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1	1	Design Authority ~~JW Bailey~~ Jim Kriskovich	Jim Kriskovich	7-24-98	~~S2-48~~ R1-56	1	1	~~JR Kriskovich~~ J.W. Bailey	J.W. Bailey	7/24/98	~~R1-56~~ S2-48
		Design Agent				1	1	SW Shaw	SW Shaw	7/24/98	S2-48
1	1	Cog.Eng. TD Kaiser	RE Larson for TDK	7/24/98	T4-07	3		Project W-320 Files			R1-29
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1	1	QA KC Conrad	Keith Conrad	7-24-98	S2-48						
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System Design Description for Portable 1,000 CFM Exhauster Skids POR-007/Skid E and POR-008/Skid F

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Abstract: Provides the system design description for the 1,000 CFM Portable Exhauster skids. The different control modes are described: flow, fan inlet pressure, and high vacuum.

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SYSTEM DESIGN DESCRIPTION

FOR

PORTABLE 1,000 CFM EXHAUSTER SKIDS

POR-007-SKID E

AND

POR-008-SKID F

Document Identifier (DI): HNF-2934

Revision 0

July 23, 1998

Prepared by:

Fluor Daniel Northwest (FDNW)
Control Systems Engineering CCAD Team
1200 Jadwin Avenue
Richland, WA

Authored by:

Steph G. Romero 7/23/98

S.G. Romero, P.E. Date
CCAD Team Leader

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1 INTRODUCTION

1.1 PURPOSE

The primary purpose of the two 1,000 SCFM Exhauster Skids, POR-007-SKID E and POR-008-SKID F is to provide backup to the waste tank primary ventilation systems for tanks 241-C-106 and 241-AY-102, and the AY-102 annulus in the event of a failure during the sluicing of tank 241-C-106 and subsequent transfer of sluiced waste to 241-AY-102. This redundancy is required since both of the tank ventilation systems have been declared as Safety Class systems.

1.2 SCOPE

One Exhauster Skid will provide the tank ventilation backup function for the first year of sluicing, at which time it will be returned to the Salt Well pumping group provided it has not actually been put into service.

1.3 PROCESS OVERVIEW

The exhauster skids E and F are identical and so the following discussions will speak of only one skid. The exhauster skid may be used in one of two modes: tank dome space ventilation or tank annulus ventilation. The difference lies primarily in the process variable used to control speed of the fan. For tank dome space ventilation (Flow Control Mode), the exhauster skid stack flow is used as the process variable. For tank annulus ventilation (Pressure Control), the exhauster skid fan inlet pressure (vacuum) is used. The instrumentation and controls for the skid operations will be discussed in more detail in later sections of this document.

1.3.1 TANK DOME SPACE VENTILATION

For tank C-106 dome space ventilation, the exhauster skid suction is connected to tank riser 19B and pulls air out of the tank dome space through the skid-mounted equipment in the following order:

- Manual flow control valve (VTP-V-135)
- 1st transition piece
- Demister (VTP-HX-001)
- Pre-filter section (VTP-FLT-001)
- Test section 1
- HEPA section 1 (VTP-FLT-002)
- Test section 2
- HEPA section 2 (VTP-FLT-003)
- 2nd transition piece
- Flow control valve (VTP-V-136)
- Expansion joint
- Exhaust fan (VTP-EF-001)
- Skid stack

See drawing H-14-102610, sheet 1, for the skid P&ID.

A glycol heater (VTP-HTR-001) is used to heat the tank air after it travels through the demister. The glycol recirc pump (VTP-P-001) is used to recirculate the glycol through the heater and the heater coil in the demister.

Any condensate from any of the skid sections, including the exhaust fan, drains into the seal pot (VTP-SP-001). A seal pot pump (VTP-P-004) is used to pump the condensate out of the seal pot.

1.3.2 TANK ANNULUS VENTILATION

For tank annulus ventilation, the exhauster skid suction is connected to a suitable tank annulus riser and pulls air out of the tank annulus and through the skid-mounted equipment described in the previous section.

1.4 DEFINITIONS

Acronym or Abbreviation	Description
HMI	Human-Machine Interface is a PC running HMI application software ~~(e.g., Wonderware, Intellution or Citect)~~ (JCB 7/25/98)
PLC	Programmable Logic Controller is a microprocessor based machine which executes user-defined logic in order to control a work process ~~(e.g., Allen-Bradley SLC500, Modicon Quantum or TI545).~~ (JCB 7/25/98)
ROC	Rate of Change

2 GENERAL DESCRIPTION

The exhauster skid, in addition to the mechanical equipment described above, is provided with several instrumentation and control devices. There are transmitters used to measure several process variables, panel mounted indicators to display the process variables, panel mounted control switches, message view displays for alarm indication and a heat-trace cabinet which houses alarm trips for plenum pressures and flows.

The process instrumentation and control devices provide input and output (I/O) signals to the PLC mounted inside the control panel. The PLC is programmed to use either exhaust flow or fan inlet vacuum as its process variable input to be controlled, for use with primary tank or annulus ventilation, respectively. It is programmed to provide safety interlocks, as well as, alarm messages which are shown on the message view displays. An unacknowledged alarm on the PLC will cause the alarm beacon mounted high on the skid to rotate and flash. Acknowledgment of alarms is done at the message view displays.

Electrical equipment includes a main skid disconnect switch and disconnect switches for the exhaust fan and glycol heater. There is a variable speed drive mounted inside the control panel for controlling the exhaust fan speed. A mini-power center provides for instrument and control power.

INSTRUMENTATION

The following table describes the skid instrumentation and lists each instrument by tagname along with any alarms associated with the process variable.

TABLE 2.1 - SKID INSTRUMENTATION[1]

Item	Tagname	Description	Manufacturer & Model No.	Range Or Setpoint	Alarms	Alarm Setpoints
1	VTP-PDT-170A	Plenum Pressure Transmitter (Mounted on Exhaust Fan Suction)	Yokogawa EJA-110A	0 to -20" WC (0" = 4mA) (-20" = 20mA)	PAH-170A (V) PAH-170A (HV) PAL-170A	-12.75" W.C./ -19.5" W.C. -6.0" W.C.
2	VTP-PDT-170B	Plenum Pressure Transmitter (Mounted on Skid Inlet)	Yokogawa EJA-110	-5" to +5" WC (-5" = 4mA) (+5" = 20mA)	PAH-170B PAL-170B	+5.0" W.C. -3.5" W.C.
3	VTP-PDT-177	Heater/Demister Differential Pressure Transmitter	Yokogawa EJA-120	0-2" WC (0" = 4mA) (2" = 20mA)	N/A	N/A
4	VTP-TE-176	Inlet Temperature Thermocouple	Omega (Model No. not visible)	Type J	N/A	N/A
5	VTP-PDT-178	Prefilter Differential Pressure Transmitter	Yokogawa EJA-120	0-2" WC (0" = 4mA) (2" = 20mA)	PDAH-178	1" W.C.
6	VTP-TE-179	HEPA Filter #1 Inlet Temperature Thermocouple	Omega (Model No. not visible)	Type J	TAH-179 TAL-179	190° F 40° F
7	VTP-PDT-180	HEPA Filter #1 Differential Pressure Transmitter	Yokogawa EJA-110	0-10" WC (0" = 4mA) (10" = 20mA)	PDAHH-180 PDAH-180 PDAL-180 ROC-180	5.4" W.C. 4.5" W.C. 0.1" W.C. 0.5" W.C.

[1]Alarm tags from P&ID H-14-102610. Alarm Setpoints from System Variables drawing H-14-102608. Descriptions match nameplates and steel tags on skid.

Item	Tagname	Description	Manufacturer & Model No.	Range Or Setpoint	Alarms	Alarm Setpoints
8	VTP-PDT-181	Filter Train Differential Pressure Transmitter	Yokogawa EJA-110	0-6" WC (0" = 4mA) (6" = 20mA)	PDAHH-181 PDAL-181	5.4" W.C. 0.1" W.C.
9	VTP-PDT-182	HEPA Filter #2 Differential Pressure Transmitter	Yokogawa EJA-110	0-6" WC (0" = 4mA) (6" = 20mA)	PDAHH-182 PDAH-182 PDAL-182 ROC-182	3.7" W.C. 3.2" W.C. 0.1" W.C. 0.5" W.C.
10	VTP-TE-183	Stack Temperature Thermocouple	Omega (Model No. not visible)	Type J	N/A	N/A
11	VTP-FT-184	Stack Flow Transmitter (Calculated from Differential Pressure)	Yokogawa EJA-120	0-1194 SCFM (0-4" WC)	FAH-184 FAH-184 (V/HV) FAL-184 FAL-184 (V/HV)	1100 SCFM 1000 SCFM 470 SCFM 675 SCFM
12	VTP-LT-205	Glycol Expansion Tank Level Transmitter	Drexelbrook Xmtr: 408-8202-001 Probe: 270-1-968	0-100%	LAL-205	50%
13	VTP-LT-185	Seal Pot Level Transmitter	Drexelbrook Xmtr: 408-8232-001 Probe:	0-100%	LAH-185 LAL-185	80% 30%
14	VTP-TS-206	Glycol Temperature Switch		70° F	N/A	N/A
15	VTP-TI-176	Inlet Temperature Indicator	Wilkerson DIS474	Type J	N/A	N/A
16	VTP-PDI-177	Heater/Demister Differential Pressure Indicator	Wilkerson DIS471	0-2" WC	N/A	N/A
17	VTP-PDI-178	Prefilter Differential Pressure Indicator	Wilkerson DIS471	0-2" WC	N/A	N/A
18	VTP-TI-179	HEPA Filter #1 Inlet Temperature Indicator	Wilkerson DIS474	Type J	N/A	N/A
19	VTP-PDI-180	HEPA Filter #1 Differential Pressure Indicator	Wilkerson DIS471	0-10" WC	N/A	N/A

Item	Tagname	Description	Manufacturer & Model No.	Range Or Setpoint	Alarms	Alarm Setpoints
20	VTP-PDI-181	Filter Train Differential Pressure Indicator	Wilkerson DIS471	0-6" WC	N/A	N/A
21	VTP-PDI-182	HEPA Filter #2 Differential Pressure Indicator	Wilkerson DIS471	0-6" WC	N/A	N/A
22	VTP-TI-183	Stack Temperature Indicator	Wilkerson DIS474	Type J	N/A	N/A
23	VTP-FI-184	Stack Flow Indicator	Wilkerson DIS471	0-1194 SCFM	N/A	N/A
24	VTP-LI-205	Glycol Expansion Tank Level Indicator	Wilkerson DIS471	0-100%	N/A	N/A
25	VTP-LI-185	Seal Pot Level Indicator	Wilkerson DIS471	0-100%	N/A	N/A

2.1 CONTROLS

The following table describes the skid controls and lists each device by tagname.

TABLE 2.2 - SKID CONTROLS

Item	Tagname	Description
1	VTP-PB-101	Exhaust Fan Start Pushbutton
2	VTP-PB-102	Exhaust Fan Stop Pushbutton
3	VTP-HS-103	Exhaust Fan Off/Enable Selector Switch
4	VTP-HS-101	Seal Pot Pump Hand/Auto Key Switch
5	VTP-HS-102	Glycol Pump On/Off Selector Switch
6	VTP-SS-102	Auto Pump ½ Control Selector Switch
7	VTP-PB-104	CAM Bypass Pushbutton

2.2 USER CHARACTERISTICS

The exhaust skid, while in the primary tank ventilation system backup role for C-106 and AY-102, is intended to be controlled locally by an operator. The operator will start and stop the exhaust fan under administrative control. An instrument technician or engineer will be required to change values in the PLC's data tables depending upon the desired mode of operation. This will be done locally by connecting a laptop loaded with the appropriate PLC programming software to the skid PLC. The technician or engineer will then make the appropriate data table changes and verify that the appropriate mode of operation has been selected. This will also require the examination of certain data table fields.

Since an HMI is not being utilized for control purposes, passwords are not required and all security access issues must be addressed in the administrative procedures.

3 SPECIFIC REQUIREMENTS

3.1 PROCESS REQUIREMENTS

The exhauster skid shall be able to exhaust 1000 SCFM from the waste tank dome space on a continuous basis. The High Efficiency Mist Eliminator is provided to remove any entrained moisture immediately upon reaching the exhauster. The glycol heater is provided to raise the relative humidity of the air by heating it before it is introduced to the HEPA filters. The HEPA filters trap any airborne contamination before the tank air is exhausted to the atmosphere.

3.2 INTERFACE REQUIREMENTS

For the W-320 backup function, the exhauster skid will operate as a stand-alone unit and is not required to interface remotely with any of the tank farm SCADA systems, such as, TMACS, CASS or the MPSS.

A local operator interface is required to allow the operator to operate the exhauster skid, including changing operational parameters and acknowledging alarms.

4 REFERENCES

4.1 "HNF-2686 ATP For A Continuous Use, Portable 1000 CFM Exhauster POR-007-SKID E"

4.2 "HNF-2687 ATP For A Continuous Use, Portable 1000 CFM Exhauster POR-008-SKID F"

5 DESCRIPTION OF PLC CONTROL AND PROGRAM

5.1 GENERAL

The PLC program controlling exhauster operation has three operational modes. These modes differ in the process variable that is used to provide feedback to the variable speed drive for the fan motor. Changing modes is accomplished by changing the value of two digital values in the processor. When a new mode is selected, portions of the PLC program that are required for the mode are enabled and the appropriate values are copied to alarm setpoint registers.

There are two basic modes of control for the skid: Flow Control Mode (see Section 5.2) and Pressure Control Mode (see Section 5.3). If Flow Control Mode is to be used then PDT-170B, mounted on the exhauster inlet, must be connected to the appropriate transmitter connection port. If the Pressure Control Mode is to be used then PDT-170A, mounted on the exhauster fan inlet, is connected to the same port instead. This way only one of these two transmitters is connected to the PLC at any one time. Verification that the correct one is plugged in must be done as part of the setup procedure for the skid depending on the desired mode of operation.

Following are descriptions of each mode of control and the PLC register changes required to start each mode.

5.2 FLOW CONTROL MODE

Flow Control mode should be used when the exhauster is connected to a primary tank space where it is desired to maintain a relatively high flow under a light vacuum load.

In this mode, the fan speed is controlled to maintain the flow rate at the value specified in the PLC floating register F8:6. This value is entered in SCFM and is currently set to 1000. PID control is utilized to modulate the control signal to the variable speed drive in order to achieve the desired setpoint. A deadband is used to avoid oscillation around the setpoint.

Enter the Flow Control Mode of operation by setting bits B3/0 and B3/1 to zero (0). PDT-170B must be installed and connected to the PLC instead of PDT-170A for this mode to operate. PDT-170B is mounted on the exhauster inlet.

5.3 PRESSURE CONTROL MODE

Pressure Control mode should be used when the exhauster is connected to a double-shell tank annulus ("Dry Annulus Operation"). (CAUTION: The Pressure Control Mode is not intended and should never be used for ventilating the primary tank space.)

This mode uses the fan inlet pressure from transmitter PDT-170A as feedback to the control routine. The pressure/vacuum setpoint is entered in PLC floating register F8:7. The value is entered in inches of water column, and is currently set to 12" WC. (CAUTION: Values greater than 13.75" WC will cause the seal pot contents to flow into the plenum.) PID control is utilized to modulate the control signal to the variable speed drive in order to achieve the desired setpoint. A deadband is used to avoid oscillation around the setpoint.

Enter this mode of operation by setting bits B3/0 to one (1) and B3/1 to zero (0). PDT-170A must be installed and connected to the PLC instead of PDT-170B for this mode to operate. Some alarm setpoints are adjusted to take account for the change in instrumentation and operating conditions. Alarm setpoints used with this mode are marked with (V) in Table 2.1.

5.4 HIGH-VACUUM MODE

High-Vacuum mode should be used only when the seal pot drains inside the filter housing have been suitably plugged, when it is intended to operate the exhauster at a maximum vacuum to increase throughput.

High-vacuum mode is designed to maximize exhauster throughput and inlet vacuum by setting the variable speed drive at a maximum output value. PID control is bypassed, and the normal output register of the PID instruction is set to 16384 (maximum).

Enter this mode of operation by setting bits B3/0 and B3/1 to one (1). PDT-170A must be installed and connected for this mode to operate. Some alarm setpoints are adjusted to take account for the change in instrumentation and operating conditions. Alarm setpoints used with this mode are marked with (HV) in Table 2.1.

5.5 OPERATIONAL INTERLOCKS

Fan operation interlocks are a subset of the alarms list in Table 2.1. Some alarms shut down the system immediately, while others shut down the system only after the interlock alarm is true for a preset amount of time. Usually only one interlock alarm is required to shut down the system, but in some cases a combination of interlock alarms is required.

Interlock alarm tags and applicable time delays are shown in Table 5.1.

TABLE 5.1 - INTERLOCKS

Item	Alarm Tag	Description	Delay (sec)
1	ROC-180	FILTER 1 DP ROC	3
2	PAL-170B	PLENUM 1 PRESS LO	0
3	FAL-184	STACK FLOW LO	30
4	FAH-184	STACK FLOW HI	15
5	PDAL-180	FILTER 1 DP LO	N/A
6	PDAHH-180	FILTER 1 DP HI HI	N/A
7	PDAL-182	FILTER 2 DP LO	N/A
8	PDAHH-182	FILTER 2 DP HI HI	N/A
9	PDAL-181	FILTER 1&2 DP LO	N/A
10	PDAHH-181	FILTER 1&2 DP HI HI	N/A
11	PAH-170A	INLET VACUUM HI	5
12	LAH-185	SEAL POT LEVEL HI	N/A
13	LAL-185	SEAL POT LEVEL LO	N/A
14	PAH-170B	PLENUM 1 PRESS HI	10
15	ROC-182	FILTER 2 DP ROC	3

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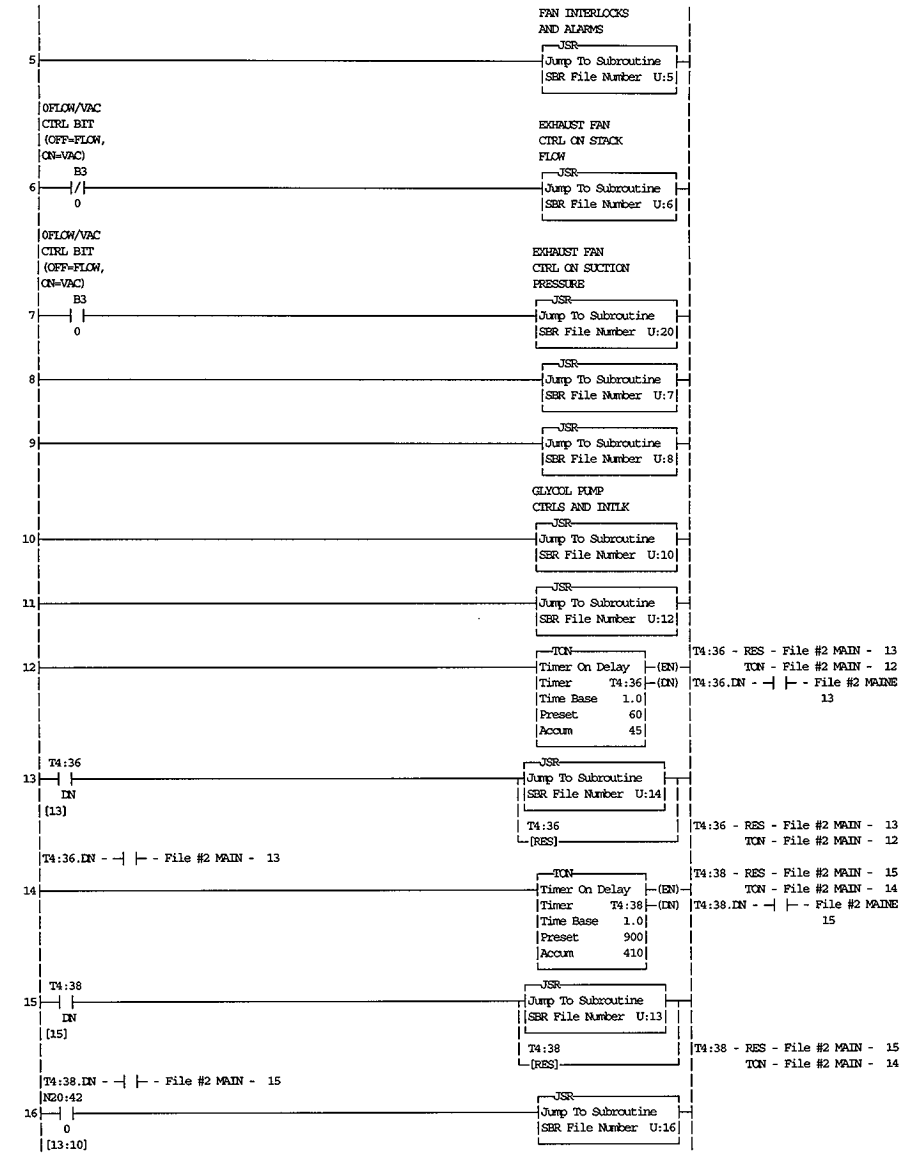
APPENDIX A - ALLEN-BRADLEY (A-B) SLC500 PLC PROGRAM PRINTOUT

Number of Program Files:21

Name	File	Sub-Program Description
	0	[SYSTEM DATA STORAGE HEADER]
	1	[RESERVED AREA]
MAIN	2	MANAGES THE EXECUTION OF SUBROUTINES
STARTUP	3	RUN ON POWER-UP TO INITIALIZE BIT/WORD STATUS
INPUTDATA	4	INPUT FILE TRANSFER TO DATAGRAM (N20) + WW TRANS?
INTRLKS	5	FAN CONTROL INTERLOCKS
FANCNTRL	6	AIR FLOW PID FAN CNTRL
MESGVIEW	7	HANDLES I/O BETWEEN MESSAGE VIEW TERMINALS AND SLC
SYSSTAT	8	RETURNS UNACK ALM STATUS AND MOTOR CONTACT ON/OFF
SIMULATE	9	SETS FAN ON BITS AND TURNS OFF DATAGRAM TRANSFER
GLYCOLPMP	10	GLYCOL PUMP CONTROLS AND INTERLOCKS
ERRSTAT	11	SHUTS DOWN MOTOR ON MAJOR FAULT
COUNTER	12	COUNTERS FOR SYSTEM STATUS CHANGES?
FIFO	13	ENABLES AND LOADS FIFO BUFFERS
COUNTER	14	SYSTEM STATUS COUNTERS
CLRFAULT	15	CLEAR ERRORS ON POWER-UP
INTLK	16	MORE INTERLOCKS FOR FILE 5
COPY_OUT	17	COPY DATA TO OUTPUT MODULES
FIFOBUFFER	18	LOADS FIFO BUFFERS USED IN RATE OF CHANGE CALCS
SEALPOTPMP	19	SEAL POT PUMP CONTROL
FANCNTRL	20	INLET PRESSURE FAN CONTRL

```
                                                                                  ALL BITS OFF
                                                                                  FOR MASKING
                                                                                  ┌─CLR──────────┐
0├──────────────────────────────────────────────────────────────────────────────┤Clear          ├─┤N13:0 - CLR - File #2 MAIN -  0
                                                                                  │Dest      N13:0│          File #3 STARTUP -
                                                                                  │             0│           1
                                                                                  └──────────────┘        NOT - File #2 MAIN -  1
                                                                                                          File #3 STARTUP -
|N13:0 - NOT - File #3 STARTUP -  2
|       FLL - File #2 MAIN -  20
|            File #3 STARTUP -  5
|       MVM - File #3 STARTUP -  11
|            File #7 MESGVIEW -  1
|            File #16 INTLK -  18, 23
|N13:0/0 - ─┤ ├─ - File #13 FIFO -  0, 1, 2, 3
|                File #14 COUNTER -  0
|FILE N13:0 LEN:110 - FLL - File #2 MAIN -  20
|                          File #3 STARTUP -  5
|FILE N13:0 LEN:3 - FLL - File #3 STARTUP -  5
|FILE N13:0 LEN:4 - FLL - File #3 STARTUP -  5
|FILE N13:0 LEN:7 - FLL - File #2 MAIN -  20
|                          File #3 STARTUP -  5
                                                                                  ALL BITS ON
                                                                                  ┌─NOT──────────┐
1├──────────────────────────────────────────────────────────────────────────────┤NOT            ├─┤N13:1 - NOT - File #2 MAIN -  1
                                                                                  │Source    N13:0│          File #3 STARTUP -
                                                                                  │             0│           2          ...
                                                                                  │Dest      N13:1│N13:0 - CLR - File #2 MAIN -  0
                                                                                  │            -1│          File #3 STARTUP -
                                                                                  └──────────────┘           1
                                                                                                        NOT - File #2 MAIN -  1.
|N13:1 - MOV - File #7 MESGVIEW -  1
|       MVM - File #3 STARTUP -  4, 10
|            File #7 MESGVIEW -  5, 6, 7
|FILE N13:1 LEN:110 - FLL - File #2 MAIN -  20
|                          File #3 STARTUP -  5
|FILE N13:1 LEN:3 - FLL - File #3 STARTUP -  5
|FILE N13:1 LEN:4 - FLL - File #3 STARTUP -  5
|FILE N13:1 LEN:7 - FLL - File #2 MAIN -  20
|                          File #3 STARTUP -  5
|N13:0 - NOT - File #3 STARTUP -  2
|       FLL - File #2 MAIN -  20
|            File #3 STARTUP -  5
|       MVM - File #3 STARTUP -  11
|            File #7 MESGVIEW -  1
|            File #16 INTLK -  18, 23
|N13:0/0 - ─┤ ├─ - File #13 FIFO -  0, 1, 2, 3
|                File #14 COUNTER -  0
|FILE N13:0 LEN:110 - FLL - File #2 MAIN -  20
|                          File #3 STARTUP -  5
|FILE N13:0 LEN:3 - FLL - File #3 STARTUP -  5
|FILE N13:0 LEN:4 - FLL - File #3 STARTUP -  5
|FILE N13:0 LEN:7 - FLL - File #2 MAIN -  20
|                          File #3 STARTUP -  5
                                                                                  RUN ONCE TO
|First Pass                                                                      INIT DATA TABLE
|    S:1                                                                         ┌─JSR──────────┐
2├──┤ ├──────────────────────────────────────────────────────────────────────┤Jump To Subroutine ├─┤
|    15                                                                         │SBR File Number  U:3│
|[11:2]                                                                         └──────────────┘
                                                                                  NORMAL MODE -
                                                                                  TRANSFERS TO
|SIMULATE MODE                                                                   I/O IMAGES ARE
|IF BIT IS TRUE                                                                  ENABLED
|    N20:42                                                                      ┌─JSR──────────┐
3├──┤/├──────────────────────────────────────────────────────────────────────┤Jump To Subroutine ├─┤
|     2                                                                         │SBR File Number  U:4│
|[13:10]                                                                        └──────────────┘
                                                                                  SIMULATE MODE
                                                                                  ON (NO TRANSFER
|SIMULATE MODE                                                                   TO I/O IMAGE
|IF BIT IS TRUE                                                                  FILES)
|    N20:42                                                                      ┌─JSR──────────┐
4├──┤ ├──────────────────────────────────────────────────────────────────────┤Jump To Subroutine ├─┤
|     2                                                                         │SBR File Number  U:9│
|[13:10]                                                                        └──────────────┘
```


FAN INTERLOCKS
AND ALARMS
5
JSR
Jump To Subroutine
SBR File Number U:5
0FLOW/VAC
CTRL BIT
(OFF=FLOW,
ON=VAC)
B3
6
0
EXHAUST FAN
CTRL ON STACK
FLOW
JSR
Jump To Subroutine
SBR File Number U:6
0FLOW/VAC
CTRL BIT
(OFF=FLOW,
ON=VAC)
B3
7
0
EXHAUST FAN
CTRL ON SUCTION
PRESSURE
JSR
Jump To Subroutine
SBR File Number U:20
8
JSR
Jump To Subroutine
SBR File Number U:7
9
JSR
Jump To Subroutine
SBR File Number U:8
GLYCOL PUMP
CTRLS AND INTLK
10
JSR
Jump To Subroutine
SBR File Number U:10
11
JSR
Jump To Subroutine
SBR File Number U:12
12
TON
Timer On Delay
Timer T4:36
Time Base 1.0
Preset 60
Accum 45
(EN)
(DN)
T4:36 - RES - File #2 MAIN - 13
TON - File #2 MAIN - 12
T4:36.DN - - File #2 MAINE
13
T4:36
13
DN
[13]
JSR
Jump To Subroutine
SBR File Number U:14
T4:36
[RES]
T4:36 - RES - File #2 MAIN - 13
TON - File #2 MAIN - 12
T4:36.DN - - File #2 MAIN - 13
14
TON
Timer On Delay
Timer T4:38
Time Base 1.0
Preset 900
Accum 410
(EN)
(DN)
T4:38 - RES - File #2 MAIN - 15
TON - File #2 MAIN - 14
T4:38.DN - - File #2 MAINE
15
T4:38
15
DN
[15]
JSR
Jump To Subroutine
SBR File Number U:13
T4:38
[RES]
T4:38 - RES - File #2 MAIN - 15
TON - File #2 MAIN - 14
T4:38.DN - - File #2 MAIN - 15
N20:42
16
0
[13:10]
JSR
Jump To Subroutine
SBR File Number U:16

```
   |SIMULATE MODE
   |IF BIT IS TRUE
   |    N20:42                                                                  |
   |                                                   ┌─JSR──────────────┐     |
17 |──────┤/├──────────────────────────────────────────│Jump To Subroutine │──┤
   |      2                                            │SBR File Number  U:17│     |
   |                                                   └──────────────────┘     |
   |[13:10]
   |5 VDC
   |FAN                                                                         |
   |START                                                          FAN          |
   |N20:24  B3                                                    ENABLED       |
18 |──┤ ├──[OSR]──────────────────────────────────────────────────(L)──┤B3/34 - —(L)— - File #2 MAIN -
   |  2     76                                                     34            |                18
   |                                                                            |       —(U)— - File #6 FANCNTRE
   |[6:5]                                                                       |                 4          ...
   |B3/34 - —(U)— - File #20 FANCNTRL -  6                                      |
   |        —┤ ├— - File #2 MAIN -  19                                         |
   |                File #5 INTRLKS -  1, 58                                    |
   |        —┤/├— - File #2 MAIN -  20                                         |
   |        MVM - File #3 STARTUP -  11                                         |
   |FAN                                                                         |
   |ENABLED                                                                     |
   |  B3                                                                        |
   |                                                   ┌─JSR──────────────┐     |
19 |──┤ ├──────────────────────────────────────────────│Jump To Subroutine │──┤
   |  34                                               │SBR File Number  U:18│     |
   |                                                   └──────────────────┘     |
   |[18]                                                                        |
   |FAN                                                FILTER 1 DP              |
   |ENABLED                                            FIFO BUFFER              |
   |  B3     B3                                        ┌─FLL──────────┐         |N35:0 - FLL - File #2 MAIN -  20
20 |──┤/├──[OSR]──────────────────────────────────────│Fill File     │──┤      |              File #3 STARTUP -
   |  34     75                                        │Source    N13:0│         |              5            ...
   |[18]                                               │Dest    #N35:0│         |N13:0 - CLR - File #2 MAIN -  0
   |                                                   │Length      110│         |              File #3 STARTUP -
   |                                                   └──────────────┘         |              1
   |                                                                            |       NOT - File #2 MAIN -  1.
   |                                                   ┌─FLL──────────┐         |N14:36 - FLL - File #2 MAIN -
   |                                                   │Fill File     │──┤      |                20
   |                                                   │Source    N13:0│         |              File #3 STARTUP E
   |                                                   │Dest   #N14:36│         |                5
   |                                                   │Length        7│         |        SUB - File #18 FIFOBUFE
   |                                                   └──────────────┘         |                2          ...
   |N35:0 - FFL - File #18 FIFOBUFFER -  1                                      |
   |        FFU - File #18 FIFOBUFFER -  1                                      |
   |FILE N35:0 LEN:110 - FLL - File #2 MAIN -  20                               |
   |                         File #3 STARTUP -  5                               |
   |N13:0 - NOT - File #3 STARTUP -  2                                          |
   |        FLL - File #2 MAIN -  20                                            |
   |              File #3 STARTUP -  5                                          |
   |        MVM - File #3 STARTUP -  11                                         |
   |              File #7 MESGVIEW -  1                                         |
   |              File #16 INTLK -  18, 23                                      |
   |N13:0/0 - —┤ ├— - File #13 FIFO -  0, 1, 2, 3                               |
   |                File #14 COUNTER -  0                                       |
   |FILE N13:0 LEN:110 - FLL - File #2 MAIN -  20                               |
   |                         File #3 STARTUP -  5                               |
   |FILE N13:0 LEN:3 - FLL - File #3 STARTUP -  5                               |
   |FILE N13:0 LEN:4 - FLL - File #3 STARTUP -  5                               |
   |FILE N13:0 LEN:7 - FLL - File #2 MAIN -  20                                 |
   |                         File #3 STARTUP -  5                               |
   |N14:36 - FFU - File #18 FIFOBUFFER -  1                                     |
   |FILE N14:36 LEN:7 - FLL - File #2 MAIN -  20                                |
   |                         File #3 STARTUP -  5                               |
   |                                                   SEAL POT PUMP            |
   |                                                   CONTROL                  |
   |                                                   ┌─JSR──────────────┐     |
21 |──────────────────────────────────────────────────│Jump To Subroutine │──┤
   |                                                   │SBR File Number  U:19│     |
   |                                                   └──────────────────┘     |
   |                                                                            |
22 |──────────────────────────────────────────────────────────────────────[END]──┤
```

```
 |RUN ONCE TO
 |INIT DATA TABLE
 |  ┌─SBR──────────┐                                  ┌─COP──────────────┐
0|──┤Subroutine    ├──────────────────────────────────┤Copy File         ├──┤
 |  └──────────────┘                                  |Source      #N9:0 |  |
 |                                                    |Dest      #O:11.0 |  |
 |                                                    |Length          4 |  |
 |                                                    └──────────────────┘  |
 |                                                    ALL BITS OFF          |
 |                                                    FOR MASKING           |
 |                                                    ┌─CLR──────────────┐  |N13:0 - CLR - File #2 MAIN -  0
1|──────────────────────────────────────────────────┤Clear             ├──┤            File #3 STARTUP -
 |                                                    |Dest       N13:0 |  |             1
 |                                                    |              0 |  |      NOT - File #2 MAIN -  1
 |                                                    └──────────────────┘  |            File #3 STARTUP -
 |N13:0 - NOT - File #3 STARTUP -  2                                        |
 |       FLL - File #2 MAIN -  20                                           |
 |             File #3 STARTUP -  5                                         |
 |       MVM - File #3 STARTUP -  11                                        |
 |             File #7 MESGVIEW -  1                                        |
 |             File #16 INTLK -  18, 23                                     |
 |N13:0/0 - ─┤ ├─ - File #13 FIFO -  0, 1, 2, 3                             |
 |                 File #14 COUNTER -  0                                    |
 |FILE N13:0 LEN:110 - FLL - File #2 MAIN -  20                             |
 |                           File #3 STARTUP -  5                           |
 |FILE N13:0 LEN:3 - FLL - File #3 STARTUP -  5                             |
 |FILE N13:0 LEN:4 - FLL - File #3 STARTUP -  5                             |
 |FILE N13:0 LEN:7 - FLL - File #2 MAIN -  20                               |
 |                         File #3 STARTUP -  5                             |
 |                                                    ALL BITS ON           |
 |                                                    ┌─NOT──────────────┐  |N13:1 - NOT - File #2 MAIN -  1
2|──────────────────────────────────────────────────┤NOT               ├──┤            File #3 STARTUP -
 |                                                    |Source     N13:0 |  |             2          ...
 |                                                    |              0 |  |N13:0 - CLR - File #2 MAIN -  0
 |                                                    |Dest       N13:1 |  |            File #3 STARTUP -
 |                                                    |             -1 |  |             1
 |                                                    └──────────────────┘  |      NOT - File #2 MAIN -  1.
 |N13:1 - MOV - File #7 MESGVIEW -  1                                       |
 |       MVM - File #3 STARTUP -  4, 10                                     |
 |             File #7 MESGVIEW -  5, 6, 7                                  |
 |FILE N13:1 LEN:110 - FLL - File #2 MAIN -  20                             |
 |                           File #3 STARTUP -  5                           |
 |FILE N13:1 LEN:3 - FLL - File #3 STARTUP -  5                             |
 |FILE N13:1 LEN:4 - FLL - File #3 STARTUP -  5                             |
 |FILE N13:1 LEN:7 - FLL - File #2 MAIN -  20                               |
 |                         File #3 STARTUP -  5                             |
 |N13:0 - NOT - File #3 STARTUP -  2                                        |
 |       FLL - File #2 MAIN -  20                                           |
 |             File #3 STARTUP -  5                                         |
 |       MVM - File #3 STARTUP -  11                                        |
 |             File #7 MESGVIEW -  1                                        |
 |             File #16 INTLK -  18, 23                                     |
 |N13:0/0 - ─┤ ├─ - File #13 FIFO -  0, 1, 2, 3                             |
 |                 File #14 COUNTER -  0                                    |
 |FILE N13:0 LEN:110 - FLL - File #2 MAIN -  20                             |
 |                           File #3 STARTUP -  5                           |
 |FILE N13:0 LEN:3 - FLL - File #3 STARTUP -  5                             |
 |FILE N13:0 LEN:4 - FLL - File #3 STARTUP -  5                             |
 |FILE N13:0 LEN:7 - FLL - File #2 MAIN -  20                               |
 |                         File #3 STARTUP -  5                             |
 |                                                    ┌─CLR──────────────┐  |N13:3 - CLR - File #3 STARTUP -
3|──────────────────────────────────────────────────┤Clear             ├──┤             3
 |                                                    |Dest       N13:3 |  |      MVM - File #3 STARTUP -
 |                                                    |              4 |  |             4
 |                                                    └──────────────────┘  |            File #16 INTLK - .
 |N13:3 - MVM - File #16 INTLK -  18, 22                                    |
 |       MUL - File #16 INTLK -  19, 20                                     |
 |       DIV - File #16 INTLK -  19, 20                                     |
 |N13:3/2 - ─┤ ├─ - File #16 INTLK -  19, 20                                |
 |N13:3/3 - ─┤ ├─ - File #16 INTLK -  19, 20                                |
 |FILE N13:3 LEN:110 - FLL - File #2 MAIN -  20                             |
 |                           File #3 STARTUP -  5                           |
 |FILE N13:3 LEN:4 - FLL - File #3 STARTUP -  5                             |
```

```
 |FILE N13:3 LEN:7 - FLL - File #2 MAIN -  20
 |                        File #3 STARTUP -  5
 |                                                          |
 |                                          ┌─MVM──────────┐|N13:3 - CLR - File #3 STARTUP -
4|──────────────────────────────────────────┤Masked Move   ├|──┤            3
 |                                          |Source   N13:1|  |       MVM - File #3 STARTUP -
 |                                          |           -1 |  |            4            ...
 |                                          |Mask     0004h|  |N13:1 - NOT - File #2 MAIN -  1
 |                                          |              |  |             File #3 STARTUP -
 |                                          |Dest     N13:3|  |             2
 |                                          |           4  |  |       MOV - File #7 MESGVIEW E
 |                                          └──────────────┘  |            1            ...
 |N13:3 - MVM - File #16 INTLK -  18, 22                      |
 |       MUL - File #16 INTLK -  19, 20                       |
 |       DIV - File #16 INTLK -  19, 20                       |
 |N13:3/2 - ─┤ ├─ - File #16 INTLK -  19, 20                  |
 |N13:3/3 - ─┤ ├─ - File #16 INTLK -  19, 20                  |
 |FILE N13:3 LEN:110 - FLL - File #2 MAIN -  20               |
 |                           File #3 STARTUP -  5             |
 |FILE N13:3 LEN:4 - FLL - File #3 STARTUP -  5               |
 |FILE N13:3 LEN:7 - FLL - File #2 MAIN -  20                 |
 |                        File #3 STARTUP -  5                |
 |N13:1 - MVM - File #3 STARTUP -  4, 10                      |
 |            File #7 MESGVIEW -  5, 6, 7                     |
 |FILE N13:1 LEN:110 - FLL - File #2 MAIN -  20               |
 |                           File #3 STARTUP -  5             |
 |FILE N13:1 LEN:3 - FLL - File #3 STARTUP -  5               |
 |FILE N13:1 LEN:4 - FLL - File #3 STARTUP -  5               |
 |FILE N13:1 LEN:7 - FLL - File #2 MAIN -  20                 |
 |                        File #3 STARTUP -  5                |
 |                                          UNACKED ALARMS    |
 |                                          WORD 1/3 STATUS   |
 |                                          ┌─FLL──────────┐  |N20:35 - FLL - File #3 STARTUP E
5|──────────────────────────────────────────┤Fill File     ├──┤            5
 |                                          |Source   N13:0|  |       COP - File #5 INTRLKS E
 |                                          |Dest   #N20:35|  |N13:0 - CLR - File #2 MAIN -  0
 |                                          |Length      3 |  |             File #3 STARTUP -
 |                                          └──────────────┘  |             1
 |                                                            |       NOT - File #2 MAIN -  1.
 |                                          ┌─FLL──────────┐  |N14:36 - FLL - File #2 MAIN -
 |                                          ├Fill File     ├──|             20
 |                                          |Source   N13:0|  |             File #3 STARTUP E
 |                                          |Dest   #N14:36|  |             5
 |                                          |Length      7 |  |        SUB - File #18 FIFOBUFE
 |                                          └──────────────┘  |             2
 |                                                            |        FFU - File #18 FIFOBUFE
 |                                          FILTER 1 DP       |             1
 |                                          FIFO BUFFER       |FILE N14:36 LEN:7 -          ...
 |                                          ┌─FLL──────────┐  |N35:0 - FLL - File #2 MAIN -  20
 |                                          ├Fill File     ├──|             File #3 STARTUP -
 |                                          |Source   N13:0|  |             5
 |                                          |Dest   #N35:0 |  |       FFL - File #18 FIFOBUFFE
 |                                          |Length    110 |  |             1
 |                                          └──────────────┘  |       FFU - File #18 FIFOBUFFE
 |                                                            |             1           ...
 |                                          ┌─FLL──────────┐  |N17:0 - FLL - File #3 STARTUP -
 |                                          └Fill File     ├──|             5
 |                                          |Source   N13:0|  |       MUL - File #12 COUNTER E
 |                                          |Dest   #N17:0 |  |             4
 |                                          |Length      4 |  |       GRT - File #7 MESGVIEW E
 |                                          └──────────────┘  |            15           ...
 |N20:35 - COP - File #5 INTRLKS -  116                       |
 |        NEQ - File #5 INTRLKS -  113                        |
 |            File #8 SYSSTAT -  0                            |
 |N20:35/0 - ─(U)─ - File #5 INTRLKS -  70                    |
 |N20:35/1 - ─(U)─ - File #5 INTRLKS -  71                    |
 |N20:35/2 - ─(L)─ - File #5 INTRLKS -  2                     |
 |          ─(U)─ - File #5 INTRLKS -  72                     |
 |N20:35/3 - ─(L)─ - File #5 INTRLKS -  5                     |
 |          ─(U)─ - File #5 INTRLKS -  73                     |
 |N20:35/4 - ─(L)─ - File #5 INTRLKS -  8                     |
 |          ─(U)─ - File #5 INTRLKS -  74                     |
 |N20:35/5 - ─(L)─ - File #5 INTRLKS -  11                    |
 |          ─(U)─ - File #5 INTRLKS -  75                     |
```

```
|N20:35/6 - -(L)- - File #5 INTRLKS -  14                                                  |
|           -(U)- - File #5 INTRLKS -  76                                                  |
|           -|/|- - File #5 INTRLKS -  15                                                  |
|N20:35/7 - -(L)- - File #5 INTRLKS -  16                                                  |
|           -(U)- - File #5 INTRLKS -  77                                                  |
|N20:35/8 - -(L)- - File #5 INTRLKS -  17                                                  |
|           -(U)- - File #5 INTRLKS -  45, 78                                              |
|N20:35/9 - -(L)- - File #5 INTRLKS -  19                                                  |
|           -(U)- - File #5 INTRLKS -  79                                                  |
|           -|/|- - File #5 INTRLKS -  20                                                  |
|N20:35/10 - -(L)- - File #5 INTRLKS -  21                                                 |
|            -(U)- - File #5 INTRLKS -  80                                                 |
|N20:35/11 - -(L)- - File #5 INTRLKS -  22                                                 |
|            -(U)- - File #5 INTRLKS -  46, 81                                             |
|N20:35/12 - -(L)- - File #5 INTRLKS -  24                                                 |
|            -(U)- - File #5 INTRLKS -  82                                                 |
|            -|/|- - File #5 INTRLKS -  25                                                 |
|N20:35/13 - -(L)- - File #5 INTRLKS -  26                                                 |
|            -(U)- - File #5 INTRLKS -  83                                                 |
|N20:35/14 - -(U)- - File #5 INTRLKS -  84                                                 |
|N20:35/15 - -(L)- - File #5 INTRLKS -  27                                                 |
|            -(U)- - File #5 INTRLKS -  85                                                 |
|            -|/|- - File #10 GLYCOLPMP -  0, 1                                            |
|FILE N20:35 LEN:100 - FFL - File #13 FIFO -  10                                           |
|FILE N20:35 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                       |
|FILE N20:35 LEN:3 - FLL - File #3 STARTUP -  5                                            |
|                    COP - File #5 INTRLKS -  116                                          |
|N13:0 - NOT - File #3 STARTUP -  2                                                        |
|        FLL - File #2 MAIN -  20                                                          |
|              File #3 STARTUP -  5                                                        |
|        MVM - File #3 STARTUP -  11                                                       |
|              File #7 MESGVIEW -  1                                                       |
|              File #16 INTLK -  18, 23                                                    |
|N13:0/0 - -| |- - File #13 FIFO -  0, 1, 2, 3                                             |
|                  File #14 COUNTER -  0                                                   |
|FILE N13:0 LEN:110 - FLL - File #2 MAIN -  20                                             |
|                           File #3 STARTUP -  5                                           |
|FILE N13:0 LEN:7 - FLL - File #2 MAIN -  20                                               |
|                         File #3 STARTUP -  5                                             |
|N14:36 - FLL - File #2 MAIN -  20                                                         |
|               File #3 STARTUP -  5                                                       |
|N35:0 - FLL - File #2 MAIN -  20                                                          |
|              File #3 STARTUP -  5                                                        |
|                                                                                  C5:0    |C5:0 - CTU - File #15 CLRFAULT E
6|-------------------------------------------------------------------------------[RES]-|                0
|                                                                                          |      RES - File #3 STARTUP - .
|C5:0 - RES - File #3 STARTUP -  6                                                         |
|C5:0.ACC - LES - File #15 CLRFAULT -  1                                                   |
|C5:0.CU - -(U)- - File #15 CLRFAULT -  0                                                  |
|                                                                                  N20:25  |N20:25/5 - -(L)- - File #6 FANCE
7|-------------------------------------------------------------------------------(U)-|                13
|                                                                                    5     |                File #20 FANE
|N20:25/5 - -(L)- - File #20 FANCNTRL -  16                                                |
|           -(U)- - File #3 STARTUP -  7                                                   |
|           MVM - File #4 INPUTDATA -  12                                                  |
|                 File #17 COPY_OUT -  3                                                   |
|FILE N20:25/5 LEN:100 - FFL - File #13 FIFO -  10                                         |
|FILE N20:25/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                     |
|FILE N20:25/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                     |
|FILE N20:25/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                     |
|                                                                                  N20:42  |N20:42/12 - -(L)- - File #16 INE
8|-------------------------------------------------------------------------------(U)-|                16
|                                                                                   12     |          -(U)- - File #3 STAE
|N20:42/12 - -(U)- - File #3 STARTUP -  8                                                  |
|                    File #5 INTRLKS -  68                                                 |
|            -| |- - File #5 INTRLKS -  42, 121                                            |
|                    File #16 INTLK -  17                                                  |
|FILE N20:42/12 LEN:100 - FFL - File #13 FIFO -  10                                        |
```

```
 9 ──────────────────────────────────────────────────────────────────────────
                                                   ┌─MOV──────────┐  N14:5 - MOV - File #3 STARTUP -
                                                   │Move          ├─┤            9
                                                   │Source      1 │ │      MVM - File #3 STARTUP -
                                                   │              │ │            9
                                                   │Dest      N14:5│ │
                                                   │            1 │ │
                                                   └──────────────┘ │
                                                   Node             │
                                                   Address/         │
                                                   Baud Rate        │
                                                   ┌─MVM──────────┐ │
                                                   │Masked Move   ├─┘
                                                   │Source    N14:5│
                                                   │            1 │
                                                   │Mask      00FFh│
                                                   │Dest       S:15│
                                                   │         1025 │
                                                   └──────────────┘
10 ──────────────────────────────────────────────────────────────────────────
                                                   ┌─MVM──────────┐  N17:1 - MVM - File #3 STARTUP -
                                                   │Masked Move   ├─┤            10
                                                   │Source    N13:1│      BSL - File #12 COUNTER E
                                                   │           -1 │            0           ...
                                                   │Mask      0001h│  N13:1 - NOT - File #2 MAIN -  1
                                                   │              │            File #3 STARTUP -
                                                   │Dest      N17:1│            2
                                                   │            0 │      MOV - File #7 MESGVIEW E
                                                   └──────────────┘            1           ...
N17:1 - NEQ - File #12 COUNTER -  1
        MEQ - File #12 COUNTER -  1
FILE N17:1 LEN:4 - FLL - File #3 STARTUP -  5
N13:1 - MVM - File #3 STARTUP -  4, 10
            File #7 MESGVIEW -  5, 6, 7
FILE N13:1 LEN:110 - FLL - File #2 MAIN -  20
                         File #3 STARTUP -  5
FILE N13:1 LEN:3 - FLL - File #3 STARTUP -  5
FILE N13:1 LEN:4 - FLL - File #3 STARTUP -  5
FILE N13:1 LEN:7 - FLL - File #2 MAIN -  20
                         File #3 STARTUP -  5
11 ──────────────────────────────────────────────────────────────────────────
                                                   ┌─MVM──────────┐  B3/32 - ─┤ ├─ - File #5 INTRLKSE
                                                   │Masked Move   ├─┤            119
                                                   │Source    N13:0│  B3/33 - ─┤ ├─ - File #5 INTRLKSE
                                                   │            0 │            121         ...
                                                   │Mask      0003h│  N13:0 - CLR - File #2 MAIN -  0
                                                   │              │            File #3 STARTUP -
                                                   │Dest       B3:2│            1
                                                   │0000000000000000│      NOT - File #2 MAIN -  1
                                                   └──────────────┘            File #3 STARTUP -
B3/34 - ─(L)─ - File #2 MAIN -  18
        ─(U)─ - File #6 FANCNTRL -  4
                File #20 FANCNTRL -  6
        ─┤ ├─ - File #2 MAIN -  19
                File #5 INTRLKS -  1, 58
        ─┤/├─ - File #2 MAIN -  20
N13:0 - NOT - File #3 STARTUP -  2
        FLL - File #2 MAIN -  20
              File #3 STARTUP -  5
        MVM - File #3 STARTUP -  11
              File #7 MESGVIEW -  1
              File #16 INTLK -  18, 23
N13:0/0 - ─┤ ├─ - File #13 FIFO -  0, 1, 2, 3
                File #14 COUNTER -  0
FILE N13:0 LEN:110 - FLL - File #2 MAIN -  20
                         File #3 STARTUP -  5
FILE N13:0 LEN:3 - FLL - File #3 STARTUP -  5
FILE N13:0 LEN:4 - FLL - File #3 STARTUP -  5
FILE N13:0 LEN:7 - FLL - File #2 MAIN -  20
                         File #3 STARTUP -  5
                                                   ┌─RET──────────┐
12 ──────────────────────────────────────────────────────────────────────────
                                                   │Return        ├─┤
                                                   └──────────────┘
13 ──────────────────────────────────────────────────────────────────────────
                                                                   {END}─┤
```

```
NORMAL MODE -
TRANSFERS TO
I/O IMAGES ARE
ENABLED

                                                                  PLENUM 1
                                                                  PRESSURE DATA
                                                                  PDI-170
                                                                  ┌─COP──────────┐
0 ┤SBR──────────┐                                                 │Copy File     ├─┤N20:0 - COP - File #4 INPUTDATAE
  │Subroutine   ├──────────────────────────────────────────────────┤Source   #I:1.0│          0
                                                                  │Dest     #N20:0│        GEQ - File #5 INTRLKS -
                                                                  │Length        4│          58, 62
                                                                  └──────────────┘        LEQ - File #5 INTRLKS -
                                                                                            2, 3, 61, 65  ...
N20:0 - SCL - File #20 FANCNTRL -  10

                                                                  FILTER 1 DP
                                                                  DATA
                                                                  ┌─COP──────────┐
1 ──────────────────────────────────────────────────────────────────┤Copy File     ├─┤N20:4 - COP - File #4 INPUTDATAE
                                                                  │Source   #I:2.0│          1
                                                                  │Dest     #N20:4│        SUB - File #18 FIFOBUFFE
                                                                  │Length        4│          2
                                                                  └──────────────┘        GEQ - File #5 INTRLKS -
                                                                                            16, 17        ...
N20:4 - LEQ - File #5 INTRLKS -  14, 18
        FFL - File #18 FIFOBUFFER -  1
FILE N20:4 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:4 LEN:30 - FFL - File #18 FIFOBUFFER -  1

                                                                  GLYCOL LEVEL
                                                                  DATA
                                                                  ┌─COP──────────┐
2 ──────────────────────────────────────────────────────────────────┤Copy File     ├─┤N20:10 - COP - File #4 INPUTDATE
                                                                  │Source   #I:3.0│          2
                                                                  │Dest    #N20:10│        GEQ - File #5 INTRLKS E
                                                                  │Length        2│          28
                                                                  └──────────────┘        LEQ - File #5 INTRLKS E
                                                                                            27          ...
N20:10 - FFL - File #13 FIFO -  10
FILE N20:10 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:10 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:10 LEN:30 - FFL - File #18 FIFOBUFFER -  1

                                                                  MODULE 4
                                                                  DATAGRAM
                                                                  ┌─COP──────────┐
3 ──────────────────────────────────────────────────────────────────┤Copy File     ├─┤FILE N20:12 LEN:100 -
                                                                  │Source   #I:4.0│      FFL - File #13 FIFO -  10
                                                                  │Dest    #N20:12│FILE N20:12 LEN:30 -
                                                                  │Length        4│      FFL - File #18 FIFOBUFFER E
                                                                  └──────────────┘          1
                                                                                        FILE N20:12 LEN:30 -        ...
N20:12 - FFL - File #18 FIFOBUFFER -  1
FILE N20:12 LEN:30 - FFL - File #18 FIFOBUFFER -  1

                                                                  MODULE 5
                                                                  DATAGRAM
                                                                  ┌─COP──────────┐
4 ──────────────────────────────────────────────────────────────────┤Copy File     ├─┤N20:16 - COP - File #4 INPUTDATE
                                                                  │Source   #I:5.0│          4
                                                                  │Dest    #N20:16│        GEQ - File #5 INTRLKS E
                                                                  │Length        4│          48
                                                                  └──────────────┘        FILE N20:16 LEN:100 -
                                                                                            FFL - File #13 FIFO -  10..
N20:16 - FFL - File #18 FIFOBUFFER -  1
FILE N20:16 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:16 LEN:30 - FFL - File #18 FIFOBUFFER -  1

                                                                  MODULE 6 5 VDC
                                                                  RC ANALOG INPUT
                                                                  ┌─COP──────────┐
5 ──────────────────────────────────────────────────────────────────┤Copy File     ├─┤N20:22 - MOV - File #16 INTLK -
                                                                  │Source   #I:6.0│          25
                                                                  │Dest    #N20:22│        COP - File #4 INPUTDATE
                                                                  │Length        2│          5
                                                                  └──────────────┘        GRT - File #16 INTLK -
                                                                                            26          ...
N20:22 - GEQ - File #16 INTLK -  3
        LEQ - File #16 INTLK -  0, 5, 25
        PID - File #16 INTLK -  29
FILE N20:22 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:22 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:22 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:22 LEN:30 - FFL - File #18 FIFOBUFFER -  1
```

```
6 ──────────────────────────────────────────────────────────────────────────────
                                                   ┌─MUL──────────┐ |N16:7 - MVM - File #4 INPUTDATAE
                                                   |Multiply      ├─|            11
                                                   |Source A  I:7.0| |      MUL - File #4 INPUTDATAE
                                                   |            9| |            6
                                                   |Source B     64| |
                                                   |Dest      N16:7| |
                                                   |          576| |
                                                   └──────────────┘ |
7 ──────────────────────────────────────────────────────────────────────────────
                                                   ┌─MUL──────────┐ |N16:8 - MVM - File #4 INPUTDATAE
                                                   |Multiply      ├─|            12
                                                   |Source A  I:8.0| |      MUL - File #4 INPUTDATAE
                                                   |            0| |            7
                                                   |Source B     64| |
                                                   |Dest      N16:8| |
                                                   |            0| |
                                                   └──────────────┘ |
8 ──────────────────────────────────────────────────────────────────────────────
                                                   ┌─MUL──────────┐ |N16:9 - MVM - File #4 INPUTDATAE
                                                   |Multiply      ├─|            13
                                                   |Source A  I:9.0| |      MUL - File #4 INPUTDATAE
                                                   |            0| |            8
                                                   |Source B     64| |
                                                   |Dest      N16:9| |
                                                   |            0| |
                                                   └──────────────┘ |
9 ──────────────────────────────────────────────────────────────────────────────
                                                   ┌─MUL──────────┐ |N16:10 - MVM - File #4 INPUTDATE
                                                   |Multiply      ├─|            14
                                                   |Source A I:10.0| |      MUL - File #4 INPUTDATE
                                                   |            0| |            9
                                                   |Source B     64| |
                                                   |Dest     N16:10| |
                                                   |            0| |
                                                   └──────────────┘ |
                                                   MODULE 11        |
                                                   DATAGRAM         |
10 ─────────────────────────────────────────────────────────────────────────────
                                                   ┌─COP──────────┐ |FILE N20:28 LEN:100 -
                                                   |Copy File     ├─|      FFL - File #13 FIFO -  10
                                                   |Source   #I:11.0| |FILE N20:28 LEN:30 -
                                                   |Dest    #N20:28| |      FFL - File #18 FIFOBUFFER E
                                                   |Length        4| |            1
                                                   └──────────────┘ |FILE N20:28 LEN:30 -          ...
|N20:28 - FFL - File #18 FIFOBUFFER -  1                             |
|FILE N20:28 LEN:30 - FFL - File #18 FIFOBUFFER -  1                 |
                                                   WW TRANSFER      |
                                                   WORD?            |
11 ─────────────────────────────────────────────────────────────────────────────
                                                   ┌─MVM──────────┐ |N20:24 - MVM - File #4 INPUTDATE
                                                   |Masked Move   ├─|            11
                                                   |Source    N16:7| |      File #17 COPY_OUE
                                                   |          576| |            2
                                                   |Mask      0FC0h| |N20:24/2 - --( )-- - File #6 FANCE
                                                   |              | |N16:7 - MVM - File #4 INPUTDATAE
                                                   |Dest     N20:24| |            11
                                                   |          616| |      MUL - File #4 INPUTDATAE
                                                   └──────────────┘ |            6
|N20:24/2 - --( )-- - File #6 FANCNTRL -  5                          |
|                   File #20 FANCNTRL -  7                           |
|          --| |-- - File #2 MAIN -  18                              |
|N20:24/3 - --( )-- - File #6 FANCNTRL -  4                          |
|                   File #20 FANCNTRL -  6                           |
|          --(L)-- - File #11 ERRSTAT -  3                           |
|N20:24/5 - --( )-- - File #6 FANCNTRL -  6                          |
|                   File #20 FANCNTRL -  8                           |
|N20:24/6 - --| |-- - File #6 FANCNTRL -  4                          |
|                   File #20 FANCNTRL -  6                           |
|N20:24/7 - --| |-- - File #6 FANCNTRL -  5                          |
|                   File #20 FANCNTRL -  7                           |
|N20:24/9 - --| |-- - File #6 FANCNTRL -  6                          |
|                   File #20 FANCNTRL -  8                           |
|FILE N20:24 LEN:100 - FFL - File #13 FIFO -  10                     |
|FILE N20:24 LEN:30 - FFL - File #18 FIFOBUFFER -  1                 |
|FILE N20:24 LEN:30 - FFL - File #18 FIFOBUFFER -  1                 |
|FILE N20:24 LEN:30 - FFL - File #18 FIFOBUFFER -  1                 |
```

```
                                                                                WW TRANSFER
                                                                                WORD?
                                                                                ┌─MVM──────────┐
12 ─────────────────────────────────────────────────────────────────────────────┤Masked Move   ├─┤N20:25 - MVM - File #4 INPUTDATE
                                                                                │Source    N16:8│          12
                                                                                │              0│          File #17 COPY_OUE
                                                                                │Mask      0FC0h│          3
                                                                                │              │N20:25/0 - -( )- - File #10 GLYE
                                                                                │Dest      N20:25│N16:8 - MVM - File #4 INPUTDATAE
                                                                                │              2│          12
                                                                                └──────────────┘        MUL - File #4 INPUTDATAE
                                                                                                        7
N20:25/0 - -( )- - File #10 GLYCOLPMP -  0
           -┤ ├- - File #10 GLYCOLPMP -  1
N20:25/1 - -( )- - File #8 SYSSTAT -  2
N20:25/2 - -(L)- - File #19 SEALPOTPMP -  0
           -(U)- - File #19 SEALPOTPMP -  1
N20:25/3 - -( )- - File #8 SYSSTAT -  1
N20:25/4 - -( )- - File #8 SYSSTAT -  0
N20:25/5 - -(L)- - File #6 FANCNTRL -  13
                   File #20 FANCNTRL -  16
           -(U)- - File #3 STARTUP -  7
N20:25/6 - -┤ ├- - File #10 GLYCOLPMP -  0
           -┤/├- - File #5 INTRLKS -  32
N20:25/7 - -(L)- - File #9 SIMULATE -  0
           -(U)- - File #9 SIMULATE -  1
           -┤ ├- - File #5 INTRLKS -  3, 7, 14, 16, 17, 19, 21, 22, 24, 52, 53, 58, 62, 66
                   File #6 FANCNTRL -  0
                   File #8 SYSSTAT -  1
                   File #14 COUNTER -  3
                   File #16 INTLK -  0, 6, 22, 24
                   File #20 FANCNTRL -  0
           -┤/├- - File #5 INTRLKS -  15, 20, 25, 55, 57
                   File #6 FANCNTRL -  1, 12
                   File #8 SYSSTAT -  2
                   File #16 INTLK -  23
                   File #20 FANCNTRL -  1, 15
N20:25/9 - -┤ ├- - File #16 INTLK -  12, 37
           -┤/├- - File #5 INTRLKS -  43
N20:25/10 - -┤ ├- - File #16 INTLK -  12, 38
           -┤/├- - File #5 INTRLKS -  44
FILE N20:25 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:25 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:25 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:25 LEN:30 - FFL - File #18 FIFOBUFFER -  1
                                                                                WW TRANSFER
                                                                                WORD?
                                                                                ┌─MVM──────────┐
13 ─────────────────────────────────────────────────────────────────────────────┤Masked Move   ├─┤N20:26 - MVM - File #4 INPUTDATE
                                                                                │Source    N16:9│          13
                                                                                │              0│          File #16 INTLK -
                                                                                │Mask      0FC0h│          22, 23
                                                                                │              │          File #17 COPY_OUE
                                                                                │Dest      N20:26│N16:9 - MVM - File #4 INPUTDATAE
                                                                                │              0│          13
                                                                                └──────────────┘        MUL - File #4 INPUTDATAE
                                                                                                        8
N20:26 - MVM - File #17 COPY_OUT -  4
N20:26/1 - -( )- - File #10 GLYCOLPMP -  1
N20:26/4 - -( )- - File #16 INTLK -  37
N20:26/5 - -( )- - File #16 INTLK -  38
N20:26/6 - -┤/├- - File #16 INTLK -  12
N20:26/7 - -┤/├- - File #16 INTLK -  12
N20:26/8 - -┤ ├- - File #16 INTLK -  16
N20:26/10 - -┤ ├- - File #16 INTLK -  19
N20:26/11 - -┤ ├- - File #16 INTLK -  19
FILE N20:26 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
```

```
                                                                  WW TRANSFER
                                                                  WORD?
                                                                  ┌─MVM──────────┐  |N20:27 - MVM - File #4 INPUTDATE
14 ├──────────────────────────────────────────────────────────────┤Masked Move   ├─┤              14
   |                                                              |Source    N16:10| |             File #17 COPY_QUE
   |                                                              |             0| |              5
   |                                                              |Mask      0FC0h| |N20:27/0 - -( )- - File #16 INTE
   |                                                              |               | |N16:10 - MVM - File #4 INPUTDATE
   |                                                              |Dest      N20:27| |              14
   |                                                              |             0| |        MUL - File #4 INPUTDATE
   |                                                              └──────────────┘ |              9
   |N20:27/0 - -( )- - File #16 INTLK -  12                                        |
   |FILE N20:27 LEN:100 - FFL - File #13 FIFO -  10                                |
   |FILE N20:27 LEN:30 - FFL - File #18 FIFOBUFFER -  1                            |
   |FILE N20:27 LEN:30 - FFL - File #18 FIFOBUFFER -  1                            |
   |FILE N20:27 LEN:30 - FFL - File #18 FIFOBUFFER -  1                            |
   |                                                                               |
                                                                  ┌─RET──────────┐  |
15 ├──────────────────────────────────────────────────────────────┤Return        ├─┤
   |                                                              └──────────────┘ |
16 ├──────────────────────────────────────────────────────────────────────────[END]─┤
```

```
 0|--------------------------------------------------------------+-DIV-------------+-|
  |                                                              |Divide           |-|
  |                                                              |Source A  N17:10 | |
  |                                                              |              10 | |
  |                                                              |Source B  N17:11 | |
  |                                                              |               5 | |
  |                                                              |Dest      N17:12 | |
  |                                                              |               2 | |
  |                                                              +-----------------+ |
  |                                                        FAN STARTUP               |
  |FAN                                                     TIMER ALARM               |
  |ENABLED                                                 BYPASS                    |
  |  B3                                                    +-TON-----------+         |T4:20.DN - -| |- - File #5 INTRE
 1|--| |-----------------------------------------------------|Timer On Delay |-(EN)---|            3, 7, 14, 19
  |  34                                                    |Timer    T4:20 |-(DN)   |            24, 58
  | [2:18]                                                 |Time Base  1.0 |        |
  |                                                        |Preset      10 |        |
  |                                                        |Accum        0 |        |
  |                                                        +---------------+        |
  |PLENUM 1 PRESSURE LOW                                                            |
  |OFLOW/VAC                                                                        |
  |CTRL BIT                                                                         |
  |(OFF=FLOW,  PLENUM 1                                                             |
  |ON=VAC)     PRESSURE DATA                                                        |
  |            PDI-170                                                              |
  |   B3      +-LEQ----------------------+                       N20:38             |N20:38/2 - -( )- - File #5 INTRE
 2|---|/|-----|Less Than or Eql (A<=B)   |-------------------------+--( )----------+-|            2
  |   0       |Source A          N20:0   |                         |   2           | |         -|/|- - File #5 INTRE
  |           |                   3275   |                         |               | |            119
  |           |Source B          N19:2   |                         |               | |         COP - File #7 MESGVIE
  |           |                   5240   |                         |               | |            12
  |           +--------------------------+                         |               | |         NEQ - File #5 INTRLKE
  |           N20:0 - [4:0]                                        |               | |            114
  |                                                                |               | |         MEQ - File #12 COUNTE
  |                                                                |  B3    N20:35 | |N20:35/2 - -(L)- - File #5 INTRE
  |                                                                +-[OSR]---(L)---+ |            2
  |                                                                  102      2      |         -(U)- - File #5 INTRE
  |N20:38 - MEQ - File #12 COUNTER -  1
  |FILE N20:38/2 LEN:100 - FFL - File #13 FIFO -  10
  |FILE N20:38/2 LEN:3 - COP - File #7 MESGVIEW -  12
  |N20:35/2 - -(U)- - File #5 INTRLKS -  72
  |           FLL - File #3 STARTUP -  5
  |           COP - File #5 INTRLKS -  116
  |           NEQ - File #5 INTRLKS -  113
  |                 File #8 SYSSTAT -  0
  |FILE N20:35/2 LEN:100 - FFL - File #13 FIFO -  10
  |FILE N20:35/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1
  |FILE N20:35/2 LEN:3 - FLL - File #3 STARTUP -  5
  |                      COP - File #5 INTRLKS -  116
  |INLET VACUUM LOW
  |OFLOW/VAC
  |CTRL BIT                            FAN STARTUP
  |(OFF=FLOW,  PLENUM 1                TIMER ALARM  MOTOR          INLET VAC LO
  |ON=VAC)     PRESSURE DATA           BYPASS       CONTACT        TIMER
  |            PDI-170
  |   B3      +-LEQ----------------------+  T4:20      N20:25      +-TON-----------+        |T4:10.DN - -| |- - File #5 INTRE
 3|---| |-----|Less Than or Eql (A<=B)   |---| |--------| |---------|Timer On Delay |-(EN)---|            4
  |   0       |Source A          N20:0   |   DN          7         |Timer    T4:10 |-(DN)   |
  |           |                   3275   | [1]         [9:0]       |Time Base  1.0 |        |
  |           |Source B          N19:25  |                         |Preset       5 |        |
  |           |                   7209   |                         |Accum        0 |        |
  |           +--------------------------+                         +---------------+        |
  |           N20:0 - [4:0]
  |           N19:25 - [20:4]
```

```
 |INLET VAC LO                                                                                  |
 |TIMER                                                                                         |
 |   T4:10                                                  B3      INLET VAC LO                |N20:37/10 - -(L)- - File #5 INTE
4|----| |-------------------------------------------------[OSR]-----(L)-----------------------|          4
 |    DN                                                   128        10                        |          -(U)- - File #5 INTE
 |[3]                                                                                           |             111
 |                                                                                              |          NEQ - File #5 INTRLE
 |                                                         |INLET VAC LO                        |             113       ...
 |                                                         |   N20:40                           |N20:40 - NEQ - File #5 INTRLKS E
 |                                                         |----( )-------------------------    |             114
 |                                                                10                            |       MEQ - File #12 COUNTERE
 |N20:37 - NEQ - File #8 SYSSTAT -  0                                                           |
 |FILE N20:37/10 LEN:100 - FFL - File #13 FIFO -  10                                            |
 |FILE N20:37/10 LEN:3 - FLL - File #3 STARTUP -  5                                             |
 |                     COP - File #5 INTRLKS -  116                                             |
 |N20:40 - MEQ - File #12 COUNTER -  3                                                          |
 |FILE N20:40/10 LEN:100 - FFL - File #13 FIFO -  10                                            |
 |FILE N20:40/10 LEN:3 - COP - File #7 MESSGVIEW -  12                                          |
 |PREFILTER DP HIGH                                                                             |
 |PRE-FILTER                                                                                    |
 |DATA                                                                                          |
 |---GEQ-----------------------N20:38                                                           |
5|Grtr Than or Eql (A>=B)----|/|-------------------------------------------N20:38-----------|N20:38/3 - -(L)- - File #5 INTRE
 |Source A          N20:2|     3                                            (L)                |          5
 |                   3253| [5]                                               3                 |          -(U)- - File #5 INTRE
 |Source B          N19:3|                                                                     |          6
 |                   9831|                                                                     |          -|/|- - File #5 INTRE
 |----------------------|                                                                      |          5
 |N20:2 - [4:0]                                                                                |          COP - File #7 MESSGVIE
 |                                                                                             |             12
 |                                                                                             |          NEQ - File #5 INTRLKE
 |                                                         B3    N20:35                        |N20:35/3 - -(L)- - File #5 INTRE
 |                                                         [OSR]-----(L)-----                  |          5
 |                                                         103      3                          |          -(U)- - File #5 INTRE
 |N20:38 - NEQ - File #5 INTRLKS -  114                                                        |
 |         MEQ - File #12 COUNTER -  1                                                         |
 |FILE N20:38/3 LEN:100 - FFL - File #13 FIFO -  10                                            |
 |FILE N20:38/3 LEN:3 - COP - File #7 MESSGVIEW -  12                                          |
 |N20:35/3 - -(U)- - File #5 INTRLKS -  73                                                     |
 |          FLL - File #3 STARTUP -  5                                                          |
 |          COP - File #5 INTRLKS -  116                                                        |
 |          NEQ - File #5 INTRLKS -  113                                                        |
 |              File #8 SYSSTAT -  0                                                            |
 |FILE N20:35/3 LEN:100 - FFL - File #13 FIFO -  10                                             |
 |FILE N20:35/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                         |
 |FILE N20:35/3 LEN:3 - FLL - File #3 STARTUP -  5                                              |
 |                     COP - File #5 INTRLKS -  116                                             |
 |PREFILTER DP HIGH RESET                                                                       |
 |PRE-FILTER                                                                                    |
 |DATA                                                                                          |
 |---LEQ-----------------------B3                                                               |
6|Less Than or Eql (A<=B)----|OSR|-------------------------------------------N20:38-----------|N20:38/3 - -(L)- - File #5 INTRE
 |Source A          N20:2|   203                                            (U)                |          5
 |                   3253|                                                   3                 |          -(U)- - File #5 INTRE
 |Source B          N18:3|                                                                     |          6
 |                   9831|                                                                     |          -|/|- - File #5 INTRE
 |----------------------|                                                                      |          5
 |N20:2 - [4:0]                                                                                |          COP - File #7 MESSGVIE
 |N20:38 - NEQ - File #5 INTRLKS -  114                                                        |             12        ...
 |         MEQ - File #12 COUNTER -  1                                                         |
 |FILE N20:38/3 LEN:100 - FFL - File #13 FIFO -  10                                            |
 |FILE N20:38/3 LEN:3 - COP - File #7 MESSGVIEW -  12                                          |
 |STACK FLOW LOW                                                                                |
 |CALC FLOW                 FAN STARTUP                                                         |
 |OUTPUT VALUE              TIMER ALARM  MOTOR                  STACK FLOW LO                   |
 |(SCFM)                    BYPASS       CONTACT                TIMER                           |
 |---LEQ-----------------------T4:20     N20:25                 ---TON----------------------    |T4:4.DN - -| |- - File #5 INTRLE
7|Less Than or Eql (A<=B)----| |-------| |-------------------------Timer On Delay  |-(EN)-|          8
 |Source A          N20:9|     DN          7                    |Timer        T4:4|-(DN)-|
 |                   6242| [1]          [9:0]                   |Time Base      1.0|                |
 |Source B          N19:4|                                      |Preset          10|                |
 |                  20356|                                      |Accum            0|                |
 |----------------------|                                       |------------------|                |
 |N20:9 - [6:15]                                                                                |
 |N19:4 - [6:3]                                                                                 |
```

```
|STACK FLOW LO
|TIMER
|     T4:4                                                    N20:35                    |N20:35/4 - -(L)- - File #5 INTRE
 8|-----| |-------------------------------------------------(L)-------------------------|          8
|      DN                                                     4                          |        -(U)- - File #5 INTRE
|[7]                                                                                     |           74
|                                                                                        |      FLL - File #3 STARTUE
|                                                            |STACK FLOW LO              |           5
|                                                            |SHUTDOWN INTLK             |      COP - File #5 INTRLKE
|                                                            |TIMER                      |         116
|                                                            |-TON-------------------|   |          ...
|                                                            |Timer On Delay  |-(EN)-|   |T4:5.DN - -| |- - File #5 INTRLE
|                                                            |Timer        T4:5|-(DN)|   |           9
|                                                            |Time Base      1.0|       |
|                                                            |Preset          20|       |
|                                                            |Accum            0|       |
|N20:35 - NEQ - File #5 INTRLKS -  113                                                   |
|               File #8 SYSSTAT -  0                                                     |
|FILE N20:35/4 LEN:100 - FFL - File #13 FIFO -  10                                       |
|FILE N20:35/4 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                   |
|FILE N20:35/4 LEN:3 - FLL - File #3 STARTUP -  5                                        |
|                      COP - File #5 INTRLKS -  116                                      |
|STACK FLOW LO
|SHUTDOWN INTLK
|TIMER                                                                                   |
|     T4:5                                                                  STACK FLOW LO |
|                                                                              N20:38     |N20:38/4 - -( )- - File #5 INTRE
 9|-----| |-------------------------------------------------------------------( )-------|          9
|      DN                                                                        4       |        -|/|- - File #5 INTRE
|[8]                                                                                     |          119      ...
|N20:38 - COP - File #7 MESGVIEW -  12                                                   |
|         NEQ - File #5 INTRLKS -  114                                                   |
|         MEQ - File #12 COUNTER -  1                                                    |
|FILE N20:38/4 LEN:100 - FFL - File #13 FIFO -  10                                       |
|FILE N20:38/4 LEN:3 - COP - File #7 MESGVIEW -  12                                      |
|STACK FLOW HIGH
|CALC FLOW
|OUTPUT VALUE          STACK FLOW HI                                 STACK FLOW HI
|(SCFM)                INTLK                                         TIMER
|-GEQ-----------------|   N20:38                                    |-TON-------------|
10|Grtr Than or Eql (A>=B)|-----|/|-------------------------------------|Timer On Delay  |-(EN)-|T4:7.DN - -| |- - File #5 INTRLE
|Source A        N20:9|      5                                      |Timer        T4:7|-(DN)|          11
|                 6242| [12]                                        |Time Base      1.0|
|Source B        N19:5|                                             |Preset           5|
|                27152|                                             |Accum            0|
|N20:9 - [6:15]
|N19:5 - [6:3]
|STACK FLOW HI
|TIMER                                                   OSR ON STACK   STACK FLOW HI
|     T4:7                                               FLOW HI LATCH  LATCH ALARM
                                                              B3          N20:35          |N20:35/5 - -(L)- - File #5 INTRE
11|-----| |-------------------------------------------------[OSR]-------(L)-------------|          11
|      DN                                                     105          5             |        -(U)- - File #5 INTRE
|[10]                                                                                    |           75
|                                                                                        |      FLL - File #3 STARTUE
|                                                            |STACK FLOW HI              |           5
|                                                            |SHUTDOWN TIMER             |      COP - File #5 INTRLKE
|                                                            |-TON-------------------|   |T4:8.DN - -| |- - File #5 INTRLE
|                                                            |Timer On Delay  |-(EN)-|   |          12
|                                                            |Timer        T4:8|-(DN)|   |
|                                                            |Time Base      1.0|       |
|                                                            |Preset          10|       |
|                                                            |Accum            0|       |
|N20:35 - COP - File #5 INTRLKS -  116                                                   |
|         NEQ - File #5 INTRLKS -  113                                                   |
|               File #8 SYSSTAT -  0                                                     |
|FILE N20:35/5 LEN:100 - FFL - File #13 FIFO -  10                                       |
|FILE N20:35/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                   |
|FILE N20:35/5 LEN:3 - FLL - File #3 STARTUP -  5                                        |
|                      COP - File #5 INTRLKS -  116                                      |
```

```
    |STACK FLOW HI                                                          STACK FLOW HI  |
    |SHUTDOWN TIMER                                                         INTLK          |
    |      T4:8                                                               N20:38       |N20:38/5 - --(L)-- - File #5 INTRL
 12 |------| |-------------------------------------------------------------(L)------------|                12
    |       DN                                                                5            |          --(U)-- - File #5 INTRL
    |[11]                                                                                  |                13       ...
    |N20:38/5 - --|/|-- - File #5 INTRLKS -  10, 119                                       |
    |           COP - File #7 MESSGVIEW -  12                                              |
    |           NEQ - File #5 INTRLKS -  114                                               |
    |           MEQ - File #12 COUNTER -  1                                                |
    |FILE N20:38/5 LEN:100 - FFL - File #13 FIFO -  10                                     |
    |FILE N20:38/5 LEN:3 - COP - File #7 MESSGVIEW -  12                                   |
    |STACK DP FROM                                                                         |
    |INPUT IMAGE                                                            STACK FLOW HI  |
    |FILE                                                                   INTLK          |
    |  ,---LEQ-----------------,                                              N20:38       |N20:38/5 - --(L)-- - File #5 INTRL
 13 |--|Less Than or Eql (A<=B)|-------------------------------------------(U)------------|                12
    |  |Source A          N20:3|                                                5            |          --(U)-- - File #5 INTRL
    |  |                   3277|                                                             |                13
    |  |Source B         N18:5|                                                              |          --|/|-- - File #5 INTRL
    |  |                  10560|                                                             |                10, 119
    |  `--------------------'                                                                |          COP - File #7 MESSGVIE
    |N20:3 - [39]                                                                            |                12       ...
    |N20:38 - NEQ - File #5 INTRLKS -  114                                                   |
    |         MEQ - File #12 COUNTER -  1                                                    |
    |FILE N20:38/5 LEN:100 - FFL - File #13 FIFO -  10                                       |
    |FILE N20:38/5 LEN:3 - COP - File #7 MESSGVIEW -  12                                     |
    |FILTER 1 DP LO ALARM                                                                    |
    |                                  FAN STARTUP                                           |
    |FILTER 1 DP                MOTOR  TIMER ALARM                                           |
    |DATA                       CONTACT BYPASS                                               |
    |  ,---LEQ-----------------,  N20:25    T4:20     B3                                   |
 14 |--|Less Than or Eql (A<=B)|--|--| |--------| |--------[OSR]-------------------------|
    |  |Source A          N20:4|   7          DN       106                                  |
    |  |                   3267| [9:0]      [1]                                            |
    |  |Source B         N19:6|                                                              |
    |  |                  3408|                                                             |
    |  `--------------------'                                                                |
    |N20:4 - [4:1]                                                                           |
    |                                                                       FILTER 1 DP LO |
    |                                                                         N20:35       |N20:35/6 - --(L)-- - File #5 INTRL
    |                                                                       ------(L)------|                14
    |                                                                         6            |          --(U)-- - File #5 INTRL
    |N20:38 - NEQ - File #5 INTRLKS -  114                                                   |
    |         MEQ - File #12 COUNTER -  1                                                    |
    |FILE N20:38/6 LEN:100 - FFL - File #13 FIFO -  10                                       |
    |FILE N20:38/6 LEN:3 - COP - File #7 MESSGVIEW -  12                                     |
    |N20:35/6 - --(U)-- - File #5 INTRLKS -  76                                              |
    |           --|/|-- - File #5 INTRLKS -  15                                              |
    |           FLL - File #3 STARTUP -  5                                                   |
    |           COP - File #5 INTRLKS -  116                                                 |
    |           NEQ - File #5 INTRLKS -  113                                                 |
    |                File #8 SYSSTAT -  0                                                    |
    |FILE N20:35/6 LEN:100 - FFL - File #13 FIFO -  10                                       |
    |FILE N20:35/6 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                   |
    |FILE N20:35/6 LEN:3 - FLL - File #3 STARTUP -  5                                        |
    |                      COP - File #5 INTRLKS -  116                                      |
    |FILTER 1 DP LO RESET                                                                    |
    |MOTOR                                                                                   |
    |CONTACT  FILTER 1 DP LO                                                FILTER 1 DP LO   |
    | N20:25       N20:35                                                     N20:38       |N20:38/6 - --(L)-- - File #5 INTRL
 15 |--|/|----------|/|-------------------------------------------------(U)------------|                14
    |   7           6                                                         6            |          --(U)-- - File #5 INTRL
    |[9:0]     [14]                                                                        |                15       ...
    |N20:38/6 - --|/|-- - File #5 INTRLKS -  119                                           |
    |           COP - File #7 MESSGVIEW -  12                                              |
    |           NEQ - File #5 INTRLKS -  114                                               |
    |           MEQ - File #12 COUNTER -  1                                                |
    |FILE N20:38/6 LEN:100 - FFL - File #13 FIFO -  10                                     |
    |FILE N20:38/6 LEN:3 - COP - File #7 MESSGVIEW -  12                                   |
```

```
|FILTER 1 DP HIHI ALARM
|FILTER 1 DP                 FILTER 1 DP   MOTOR                                  FILTER 1 DP
|DATA                        HI HI         CONTACT                                HI HI
|┌─GEQ──────────────┐         N20:38        N20:25                                 N20:38          |N20:38/7 - —(L)— - File #5 INTRE
16├Grtr Than or Eql (A>=B)├──────┤/├──────────┤ ├──────────────────────────────────────(L)──────┤                  16
|│Source A        N20:4│       7             7                                      7            │          —(U)— - File #5 INTRE
|│                 3267│ [16]              [9:0]                                                  │                  18
|│Source B        N19:7│                                                                          │          —┤ ├— - File #5 INTRE
|│                10355│                                                                          │                  45
|└──────────────────┘                                                                 FILTER 1 DP │          —┤/├— - File #5 INTRE
|N20:4 - [4:1]                                                                        HI HI       │                  16, 119
|                                                                                                 │          COP - File #7 MESSGVIE
|                                                                                     N20:35      │N20:35/7 - —(L)— - File #5 INTRE
|                                                                                       (L)       │                  16
|                                                                                       7         │          —(U)— - File #5 INTRE
|
|N20:38 - COP - File #7 MESSGVIEW -  12
|         NEQ - File #5 INTRLKS -  114
|         MEQ - File #12 COUNTER -  1
|FILE N20:38/7 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:38/7 LEN:3 - COP - File #7 MESSGVIEW -  12
|N20:35/7 - —(U)— - File #5 INTRLKS -  77
|          FLL - File #3 STARTUP -  5
|          COP - File #5 INTRLKS -  116
|          NEQ - File #5 INTRLKS -  113
|               File #8 SYSSTAT -  0
|FILE N20:35/7 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:35/7 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:35/7 LEN:3 - FLL - File #3 STARTUP -  5
|                COP - File #5 INTRLKS -  116
|FILTER 1 DP HI ALARM
|FILTER 1 DP                                   MOTOR
|DATA                        FILTER 1 DP HI    CONTACT                              FILTER 1 DP HI
|┌─GEQ──────────────┐         N20:38        N20:25                                 N20:38          |N20:38/8 - —(L)— - File #5 INTRE
17├Grtr Than or Eql (A>=B)├──────┤/├──────────┤ ├──────────────────────────────────────(L)──────┤                  17
|│Source A        N20:4│       8             7                                      8            │          —(U)— - File #5 INTRE
|│                 3267│ [17]              [9:0]                                                  │                  18, 45
|│Source B        N19:8│                                                                          │          —┤/├— - File #5 INTRE
|│                 9175│                                                                          │                  17
|└──────────────────┘                                                                             │          COP - File #7 MESSGVIE
|N20:4 - [4:1]                                                                        FILTER 1 DP HI │                  12
|                                                                                                 │          NEQ - File #5 INTRLKE
|                                                                                     N20:35      │N20:35/8 - —(L)— - File #5 INTRE
|                                                                                       (L)       │                  17
|                                                                                       8         │          —(U)— - File #5 INTRE
|N20:38 - NEQ - File #5 INTRLKS -  114
|         MEQ - File #12 COUNTER -  1
|FILE N20:38/8 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:38/8 LEN:3 - COP - File #7 MESSGVIEW -  12
|N20:35/8 - —(U)— - File #5 INTRLKS -  45, 78
|          FLL - File #3 STARTUP -  5
|          COP - File #5 INTRLKS -  116
|          NEQ - File #5 INTRLKS -  113
|               File #8 SYSSTAT -  0
|FILE N20:35/8 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:35/8 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:35/8 LEN:3 - FLL - File #3 STARTUP -  5
|                COP - File #5 INTRLKS -  116
|FILTER 1 DP
|DATA                                                                                 FILTER 1 DP HI
|┌─LEQ──────────────┐         B3                                                     N20:38          |N20:38/8 - —(L)— - File #5 INTRE
18├Less Than or Eql (A<=B)├──────├[OSR]──────────────────────────────────────────────────(U)──────┤                  17
|│Source A        N20:4│       207                                                    8            │          —(U)— - File #5 INTRE
|│                 3267│                                                                          │                  18, 45
|│Source B        N18:8│                                                                          │          —┤/├— - File #5 INTRE
|│                 8518│                                                                          │                  17
|└──────────────────┘                                                                 FILTER 1 DP │          COP - File #7 MESSGVIE
|N20:4 - [4:1]                                                                        HI HI       │                  12
|                                                                                                 │          NEQ - File #5 INTRLKE
|                                                                                     N20:38      │N20:38/7 - —(L)— - File #5 INTRE
|                                                                                       (U)       │                  16
|                                                                                       7         │          —(U)— - File #5 INTRE
|
```

```
    |N20:38 - NEQ - File #5 INTRLKS -  114                                                  |
    |        MEQ - File #12 COUNTER -  1                                                     |
    |FILE N20:38/8 LEN:100 - FFL - File #13 FIFO -  10                                       |
    |FILE N20:38/8 LEN:3 - COP - File #7 MESGVIEW -  12                                      |
    |N20:38/7 - —(U)— - File #5 INTRLKS -  18                                                |
    |          —| |— - File #5 INTRLKS -  45                                                 |
    |          —|/|— - File #5 INTRLKS -  16, 119                                            |
    |          COP - File #7 MESGVIEW -  12                                                  |
    |          NEQ - File #5 INTRLKS -  114                                                  |
    |          MEQ - File #12 COUNTER -  1                                                   |
    |FILE N20:38/7 LEN:100 - FFL - File #13 FIFO -  10                                       |
    |FILE N20:38/7 LEN:3 - COP - File #7 MESGVIEW -  12                                      |
    |                                FAN STARTUP                                             |
    |FILTER 2 DP                MOTOR   TIMER ALARM                                          |
    |DATA                       CONTACT BYPASS                                               |
    |  ┌─LEQ──────────────┐      N20:25     T4:20      B3                                   |
19  |─┤Less Than or Eql (A<=B)├──┤ |──────┤ |──────[OSR]──────────────────────────────────|
    |  |Source A        N20:5|    7          DN        109                                  |
    |  |                 3291| [9:0]      [1]                                               |
    |  |Source B        N19:9|                                                              |
    |  |                 3495|                                                              |
    |  └──────────────────┘                                                                  |
    |N20:5 - [18:2]                                                                          |
    |                                                                                        |
    |                                                                                        |
    |                                                                                        |
    |N20:38 - NEQ - File #5 INTRLKS -  114                                                   |
    |        MEQ - File #12 COUNTER -  1                                                     |
    |FILE N20:38/9 LEN:100 - FFL - File #13 FIFO -  10                                       |
    |FILE N20:38/9 LEN:3 - COP - File #7 MESGVIEW -  12                                      |
    |N20:35/9 - —(U)— - File #5 INTRLKS -  79                                                |
    |          —|/|— - File #5 INTRLKS -  20                                                 |
    |          FLL - File #3 STARTUP -  5                                                    |
    |          COP - File #5 INTRLKS -  116                                                  |
    |          NEQ - File #5 INTRLKS -  113                                                  |
    |                File #8 SYSSTAT -  0                                                    |
    |FILE N20:35/9 LEN:100 - FFL - File #13 FIFO -  10                                       |
    |FILE N20:35/9 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                   |
    |FILE N20:35/9 LEN:3 - FLL - File #3 STARTUP -  5                                        |
    |                    COP - File #5 INTRLKS -  116                                        |
    |FILTER 2 DP LO RESET                                                                    |
    |MOTOR                                                                                   |
    |CONTACT  FILTER 2 DP LO                                                                 |
    | N20:25       N20:35                                                                    |
20  |──┤/├──────────┤/├──────────────────────────────────────────────────────────────────|
    |   7           9                                                                        |
    |[9:0]     [19]                                                                          |
    |N20:38/9 - —|/|— - File #5 INTRLKS -  119                                               |
    |          COP - File #7 MESGVIEW -  12                                                  |
    |          NEQ - File #5 INTRLKS -  114                                                  |
    |          MEQ - File #12 COUNTER -  1                                                   |
    |FILE N20:38/9 LEN:100 - FFL - File #13 FIFO -  10                                       |
    |FILE N20:38/9 LEN:3 - COP - File #7 MESGVIEW -  12                                      |
    |FILTER 2 DP HI HI                                                                       |
    |FILTER 2 DP                FILTER #2 DP  MOTOR                                          |
    |DATA                       HI HI         CONTACT                                        |
    |  ┌─GEQ──────────────┐      N20:38     N20:25                                           |
21  |─┤Grtr Than or Eql (A>=B)├──┤/├──────────┤ |──────────────────────────────────────────|
    |  |Source A        N20:5|    10           7                                            |
    |  |                 3291| [21]          [9:0]                                          |
    |  |Source B       N19:10|                                                              |
    |  |                11360|                                                              |
    |  └──────────────────┘                                                                  |
    |N20:5 - [18:2]                                                                          |
    |                                                                                        |
    |                                                                                        |
    |                                                                                        |
    |N20:38 - COP - File #7 MESGVIEW -  12                                                   |
    |        NEQ - File #5 INTRLKS -  114                                                    |
    |        MEQ - File #12 COUNTER -  1                                                     |
    |FILE N20:38/10 LEN:100 - FFL - File #13 FIFO -  10                                      |
```

```
FILTER 2 DP LO
    N20:38
  ──(L)──
     9

FILTER 2 DP LO
    N20:35
  ──(L)──
     9

FILTER 2 DP LO
    N20:38
  ──(U)──
     9

FILTER #2 DP
HI HI
    N20:38
  ──(L)──
     10

FILTER #2 DP
HI HI
    N20:35
  ──(L)──
     10
```

```
N20:38/9 - —(L)— - File #5 INTRL
                        19
         —(U)— - File #5 INTRL
                        20
         —|/|— - File #5 INTRL
                        119
         COP - File #7 MESGVIE
                        12
         NEQ - File #5 INTRLKS
N20:35/9 - —(L)— - File #5 INTRL
                        19
         —(U)— - File #5 INTRL

N20:38/9 - —(L)— - File #5 INTRL
                        19
         —(U)— - File #5 INTRL
                        20      ...

N20:38/10 - —(L)— - File #5 INTR
                        21
         —(U)— - File #5 INTR
                        23
         —| |— - File #5 INTR
                        46
         —|/|— - File #5 INTR
                        21, 120
         COP - File #7 MESGVE
N20:35/10 - —(L)— - File #5 INTR
                        21
         —(U)— - File #5 INTR
```

```
|FILE N20:38/10 LEN:3 - COP - File #7 MESSGVIEW -  12
|N20:35/10 - -(U)- - File #5 INTRLKS -  80
|           FFL - File #3 STARTUP -  5
|           COP - File #5 INTRLKS -  116
|           NEQ - File #5 INTRLKS -  113
|                File #8 SYSSTAT -  0
|FILE N20:35/10 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:35/10 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:35/10 LEN:3 - FLL - File #3 STARTUP -  5
|                    COP - File #5 INTRLKS -  116
|FILTER 2 DP HI
|FILTER 2 DP                MOTOR
|DATA                       CONTACT  FILTER #2 DP HI                    FILTER #2 DP HI
|  ┌─GEQ──────────────┐      N20:25      N20:38                            N20:38          |N20:38/11 - -(L)- - File #5 INTE
22├Grtr Than or Eql (A>=B)├──┤ ├──────────┤/├──────────────────────────────────(L)──────┤                22
|  │Source A        N20:5│    7            11                                 11          │          -(U)- - File #5 INTE
|  │                3291│  [9:0]     [22]                                                 │             23, 46
|  │Source B       N19:11│                                                                │          -┤/├- - File #5 INTE
|  │                10267│                                                                │                22
|  └──────────────────┘                                                                   │          COP - File #7 MESSGVE
|N20:5 - [18:2]                                                          FILTER 2 DP HI   │                12
|                                                                                         │          NEQ - File #5 INTRLE
|                                                                                         │
|                                                                          N20:35         │N20:35/11 - -(L)- - File #5 INTE
|                                                                         └──(L)──────┘   │                22
|                                                                            11           │          -(U)- - File #5 INTE
|N20:38 - NEQ - File #5 INTRLKS -  114
|        MEQ - File #12 COUNTER -  1
|FILE N20:38/11 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:38/11 LEN:3 - COP - File #7 MESSGVIEW -  12
|N20:35/11 - -(U)- - File #5 INTRLKS -  46, 81
|           FLL - File #3 STARTUP -  5
|           COP - File #5 INTRLKS -  116
|           NEQ - File #5 INTRLKS -  113
|                File #8 SYSSTAT -  0
|FILE N20:35/11 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:35/11 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:35/11 LEN:3 - FLL - File #3 STARTUP -  5
|                    COP - File #5 INTRLKS -  116
|FILTER 2 DP
|DATA                                                                     FILTER #2 DP HI
|  ┌─LEQ──────────────┐      B3                                              N20:38          |N20:38/11 - -(L)- - File #5 INTE
23├Less Than or Eql (A<=B)├──[OSR]──────────────────────────────────────────────(U)──────┤                22
|  │Source A        N20:5│  210                                                 11          │          -(U)- - File #5 INTE
|  │                3291│                                                                │             23, 46
|  │Source B       N18:11│                                                                │          -┤/├- - File #5 INTE
|  │                 9615│                                                                │                22
|  └──────────────────┘                                                                   │          COP - File #7 MESSGVE
|N20:5 - [18:2]                                                          FILTER #2 DP     │                12
|                                                                         HI HI           │          NEQ - File #5 INTRLE
|                                                                                         │
|                                                                          N20:38         │N20:38/10 - -(L)- - File #5 INTE
|                                                                         └──(U)──────┘   │                21
|                                                                            10           │          -(U)- - File #5 INTE
|N20:38 - NEQ - File #5 INTRLKS -  114
|        MEQ - File #12 COUNTER -  1
|FILE N20:38/11 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:38/11 LEN:3 - COP - File #7 MESSGVIEW -  12
|N20:38/10 - -(U)- - File #5 INTRLKS -  23
|           -┤ ├- - File #5 INTRLKS -  46
|           -┤/├- - File #5 INTRLKS -  21, 120
|           COP - File #7 MESSGVIEW -  12
|           NEQ - File #5 INTRLKS -  114
|           MEQ - File #12 COUNTER -  1
|FILE N20:38/10 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:38/10 LEN:3 - COP - File #7 MESSGVIEW -  12
```

```
                                   FAN STARTUP
 FILTERS 1&2 DP                    TIMER ALARM
 DATA                              BYPASS                                  FILTER 1&2
                   MOTOR           T4:20      B3                           DP LO
 ┌─LEQ──────────┐  CONTACT  N20:25                                         N20:38      N20:38/12 - -(L)- - File #5 INTE
24├Less Than or Eql (A<=B)├──┤ ├──────┤ ├──────[OSR]──────────────────────────(L)──┐                  24
 │Source A      N20:6 │   7        IN        112                          12   │          -(U)- - File #5 INTE
 │              3255 │ [9:0]     [1]                                            │                  25
 │Source B     N19:12 │                                                        │          -┤/├- - File #5 INTE
 │              3495 │                                                        │                 120
 └──────────────────┘                                                        FILTER 1&2         COP - File #7 MESGVE
 N20:6 - [18:2]                                                              DP LO                  12
                                                                                                NEQ - File #5 INTRLE
                                                                             N20:35      N20:35/12 - -(L)- - File #5 INTE
                                                                              └──(L)──┘                 24
                                                                                 12             -(U)- - File #5 INTE
 N20:38 - NEQ - File #5 INTRLKS -  114
          MEQ - File #12 COUNTER -  1
 FILE N20:38/12 LEN:100 - FFL - File #13 FIFO -  10
 FILE N20:38/12 LEN:3 - COP - File #7 MESGVIEW -  12
 N20:35/12 - -(U)- - File #5 INTRLKS -  82
           -┤/├- - File #5 INTRLKS -  25
           FLL - File #3 STARTUP -  5
           COP - File #5 INTRLKS -  116
           NEQ - File #5 INTRLKS -  113
                 File #8 SYSSTAT -  0
 FILE N20:35/12 LEN:100 - FFL - File #13 FIFO -  10
 FILE N20:35/12 LEN:30 - FFL - File #18 FIFOBUFFER -  1
 FILE N20:35/12 LEN:3 - FLL - File #3 STARTUP -  5
                        COP - File #5 INTRLKS -  116
 FILTER 1&2 DP LO RESET
 MOTOR    FILTER 1&2                                                         FILTER 1&2
 CONTACT  DP LO                                                              DP LO
  N20:25     N20:35                                                           N20:38      N20:38/12 - -(L)- - File #5 INTE
25├──┤/├──────┤/├──────────────────────────────────────────────────────────────(U)──┤                  24
   7         12                                                                12             -(U)- - File #5 INTE
 [9:0]     [24]                                                                                     25      ...
 N20:38/12 - -┤/├- - File #5 INTRLKS -  120
           COP - File #7 MESGVIEW -  12
           NEQ - File #5 INTRLKS -  114
           MEQ - File #12 COUNTER -  1
 FILE N20:38/12 LEN:100 - FFL - File #13 FIFO -  10
 FILE N20:38/12 LEN:3 - COP - File #7 MESGVIEW -  12
 FILTERS 1&2 DP
 DATA
 ┌─GEQ──────────┐                                                          N20:38      N20:38/13 - -( )- - File #5 INTE
26├Grtr Than or Eql (A>=B)├──────────────────────────────────────────────────( )──┤                  26
 │Source A      N20:6 │                                                        13   │          -┤ ├- - File #5 INTE
 │              3255 │                                                             │                  47
 │Source B     N19:13 │                                                             │          -┤/├- - File #5 INTE
 │             15073 │                                                             │                 120
 └──────────────────┘                                                             │          COP - File #7 MESGVE
 N20:6 - [18:2]                                                                   │                  12
                                                                                  │          NEQ - File #5 INTRLE
                                                                          B3   N20:35  N20:35/13 - -(L)- - File #5 INTE
                                                                         └[OSR]──(L)──┘                 26
                                                                          114     13            -(U)- - File #5 INTE
 N20:38 - NEQ - File #5 INTRLKS -  114
          MEQ - File #12 COUNTER -  1
 FILE N20:38/13 LEN:100 - FFL - File #13 FIFO -  10
 FILE N20:38/13 LEN:3 - COP - File #7 MESGVIEW -  12
 N20:35/13 - -(U)- - File #5 INTRLKS -  83
           FLL - File #3 STARTUP -  5
           COP - File #5 INTRLKS -  116
           NEQ - File #5 INTRLKS -  113
                 File #8 SYSSTAT -  0
 FILE N20:35/13 LEN:100 - FFL - File #13 FIFO -  10
 FILE N20:35/13 LEN:30 - FFL - File #18 FIFOBUFFER -  1
 FILE N20:35/13 LEN:3 - FLL - File #3 STARTUP -  5
                        COP - File #5 INTRLKS -  116
```

```
   |GLYCOL LEVEL              GLYCOL LEVEL                                GLYCOL LEVEL                |
   |DATA                      LOW CURR ALM                                LOW CURR ALM                |
   |┌─LEQ──────────────┐        N20:38                                      N20:38                   |N20:38/15 - -(L)- - File #5 INTE
27 |│Less Than or Eql (A<=B)│──────┤/├──────────────────────────────────────────(L)──────────────────│                27
   |│Source A        N20:10│       15                                          15                      │          -(U)- - File #5 INTE
   |│                10715│ [27]                                                                      │                28
   |│Source B        N19:15│                                                                           │          -┤/├- - File #5 INTE
   |│                 9831│                                                                           │                27
   |└──────────────────┘                                                                              │              File #10 GLE
   |N20:10 - [4:2]                                                                                    │                0, 1
   |                                                                                                  │          COP - File #7 MESGVE
   |                                                                  GLYCOL LEVEL                    |
   |                                                                  LOW UNACK ALM                   |
   |                                                                                                  |
   |                                                                B3        N20:35                  |N20:35/15 - -(L)- - File #5 INTE
   |                                                                [OSR]──────(L)──────              |                27
   |                                                                115          15                  |          -(U)- - File #5 INTE
   |N20:38 - COP - File #7 MESGVIEW -  12
   |         NBQ - File #5 INTRLKS -  114
   |         MEQ - File #12 COUNTER -  1
   |FILE N20:38/15 LEN:100 - FFL - File #13 FIFO -  10
   |FILE N20:38/15 LEN:3 - COP - File #7 MESGVIEW -  12
   |N20:35/15 - -(U)- - File #5 INTRLKS -  85
   |            -┤/├- - File #10 GLYCOLPMP -  0, 1
   |            FLL - File #3 STARTUP -  5
   |            COP - File #5 INTRLKS -  116
   |            NBQ - File #5 INTRLKS -  113
   |                File #8 SYSSTAT -  0
   |FILE N20:35/15 LEN:100 - FFL - File #13 FIFO -  10
   |FILE N20:35/15 LEN:30 - FFL - File #18 FIFOBUFFER -  1
   |FILE N20:35/15 LEN:3 - FLL - File #3 STARTUP -  5
   |                    COP - File #5 INTRLKS -  116
   |GLYCOL LEVEL                                                      GLYCOL LEVEL                    |
   |DATA                                                              LOW CURR ALM                    |
   |┌─GEQ──────────────┐  B3                                             N20:38                   |N20:38/15 - -(L)- - File #5 INTE
28 |│Grtr Than or Eql (A>=B)│─┤OSR├──────────────────────────────────────────(U)──────────────────│                27
   |│Source A        N20:10│ 215                                              15                      │          -(U)- - File #5 INTE
   |│                10715│                                                                           │                28
   |│Source B        N18:15│                                                                           │          -┤/├- - File #5 INTE
   |│                10475│                                                                           │                27
   |└──────────────────┘                                                                              │              File #10 GLE
   |N20:10 - [4:2]                                                                                    │                0, 1    ...
   |N20:38 - COP - File #7 MESGVIEW -  12
   |         NBQ - File #5 INTRLKS -  114
   |         MEQ - File #12 COUNTER -  1
   |FILE N20:38/15 LEN:100 - FFL - File #13 FIFO -  10
   |FILE N20:38/15 LEN:3 - COP - File #7 MESGVIEW -  12
   |                    HIR AIR TMP
   |                    HIGH CURR ALM
   |┌─GEQ──────────────┐    N20:39                                   ┌─TON──────────┐              |T4:16.DN - -┤ ├- - File #5 INTRE
29 |│Grtr Than or Eql (A>=B)│──────┤/├──────────────────────────────│Timer On Delay │─(EN)─│                30
   |│Source A        N20:29│       0                                 │Timer      T4:16│─(DN)│
   |│                   100│ [30]                                    │Time Base     1.0│
   |│Source B        N19:16│                                         │Preset          2│
   |│                   190│                                         │Accum           0│
   |└──────────────────┘                                             └──────────────┘
   |N20:29 - [13:10]
   |                                                                  HIR AIR TMP
   |                                                                  HIGH CURR ALM
   |T4:16                                                                N20:39                   |N20:39/0 - -(L)- - File #5 INTRE
30 |─┤ ├──────────────────────────────────────────────────────────────────(L)──────────────────│                30
   |  DN                                                                   0                      │          -(U)- - File #5 INTRE
   |[29]                                                                                          │                31
   |                                                                                              │          -┤/├- - File #5 INTRE
   |                                                                  HIR AIR TEMP                |                29
   |                                                                  HIGH UNACK                  |              File #10 GLYE
   |                                                                  ALM                         |                1       ...
   |                                                                B3        N20:36                  |N20:36/0 - -(L)- - File #5 INTRE
   |                                                                [OSR]──────(L)──────              |                30
   |                                                                116          0                   |          -(U)- - File #5 INTRE
   |N20:39 - NBQ - File #5 INTRLKS -  114
   |         MEQ - File #12 COUNTER -  2
   |FILE N20:39/0 LEN:100 - FFL - File #13 FIFO -  10
   |FILE N20:39/0 LEN:3 - COP - File #7 MESGVIEW -  12
```

```
 |N20:36/0 - -(U)- - File #5 INTRLKS -  86
 |          -|/|- - File #10 GLYCOLPMP -  1
 |          NEQ - File #5 INTRLKS -  113
 |               File #8 SYSSTAT -  0
 |FILE N20:36/0 LEN:100 - FFL - File #13 FIFO -  10
 |FILE N20:36/0 LEN:3 - FLL - File #3 STARTUP -  5
 |                    COP - File #5 INTRLKS -  116
 |                                                                  HIR AIR TMP
 |                                                                  HIGH CURR ALM
 |  ┌-LEQ-------------------┐ B3                                     N20:39
31|-|Less Than or Eql (A<=B) |-|OSR|-------------------------------------(U)-----|N20:39/0 - -(L)- - File #5 INTRE
 |  |Source A        N20:29| 230                                        0                  30
 |  |                   100|                                                     -(U)- - File #5 INTRE
 |  |Source B        N18:16|                                                                31
 |  |                   160|                                                     -|/|- - File #5 INTRE
 |  └-----------------------┘                                                                29
 |                                                                                      File #10 GLYE
 |N20:29 - [13:10]                                                                        1        ...
 |N20:39 - NEQ - File #5 INTRLKS -  114
 |         NEQ - File #12 COUNTER -  2
 |FILE N20:39/0 LEN:100 - FFL - File #13 FIFO -  10
 |FILE N20:39/0 LEN:3 - COP - File #7 MESGVIEW -  12
 |GLYCOL PUMP
 |ON/OFF
 |   N20:25                                                         N20:39
32|-------|/|-------------------------------------------------------|-( )-------|N20:39 - NEQ - File #5 INTRLKS E
 |     6                                                            1          |                114
 |[4:12]                                                             |        NEQ - File #12 COUNTERE
 |                                                                   |                2
 |                                                                   |FILE N20:39/1 LEN:100 -      ...
 |                                                                   | B3    N20:36 |N20:36/1 - -(L)- - File #5 INTRE
 |                                                                   |-|OSR|---|L|--|                32
 |                                                                   119     1      |        -(U)- - File #5 INTRE
 |N20:39/1 - FFL - File #13 FIFO -  10
 |FILE N20:39/1 LEN:3 - COP - File #7 MESGVIEW -  12
 |N20:36/1 - -(U)- - File #5 INTRLKS -  87
 |          NEQ - File #5 INTRLKS -  113
 |               File #8 SYSSTAT -  0
 |FILE N20:36/1 LEN:100 - FFL - File #13 FIFO -  10
 |FILE N20:36/1 LEN:3 - FLL - File #3 STARTUP -  5
 |                    COP - File #5 INTRLKS -  116
 |  ┌-LEQ-------------------┐ N20:39                                 N20:39
33|-|Less Than or Eql (A<=B) |-|/|-----------------------------------|-(L)-------|N20:39/2 - -(L)- - File #5 INTRE
 |  |Source A        N20:29|   2                                      2          |                33
 |  |                   100| [33]                                                        -(U)- - File #5 INTRE
 |  |Source B        N19:18|                                                                34
 |  |                    40|                                                                -|/|- - File #5 INTRE
 |  └-----------------------┘                                                                33
 |N20:29 - [13:10]                                                                        NEQ - File #5 INTRLKE
 |                                                                                          114
 |                                                                                        NEQ - File #12 COUNTE
 |                                                                   | B3    N20:36 |N20:36/2 - -(L)- - File #5 INTRE
 |                                                                   |-|OSR|---|L|--|                33
 |                                                                   141     2      |        -(U)- - File #5 INTRE
 |N20:39 - NEQ - File #12 COUNTER -  2
 |FILE N20:39/2 LEN:100 - FFL - File #13 FIFO -  10
 |FILE N20:39/2 LEN:3 - COP - File #7 MESGVIEW -  12
 |N20:36/2 - -(U)- - File #5 INTRLKS -  88
 |          NEQ - File #5 INTRLKS -  113
 |               File #8 SYSSTAT -  0
 |FILE N20:36/2 LEN:100 - FFL - File #13 FIFO -  10
 |FILE N20:36/2 LEN:3 - FLL - File #3 STARTUP -  5
 |                    COP - File #5 INTRLKS -  116
 |  ┌-GEQ-------------------┐ B3                                     N20:39
34|-|Grtr Than or Eql (A>=B) |-|OSR|-------------------------------------(U)-----|N20:39/2 - -(L)- - File #5 INTRE
 |  |Source A        N20:29| 146                                        2                  33
 |  |                   100|                                                     -(U)- - File #5 INTRE
 |  |Source B        N18:18|                                                                34
 |  |                    45|                                                                -|/|- - File #5 INTRE
 |  └-----------------------┘                                                                33
 |                                                                                        NEQ - File #5 INTRLKE
 |N20:29 - [13:10]                                                                          114        ...
 |N20:39 - NEQ - File #12 COUNTER -  2
 |FILE N20:39/2 LEN:100 - FFL - File #13 FIFO -  10
 |FILE N20:39/2 LEN:3 - COP - File #7 MESGVIEW -  12
```

```
|                                HI VACUUM MODE
|SEAL POT LEVEL                  (SEAL POT PLUG)
|PUMP ON AT 70%                  SELECTED
|LT185
|┌─LEQ──────────────┐      B3                                N20:39          |N20:39/3 - -(L)- - File #5 INTRE
35├Less Than or Eql (A<=B)├──────┤/├──────────────────────────────(L)──────┤                35
|│Source A       N20:11│       1                                3          │          -(U)- - File #5 INTRE
|│                10688│                                                   │                36
|│Source B       N19:19│                                                   │          -|/|- - File #5 INTRE
|│                 7209│                                                   │                120
|└──────────────────┘                                                     │          NEQ - File #5 INTRLKE
|N20:11 - [13:10]                                                         │                114
|                                                                         │          MEQ - File #12 COUNTE
|                                                                         │
|                                                          B3    N20:36   |N20:36/3 - -(L)- - File #5 INTRE
|                                                         └[OSR]──(L)──┘                35
|                                                          130     3      │          -(U)- - File #5 INTRE
|N20:39 - MEQ - File #12 COUNTER -  2
|FILE N20:39/3 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:39/3 LEN:3 - COP - File #7 MESGVIEW -  12
|N20:36/3 - -(U)- - File #5 INTRLKS -  89
|           NEQ - File #5 INTRLKS -  113
|               File #8 SYSSTAT -  0
|FILE N20:36/3 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:36/3 LEN:3 - FLL - File #3 STARTUP -  5
|                   COP - File #5 INTRLKS -  116
|SEAL POT LEVEL
|PUMP ON AT 70%
|LT185
|┌─GEQ──────────────┐      B3                                N20:39          |N20:39/3 - -(L)- - File #5 INTRE
36├Grtr Than or Eql (A>=B)├─[OSR]──────────────────────────────────(U)──┤                35
|│Source A       N20:11│  131                                   3          │          -(U)- - File #5 INTRE
|│                10688│                                                   │                36
|│Source B       N18:19│                                                   │          -|/|- - File #5 INTRE
|│                 7864│                                                   │                120
|└──────────────────┘                                                     │          NEQ - File #5 INTRLKE
|N20:11 - [13:10]                                                         │                114        ...
|N20:39 - MEQ - File #12 COUNTER -  2
|FILE N20:39/3 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:39/3 LEN:3 - COP - File #7 MESGVIEW -  12
|                                HI VACUUM MODE
|SEAL POT LEVEL                  (SEAL POT PLUG)
|PUMP ON AT 70%                  SELECTED
|LT185
|┌─GEQ──────────────┐ N20:39   B3                                N20:39          |N20:39/4 - -(L)- - File #5 INTRE
37├Grtr Than or Eql (A>=B)├──┤/├────┤/├──────────────────────────────(L)──────┤                37
|│Source A       N20:11│    4      1                                4          │          -(U)- - File #5 INTRE
|│                10688│ [37]                                                │                38
|│Source B       N19:20│                                                   │          -|/|- - File #5 INTRE
|│                13763│                                                   │                37, 121
|└──────────────────┘                                                     │          NEQ - File #5 INTRLKE
|N20:11 - [13:10]                                                         │                114
|                                                                         │          MEQ - File #12 COUNTE
|                                                          B3    N20:36   |N20:36/4 - -(L)- - File #5 INTRE
|                                                         └[OSR]──(L)──┘                37
|                                                          132     4      │          -(U)- - File #5 INTRE
|N20:39 - MEQ - File #12 COUNTER -  2
|FILE N20:39/4 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:39/4 LEN:3 - COP - File #7 MESGVIEW -  12
|N20:36/4 - -(U)- - File #5 INTRLKS -  90
|           NEQ - File #5 INTRLKS -  113
|               File #8 SYSSTAT -  0
|FILE N20:36/4 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:36/4 LEN:3 - FLL - File #3 STARTUP -  5
|                   COP - File #5 INTRLKS -  116
```

```
    |SEAL POT LEVEL
    |PUMP ON AT 70%
    |LT185
    |┌─LEQ──────────────┐  B3                                                  N20:39 |N20:39/4 - -(L)- - File #5 INTRE
 38 |│Less Than or Eql (A<=B)│[OSR]──────────────────────────────────────────(U)──┤                  37
    |│Source A        N20:11│  133                                                 4  |        -(U)- - File #5 INTRE
    |│                10688│                                                         |                  38
    |│Source B        N18:20│                                                         |        -┤/├- - File #5 INTRE
    |│                 13107│                                                         |                  37, 121
    |└──────────────────┘                                                            |      NEQ - File #5 INTRLKE
    |                                                                                |                 114        ...
    |N20:11 - [13:10]
    |N20:39 - MEQ - File #12 COUNTER -  2
    |FILE N20:39/4 LEN:100 - FFL - File #13 FIFO -  10
    |FILE N20:39/4 LEN:3 - COP - File #7 MESGVIEW -  12
    |STACK DP FROM
    |INPUT IMAGE
    |FILE
    |┌─LEQ──────────────┐                                                          |
 39 |│Less Than or Eql (A<=B)│──────────────────────────────────────────────B3──┐│
    |│Source A        N20:3│                                                      │( )│
    |│                 3277│                                                      │23 │
    |│Source B         3277│                                                      │   │
    |│                     │                                                      │   │
    |└──────────────────┘                                                      STACK DP FROM │
    |N20:3 - [39]                                                              INPUT IMAGE │
    |                                                                          FILE        │
    |                                                                          ┌─MOV──────┐│ |N20:3 - MOV - File #5 INTRLKS -
    |                                                                          │Move      ├┘│ |                 39
    |                                                                          |Source  3277│ |        SUB - File #6 FANCNTRL E
    |                                                                          |            | |                 14
    |                                                                          |Dest    N20:3| |              File #20 FANCNTRLE
    |                                                                          |        3277| |                 18
    |                                                                          └────────────┘ |      MUL - File #6 FANCNTRL E
    |N20:3 - MUL - File #6 FANCNTRL -  21
    |            File #20 FANCNTRL -  30
    |        LEQ - File #5 INTRLKS -  13, 39
    |        FFL - File #13 FIFO -  10
    |FILE N20:3 LEN:4 - COP - File #4 INPUTDATA -  0
    |FILE N20:3 LEN:100 - FFL - File #13 FIFO -  10
    |┌─GRT──────────────┐                                                          |
 40 |│Greater Than (A>B)│──────────────────────────────────────────────B3──┐│
    |│Source A      I:1.3│                                                     │(L)│
    |│               3251│                                                     │24 │
    |│Source B      16384│                                                     │   │
    |└──────────────────┘                                                      │   │
    |I:1.3 - [40]                                                              │   │
    |                                                                          ┌─MOV──────┐│ |I:1.3 - MOV - File #5 INTRLKS -
    |                                                                          │Move      ├┘│ |                 40
    |                                                                          |Source  16384│ |              File #16 INTLK -
    |                                                                          |            | |                 26
    |                                                                          |Dest    I:1.3| |        GRT - File #5 INTRLKS -
    |                                                                          |         3251| |                 40
    |                                                                          └────────────┘ |FILE I:1.3 LEN:4 -            ...
    |I:1.3 - COP - File #4 INPUTDATA -  0
    |PLENUM 2
    |PRESSURE DATA
    |┌─LEQ──────────────┐                                                N20:39    |N20:39/11 - -( )- - File #5 INTE
 41 |│Less Than or Eql (A<=B)│──────────────────────────────────────────────( )──┤                  41
    |│Source A        N20:7│                                                 11   |            -┤/├- - File #5 INTE
    |│                 8192│                                                      |                 121
    |│Source B        N19:27│                                                     |          NEQ - File #5 INTRLE
    |│                 5243│                                                      |                 114
    |└──────────────────┘                                                          |         MEQ - File #12 COUNE
    |N20:7 - [13:10]                                                               |                   2
    |                                                                              |FILE N20:39/11 LEN:100 -      ...
    |                                                                          B3  N20:36 |N20:36/11 - -(L)- - File #5 INTE
    |                                                                          [OSR]──(L)──┤                  41
    |                                                                          161     11 |            -(U)- - File #5 INTE
    |N20:39/11 - FFL - File #13 FIFO -  10
    |FILE N20:39/11 LEN:3 - COP - File #7 MESGVIEW -  12
    |N20:36/11 - -(U)- - File #5 INTRLKS -  97
    |          NEQ - File #5 INTRLKS -  113
    |              File #8 SYSSTAT -  0
    |FILE N20:36/11 LEN:100 - FFL - File #13 FIFO -  10
```

```
   |FILE N20:36/11 LEN:3 - FLL - File #3 STARTUP -  5                                  |
   |                       COP - File #5 INTRLKS -  116                                 |
   |N20:42 N20:42                                                          N20:39 |N20:39/12 - -( )- - File #5 INTE
42 |--| |----| |-------------------------------------------------------( )--|                  42
   |  12     0                                                            12 |          -|/|- - File #16 INE
   |[68]   [13:10]                                                              |                  12      ...
   |N20:39 - NEQ - File #5 INTRLKS -  114                                       |
   |         MEQ - File #12 COUNTER -  2                                        |
   |FILE N20:39/12 LEN:100 - FFL - File #13 FIFO -  10                          |
   |FILE N20:39/12 LEN:3 - COP - File #7 MESGVIEW -  12                         |
   |N20:42  N20:25                                                         N20:39 |N20:39 - NEQ - File #5 INTRLKS E
43 |--| |----|/|-------------------------------------------------------( )--|                 114
   |  0       9                                                            13 |        MEQ - File #12 COUNTERE
   |[13:10]  [4:12]                                                             |                  2       ...
   |N20:39/13 - FFL - File #13 FIFO -  10                                       |
   |FILE N20:39/13 LEN:3 - COP - File #7 MESGVIEW -  12                         |
   |N20:42  N20:25                                                         N20:39 |N20:39/14 - -( )- - File #5 INTE
44 |--| |----|/|-------------------------------------------------------( )--|                  44
   |  0       10                                                           14 |          -(U)- - File #5 INTE
   |[13:10]  [4:12]                                                             |                  47      ...
   |N20:39 - NEQ - File #5 INTRLKS -  114                                       |
   |         MEQ - File #12 COUNTER -  2                                        |
   |FILE N20:39/14 LEN:100 - FFL - File #13 FIFO -  10                          |
   |FILE N20:39/14 LEN:3 - COP - File #7 MESGVIEW -  12                         |
   |FILTER 1 DP                                                                 |
   |HI HI                                                  FILTER 1 DP HI       |
   |    N20:38     B3                                          N20:35           |N20:35/8 - -(L)- - File #5 INTRE
45 |----| |-----[OSR]-------------------------------------------(U)-----|                  17
   |      7        142                                          8        |          -(U)- - File #5 INTRE
   |[18]                                                                |                  45, 78
   |                                                                    |          FLL - File #3 STARTUE
   |                                                      FILTER 1 DP HI |                  5       ...
   |                                                          N20:38     |N20:38/8 - -(L)- - File #5 INTRE
   |                                                          (U)-----|                  17
   |                                                            8        |          -(U)- - File #5 INTRE
   |N20:35 - COP - File #5 INTRLKS -  116                                       |
   |         NEQ - File #5 INTRLKS -  113                                       |
   |               File #8 SYSSTAT -  0                                         |
   |FILE N20:35/8 LEN:100 - FFL - File #13 FIFO -  10                           |
   |FILE N20:35/8 LEN:30 - FFL - File #18 FIFOBUFFER -  1                       |
   |FILE N20:35/8 LEN:3 - FLL - File #3 STARTUP -  5                            |
   |                      COP - File #5 INTRLKS -  116                          |
   |N20:38/8 - -(U)- - File #5 INTRLKS -  18, 45                                |
   |           -|/|- - File #5 INTRLKS -  17                                    |
   |           COP - File #7 MESGVIEW -  12                                     |
   |           NEQ - File #5 INTRLKS -  114                                     |
   |           MEQ - File #12 COUNTER -  1                                      |
   |FILE N20:38/8 LEN:100 - FFL - File #13 FIFO -  10                           |
   |FILE N20:38/8 LEN:3 - COP - File #7 MESGVIEW -  12                          |
   |FILTER #2 DP                                                                |
   |HI HI                                                  FILTER 2 DP HI       |
   |    N20:38     B3                                          N20:35           |N20:35/11 - -(L)- - File #5 INTE
46 |----| |-----[OSR]-------------------------------------------(U)-----|                  22
   |      10       143                                          11       |          -(U)- - File #5 INTE
   |[23]                                                                |                  46, 81
   |                                                                    |          FLL - File #3 STARTE
   |                                                      FILTER #2 DP HI |                  5       ...
   |                                                          N20:38     |N20:38/11 - -(L)- - File #5 INTE
   |                                                          (U)-----|                  22
   |                                                            11       |          -(U)- - File #5 INTE
   |N20:35 - COP - File #5 INTRLKS -  116                                       |
   |         NEQ - File #5 INTRLKS -  113                                       |
   |               File #8 SYSSTAT -  0                                         |
   |FILE N20:35/11 LEN:100 - FFL - File #13 FIFO -  10                          |
   |FILE N20:35/11 LEN:30 - FFL - File #18 FIFOBUFFER -  1                      |
   |FILE N20:35/11 LEN:3 - FLL - File #3 STARTUP -  5                           |
   |                       COP - File #5 INTRLKS -  116                         |
   |N20:38/11 - -(U)- - File #5 INTRLKS -  23, 46                               |
   |            -|/|- - File #5 INTRLKS -  22                                   |
   |            COP - File #7 MESGVIEW -  12                                    |
   |            NEQ - File #5 INTRLKS -  114                                    |
   |            MEQ - File #12 COUNTER -  1                                     |
   |FILE N20:38/11 LEN:100 - FFL - File #13 FIFO -  10                          |
```

```
    |FILE N20:38/11 LEN:3 - COP - File #7 MESSGVIEW -  12
    |N20:38  B3                                                                    |
 47|─┤ ├─[OSR]──────────────────────────────────────────────────────────────────────┤
    |  13   144                                                                     |
    |[26]                                                                           |
    |                                                                               |
    |                                                                               |
    |                                                                               |
    |                                                                               |
    |N20:36 - NEQ - File #8 SYSSTAT -  0                                            |
    |FILE N20:36/14 LEN:100 - FFL - File #13 FIFO -  10                             |
    |FILE N20:36/14 LEN:3 - FLL - File #3 STARTUP -  5                              |
    |                     COP - File #5 INTRLKS -  116                              |
    |N20:39/14 - —(U)— - File #5 INTRLKS -  47                                      |
    |            NEQ - File #5 INTRLKS -  114                                       |
    |            NEQ - File #12 COUNTER -  2                                        |
    |FILE N20:39/14 LEN:100 - FFL - File #13 FIFO -  10                             |
    |FILE N20:39/14 LEN:3 - COP - File #7 MESSGVIEW -  12                           |
    |       MODULE 5                                                                |
    |       DATAGRAM                                                                |
    |N20:41 ┌─GEQ──────────────┐ N20:42                                            |
 48|─┤ ├─│Grtr Than or Eql (A>=B)│─┤ ├──────────────────────────────────────────────┤
    |  5  │Source A        N20:16│  1                                              |
    |[7:1]│                     2│ [13:10]                                         |
    |     │Source B        N19:32│                                                 |
    |     │                 10635│                                                 |
    |     └──────────────────────┘                                                  |
    |       N20:16 - [4:4]                                                          |
    |                                                                               |
    |                                                                               |
    |                                                                               |
    |N20:40/0 - FFL - File #13 FIFO -  10                                           |
    |FILE N20:40/0 LEN:3 - COP - File #7 MESSGVIEW -  12                            |
    |N20:37/0 - —(U)— - File #5 INTRLKS -  102                                      |
    |           NEQ - File #5 INTRLKS -  113                                        |
    |                File #8 SYSSTAT -  0                                           |
    |FILE N20:37/0 LEN:100 - FFL - File #13 FIFO -  10                              |
    |FILE N20:37/0 LEN:3 - FLL - File #3 STARTUP -  5                               |
    |                    COP - File #5 INTRLKS -  116                               |
    |N20:41 ┌─GEQ──────────────┐ N20:42                                            |
 49|─┤ ├─│Grtr Than or Eql (A>=B)│─┤ ├──────────────────────────────────────────────┤
    |  7  │Source A        N20:17│  1                                              |
    |[7:1]│                     2│ [13:10]                                         |
    |     │Source B        N19:33│                                                 |
    |     │                 10635│                                                 |
    |     └──────────────────────┘                                                  |
    |       N20:17 - [13:10]                                                        |
    |                                                                               |
    |                                                                               |
    |                                                                               |
    |N20:40/1 - FFL - File #13 FIFO -  10                                           |
    |FILE N20:40/1 LEN:3 - COP - File #7 MESSGVIEW -  12                            |
    |N20:37/1 - —(U)— - File #5 INTRLKS -  103                                      |
    |           NEQ - File #5 INTRLKS -  113                                        |
    |                File #8 SYSSTAT -  0                                           |
    |FILE N20:37/1 LEN:100 - FFL - File #13 FIFO -  10                              |
    |FILE N20:37/1 LEN:3 - FLL - File #3 STARTUP -  5                               |
    |                    COP - File #5 INTRLKS -  116                               |
    |N20:41 ┌─GEQ──────────────┐ N20:42                                            |
 50|─┤ ├─│Grtr Than or Eql (A>=B)│─┤ ├──────────────────────────────────────────────┤
    |  9  │Source A        N20:18│  1                                              |
    |[7:1]│                     3│ [13:10]                                         |
    |     │Source B        N19:34│                                                 |
    |     │                 10635│                                                 |
    |     └──────────────────────┘                                                  |
    |       N20:18 - [13:10]                                                        |
    |                                                                               |
    |                                                                               |
    |                                                                               |
    |                                                                               |
```

```
                                                N20:36
                                                ─(U)─
                                                  14
                                                N20:39
                                                ─(U)─
                                                  14
```

```
|N20:36/14 - —(U)— - File #5 INTE
                          47, 100
          NEQ - File #5 INTRLE
                          113
                File #8 SYSSTE
|N20:39/14 - —( )— - File #5 INTE
                           44
          —(U)— - File #5 INTE
```

```
                                                N20:40
                                                ─( )─
                                                   0
                                                B3    N20:37
                                                ─[OSR]──(L)─
                                                  60     0
```

```
|N20:40/0 - —( )— - File #5 INTRE
                           48
          —|/|— - File #5 INTRE
                           69
          NEQ - File #5 INTRLKE
                          114
          NEQ - File #12 COUNTE
                            3
|FILE N20:40/0 LEN:100 -      ...
|N20:37/0 - —(L)— - File #5 INTRE
                           48
          —(U)— - File #5 INTRE
```

```
                                                N20:40
                                                ─( )─
                                                   1
                                                B3    N20:37
                                                ─[OSR]──(L)─
                                                  61     1
```

```
|N20:40/1 - —( )— - File #5 INTRE
                           49
          —|/|— - File #5 INTRE
                           69
          NEQ - File #5 INTRLKE
                          114
          NEQ - File #12 COUNTE
                            3
|FILE N20:40/1 LEN:100 -      ...
|N20:37/1 - —(L)— - File #5 INTRE
                           49
          —(U)— - File #5 INTRE
```

```
                                                N20:40
                                                ─( )─
                                                   2
                                                B3    N20:37
                                                ─[OSR]──(L)─
                                                  62     2
```

```
|N20:40/2 - —( )— - File #5 INTRE
                           50
          —|/|— - File #5 INTRE
                           69
          NEQ - File #5 INTRLKE
                          114
          NEQ - File #12 COUNTE
                            3
|FILE N20:40/2 LEN:100 -      ...
|N20:37/2 - —(L)— - File #5 INTRE
                           50
          —(U)— - File #5 INTRE
```

```
|N20:40/2 - FFL - File #13 FIFO -  10
|FILE N20:40/2 LEN:3 - COP - File #7 MESGVIEW -  12
|N20:37/2 - -(U)- - File #5 INTRLKS -  104
|          NEQ - File #5 INTRLKS -  113
|                File #8 SYSSTAT -  0
|FILE N20:37/2 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:37/2 LEN:3 - FLL - File #3 STARTUP -  5
|                     COP - File #5 INTRLKS -  116
|N20:41   ┌GEQ──────────────┐ N20:42                                  N20:40                  |N20:40/3 - -( )- - File #5 INTRE
51├─┤ ├─┤Grtr Than or Eql (A>=B)├─┤ ├──────────────────────────────────────( )──────────────┤                    51
|  11   |Source A        N20:19|   1                                   3                       |          ─┤/├─ - File #5 INTRE
|[7:1]  |                    0| [13:10]                                                       |                    69
|       |Source B        N19:35|                                                               |          NEQ - File #5 INTRLKE
|       |                10635|                                                               |                   114
|       └──────────────────────┘                                                               |          MEQ - File #12 COUNTE
|       N20:19 - [13:10]                                                                       |                     3
|                                                                                              |FILE N20:40/3 LEN:100 -      ...
|                                                                                              |N20:37/3 - -(L)- - File #5 INTRE
|                                                                                              |                    51
|                                                                                              |          -(U)- - File #5 INTRE
|N20:40/3 - FFL - File #13 FIFO -  10
|FILE N20:40/3 LEN:3 - COP - File #7 MESGVIEW -  12
|N20:37/3 - -(U)- - File #5 INTRLKS -  105
|          NEQ - File #5 INTRLKS -  113
|                File #8 SYSSTAT -  0
|FILE N20:37/3 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:37/3 LEN:3 - FLL - File #3 STARTUP -  5
|                     COP - File #5 INTRLKS -  116
|FILTER 1 ROC TIMER
|          MOTOR
|FAN INTLKS  CONTACT                                                  FILTER #1 ROC
|  N20:41    N20:25  ┌GEQ──────────────┐                             TIMER
52├──┤ ├──────┤ ├──┤Grtr Than or Eql (A>=B)├──────────────────────┌TON──────────┐                |T4:2.DN - -┤ ├- - File #5 INTRLE
|   1         7      |Source A        N14:40|                      |Timer On Delay ├(EN)┤                    54
|[121]      [9:0]    |                    0|                      |Timer       T4:2├(DN)┤
|                    |Source B        N19:36|                      |Time Base     1.0|
|                    |                   655|                      |Preset          3|
|                    └──────────────────────┘                      |Accum           0|
|                    N14:40 - [18:2]                                └─────────────────┘
|FILTER 2 ROC TIMER
|          MOTOR                                                      FILTER #2 ROC
|FAN INTLKS  CONTACT                                                  TIMER
|  N20:41    N20:25  ┌GEQ──────────────┐                             ┌TON──────────┐                |T4:3.DN - -┤ ├- - File #5 INTRLE
53├──┤ ├──────┤ ├──┤Grtr Than or Eql (A>=B)├──────────────────────┌Timer On Delay ├(EN)┤                    56
|   1         7      |Source A        N14:41|                      |Timer       T4:3├(DN)┤
|[121]      [9:0]    |                    0|                      |Time Base     1.0|
|                    |Source B        N19:37|                      |Preset          3|
|                    |                   655|                      |Accum           0|
|                    └──────────────────────┘                      └─────────────────┘
|                    N14:41 - [18:2]
|FILTER #1 ROC
|TIMER
|     T4:2                                                                                     N20:37                  |N20:37/4 - -(L)- - File #5 INTRE
54├────┤ ├──────────────────────────────────────────────────────────────────────────────────────(L)──────────────┤                    54
|      DN                                                                                      4                       |          -(U)- - File #5 INTRE
|[52]                                                                                                                 |                   106
|                                                                                                                     |          ─┤/├─ - File #5 INTRE
|                                                                                                                     |                   119
|                                                                                                                     |          NEQ - File #5 INTRLKE
|                                                                                              |FILTER 1 ROC          |N20:40/4 - -(L)- - File #5 INTRE
|                                                                                              |INTERLOCK             |                    54
|                                                                                              |    N20:40            |          -(U)- - File #5 INTRE
|                                                                                              |──────(L)─────────────┤
|                                                                                              |      4               |
|N20:37 - NEQ - File #5 INTRLKS -  113
|                File #8 SYSSTAT -  0
|FILE N20:37/4 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:37/4 LEN:3 - FLL - File #3 STARTUP -  5
|                     COP - File #5 INTRLKS -  116
|N20:40/4 - -(U)- - File #5 INTRLKS -  55
|          ─┤/├─ - File #5 INTRLKS -  67
|          NEQ - File #5 INTRLKS -  114
|          MEQ - File #12 COUNTER -  3
|FILE N20:40/4 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:40/4 LEN:3 - COP - File #7 MESGVIEW -  12
```

```
     |MOTOR                                                                  FILTER 1 ROC  |
     |CONTACT                                                                INTERLOCK     |
     | N20:25   B3                                                            N20:40       |N20:40/4 - -(L)- - File #5 INTRE
 55 |---/|---[OSR]-------------------------------------------------------------(U)--------|                  54
     |  7      16                                                              4           |          -(U)- - File #5 INTRE
     |[9:0]                                                                                |                  55       ...
     |N20:40/4 - -|/|- - File #5 INTRLKS -  67                                            |
     |           NEQ - File #5 INTRLKS -  114                                             |
     |           MEQ - File #12 COUNTER -  3                                              |
     |FILE N20:40/4 LEN:100 - FFL - File #13 FIFO -  10                                   |
     |FILE N20:40/4 LEN:3 - COP - File #7 MESGVIEW -  12                                  |
     |FILTER #2 ROC                                                                       |
     |TIMER                                                                               |
     |     T4:3                                                                           |
 56 |-------| |-------------------------------------------------------------N20:37-------|N20:37/5 - -(L)- - File #5 INTRE
     |       DN                                                             -(L)-------|                  56
     |[53]                                                                  5          |          -(U)- - File #5 INTRE
     |                                                                                 |                 107
     |                                                                                 |          -|/|- - File #5 INTRE
     |                                                                                 |                 119
     |                                                                FILTER 2 ROC     |          NEQ - File #5 INTRLKE
     |                                                                INTERLOCK        |N20:40/5 - -(L)- - File #5 INTRE
     |                                                                  N20:40         |                  56
     |                                                                -(L)-------------|          -(U)- - File #5 INTRE
     |                                                                  5              |
     |N20:37 - NEQ - File #5 INTRLKS -  113                                            |
     |               File #8 SYSSTAT -  0                                              |
     |FILE N20:37/5 LEN:100 - FFL - File #13 FIFO -  10                                |
     |FILE N20:37/5 LEN:3 - FLL - File #3 STARTUP -  5                                 |
     |                    COP - File #5 INTRLKS -  116                                 |
     |N20:40/5 - -(U)- - File #5 INTRLKS -  57                                         |
     |           -|/|- - File #5 INTRLKS -  67                                         |
     |           NEQ - File #5 INTRLKS -  114                                          |
     |           MEQ - File #12 COUNTER -  3                                           |
     |FILE N20:40/5 LEN:100 - FFL - File #13 FIFO -  10                                |
     |FILE N20:40/5 LEN:3 - COP - File #7 MESGVIEW -  12                               |
     |MOTOR                                                                  FILTER 2 ROC  |
     |CONTACT                                                                INTERLOCK     |
     | N20:25   B3                                                            N20:40       |N20:40/5 - -(L)- - File #5 INTRE
 57 |---/|---[OSR]-------------------------------------------------------------(U)--------|                  56
     |  7      17                                                              5           |          -(U)- - File #5 INTRE
     |[9:0]                                                                                |                  57       ...
     |N20:40/5 - -|/|- - File #5 INTRLKS -  67                                            |
     |           NEQ - File #5 INTRLKS -  114                                             |
     |           MEQ - File #12 COUNTER -  3                                              |
     |FILE N20:40/5 LEN:100 - FFL - File #13 FIFO -  10                                   |
     |FILE N20:40/5 LEN:3 - COP - File #7 MESGVIEW -  12                                  |
     |PLENUM 1 PRESSURE HIGH                                                              |
     |                                  OFLOW/VAC                                         |
     |                  FAN STARTUP     CIRL BIT                                          |
     |MOTOR    FAN      TIMER ALARM     (OFF=FLOW,  PLENUM 1                PLENUM 1 PRESS |
     |CONTACT  ENABLED  BYPASS          ON=VAC)     PRESSURE DATA           HI ALARM TMR   |
     |                                              PDI-170                                |
     | N20:25    B3       T4:20        B3          GEQ                     TON            |T4:15.DN - -| |- - File #5 INTRE
 58 |--| |------| |------| |----------|/|---------|Grtr Than or Eql (A>=B)|-------|Timer On Delay |-(EN)-|                  59
     |  7       34        DN           0           |Source A        N20:0  |       |Timer      T4:15|-(DN)|
     |[9:0]    [2:18]    [1]                      |                 3275  |       |Time Base     1.0|       |
     |                                              |Source B       N19:39  |       |Preset          5|       |
     |                                              |                16384  |       |Accum           0|       |
     |                                              N20:0 - [4:0]                                                |
```

```
     |PLENUM 1 PRESS                                                    PLENUM 1 PRESS                |
     |HI ALARM TMR                                                      HI (ACK ALM)                  |
     |     T4:15                                                   B3       N20:37                   |N20:37/7 - --(L)-- - File #5 INTRE
 59  |------| |-------------------------------------------------[OSR]------(L)-------------------|                 59
     |      IN                                                     |  73        7                   |          --(U)-- - File #5 INTRE
     |[58]                                                         |                                |                109
     |                                                             |                                |         NEQ - File #5 INTRLKE
     |                                                             |PLENUM 1 PRESS                  |                113
     |                                                             |HI SHUTDOWN TMR                 |            File #8 SYSSTAE
     |                                                             |---TON----------------------|   |T4:17.DN - -| |- - File #5 INTRE
     |                                                             |Timer On Delay  |-(EN)-|        |                 60
     |                                                             |Timer       T4:17|-(DN)|        |
     |                                                             |Time Base     1.0|              |
     |                                                             |Preset          5|              |
     |                                                             |Accum           0|              |
     |                                                             |------------------------------|
     |N20:37 - NEQ - File #8 SYSSTAT -  0                                                           |
     |FILE N20:37/7 LEN:100 - FFL - File #13 FIFO -  10                                             |
     |FILE N20:37/7 LEN:3 - FLL - File #3 STARTUP -  5                                              |
     |                      COP - File #5 INTRLKS -  116                                            |
     |PLENUM 1 PRESS                                                    PLENUM 1 PRESS                |
     |HI SHUTDOWN TMR                                                   HI (CURR ALM)                 |
     |     T4:17       B3                                                  N20:40                     |N20:40/7 - --(L)-- - File #5 INTRE
 60  |------| |-------[OSR]-------------------------------------------------(L)-------------------|                 60
     |      IN         72                                                   7                         |          --(U)-- - File #5 INTRE
     |[59]                                                                                            |                 61        ...
     |N20:40/7 - -|/|- - File #5 INTRLKS -  67                                                       |
     |           NEQ - File #5 INTRLKS -  114                                                       |
     |           MEQ - File #12 COUNTER -  3                                                        |
     |FILE N20:40/7 LEN:100 - FFL - File #13 FIFO -  10                                             |
     |FILE N20:40/7 LEN:3 - COP - File #7 MESSGVIEW -  12                                           |
     |PLENUM 1                                                          PLENUM 1 PRESS                |
     |PRESSURE DATA                                                     HI (CURR ALM)                 |
     |PDI-170                                                                                         |
     |---LEQ-----------------------|                                       N20:40                     |N20:40/7 - --(L)-- - File #5 INTRE
 61  |-|Less Than or Eql (A<=B)|-------------------------------------------(U)-------------------|                 60
     |  |Source A          N20:0|                                          7                         |          --(U)-- - File #5 INTRE
     |  |                   3275|                                                                    |                 61
     |  |Source B         N19:39|                                                                    |         -|/|- - File #5 INTRE
     |  |                  16384|                                                                    |                 67
     |  |-----------------------|                                                                    |         NEQ - File #5 INTRLKE
     |N20:0 - [4:0]                                                                                   |                114        ...
     |N20:40 - MEQ - File #12 COUNTER -  3                                                            |
     |FILE N20:40/7 LEN:100 - FFL - File #13 FIFO -  10                                               |
     |FILE N20:40/7 LEN:3 - COP - File #7 MESSGVIEW -  12                                             |
     |INLET VACUUM HIGH                                                                               |
     |OFLOW/VAC                                                                                       |
     |CTRL BIT                                                                                        |
     |(OFF=FLOW,  PLENUM 1                  MOTOR                      INLET VAC HI                   |
     |ON=VAC)     PRESSURE DATA             CONTACT                    INITIAL DELAY                  |
     |            PDI-170                                                                             |
     |     B3     ---GEQ-----------------|  N20:25                    ---TON----------------------|   |T4:13.DN - -| |- - File #5 INTRE
 62  |-----| |----|Grtr Than or Eql (A>=B)|-----| |-------------------|Timer On Delay  |-(EN)-|        |                 63
     |     0      |Source A          N20:0|     7                    |Timer       T4:13|-(DN)|        |
     |            |                   3275| [9:0]                    |Time Base     1.0|              |
     |            |Source B         N19:26|                          |Preset          3|              |
     |            |                  16056|                          |Accum           0|              |
     |            |-----------------------|                          |------------------------------|
     |            N20:0 - [4:0]
     |            N19:26 - [20:4]
```

```
     |INLET VAC HI
     |INITIAL DELAY                                                                  |
     |     T4:13                                                  INLET VAC HI       |
 63  |-----| |-------------------------------------------------{OSR}-----(L)-------|N20:37/11 - -(L)- - File #5 INTE
     |      IN                                                B3        N20:37       |                63
     |[62]                                                    126         11         |          -(U)- - File #5 INTE
     |                                                                               |                112
     |                                                                               |         NEQ - File #5 INTRLE
     |                                                          |INLET VAC HI        |                113
     |                                                          |SHUTDN INTLK        |              File #8 SYSSTE
     |                                                          |TIMER               |                0     ...
     |                                                          |  ---TON----------  |T4:14.DN - -| |- - File #5 INTRE
     |                                                          |Timer On Delay |-(EN)-|                64
     |                                                          |Timer       T4:14 |-(DN)-|
     |                                                          |Time Base     1.0 |
     |                                                          |Preset          2 |
     |                                                          |Accum           0 |
     |N20:37/11 - FFL - File #13 FIFO -  10
     |FILE N20:37/11 LEN:3 - FLL - File #3 STARTUP -  5
     |                       COP - File #5 INTRLKS -  116
     |INLET VAC HI
     |SHUTDN INTLK
     |TIMER                                                                INLET VAC HI
     |    T4:14                                                              N20:40  |N20:40/11 - -(L)- - File #5 INTE
 64  |-----| |-------------------------------------------------------------(L)-----|                64
     |      IN                                                                 11    |          -(U)- - File #5 INTE
     |[63]                                                                           |                65      ...
     |N20:40/11 - -|/|- - File #5 INTRLKS -  120
     |            NEQ - File #5 INTRLKS -  114
     |            MEQ - File #12 COUNTER -  3
     |FILE N20:40/11 LEN:100 - FFL - File #13 FIFO -  10
     |FILE N20:40/11 LEN:3 - COP - File #7 MESGVIEW -  12
     |PLENUM 1
     |PRESSURE DATA                                                        INLET VAC HI
     |PDI-170
     |  ---LEQ-----------------------------                                  N20:40  |N20:40/11 - -(L)- - File #5 INTE
 65  |-|Less Than or Eql (A<=B)|-----------------------------------------(U)-----|                64
     |  |Source A          N20:0|                                             11    |          -(U)- - File #5 INTE
     |  |                   3275|                                                   |                65
     |  |Source B         N19:26|                                                   |          -|/|- - File #5 INTE
     |  |                  16056|                                                   |                120
     |  ---------------------------                                                |         NEQ - File #5 INTRLE
     |N20:0 - [4:0]                                                                  |                114
     |N19:26 - [20:4]                                                                |          MEQ - File #12 COUNE
     |N20:40 - MEQ - File #12 COUNTER -  3
     |FILE N20:40/11 LEN:100 - FFL - File #13 FIFO -  10
     |FILE N20:40/11 LEN:3 - COP - File #7 MESGVIEW -  12
     |PLENUM 2 PRESSURE HIGH
     |MOTOR    PLENUM 2
     |CONTACT  PRESSURE DATA
     | N20:25  ---GEQ-----------------------                                 B3   N20:37 |N20:37/8 - -(L)- - File #5 INTRE
 66  |-----| |-|Grtr Than or Eql (A>=B)|-----------------------------------{OSR}-----(L)-----|                66
     |     7   |Source A          N20:7|                                    74      8    |          -(U)- - File #5 INTRE
     |[9:0]    |                   8192|                                                 |                110
     |         |Source B         N19:40|                                                 |         NEQ - File #5 INTRLKE
     |         |                 14417|                                                 |                113
     |         ---------------------------                                              |              File #8 SYSSTAE
     |         N20:7 - [13:10]                                                          |                0
     |                                                                                  |FILE N20:37/8 LEN:100 -      ...
     |                                                                                  |N20:40/8 - -( )- - File #5 INTRE
     |                                                                          N20:40  |                66
     |                                                                          -( )----|         -|/|- - File #5 INTRE
     |                                                                            8     |
     |N20:37/8 - FFL - File #13 FIFO -  10
     |FILE N20:37/8 LEN:3 - FLL - File #3 STARTUP -  5
     |                      COP - File #5 INTRLKS -  116
     |N20:40/8 - -|/|- - File #5 INTRLKS -  67
     |           NEQ - File #5 INTRLKS -  114
     |           MEQ - File #12 COUNTER -  3
     |FILE N20:40/8 LEN:100 - FFL - File #13 FIFO -  10
     |FILE N20:40/8 LEN:3 - COP - File #7 MESGVIEW -  12
```

```
    |FILTER 1 ROC  FILTER 2 ROC          PLENUM 1 PRESS                                  |
    |INTERLOCK     INTERLOCK             HI (CURR ALM)                                   |
    |   N20:40        N20:40    N20:40       N20:40    N20:40                  N20:41 |N20:41/12 - -( )- - File #5 INTE
 67 |---]/[-----------]/[-------]/[----------]/[-------]/[-----------------------( )--|
    |    4            5         6            7         8                        12     |            -| |- - File #5 INTE
    |[55]          [57]         [13:10] [61]           [66]                            |                 121     ...
    |N20:41 - MVM - File #7 MESGVIEW -  1                                               |
    |FILE N20:41/12 LEN:100 - FFL - File #13 FIFO -  10                                 |
    |   T4:40     B3                                                              N20:42 |N20:42/12 - -(L)- - File #16 INE
 68 |--| |---[OSR]-------------------------------------------------------------(U)--|
    | | DN |  51                                                                  12     |            -(U)- - File #3 STAE
    | |[16:16] |                                                                        |                   8
    | |        |                                                                        |                 File #5 INTE
    | |N20:42  |                                                                        |                   68
    | \---]/[---/                                                                        |            -| |- - File #5 INTE
    |    0                                                                               |                   42, 121
    |  [13:10]                                                                           |                 File #16 INE
    |N20:42/12 - -| |- - File #16 INTLK -  17                                           |
    |FILE N20:42/12 LEN:100 - FFL - File #13 FIFO -  10                                 |
    |N20:40 N20:40 N20:40 N20:40                                                  N20:41 |N20:41/15 - -( )- - File #5 INTE
 69 |---]/[-----]/[-----]/[-----]/[-----------------------------------------------( )--|
    |    0      1      2      3                                                   15     |            -| |- - File #5 INTE
    |[48]    [49]   [50]   [51]                                                          |                 120     ...
    |N20:41 - MVM - File #7 MESGVIEW -  1                                               |
    |FILE N20:41/15 LEN:100 - FFL - File #13 FIFO -  10                                 |
    | N12:0                                                                       N20:35 |N20:35 - FLL - File #3 STARTUP E
 70 |--| |-----------------------------------------------------------------------(U)--|                 5
    |   0                                                                         0      |         COP - File #5 INTRLKS E
    |[7:4]                                                                               |                 116         ...
    |N20:35 - NEQ - File #5 INTRLKS -  113                                               |
    |               File #8 SYSSTAT -  0                                                 |
    |FILE N20:35/0 LEN:100 - FFL - File #13 FIFO -  10                                  |
    |FILE N20:35/0 LEN:30 - FFL - File #18 FIFOBUFFER -  1                              |
    |FILE N20:35/0 LEN:3 - FLL - File #3 STARTUP -  5                                   |
    |                      COP - File #5 INTRLKS -  116                                 |
    | N12:0                                                                       N20:35 |N20:35 - FLL - File #3 STARTUP E
 71 |--| |-----------------------------------------------------------------------(U)--|                 5
    |   1                                                                         1      |         COP - File #5 INTRLKS E
    |[7:4]                                                                               |                 116         ...
    |N20:35 - NEQ - File #5 INTRLKS -  113                                               |
    |               File #8 SYSSTAT -  0                                                 |
    |FILE N20:35/1 LEN:100 - FFL - File #13 FIFO -  10                                  |
    |FILE N20:35/1 LEN:30 - FFL - File #18 FIFOBUFFER -  1                              |
    |FILE N20:35/1 LEN:3 - FLL - File #3 STARTUP -  5                                   |
    |                      COP - File #5 INTRLKS -  116                                 |
    | N12:0                                                                       N20:35 |N20:35/2 - -(L)- - File #5 INTRE
 72 |--| |-----------------------------------------------------------------------(U)--|                 2
    |   2                                                                         2      |            -(U)- - File #5 INTRE
    |[7:4]                                                                               |                 72          ...
    |N20:35 - FLL - File #3 STARTUP -  5                                                 |
    |         COP - File #5 INTRLKS -  116                                               |
    |         NEQ - File #5 INTRLKS -  113                                               |
    |               File #8 SYSSTAT -  0                                                 |
    |FILE N20:35/2 LEN:100 - FFL - File #13 FIFO -  10                                  |
    |FILE N20:35/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1                              |
    |FILE N20:35/2 LEN:3 - FLL - File #3 STARTUP -  5                                   |
    |                      COP - File #5 INTRLKS -  116                                 |
    | N12:0                                                                       N20:35 |N20:35/3 - -(L)- - File #5 INTRE
 73 |--| |-----------------------------------------------------------------------(U)--|                 5
    |   3                                                                         3      |            -(U)- - File #5 INTRE
    |[7:4]                                                                               |                 73          ...
    |N20:35 - FLL - File #3 STARTUP -  5                                                 |
    |         COP - File #5 INTRLKS -  116                                               |
    |         NEQ - File #5 INTRLKS -  113                                               |
    |               File #8 SYSSTAT -  0                                                 |
    |FILE N20:35/3 LEN:100 - FFL - File #13 FIFO -  10                                  |
    |FILE N20:35/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1                              |
    |FILE N20:35/3 LEN:3 - FLL - File #3 STARTUP -  5                                   |
    |                      COP - File #5 INTRLKS -  116                                 |
    | N12:0                                                                       N20:35 |N20:35/4 - -(L)- - File #5 INTRE
 74 |--| |-----------------------------------------------------------------------(U)--|                 8
    |   4                                                                         4      |            -(U)- - File #5 INTRE
    |[7:4]                                                                               |                 74          ...
```

```
   |N20:35 - FLL - File #3 STARTUP -  5                                                                  |
   |         COP - File #5 INTRLKS -  116                                                                 |
   |         NEQ - File #5 INTRLKS -  113                                                                 |
   |               File #8 SYSSTAT -  0                                                                   |
   |FILE N20:35/4 LEN:100 - FFL - File #13 FIFO -  10                                                     |
   |FILE N20:35/4 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                                 |
   |FILE N20:35/4 LEN:3 - FLL - File #3 STARTUP -  5                                                      |
   |                      COP - File #5 INTRLKS -  116                                                    |
   |                                                                                                      |
   |                                                                                 STACK FLOW HI        |
   |                                                                                 LATCH ALARM          |
   | N12:0                                                                              N20:35            |N20:35/5 - -(L)- - File #5 INTRE
75|--| |-------------------------------------------------------------------------------(U)-------|                  11
   |  5                                                                                  5                |          -(U)- - File #5 INTRE
   |[7:4]                                                                                                 |                  75      ...
   |N20:35 - FLL - File #3 STARTUP -  5                                                                  |
   |         COP - File #5 INTRLKS -  116                                                                 |
   |         NEQ - File #5 INTRLKS -  113                                                                 |
   |               File #8 SYSSTAT -  0                                                                   |
   |FILE N20:35/5 LEN:100 - FFL - File #13 FIFO -  10                                                     |
   |FILE N20:35/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                                 |
   |FILE N20:35/5 LEN:3 - FLL - File #3 STARTUP -  5                                                      |
   |                      COP - File #5 INTRLKS -  116                                                    |
   |                                                                                                      |
   |                                                                                 FILTER 1 DP LO       |
   | N12:0                                                                              N20:35            |N20:35/6 - -(L)- - File #5 INTRE
76|--| |-------------------------------------------------------------------------------(U)-------|                  14
   |  6                                                                                  6                |          -(U)- - File #5 INTRE
   |[7:4]                                                                                                 |                  76      ...
   |N20:35/6 - -|/|- - File #5 INTRLKS -  15                                                             |
   |           FLL - File #3 STARTUP -  5                                                                 |
   |           COP - File #5 INTRLKS -  116                                                               |
   |           NEQ - File #5 INTRLKS -  113                                                               |
   |                 File #8 SYSSTAT -  0                                                                 |
   |FILE N20:35/6 LEN:100 - FFL - File #13 FIFO -  10                                                     |
   |FILE N20:35/6 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                                 |
   |FILE N20:35/6 LEN:3 - FLL - File #3 STARTUP -  5                                                      |
   |                      COP - File #5 INTRLKS -  116                                                    |
   |                                                                                                      |
   |                                                                                 FILTER 1 DP          |
   |                                                                                 HI HI                |
   | N12:0                                                                              N20:35            |N20:35/7 - -(L)- - File #5 INTRE
77|--| |-------------------------------------------------------------------------------(U)-------|                  16
   |  7                                                                                  7                |          -(U)- - File #5 INTRE
   |[7:4]                                                                                                 |                  77      ...
   |N20:35 - FLL - File #3 STARTUP -  5                                                                  |
   |         COP - File #5 INTRLKS -  116                                                                 |
   |         NEQ - File #5 INTRLKS -  113                                                                 |
   |               File #8 SYSSTAT -  0                                                                   |
   |FILE N20:35/7 LEN:100 - FFL - File #13 FIFO -  10                                                     |
   |FILE N20:35/7 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                                 |
   |FILE N20:35/7 LEN:3 - FLL - File #3 STARTUP -  5                                                      |
   |                      COP - File #5 INTRLKS -  116                                                    |
   |                                                                                                      |
   |                                                                                 FILTER 1 DP HI       |
   | N12:0                                                                              N20:35            |N20:35/8 - -(L)- - File #5 INTRE
78|--| |-------------------------------------------------------------------------------(U)-------|                  17
   |  8                                                                                  8                |          -(U)- - File #5 INTRE
   |[7:4]                                                                                                 |                  45, 78  ...
   |N20:35 - FLL - File #3 STARTUP -  5                                                                  |
   |         COP - File #5 INTRLKS -  116                                                                 |
   |         NEQ - File #5 INTRLKS -  113                                                                 |
   |               File #8 SYSSTAT -  0                                                                   |
   |FILE N20:35/8 LEN:100 - FFL - File #13 FIFO -  10                                                     |
   |FILE N20:35/8 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                                 |
   |FILE N20:35/8 LEN:3 - FLL - File #3 STARTUP -  5                                                      |
   |                      COP - File #5 INTRLKS -  116                                                    |
   |                                                                                                      |
   |                                                                                 FILTER 2 DP LO       |
   | N12:0                                                                              N20:35            |N20:35/9 - -(L)- - File #5 INTRE
79|--| |-------------------------------------------------------------------------------(U)-------|                  19
   |  9                                                                                  9                |          -(U)- - File #5 INTRE
   |[7:4]                                                                                                 |                  79      ...
   |N20:35/9 - -|/|- - File #5 INTRLKS -  20                                                             |
   |           FLL - File #3 STARTUP -  5                                                                 |
   |           COP - File #5 INTRLKS -  116                                                               |
   |           NEQ - File #5 INTRLKS -  113                                                               |
   |                 File #8 SYSSTAT -  0                                                                 |
```

```
    |FILE N20:35/9 LEN:100 - FFL - File #13 FIFO -  10                                  |
    |FILE N20:35/9 LEN:30 - FFL - File #18 FIFOBUFFER -  1                              |
    |FILE N20:35/9 LEN:3 - FLL - File #3 STARTUP -  5                                   |
    |                      COP - File #5 INTRLKS -  116                                 |
    |                                                                                   |
    |                                                                FILTER 2 DP        |
    |                                                                HI HI              |
    | N12:0                                                             N20:35          |N20:35/10 - -(L)- - File #5 INTE
 80 |-| |-------------------------------------------------------------(U)-------------|                    21
    |  10                                                               10              |          -(U)- - File #5 INTE
    | [7:4]                                                                             |                    80      ...
    |N20:35 - FLL - File #3 STARTUP -  5                                                |
    |        COP - File #5 INTRLKS -  116                                               |
    |        NEQ - File #5 INTRLKS -  113                                               |
    |             File #8 SYSSTAT -  0                                                  |
    |FILE N20:35/10 LEN:100 - FFL - File #13 FIFO -  10                                 |
    |FILE N20:35/10 LEN:30 - FFL - File #18 FIFOBUFFER -  1                             |
    |FILE N20:35/10 LEN:3 - FLL - File #3 STARTUP -  5                                  |
    |                      COP - File #5 INTRLKS -  116                                 |
    |                                                                                   |
    |                                                                FILTER 2 DP HI     |
    | N12:0                                                             N20:35          |N20:35/11 - -(L)- - File #5 INTE
 81 |-| |-------------------------------------------------------------(U)-------------|                    22
    |  11                                                               11              |          -(U)- - File #5 INTE
    | [7:4]                                                                             |                    46, 81  ...
    |N20:35 - FLL - File #3 STARTUP -  5                                                |
    |        COP - File #5 INTRLKS -  116                                               |
    |        NEQ - File #5 INTRLKS -  113                                               |
    |             File #8 SYSSTAT -  0                                                  |
    |FILE N20:35/11 LEN:100 - FFL - File #13 FIFO -  10                                 |
    |FILE N20:35/11 LEN:30 - FFL - File #18 FIFOBUFFER -  1                             |
    |FILE N20:35/11 LEN:3 - FLL - File #3 STARTUP -  5                                  |
    |                      COP - File #5 INTRLKS -  116                                 |
    |                                                                                   |
    |                                                                FILTER 1&2         |
    |                                                                DP LO              |
    | N12:0                                                             N20:35          |N20:35/12 - -(L)- - File #5 INTE
 82 |-| |-------------------------------------------------------------(U)-------------|                    24
    |  12                                                               12              |          -(U)- - File #5 INTE
    | [7:4]                                                                             |                    82      ...
    |N20:35/12 - -|/|- - File #5 INTRLKS -  25                                         |
    |           FLL - File #3 STARTUP -  5                                              |
    |           COP - File #5 INTRLKS -  116                                            |
    |           NEQ - File #5 INTRLKS -  113                                            |
    |                File #8 SYSSTAT -  0                                               |
    |FILE N20:35/12 LEN:100 - FFL - File #13 FIFO -  10                                 |
    |FILE N20:35/12 LEN:30 - FFL - File #18 FIFOBUFFER -  1                             |
    |FILE N20:35/12 LEN:3 - FLL - File #3 STARTUP -  5                                  |
    |                      COP - File #5 INTRLKS -  116                                 |
    | N12:0                                                             N20:35          |N20:35/13 - -(L)- - File #5 INTE
 83 |-| |-------------------------------------------------------------(U)-------------|                    26
    |  13                                                               13              |          -(U)- - File #5 INTE
    | [7:4]                                                                             |                    83      ...
    |N20:35 - FLL - File #3 STARTUP -  5                                                |
    |        COP - File #5 INTRLKS -  116                                               |
    |        NEQ - File #5 INTRLKS -  113                                               |
    |             File #8 SYSSTAT -  0                                                  |
    |FILE N20:35/13 LEN:100 - FFL - File #13 FIFO -  10                                 |
    |FILE N20:35/13 LEN:30 - FFL - File #18 FIFOBUFFER -  1                             |
    |FILE N20:35/13 LEN:3 - FLL - File #3 STARTUP -  5                                  |
    |                      COP - File #5 INTRLKS -  116                                 |
    | N12:0                                                             N20:35          |N20:35 - FLL - File #3 STARTUP E
 84 |-| |-------------------------------------------------------------(U)-------------|                     5
    |  14                                                               14              |        COP - File #5 INTRLKS E
    | [7:4]                                                                             |                   116      ...
    |N20:35 - NEQ - File #5 INTRLKS -  113                                              |
    |             File #8 SYSSTAT -  0                                                  |
    |FILE N20:35/14 LEN:100 - FFL - File #13 FIFO -  10                                 |
    |FILE N20:35/14 LEN:30 - FFL - File #18 FIFOBUFFER -  1                             |
    |FILE N20:35/14 LEN:3 - FLL - File #3 STARTUP -  5                                  |
    |                      COP - File #5 INTRLKS -  116                                 |
    |                                                                                   |
    |                                                                GLYCOL LEVEL       |
    |                                                                LOW UNPACK ALM     |
    | N12:0                                                             N20:35          |N20:35/15 - -(L)- - File #5 INTE
 85 |-| |-------------------------------------------------------------(U)-------------|                    27
    |  15                                                               15              |          -(U)- - File #5 INTE
    | [7:4]                                                                             |                    85      ...
```

```
   |N20:35/15 - -|/|- - File #10 GLYCOLPMP -  0, 1                                  |
   |            FLL - File #3 STARTUP -  5                                           |
   |            COP - File #5 INTRLKS -  116                                         |
   |            NEQ - File #5 INTRLKS -  113                                         |
   |                  File #8 SYSSTAT -  0                                           |
   |FILE N20:35/15 LEN:100 - FFL - File #13 FIFO -  10                               |
   |FILE N20:35/15 LEN:30 - FFL - File #18 FIFOBUFFER -  1                           |
   |FILE N20:35/15 LEN:3 - FLL - File #3 STARTUP -  5                                |
   |                       COP - File #5 INTRLKS -  116                              |
   |                                                                                 |
   |                                                                 HTR AIR TEMP    |
   |                                                                 HIGH UNACK      |
   |                                                                 ALM             |
   | N12:1                                                              N20:36       |N20:36/0 - -(L)- - File #5 INTRE
86 |-| |-------------------------------------------------------------------(U)-------|                  30
   |  0                                                                  0           |          -(U)- - File #5 INTRE
   |[7:4]                                                                            |                  86      ...
   |N20:36/0 - -|/|- - File #10 GLYCOLPMP -  1                                      |
   |           NEQ - File #5 INTRLKS -  113                                          |
   |                 File #8 SYSSTAT -  0                                            |
   |FILE N20:36/0 LEN:100 - FFL - File #13 FIFO -  10                                |
   |FILE N20:36/0 LEN:3 - FLL - File #3 STARTUP -  5                                 |
   |                     COP - File #5 INTRLKS -  116                                |
   | N12:1                                                              N20:36       |N20:36/1 - -(L)- - File #5 INTRE
87 |-| |-------------------------------------------------------------------(U)-------|                  32
   |  1                                                                  1           |          -(U)- - File #5 INTRE
   |[7:4]                                                                            |                  87      ...
   |N20:36 - NEQ - File #5 INTRLKS -  113                                            |
   |               File #8 SYSSTAT -  0                                              |
   |FILE N20:36/1 LEN:100 - FFL - File #13 FIFO -  10                                |
   |FILE N20:36/1 LEN:3 - FLL - File #3 STARTUP -  5                                 |
   |                     COP - File #5 INTRLKS -  116                                |
   | N12:1                                                              N20:36       |N20:36/2 - -(L)- - File #5 INTRE
88 |-| |-------------------------------------------------------------------(U)-------|                  33
   |  2                                                                  2           |          -(U)- - File #5 INTRE
   |[7:4]                                                                            |                  88      ...
   |N20:36 - NEQ - File #5 INTRLKS -  113                                            |
   |               File #8 SYSSTAT -  0                                              |
   |FILE N20:36/2 LEN:100 - FFL - File #13 FIFO -  10                                |
   |FILE N20:36/2 LEN:3 - FLL - File #3 STARTUP -  5                                 |
   |                     COP - File #5 INTRLKS -  116                                |
   | N12:1                                                              N20:36       |N20:36/3 - -(L)- - File #5 INTRE
89 |-| |-------------------------------------------------------------------(U)-------|                  35
   |  3                                                                  3           |          -(U)- - File #5 INTRE
   |[7:4]                                                                            |                  89      ...
   |N20:36 - NEQ - File #5 INTRLKS -  113                                            |
   |               File #8 SYSSTAT -  0                                              |
   |FILE N20:36/3 LEN:100 - FFL - File #13 FIFO -  10                                |
   |FILE N20:36/3 LEN:3 - FLL - File #3 STARTUP -  5                                 |
   |                     COP - File #5 INTRLKS -  116                                |
   | N12:1                                                              N20:36       |N20:36/4 - -(L)- - File #5 INTRE
90 |-| |-------------------------------------------------------------------(U)-------|                  37
   |  4                                                                  4           |          -(U)- - File #5 INTRE
   |[7:4]                                                                            |                  90      ...
   |N20:36 - NEQ - File #5 INTRLKS -  113                                            |
   |               File #8 SYSSTAT -  0                                              |
   |FILE N20:36/4 LEN:100 - FFL - File #13 FIFO -  10                                |
   |FILE N20:36/4 LEN:3 - FLL - File #3 STARTUP -  5                                 |
   |                     COP - File #5 INTRLKS -  116                                |
   | N12:1                                                              N20:36       |N20:36/5 - -(L)- - File #16 INTE
91 |-| |-------------------------------------------------------------------(U)-------|                  1
   |  5                                                                  5           |          -(U)- - File #5 INTRE
   |[7:4]                                                                            |                  91      ...
   |N20:36/5 - -| |- - File #16 INTLK -  20                                          |
   |           -|/|- - File #16 INTLK -  21                                          |
   |           NEQ - File #5 INTRLKS -  113                                          |
   |                 File #8 SYSSTAT -  0                                            |
   |FILE N20:36/5 LEN:100 - FFL - File #13 FIFO -  10                                |
   |FILE N20:36/5 LEN:3 - FLL - File #3 STARTUP -  5                                 |
   |                     COP - File #5 INTRLKS -  116                                |
   | N12:1                                                              N20:36       |N20:36/6 - -(L)- - File #16 INTE
92 |-| |-------------------------------------------------------------------(U)-------|                  4
   |  6                                                                  6           |          -(U)- - File #5 INTRE
   |[7:4]                                                                            |                  92      ...
```

```
   |N20:36 - NEQ - File #5 INTRLKS -  113                                                  |
   |               File #8 SYSSTAT -  0                                                    |
   |FILE N20:36/6 LEN:100 - FFL - File #13 FIFO -  10                                      |
   |FILE N20:36/6 LEN:3 - FLL - File #3 STARTUP -  5                                       |
   |                     COP - File #5 INTRLKS -  116                                      |
   | N12:1                                                                  N20:36 |N20:36/7 - -(L)- - File #16 INTE
 93|--| |-------------------------------------------------------------------(U)--|                  7
   |   7                                                                     7 |          -(U)- - File #5 INTRE
   |[7:4]                                                                      |                  93      ...
   |N20:36/7 - -| |- - File #16 INTLK -  20                                     |
   |           -|/|- - File #16 INTLK -  21                                     |
   |           NEQ - File #5 INTRLKS -  113                                     |
   |                File #8 SYSSTAT -  0                                        |
   |FILE N20:36/7 LEN:100 - FFL - File #13 FIFO -  10                           |
   |FILE N20:36/7 LEN:3 - FLL - File #3 STARTUP -  5                            |
   |                     COP - File #5 INTRLKS -  116                           |
   | N12:1                                                                  N20:36 |N20:36/8 - -(L)- - File #16 INTE
 94|--| |-------------------------------------------------------------------(U)--|                  10
   |   8                                                                     8 |          -(U)- - File #5 INTRE
   |[7:4]                                                                      |                  94      ...
   |N20:36 - NEQ - File #5 INTRLKS -  113                                       |
   |               File #8 SYSSTAT -  0                                        |
   |FILE N20:36/8 LEN:100 - FFL - File #13 FIFO -  10                           |
   |FILE N20:36/8 LEN:3 - FLL - File #3 STARTUP -  5                            |
   |                     COP - File #5 INTRLKS -  116                           |
   | N12:1                                                                  N20:36 |N20:36/9 - -(L)- - File #16 INTE
 95|--| |-------------------------------------------------------------------(U)--|                  12
   |   9                                                                     9 |          -(U)- - File #5 INTRE
   |[7:4]                                                                      |                  95      ...
   |N20:36 - NEQ - File #5 INTRLKS -  113                                       |
   |               File #8 SYSSTAT -  0                                        |
   |FILE N20:36/9 LEN:100 - FFL - File #13 FIFO -  10                           |
   |FILE N20:36/9 LEN:3 - FLL - File #3 STARTUP -  5                            |
   |                     COP - File #5 INTRLKS -  116                           |
   | N12:1                                                                  N20:36 |N20:36/10 - -(L)- - File #16 INE
 96|--| |-------------------------------------------------------------------(U)--|                  12
   |   10                                                                    10 |          -(U)- - File #5 INTE
   |[7:4]                                                                      |                  96      ...
   |N20:36 - NEQ - File #5 INTRLKS -  113                                       |
   |               File #8 SYSSTAT -  0                                        |
   |FILE N20:36/10 LEN:100 - FFL - File #13 FIFO -  10                          |
   |FILE N20:36/10 LEN:3 - FLL - File #3 STARTUP -  5                           |
   |                     COP - File #5 INTRLKS -  116                           |
   | N12:1                                                                  N20:36 |N20:36/11 - -(L)- - File #5 INTE
 97|--| |-------------------------------------------------------------------(U)--|                  41
   |   11                                                                    11 |          -(U)- - File #5 INTE
   |[7:4]                                                                      |                  97      ...
   |N20:36 - NEQ - File #5 INTRLKS -  113                                       |
   |               File #8 SYSSTAT -  0                                        |
   |FILE N20:36/11 LEN:100 - FFL - File #13 FIFO -  10                          |
   |FILE N20:36/11 LEN:3 - FLL - File #3 STARTUP -  5                           |
   |                     COP - File #5 INTRLKS -  116                           |
   | N12:1                                                                  N20:36 |N20:36 - NEQ - File #5 INTRLKS E
 98|--| |-------------------------------------------------------------------(U)--|                  113
   |   12                                                                    12 |               File #8 SYSSTAT E
   |[7:4]                                                                      |                  0       ...
   |N20:36/12 - FFL - File #13 FIFO -  10                                       |
   |FILE N20:36/12 LEN:3 - FLL - File #3 STARTUP -  5                           |
   |                     COP - File #5 INTRLKS -  116                           |
   | N12:1                                                                  N20:36 |N20:36 - NEQ - File #5 INTRLKS E
 99|--| |-------------------------------------------------------------------(U)--|                  113
   |   13                                                                    13 |               File #8 SYSSTAT E
   |[7:4]                                                                      |                  0       ...
   |N20:36/13 - FFL - File #13 FIFO -  10                                       |
   |FILE N20:36/13 LEN:3 - FLL - File #3 STARTUP -  5                           |
   |                     COP - File #5 INTRLKS -  116                           |
   | N12:1                                                                  N20:36 |N20:36/14 - -(U)- - File #5 INTE
100|--| |-------------------------------------------------------------------(U)--|                  47, 100
   |   14                                                                    14 |          NEQ - File #5 INTRLE
   |[7:4]                                                                      |                  113     ...
   |N20:36 - NEQ - File #8 SYSSTAT -  0                                         |
   |FILE N20:36/14 LEN:100 - FFL - File #13 FIFO -  10                          |
   |FILE N20:36/14 LEN:3 - FLL - File #3 STARTUP -  5                           |
```

```
|                    COP - File #5 INTRLKS -  116                                  |
| N12:1                                                          N20:36 |N20:36 - NEQ - File #5 INTRLKS E
101├─┤ ├──────────────────────────────────────────────────────────(U)──┤            113
|  15                                                              15  |          File #8 SYSSTAT E
|[7:4]                                                                 |           0          ...
|N20:36/15 - FFL - File #13 FIFO -  10                                 |
|FILE N20:36/15 LEN:3 - FLL - File #3 STARTUP -  5                     |
|                    COP - File #5 INTRLKS -  116                      |
| N12:2                                                          N20:37 |N20:37/0 - -(L)- - File #5 INTRE
102├─┤ ├──────────────────────────────────────────────────────────(U)──┤            48
|  0                                                                0  |        -(U)- - File #5 INTRE
|[7:4]                                                                 |            102       ...
|N20:37 - NEQ - File #5 INTRLKS -  113                                 |
|             File #8 SYSSTAT -  0                                     |
|FILE N20:37/0 LEN:100 - FFL - File #13 FIFO -  10                     |
|FILE N20:37/0 LEN:3 - FLL - File #3 STARTUP -  5                      |
|                    COP - File #5 INTRLKS -  116                      |
| N12:2                                                          N20:37 |N20:37/1 - -(L)- - File #5 INTRE
103├─┤ ├──────────────────────────────────────────────────────────(U)──┤            49
|  1                                                                1  |        -(U)- - File #5 INTRE
|[7:4]                                                                 |            103       ...
|N20:37 - NEQ - File #5 INTRLKS -  113                                 |
|             File #8 SYSSTAT -  0                                     |
|FILE N20:37/1 LEN:100 - FFL - File #13 FIFO -  10                     |
|FILE N20:37/1 LEN:3 - FLL - File #3 STARTUP -  5                      |
|                    COP - File #5 INTRLKS -  116                      |
| N12:2                                                          N20:37 |N20:37/2 - -(L)- - File #5 INTRE
104├─┤ ├──────────────────────────────────────────────────────────(U)──┤            50
|  2                                                                2  |        -(U)- - File #5 INTRE
|[7:4]                                                                 |            104       ...
|N20:37 - NEQ - File #5 INTRLKS -  113                                 |
|             File #8 SYSSTAT -  0                                     |
|FILE N20:37/2 LEN:100 - FFL - File #13 FIFO -  10                     |
|FILE N20:37/2 LEN:3 - FLL - File #3 STARTUP -  5                      |
|                    COP - File #5 INTRLKS -  116                      |
| N12:2                                                          N20:37 |N20:37/3 - -(L)- - File #5 INTRE
105├─┤ ├──────────────────────────────────────────────────────────(U)──┤            51
|  3                                                                3  |        -(U)- - File #5 INTRE
|[7:4]                                                                 |            105       ...
|N20:37 - NEQ - File #5 INTRLKS -  113                                 |
|             File #8 SYSSTAT -  0                                     |
|FILE N20:37/3 LEN:100 - FFL - File #13 FIFO -  10                     |
|FILE N20:37/3 LEN:3 - FLL - File #3 STARTUP -  5                      |
|                    COP - File #5 INTRLKS -  116                      |
| N12:2                                                          N20:37 |N20:37/4 - -(L)- - File #5 INTRE
106├─┤ ├──────────────────────────────────────────────────────────(U)──┤            54
|  4                                                                4  |        -(U)- - File #5 INTRE
|[7:4]                                                                 |            106       ...
|N20:37/4 - -┤/├- - File #5 INTRLKS -  119                             |
|          NEQ - File #5 INTRLKS -  113                                |
|             File #8 SYSSTAT -  0                                     |
|FILE N20:37/4 LEN:100 - FFL - File #13 FIFO -  10                     |
|FILE N20:37/4 LEN:3 - FLL - File #3 STARTUP -  5                      |
|                    COP - File #5 INTRLKS -  116                      |
| N12:2                                                          N20:37 |N20:37/5 - -(L)- - File #5 INTRE
107├─┤ ├──────────────────────────────────────────────────────────(U)──┤            56
|  5                                                                5  |        -(U)- - File #5 INTRE
|[7:4]                                                                 |            107       ...
|N20:37/5 - -┤/├- - File #5 INTRLKS -  119                             |
|          NEQ - File #5 INTRLKS -  113                                |
|             File #8 SYSSTAT -  0                                     |
|FILE N20:37/5 LEN:100 - FFL - File #13 FIFO -  10                     |
|FILE N20:37/5 LEN:3 - FLL - File #3 STARTUP -  5                      |
|                    COP - File #5 INTRLKS -  116                      |
| N12:2                                                          N20:37 |N20:37 - NEQ - File #5 INTRLKS E
108├─┤ ├──────────────────────────────────────────────────────────(U)──┤            113
|  6                                                                6  |          File #8 SYSSTAT E
|[7:4]                                                                 |           0          ...
|N20:37/6 - FFL - File #13 FIFO -  10                                  |
|FILE N20:37/6 LEN:3 - FLL - File #3 STARTUP -  5                      |
|                    COP - File #5 INTRLKS -  116                      |
```

```
                                                                                  PLENUM 1 PRESS
                                                                                  HI (ACK ALM)
  N12:2                                                                              N20:37
109 ─┤ ├──────────────────────────────────────────────────────────────────────────────(U)──────┤
   7                                                                                  7
  [7:4]
  N20:37 - NEQ - File #5 INTRLKS -  113
                 File #8 SYSSTAT -  0
  FILE N20:37/7 LEN:100 - FFL - File #13 FIFO -  10
  FILE N20:37/7 LEN:3 - FLL - File #3 STARTUP -  5
                       COP - File #5 INTRLKS -  116
  N12:2                                                                              N20:37
110 ─┤ ├──────────────────────────────────────────────────────────────────────────────(U)──┤
   8                                                                                  8
  [7:4]
  N20:37 - NEQ - File #5 INTRLKS -  113
                 File #8 SYSSTAT -  0
  FILE N20:37/8 LEN:100 - FFL - File #13 FIFO -  10
  FILE N20:37/8 LEN:3 - FLL - File #3 STARTUP -  5
                       COP - File #5 INTRLKS -  116
  ACK INLET VAC
  LO ALARM                                                                        INLET VAC LO
      N12:2                                                                          N20:37
111 ─────┤ ├──────────────────────────────────────────────────────────────────────────(U)──────┤
        9                                                                               10
  [7:4]
  N20:37 - NEQ - File #5 INTRLKS -  113
                 File #8 SYSSTAT -  0
  FILE N20:37/10 LEN:100 - FFL - File #13 FIFO -  10
  FILE N20:37/10 LEN:3 - FLL - File #3 STARTUP -  5
                       COP - File #5 INTRLKS -  116
  ACK INLET VAC
  HI ALARM                                                                        INLET VAC HI
      N12:2                                                                          N20:37
112 ─────┤ ├──────────────────────────────────────────────────────────────────────────(U)──────┤
        10                                                                              11
  [7:4]
  N20:37 - NEQ - File #5 INTRLKS -  113
                 File #8 SYSSTAT -  0
  FILE N20:37/11 LEN:100 - FFL - File #13 FIFO -  10
  FILE N20:37/11 LEN:3 - FLL - File #3 STARTUP -  5
                       COP - File #5 INTRLKS -  116
   UNACKED ALARMS
   WORD 1/3 STATUS
   ┌─NEQ──────────┐                                                                  N20:41
113 ─┤Not Equal     ├─┬──────────────────────────────────────────────────────────────────( )──┤
   │ │Source A  N20:35│ │                                                                13
   │ │              0│ │
   │ │Source B      0│ │
   │ └──────────────┘ │
   │N20:35 - [116]    │
   │UNACKED ALARMS    │
   │WORD 2/3 STATUS   │
   │┌─NEQ──────────┐ │
   │├Not Equal     ├─┤
   │ │Source A  N20:36│ │
   │ │              0│ │
   │ │Source B      0│ │
   │ └──────────────┘ │
   │N20:36 - [116]    │
   │UNACKED ALARMS    │
   │WORD 3/3 STATUS   │
   │┌─NEQ──────────┐ │
   │└Not Equal     ├─┘
   │ │Source A  N20:37│
   │ │              0│
   │ │Source B      0│
   │ └──────────────┘
   │ N20:37 - [116]
```

```
N20:37/7 - -(L)- - File #5 INTRE
                   59
         -(U)- - File #5 INTRE
                   109      ...
N20:37/8 - -(L)- - File #5 INTRE
                   66
         -(U)- - File #5 INTRE
                   110      ...
N20:37/10 - -(L)- - File #5 INTE
                   4
         -(U)- - File #5 INTE
                   111      ...
N20:37/11 - -(L)- - File #5 INTE
                   63
         -(U)- - File #5 INTE
                   112      ...
N20:41 - MVM - File #7 MESGVIEWE
                   1
FILE N20:41/13 LEN:100 -
     FFL - File #13 FIFO -  10
```

```
   |  ┌─NEQ──────────┐                                                  N20:41 |N20:41 - MVM - File #7 MESGVIEWE
114|─┤Not Equal       ├─┬──────────────────────────────────────────────( )──|                1
   | |Source A  N20:38| |                                                14 |FILE N20:41/14 LEN:100 -
   | |              0| |                                                   |     FFL - File #13 FIFO -  10
   | |Source B       0| |                                                   |
   | |└──────────────┘ |                                                   |
   |N20:38 - [46]      |                                                   |
   | ┌─NEQ──────────┐ |                                                   |
   |─┤Not Equal       ├─┤                                                   |
   | |Source A  N20:39| |                                                   |
   | |              2| |                                                   |
   | |Source B       0| |                                                   |
   | |└──────────────┘ |                                                   |
   |N20:39 - [47]      |                                                   |
   | ┌─NEQ──────────┐ |                                                   |
   | └─┤Not Equal       ├─┘                                                   |
   | |Source A  N20:40|                                                   |
   | |              0|                                                   |
   | |Source B       0|                                                   |
   | └──────────────┘                                                   |
   |N20:40 - [66]                                                       |
   |                                                                    |
   |                                                  ┌─TON──────────┐  |T4:50 - RES - File #5 INTRLKS -
115|──────────────────────────────────────────────────┤Timer On Delay ├─(EN)─|                118
   |                                                  |Timer      T4:50├─(DN)  |       TON - File #5 INTRLKS -
   |                                                  |Time Base    1.0|  |                115
   |                                                  |Preset         3|  |T4:50.DN - ─┤ ├─ - File #5 INTRE
   |                                                  |Accum          2|  |                 117
   |                                                  └──────────────┘  |T4:50.TT - ─┤ ├─ - File #5 INTRE
   |T4:50.TT - ─┤ ├─ - File #5 INTRLKS -  116                            |
   | T4:50                                                              |O:12.0 - CLR - File #5 INTRLKS E
116|─┤ ├──────────────────────────────────────────────────┬─COP──────────┐├─|                118
   |  TT                                                  |Copy File      |  |       COP - File #5 INTRLKS E
   |[115]                                                 |Source   #N20:35|  |N20:35 - FLL - File #3 STARTUP E
   |                                                      |Dest     #O:12.0|  |                5
   |                                                      |Length         3|  |       COP - File #5 INTRLKS E
   |                                                      └──────────────┘  |
   |O:12.0 - COP - File #5 INTRLKS -  116                                  |
   |N20:35 - COP - File #5 INTRLKS -  116                                  |
   |         NEQ - File #5 INTRLKS -  113                                  |
   |              File #8 SYSSTAT -  0                                     |
   |N20:35/0 - ─(U)─ - File #5 INTRLKS -  70                               |
   |N20:35/1 - ─(U)─ - File #5 INTRLKS -  71                               |
   |N20:35/2 - ─(L)─ - File #5 INTRLKS -  2                                |
   |           ─(U)─ - File #5 INTRLKS -  72                               |
   |N20:35/3 - ─(L)─ - File #5 INTRLKS -  5                                |
   |           ─(U)─ - File #5 INTRLKS -  73                               |
   |N20:35/4 - ─(L)─ - File #5 INTRLKS -  8                                |
   |           ─(U)─ - File #5 INTRLKS -  74                               |
   |N20:35/5 - ─(L)─ - File #5 INTRLKS -  11                               |
   |           ─(U)─ - File #5 INTRLKS -  75                               |
   |N20:35/6 - ─(L)─ - File #5 INTRLKS -  14                               |
   |           ─(U)─ - File #5 INTRLKS -  76                               |
   |           ─┤/├─ - File #5 INTRLKS -  15                               |
   |N20:35/7 - ─(L)─ - File #5 INTRLKS -  16                               |
   |           ─(U)─ - File #5 INTRLKS -  77                               |
   |N20:35/8 - ─(L)─ - File #5 INTRLKS -  17                               |
   |           ─(U)─ - File #5 INTRLKS -  45, 78                           |
   |N20:35/9 - ─(L)─ - File #5 INTRLKS -  19                               |
   |           ─(U)─ - File #5 INTRLKS -  79                               |
   |           ─┤/├─ - File #5 INTRLKS -  20                               |
   |N20:35/10 - ─(L)─ - File #5 INTRLKS -  21                              |
   |            ─(U)─ - File #5 INTRLKS -  80                              |
   |N20:35/11 - ─(L)─ - File #5 INTRLKS -  22                              |
   |            ─(U)─ - File #5 INTRLKS -  46, 81                          |
   |N20:35/12 - ─(L)─ - File #5 INTRLKS -  24                              |
   |            ─(U)─ - File #5 INTRLKS -  82                              |
   |            ─┤/├─ - File #5 INTRLKS -  25                              |
   |N20:35/13 - ─(L)─ - File #5 INTRLKS -  26                              |
   |            ─(U)─ - File #5 INTRLKS -  83                              |
   |N20:35/14 - ─(U)─ - File #5 INTRLKS -  84                              |
   |N20:35/15 - ─(L)─ - File #5 INTRLKS -  27                              |
   |            ─(U)─ - File #5 INTRLKS -  85                              |
   |            ─┤/├─ - File #10 GLYCOLPMP -  0, 1                         |
   |FILE N20:35 LEN:100 - FFL - File #13 FIFO -  10                        |
```

```
FILE N20:35 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:35 LEN:3 - FLL - File #3 STARTUP -  5
                    COP - File #5 INTRLKS -  116

117 T4:50 DN [118]  ──┤ ├──  TON Timer On Delay  Timer T4:51  Time Base 1.0  Preset 5  Accum 0  (EN) (DN)
                                                                                  T4:51 - RES - File #5 INTRLKS - 118
                                                                                  TON - File #5 INTRLKS - 117
                                                                                  T4:51.DN - ┤ ├ - File #5 INTRE 118

118 T4:51 DN [118]  ──┤ ├──  CLR Clear  Dest O:12.0  0
                                                                                  O:12.0 - CLR - File #5 INTRLKS E 118
                                                                                  COP - File #5 INTRLKS E 116
                                                                                  FILE O:12.0 LEN:3 -
                                                                                  COP - File #5 INTRLKS - ...
                                                                                  FILE O:12.1 LEN:3 -
                                                                                  COP - File #5 INTRLKS - 116
                                                                                  FILE O:12.2 LEN:3 -
                                                                                  COP - File #5 INTRLKS - 116
                                                                                  T4:50 - RES - File #5 INTRLKS - 118
                                                                                  TON - File #5 INTRLKS -
                                                                                  T4:51 - RES - File #5 INTRLKS - 118 ...
O:12.0 - COP - File #5 INTRLKS -  116
T4:50 - TON - File #5 INTRLKS -  115
T4:50.DN - ┤ ├ - File #5 INTRLKS -  117
T4:50.TT - ┤ ├ - File #5 INTRLKS -  116
T4:51 - TON - File #5 INTRLKS -  117
T4:51.DN - ┤ ├ - File #5 INTRLKS -  118

119 N20:37 N20:37 N20:38 / N20:38 / N20:38 / N20:38 / N20:38 >
    4 [106]  5 [107]  2 [2]  4 [9] OFLOW/VAC CTRL BIT (OFF=FLOW, ON=VAC) B3 0  5 [13] HI VACUUM MODE (SEAL POT PLUG) SELECTED B3 1  6 [15]  7 [18] >
    B3 32 [3:11]
                                                                                  N20:42/3 - -( )- - File #5 INTRE 119
                                                                                  ┤ ├ - File #5 INTRE 120 ...
120 N20:42 3 [119]  N20:38 10 [23]  N20:38 12 [25]  N20:41 15 [69]  N20:38 13 [26]  N20:39 3 [36]  N20:40 11 [65]  N20:42 6
    N20:42 1 [13:10]
                                                                                  N20:42/6 - -( )- - File #5 INTRE 120
                                                                                  ┤ ├ - File #5 INTRE 121
                                                                                  FILE N20:42/6 LEN:100 -
                                                                                  FFL - File #13 FIFO -  10
```

```
     |                LOW INPUT INTLK                                                  FAN INTLKS |
     |N20:42 N20:39      N20:42      N20:42   N20:39  N20:39    N20:39   N20:41                N20:41 |N20:41/1 - -( )- - File #5 INTRE
121 |-| |----|/|-------------|/|-------|/|-----|/|-------|/|-----|/|-----|-|-------------------( )-----|                  121
     |  6      4          13          14      |  9       10      |  11     |  12     |                1 |          -| |- - File #5 INTRE
     |[120]  [38]   [16:2]          [16:8]  |[16:12]  [16:12]  |[41]     |[67]     |                  |                  52, 53
     |                                      |                  |         |         |                  |                  File #6 FANCE
     |                                      |N20:42            |         |  B3     |                  |                  5
     |                                      |-| |-------------|         |-| |-----|                  |                  File #20 FANE
     |                                      |  12              |           33                         |                  7
     |                                      |[68]              |         [3:11]                       |          -|/|- - File #6 FANCE
     |                                      |                  |                                      |                  2
     |                                      |N20:42            |                                      |                  File #9 SIMUE
     |                                      |-|/|-------------|                                      |                  1
     |                                        0                                                      |                  File #20 FANE
     |                                      [13:10]                                                  |                  2        ...
     |N20:41 - MVM - File #7 MESGVIEW -  1                                                           |
     |FILE N20:41/1 LEN:100 - FFL - File #13 FIFO -  10                                              |
     |                                                                                               |
     |                                                                                  ┌-RET-------┐ |
122 |-------------------------------------------------------------------------------------|Return     |-|
     |                                                                                  └-----------┘ |
123 |-------------------------------------------------------------------------------------------[END]-|
```

```
 EXHAUST FAN
 CTRL ON STACK          MOTOR                                                                  |
 FLOW                   CONTACT                                  FAN AUTO/MAN                  |
 ┌─SER──────────┐       N20:25   B3                                N20:41                      |N20:41/6 - -(L)- - File #6 FANCE
0├Subroutine────┤──┤ ├──[OSR]──────────────────────────────────────(L)──────────────────────┤                    0
 └──────────────┘        7     117                                  6                         |                File #20 FANE
                        [9:0]                                                                  |                    0
                                                                                               |         -(U)- - File #6 FANCE
                                                                   PUMP COUNT BIT              |                    1, 4     ...
                                                                      N20:42                   |N20:42/9 - -(L)- - File #16 INTE
                                                                   ──────(U)──────────────────┤                   20
                                                                        9                      |         -(U)- - File #6 FANCE
                                                                                               |                    0, 1     ...
                                                                   N20:42     N20:42          |N20:42/4 - -(L)- - File #6 FANCE
                                                                   └─┤ ├──────────┬─(L)─┘      |                    0
                                                                       0        │   4         |                File #20 FANE
                                                                    [13:10]     │             |                    0
                                                                                │             |         -(U)- - File #6 FANCE
                                                                                │N20:42       |N20:42/5 - -(L)- - File #6 FANCE
                                                                                └─(L)─┘       |                    0
                                                                                   5          |                File #20 FANE
N20:41/6 - -(U)- - File #20 FANCNTRL -  1, 6
          -┤ ├- - File #6 FANCNTRL -  16
                  File #20 FANCNTRL -  26
          -┤/├- - File #6 FANCNTRL -  17
                  File #20 FANCNTRL -  27
          MVM - File #7 MESGVIEW -  1
FILE N20:41/6 LEN:100 - FFL - File #13 FIFO -  10
N20:42/9 - -(U)- - File #16 INTLK -  21
                  File #20 FANCNTRL -  0, 1
          -┤/├- - File #16 INTLK -  20
FILE N20:42/9 LEN:100 - FFL - File #13 FIFO -  10
N20:42/4 - -(U)- - File #6 FANCNTRL -  1
                  File #20 FANCNTRL -  1
          -┤ ├- - File #16 INTLK -  31
          -┤/├- - File #16 INTLK -  32
FILE N20:42/4 LEN:100 - FFL - File #13 FIFO -  10
N20:42/5 - -(L)- - File #20 FANCNTRL -  0
          -(U)- - File #6 FANCNTRL -  1
                  File #20 FANCNTRL -  1
          -┤ ├- - File #16 INTLK -  34
          -┤/├- - File #16 INTLK -  35
FILE N20:42/5 LEN:100 - FFL - File #13 FIFO -  10
MOTOR
CONTACT                                                        FAN AUTO/MAN                    |
 N20:25   B3                                                      N20:41                        |N20:41/6 - -(L)- - File #6 FANCE
1──┤/├──[OSR]──────────────────────────────────────────────────────(U)──────────────────────┤                    0
   7     118                                                       6                           |                File #20 FANE
 [9:0]                                                                                         |                    0
                                                                                               |         -(U)- - File #6 FANCE
                                                                   PUMP COUNT BIT              |                    1, 4     ...
                                                                      N20:42                   |N20:42/9 - -(L)- - File #16 INTE
                                                                   ──────(U)──────────────────┤                   20
                                                                        9                      |         -(U)- - File #6 FANCE
                                                                                               |                    0, 1     ...
                                                                   N20:42                      |N20:42/4 - -(L)- - File #6 FANCE
                                                                   ──(U)──────────────────────┤                    0
                                                                        4                      |                File #20 FANE
                                                                                               |                    0        ...
                                                                   N20:42                      |N20:42/5 - -(L)- - File #6 FANCE
                                                                   └─(U)──────────────────────┘                    0
                                                                        5                      |                File #20 FANE
N20:41/6 - -(U)- - File #20 FANCNTRL -  1, 6
          -┤ ├- - File #6 FANCNTRL -  16
                  File #20 FANCNTRL -  26
          -┤/├- - File #6 FANCNTRL -  17
                  File #20 FANCNTRL -  27
          MVM - File #7 MESGVIEW -  1
FILE N20:41/6 LEN:100 - FFL - File #13 FIFO -  10
N20:42/9 - -(U)- - File #16 INTLK -  21
                  File #20 FANCNTRL -  0, 1
          -┤/├- - File #16 INTLK -  20
FILE N20:42/9 LEN:100 - FFL - File #13 FIFO -  10
```

```
 |N20:42/4 - -(U)- - File #6 FANCNTRL -  1                                      |
 |                   File #20 FANCNTRL -  1                                     |
 |          -| |- - File #16 INTLK -  31                                        |
 |          -|/|- - File #16 INTLK -  32                                        |
 |FILE N20:42/4 LEN:100 - FFL - File #13 FIFO -  10                             |
 |N20:42/5 - -(L)- - File #20 FANCNTRL -  0                                     |
 |          -(U)- - File #6 FANCNTRL -  1                                       |
 |                   File #20 FANCNTRL -  1                                     |
 |          -| |- - File #16 INTLK -  34                                        |
 |          -|/|- - File #16 INTLK -  35                                        |
 |FILE N20:42/5 LEN:100 - FFL - File #13 FIFO -  10                             |
 |FAN INTLKS                                                                    |
 |  N20:41                                              +-TON-----------+       |T4:1 - TON - File #6 FANCNTRL -
2|----|/|-----------------------------------------------|Timer On Delay |-(EN)-|        2
 |    1                                                 |Timer     T4:1 |-(DN) |          File #20 FANCNTRL E
 |[5:121]                                               |Time Base  1.0 |      |        2
 |                                                      |Preset       2 |      |T4:1.TT - -|/|- - File #6 FANCNE
 |                                                      |Accum        0 |      |            4
 |                                                      +---------------+      |              File #20 FANCE
 |T4:1.TT - -|/|- - File #20 FANCNTRL -  6                                      |
 |                                                        STACK FLOW LOW        |
 |                                                        SETPOINT              |
 |                                                        +-COP-----------+     |N19:4 - COP - File #6 FANCNTRL E
3|--------------------------------------------------------|Copy File      |-----|          3
 |                                                        |Source  #N36:16|     |          File #20 FANCNTRLE
 |                                                        |Dest     #N19:4|     |          3
 |                                                        |Length        2|     |     LEQ - File #5 INTRLKS -
 |                                                        +---------------+     |          7             ...
 |N19:4 - COP - File #6 FANCNTRL -  3                                           |
 |              File #20 FANCNTRL -  3                                          |
 |120 VAC STOP      WW STOP                            5 VDC STOP               |
 |  N20:24     T4:1  N20:41                             N20:24                  |N20:24/3 - -( )- - File #6 FANCE
4|----| |------|/|----|/|-------------------------------+---( )---------------+-|            4
 |    6         TT    3                                 |    3                | |            File #20 FANE
 |[4:11]        [2]  [9:0]                              |                     | |            6
 |                                                      |                     | |      -(L)- - File #11 ERRE
 |                                                      |        FAN AUTO/MAN | |            3            ...
 |                                                      | B3        N20:41    | |N20:41/6 - -(L)- - File #6 FANCE
 |                                                      +-[OSR]------(U)------+ |            0
 |                                                      | 145         6       | |            File #20 FANE
 |                                                      |                     | |            0
 |                                                      |        FAN          | |      -(U)- - File #6 FANCE
 |                                                      |        ENABLED      | |            1, 4        ...
 |                                                      | B3       B3         | |B3/34 - -(L)- - File #2 MAIN -
 |                                                      +-[OSR]----(U)--------+ |       18
 |                                                        77       34           |     -(U)- - File #6 FANCNTRE
 |N20:24 - MVM - File #4 INPUTDATA -  11                                        |
 |               File #17 COPY_OUT -  2                                         |
 |FILE N20:24/3 LEN:100 - FFL - File #13 FIFO -  10                             |
 |FILE N20:24/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1                         |
 |FILE N20:24/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1                         |
 |FILE N20:24/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1                         |
 |N20:41/6 - -(U)- - File #20 FANCNTRL -  1, 6                                  |
 |          -| |- - File #6 FANCNTRL -  16                                      |
 |                  File #20 FANCNTRL -  26                                     |
 |          -|/|- - File #6 FANCNTRL -  17                                      |
 |                  File #20 FANCNTRL -  27                                     |
 |          MVM - File #7 MESGVIEW -  1                                         |
 |FILE N20:41/6 LEN:100 - FFL - File #13 FIFO -  10                             |
 |B3/34 - -(U)- - File #6 FANCNTRL -  4                                         |
 |               File #20 FANCNTRL -  6                                         |
 |      -| |- - File #2 MAIN -  19                                              |
 |               File #5 INTRLKS -  1, 58                                       |
 |      -|/|- - File #2 MAIN -  20                                              |
 |      MVM - File #3 STARTUP -  11                                             |
```

```
                                                                                  5 VDC
                                                                                  FAN
  START PBUTTON    FAN INTLKS                                                    START
      N20:24          N20:41                                                     N20:24 |N20:24/2 - -( )- - File #6 FANCE
5|-------] |-------] |-------------------------------------------------------( )-|
  |       7        |       1                                                     2                  5
  | [4:11]         | [5:121]                                                                        File #20 FANE
  |                |                                                                                 7
  |WW START        |                                                                        -| |- - File #2 MAINE
  | N20:41         |                                                                                 18
  |-------] |-------]                                                                    MVM - File #4 INPUTDE
      2                                                                                          11
  [7:1]                                                                                       File #17 COPY_E
|N20:24/2 - FFL - File #13 FIFO -  10                                                          2          ...
|FILE N20:24/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:24/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:24/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|N20:24                                                                            N20:24 |N20:24/5 - -( )- - File #6 FANCE
6|-| |-------------------------------------------------------------------------( )-|
  | 9                                                                            5                  6
  |[4:11]                                                                                          File #20 FANE
  |N20:24 - MVM - File #4 INPUTDATA -  11                                                           8          ...
  |              File #17 COPY_OUT -  2
  |FILE N20:24/5 LEN:100 - FFL - File #13 FIFO -  10
  |FILE N20:24/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
  |FILE N20:24/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
  |FILE N20:24/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
  |                                                                                PROPORTIONAL
  |                                                                                GAIN
  | B3                                                                            ┌─COP──────┐
7|-[OSR]-------------------------------------------------------------------------|Copy File |-|
  | 129                                                                           |Source  #N36:13|  |N10:3 - COP - File #6 FANCNTRL E
  |                                                                               |Dest     #N10:3|  |              7, 18
  |                                                                               |Length        3|  |             File #20 FANCNTRLE
  |                                                                               └──────────┘  |              9            ...
  |                                                                               |FAN CTRL PID   |  |N36:13 - COP - File #6 FANCNTRLE
  |                                                                               |BIT SETTINGS   |  |              7, 18
  |                                                                               ┌─COP──────┐  |FILE N36:13 LEN:3 -
  |                                                                               |Copy File |-|  |     COP - File #6 FANCNTRL -  7
  |                                                                               |Source  #N36:10|  |              18
  |                                                                               |Dest     #N10:0|  |N10:0 - COP - File #6 FANCNTRL E
  |                                                                               |Length        1|  |              7
  |                                                                               └──────────┘  |             File #20 FANCNTRLE
  |                                                                               |FAN PID        |  |              9            ...
  |                                                                               |DEADBAND       |  |
  |                                                                               ┌─COP──────┐  |
  |                                                                               |Copy File |-|  |N10:9 - COP - File #6 FANCNTRL E
  |                                                                               |Source  #N36:11|  |              7
  |                                                                               |Dest     #N10:9|  |             File #20 FANCNTRLE
  |                                                                               |Length        1|  |              9            ...
  |                                                                               └──────────┘  |
  |                                                                               |FAN PID CALC   |  |
  |                                                                               |INTERVAL /100s |  |
  |                                                                               ┌─COP──────┐  |N10:13 - COP - File #6 FANCNTRLE
  |                                                                               |Copy File |-|  |              7
  |                                                                               |Source  #N36:12|  |             File #20 FANCNTRE
  |                                                                               |Dest    #N10:13|  |              9
  |                                                                               |Length        1|  |FILE N10:13 LEN:23 -
  |                                                                               └──────────┘  |     PID - File #6 FANCNTRL - ..
|N10:3 - PID - File #6 FANCNTRL -  10
|              File #20 FANCNTRL -  12
|FILE N10:3 LEN:3 - COP - File #6 FANCNTRL -  7, 18
|                         File #20 FANCNTRL -  9
|N10:0 - PID - File #6 FANCNTRL -  10
|              File #20 FANCNTRL -  12
|N10:0/1 - -( )- - File #6 FANCNTRL -  17
|                File #20 FANCNTRL -  27
|FILE N10:0 LEN:1 - COP - File #6 FANCNTRL -  7
|                         File #20 FANCNTRL -  9
|FILE N10:0 LEN:23 - PID - File #6 FANCNTRL -  10
|                          File #20 FANCNTRL -  12
```

```
|N10:9 - PID - File #6 FANCNTRL -  10
|              File #20 FANCNTRL -  12
|FILE N10:9 LEN:1 - COP - File #6 FANCNTRL -  7
|                         File #20 FANCNTRL -  9
|N10:13 - PID - File #6 FANCNTRL -  10
|               File #20 FANCNTRL -  12
|FILE N10:13 LEN:1 - COP - File #6 FANCNTRL -  7
|                          File #20 FANCNTRL -  9
|
|                                                   FAN PID PV
|                                                  ┌─SCL──────────┐
8├──────────────────────────────────────────────────┤Scale         ├─
|                                                  |Source    N20:9|
|                                                  |           6242|
|                                                  |Rate [/10000] 6563|
|                                                  |              |
|                                                  |Offset    -4096|
|                                                  |              |
|                                                  |Dest     N10:28|
|                                                  |           -1|
|                                                  └──────────────┘
|N10:28 - PID - File #6 FANCNTRL -  10
|               File #20 FANCNTRL -  12
|N20:9 - GEQ - File #5 INTRLKS -  10
|        LEQ - File #5 INTRLKS -  7
|        SCL - File #6 FANCNTRL -  8
|FILE N20:9 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:9 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:9 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:9 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:9 LEN:2 - COP - File #17 COPY_OUT -  0
|
|                                                   PID SETPOINT
|                                                   (RAW UNITS, IN
|                                                   CONTROL BLOCK)
|                                                  ┌─MUL──────────┐
9├──────────────────────────────────────────────────┤Multiply      ├─
|                                                  |Source A    F8:6|
|                                                  |         1000.0|
|                                                  |Source B 13.72194|
|                                                  |              |
|                                                  |Dest       N10:2|
|                                                  |           9830|
|                                                  └──────────────┘
|                                                 FAN CTRL PID
|                                                 BIT SETTINGS
|                                                  ┌─PID──────────┐
10├──────────────────────────────────────────────────┤PID           ├─
|                                                  |Control Block     N10:0|
|                                                  |Process Variable  N10:28|
|                                                  |Control Variable  N10:29|
|                                                  |Control Block Length  23|
|                                                  └──────────────┘
|N10:0 - COP - File #20 FANCNTRL -  9
|        PID - File #6 FANCNTRL -  10
|              File #20 FANCNTRL -  12
|N10:0/1 - -( )- - File #6 FANCNTRL -  17
|                File #20 FANCNTRL -  27
|FILE N10:0 LEN:1 - COP - File #6 FANCNTRL -  7
|                         File #20 FANCNTRL -  9
|FILE N10:0 LEN:23 - PID - File #6 FANCNTRL -  10
|                         File #20 FANCNTRL -  12
|N10:28 - SCL - File #20 FANCNTRL -  10
|        PID - File #6 FANCNTRL -  10
|              File #20 FANCNTRL -  12
|N10:29 - COP - File #6 FANCNTRL -  16, 17
|              File #20 FANCNTRL -  26, 27
|        SCL - File #6 FANCNTRL -  11
|              File #20 FANCNTRL -  14
|        PID - File #6 FANCNTRL -  10
|              File #20 FANCNTRL -  12
|FILE N10:29 LEN:1 - COP - File #6 FANCNTRL -  16, 17
|                         File #20 FANCNTRL -  26, 27
|
|N10:28 - SCL - File #6 FANCNTRLE
|                8
|              File #20 FANCNTRE
|                10
|        PID - File #6 FANCNTRLE
|N20:9 - MOV - File #6 FANCNTRL E
|                15
|      ADD - File #6 FANCNTRL E
|                14
|              File #20 FANCNTRLE
|                25            ...
|
|N10:2 - MUL - File #6 FANCNTRL E
|                9
|              File #20 FANCNTRLE
|                11
|FILE N10:2 LEN:23 -
|     PID - File #6 FANCNTRL -
|           10
|          File #20 FANCNTRL -
|           12
|
|N10:0 - COP - File #6 FANCNTRL E
|                7            ...
|N10:28 - SCL - File #6 FANCNTRLE
|                8            ...
|N10:29 - MOV - File #20 FANCNTRE
|                13
|        COP - File #6 FANCNTRLE
|
```

```
|                                                                                                                  |
|                 Auto/Manual......: MANUAL          Time Mode................: 0 TM                              |
|                 Mode.............: STI             Auto/Manual..............: 1 AM                              |
|                 Control..........: E=SP-PV         Control Mode.............: 0 CM                              |
|                 Setpoint (SP)....:   9830          Output Limiting Enable...: 1 OL                              |
|                 Process (PV).....:      0          Reset and Gain Range.....: 0 RG                              |
|                 Scaled Error.....:   9830          Scale Setpoint Flag......: 1 SC                              |
|                 Deadband.........:     50          Loop Update Time Too Fast: 0 TF                              |
|                 Output (CV)......:     92 %        Derivative (rate) Action.: 0 DA                              |
|                                                    Set when Error is in DB..: 0 DB                              |
|                 Loop Update......:    125 (.01 secs) Output Alarm, Upper Limit: 0 UL                             |
|                 Gain.............:     10 (/10)    Output Alarm, Lower Limit: 0 LL                              |
|                 Reset............:     50 (/10 m/r) Setpoint Out of Range....: 0 SP                              |
|                 Rate.............:     10 (/100 min) Process Var Out of Range.: 0 PV                             |
|                 Min Scaled.......:      0          PID Done.................: 0 DN                              |
|                 Max Scaled.......:      0                                                                          |
|                 Output (CV) Limit: YES             PID Enabled..............: 0 EN                              |
|                 Output (CV) Min..:      0 %                                                                        |
|                 Output (CV) Max..:    100 %                                                                        |
|                                                                                                                  |
|                                                                  VFD INPUT DATA                                  |
|                                                                  ┌SCL──────────┐ |N20:8 - COP - File #17 COPY_OUTE
11├──────────────────────────────────────────────────────────────┤Scale        ├─┤            0
|                                                                  |Source     N10:29| |      SCL - File #6 FANCNTRL E
|                                                                  |           16384| |             11
|                                                                  |Rate [/10000] 15239| |          File #20 FANCNTRLE
|                                                                  |               | |N10:29 - MOV - File #20 FANCNTRE
|                                                                  |Offset      6242| |            13
|                                                                  |               | |      COP - File #6 FANCNTRLE
|                                                                  |Dest       N20:8| |            16, 17
|                                                                  |           31210| |          File #20 FANCNTRE
|                                                                  └──────────────┘ |            26, 27      ...
|N20:8 - SCL - File #20 FANCNTRL -  14                                                |
|FILE N20:8 LEN:100 - FFL - File #13 FIFO -  10                                       |
|FILE N20:8 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                   |
|FILE N20:8 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                   |
|FILE N20:8 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                   |
|FILE N20:8 LEN:2 - COP - File #17 COPY_OUT -  0                                      |
|N10:29 - SCL - File #6 FANCNTRL -  11                                                |
|             File #20 FANCNTRL -  14                                                 |
|         PID - File #6 FANCNTRL -  10                                                |
|             File #20 FANCNTRL -  12                                                 |
|FILE N10:29 LEN:1 - COP - File #6 FANCNTRL -  16, 17                                 |
|                  File #20 FANCNTRL -  26, 27                                        |
|MOTOR                                                                                |
|CONTACT                                                           LAST PID RESULT    |
| N20:25   B3                                                      ┌CLR──────────┐ |N20:43 - CLR - File #6 FANCNTRLE
12├──┤/├──[OSR]──────────────────────────────────────────────────┤Clear        ├─┤            12
|   7     147                                                      |Dest       N20:43| | |      COP - File #6 FANCNTRLE
|[9:0]                                                             |           16384| | |            16, 17
|                                                                  └──────────────┘ | |          File #20 FANCNTRE
|                                                                                   | |            26, 27      ...
|                                                                  ┌CLR──────────┐ | |N20:48 - CLR - File #6 FANCNTRLE
|                                                                  ├Clear        ├─┤ |            12
|                                                                  |Dest       N20:48| | |      COP - File #16 INTLK -
|                                                                  |               0| | |            31, 32
|                                                                  └──────────────┘ | |FILE N20:48 LEN:100 -
|                                                                                   | |    FFL - File #13 FIFO -  10..
|                                                                  ┌CLR──────────┐ | |N20:53 - CLR - File #6 FANCNTRLE
|                                                                  └Clear        ├─┘ |            12
|                                                                  |Dest       N20:53| |      COP - File #16 INTLK -
|                                                                  |               0| |            34, 35
|                                                                  └──────────────┘ |FILE N20:53 LEN:100 -       ...
|N20:43 - FFL - File #13 FIFO -  10                                                   |
|FILE N20:43 LEN:1 - COP - File #6 FANCNTRL -  16, 17                                 |
|                  File #20 FANCNTRL -  26, 27                                        |
|N20:48 - COP - File #16 INTLK -  31, 32                                              |
|N20:53 - FFL - File #13 FIFO -  10                                                   |
|FILE N20:53 LEN:1 - COP - File #16 INTLK -  34, 35                                   |
|N20:41  B3                                                                N20:25     |N20:25/5 - -(L)- - File #6 FANCE
13├──┤ ├──[OSR]──────────────────────────────────────────────────────────────(L)──┤                13
|   8     231                                                                  5     |                File #20 FANE
|[7:1]                                                                               |                 16       ...
```

```
|N20:25/5 - -(U)- - File #3 STARTUP -  7                                  |
|          MVM - File #4 INPUTDATA -  12                                  |
|                File #17 COPY_OUT -  3                                   |
|FILE N20:25/5 LEN:100 - FFL - File #13 FIFO -  10                        |
|FILE N20:25/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1                    |
|FILE N20:25/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1                    |
|FILE N20:25/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1                    |
```

```
CHAIN FLOW CALC

                                                  CORRECTED
                                                  TEMPERATURE
                                                  VALUE
                                                  ┌─ADD──────────┐
14 ──────────────────────────────────────────────┤Add           ├──┬─┤N14:0 - ADD - File #6 FANCNTRL E
                                                  │Source A  N20:30│  │              14
                                                  │             101│  │             File #20 FANCNTRLE
                                                  │Source B     460│  │              17
                                                  │                │  │        DIV - File #6 FANCNTRL E
                                                  │                │  │              14          ...
                                                  │Dest       N14:0│  │N20:30 - ADD - File #6 FANCNTRLE
                                                  │             561│  │              14, 19
                                                  └────────────────┘  │             File #20 FANCNTRE
                                                                      │              17, 28
                                                  STACK DP IN         │FILE N20:30 LEN:100 -
                                                  ARBITRARY UNITS     │     FFL - File #13 FIFO -  10..
                                                  ┌─SUB──────────┐  │N14:1 - SUB - File #6 FANCNTRL E
                                                  ├Subtract      ├──┤              14
                                                  │Source A   N20:3│  │             File #20 FANCNTRLE
                                                  │            3277│  │              18
                                                  │Source B    3277│  │        DIV - File #6 FANCNTRL E
                                                  │                │  │              14          ...
                                                  │Dest       N14:1│  │N20:3 - MOV - File #5 INTRLKS -
                                                  │               0│  │              39
                                                  └────────────────┘  │        SUB - File #6 FANCNTRL E
                                                                      │              14
                                                  SCALED DP VALUE     │             File #20 FANCNTRLE
                                                  (IN W.C.)           │              18          ...
                                                  ┌─DIV──────────┐  │F8:0 - MUL - File #6 FANCNTRL -
                                                  ├Divide        ├──┤              14
                                                  │Source A   N14:1│  │             File #20 FANCNTRL E
                                                  │               0│  │              20
                                                  │Source B  3276.75│  │       DIV - File #6 FANCNTRL -
                                                  │                │  │              14
                                                  │Dest        F8:0│  │             File #20 FANCNTRL E
                                                  │             0.0│  │              19
                                                  └────────────────┘  │
                                                  FLOW CALC           │
                                                  INTERMEDIATE        │
                                                  VALUE               │
                                                  ┌─MUL──────────┐  │F8:1 - MUL - File #6 FANCNTRL -
                                                  ├Multiply      ├──┤              14
                                                  │Source A    F8:0│  │             File #20 FANCNTRL E
                                                  │             0.0│  │              20
                                                  │Source B  410.47│  │       DIV - File #6 FANCNTRL -
                                                  │                │  │              14
                                                  │Dest        F8:1│  │             File #20 FANCNTRL E
                                                  │             0.0│  │              21
                                                  └────────────────┘  │
                                                  FLOW CALC           │
                                                  INTERMEDIATE        │
                                                  VALUE               │
                                                  ┌─DIV──────────┐  │F8:2 - DIV - File #6 FANCNTRL -
                                                  ├Divide        ├──┤              14
                                                  │Source A    F8:1│  │             File #20 FANCNTRL E
                                                  │             0.0│  │              21
                                                  │Source B   N14:0│  │       SQR - File #6 FANCNTRL -
                                                  │             561│  │              14
                                                  │Dest        F8:2│  │             File #20 FANCNTRL E
                                                  │             0.0│  │              22
                                                  └────────────────┘  │
                                                  FLOW CALC           │
                                                  INTERMEDIATE        │
                                                  VALUE               │
                                                  ┌─SQR──────────┐  │F8:3 - MUL - File #6 FANCNTRL -
                                                  ├Square Root   ├──┤              14
                                                  │Source      F8:2│  │             File #20 FANCNTRL E
                                                  │             0.0│  │              23
                                                  │Dest        F8:3│  │       SQR - File #6 FANCNTRL -
                                                  │             0.0│  │              14
                                                  └────────────────┘  │             File #20 FANCNTRL E
                                                                      │              22
```

```
|                                                                  |CALCULATED FLOW      | |
|                                                                  |(SCFM)               | |
|                                                                  |┌─MUL──────────┐  | |F8:4 - MUL - File #6 FANCNTRL -
|                                                                  ├Multiply        ├─┤ |            14
|                                                                  ||Source A    F8:3| | |            File #20 FANCNTRL E
|                                                                  ||             0.0| | |            23, 24
|                                                                  ||Source B  667.116| | |
|                                                                  ||Dest        F8:4| | |
|                                                                  ||             0.0| | |
|                                                                  |└──────────────┘  | |
|                                                                  |FLOW CALC            | |
|                                                                  |INTERMEDIATE         | |
|                                                                  |┌─MUL──────────┐  | |F8:5 - ADD - File #6 FANCNTRL -
|                                                                  ├Multiply        ├─┤ |            14
|                                                                  ||Source A    F8:4| | |            File #20 FANCNTRL E
|                                                                  ||             0.0| | |            25
|                                                                  ||Source B  20.9095| | |       MUL - File #6 FANCNTRL -
|                                                                  ||                | | |            14
|                                                                  ||Dest        F8:5| | |            File #20 FANCNTRL E
|                                                                  ||             0.0| | |            24
|                                                                  |└──────────────┘  | |
|                                                                  |CALC FLOW            | |
|                                                                  |OUTPUT VALUE         | |
|                                                                  |(SCFM)               | |
|                                                                  |┌─ADD──────────┐  | |N20:9 - MOV - File #6 FANCNTRL E
|                                                                  └Add             ├─┘ |            15
|                                                                  |Source A    F8:5| | |       ADD - File #6 FANCNTRL E
|                                                                  |             0.0| | |            14
|                                                                  |Source B  6242.0| | |            File #20 FANCNTRLE
|                                                                  |                | | |            25
|                                                                  |Dest       N20:9| | |       GEQ - File #5 INTRLKS -
|                                                                  |            6242| | |            10
|                                                                  └──────────────┘  | |       LEQ - File #5 INTRLKS -
|N20:30 - ADD - File #6 FANCNTRL -  14, 19                                                |
|               File #20 FANCNTRL -  17, 28                                                |
|FILE N20:30 LEN:100 - FFL - File #13 FIFO -  10                                          |
|FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                      |
|FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                      |
|FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                      |
|FILE N20:30 LEN:4 - COP - File #4 INPUTDATA -  10                                        |
|N14:1 - SUB - File #6 FANCNTRL -  14                                                     |
|              File #20 FANCNTRL -  18                                                    |
|        DIV - File #6 FANCNTRL -  14                                                     |
|              File #20 FANCNTRL -  19                                                    |
|F8:0 - MUL - File #6 FANCNTRL -  14                                                      |
|             File #20 FANCNTRL -  20                                                     |
|       DIV - File #6 FANCNTRL -  14                                                      |
|             File #20 FANCNTRL -  19                                                     |
|F8:2 - DIV - File #6 FANCNTRL -  14                                                      |
|             File #20 FANCNTRL -  21                                                     |
|       SQR - File #6 FANCNTRL -  14                                                      |
|             File #20 FANCNTRL -  22                                                     |
|F8:4 - MUL - File #6 FANCNTRL -  14                                                      |
|             File #20 FANCNTRL -  23, 24                                                 |
|                                                                                         |
|                                                                  CALC FLOW              |
|                                                                  OUTPUT VALUE           |
|BYPASS                                                            (SCFM)                 |
|   B3                                                             ┌─MOV──────────┐  |N20:9 - MOV - File #6 FANCNTRL E
15├──┤ ├──────────────────────────────────────────────────────────┤Move            ├─┤            15
|   2                                                              |Source     31208| |       ADD - File #6 FANCNTRL E
|                                                                  |                | |            14
|                                                                  |Dest       N20:9| |            File #20 FANCNTRLE
|                                                                  |            6242| |            25
|                                                                  └──────────────┘  |       GEQ - File #5 INTRLKS -
|N20:9 - GEQ - File #5 INTRLKS -  10                                                      |
|        LEQ - File #5 INTRLKS -  7                                                       |
|        SCL - File #6 FANCNTRL -  8                                                      |
|FILE N20:9 LEN:100 - FFL - File #13 FIFO -  10                                           |
|FILE N20:9 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                       |
|FILE N20:9 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                       |
|FILE N20:9 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                       |
|FILE N20:9 LEN:2 - COP - File #17 COPY_OUT -  0                                          |
```

```
   |FAN AUTO/MAN                                                    LAST PID RESULT   |
   |    N20:41                                                      ┌─COP──────────┐  |N20:43 - CLR - File #6 FANCNTRLE
16 |───┤ ├──────────────────────────────────────────────────────────┤Copy File     ├─┤          12
   |     6                                                          |Source   #N10:29|  |       COP - File #6 FANCNTRLE
   |[4]                                                             |Dest     #N20:43|  |N10:29 - MOV - File #20 FANCNTRE
   |                                                                |Length         1|  |          13
   |                                                                └──────────────┘  |       COP - File #6 FANCNTRLE
   |N20:43 - COP - File #6 FANCNTRL -  16, 17                                         |
   |              File #20 FANCNTRL -  26, 27                                         |
   |FILE N20:43 LEN:100 - FFL - File #13 FIFO -  10                                   |
   |FILE N20:43 LEN:1 - COP - File #6 FANCNTRL -  16, 17                              |
   |                        File #20 FANCNTRL -  26, 27                               |
   |N10:29 - COP - File #6 FANCNTRL -  16, 17                                         |
   |              File #20 FANCNTRL -  26, 27                                         |
   |        SCL - File #6 FANCNTRL -  11                                              |
   |              File #20 FANCNTRL -  14                                             |
   |        PID - File #6 FANCNTRL -  10                                              |
   |              File #20 FANCNTRL -  12                                             |
   |FILE N10:29 LEN:1 - COP - File #6 FANCNTRL -  16, 17                              |
   |                        File #20 FANCNTRL -  26, 27                               |
   |                                                                PID OUTPUT TO     |
   |FAN AUTO/MAN                                                    FAN VFD           |
   |    N20:41                                                      ┌─COP──────────┐  |N10:29 - MOV - File #20 FANCNTRE
17 |───┤/├──────────────────────────────────────────────────────────┤Copy File     ├─┤          13
   |     6                                                          |Source   #N20:43|  |       COP - File #6 FANCNTRLE
   |[4]                                                             |Dest     #N10:29|  |          16, 17      ...
   |                                                                |Length         1|  |N20:43 - CLR - File #6 FANCNTRLE
   |                                                                └──────────────┘  |          12
   |                                                                                  |       COP - File #6 FANCNTRLE
   |                                                                PID AUTO/MAN      |          16, 17
   |                                                                STATUS            |          File #20 FANCNTRE
   |                                                                    N10:0         |N10:0/1 - ─( )─ - File #6 FANCNE
   |                                                                └──────( )──────┘  |          17
   |                                                                       1          |          File #20 FANCE
   |N10:29 - COP - File #20 FANCNTRL -  26, 27                                         |
   |        SCL - File #6 FANCNTRL -  11                                              |
   |              File #20 FANCNTRL -  14                                             |
   |        PID - File #6 FANCNTRL -  10                                              |
   |              File #20 FANCNTRL -  12                                             |
   |FILE N10:29 LEN:1 - COP - File #6 FANCNTRL -  16, 17                              |
   |                        File #20 FANCNTRL -  26, 27                               |
   |N20:43 - COP - File #20 FANCNTRL -  26, 27                                         |
   |FILE N20:43 LEN:100 - FFL - File #13 FIFO -  10                                   |
   |FILE N20:43 LEN:1 - COP - File #6 FANCNTRL -  16, 17                              |
   |                        File #20 FANCNTRL -  26, 27                               |
   |N10:0/1 - ─( )─ - File #20 FANCNTRL -  27                                         |
   |         COP - File #6 FANCNTRL -  7                                              |
   |               File #20 FANCNTRL -  9                                             |
   |         PID - File #6 FANCNTRL -  10                                             |
   |               File #20 FANCNTRL -  12                                            |
   |FILE N10:0/1 LEN:1 - COP - File #6 FANCNTRL -  7                                  |
   |                         File #20 FANCNTRL -  9                                   |
   |FILE N10:0/1 LEN:23 - PID - File #6 FANCNTRL -  10                                |
   |                          File #20 FANCNTRL -  12                                 |
   |                                                                PROPORTIONAL      |
   |                                                                GAIN              |
   |                                                                ┌─COP──────────┐  |N10:3 - COP - File #6 FANCNTRL E
18 |──────────────────────────────────────────────────────────────┤Copy File     ├─┤          7, 18
   |                                                                |Source   #N36:13|  |          File #20 FANCNTRLE
   |                                                                |Dest     #N10:3|  |N36:13 - COP - File #6 FANCNTRLE
   |                                                                |Length         3|  |          7, 18
   |                                                                └──────────────┘  |FILE N36:13 LEN:3 -        ...
   |N10:3 - COP - File #20 FANCNTRL -  9                                              |
   |FILE N10:3 LEN:23 - PID - File #6 FANCNTRL -  10                                  |
   |                        File #20 FANCNTRL -  12                                   |
   |FILE N10:3 LEN:3 - COP - File #6 FANCNTRL -  7, 18                                |
   |                        File #20 FANCNTRL -  9                                    |
   |N36:13 - COP - File #6 FANCNTRL -  7, 18                                          |
```

```
 |                                                                    |F8:10 - ADD - File #6 FANCNIRL E
19|------------------------------------------------------------------|Add                 |-|-|         19
 |                                                                    | |Source A  N20:30| | |        File #20 FANCNIRLE
 |                                                                    | |            101| | |         28
 |                                                                    | |Source B   460.0| | |     DIV - File #6 FANCNIRL E
 |                                                                    | |               | | |N20:30 - ADD - File #6 FANCNIRLE
 |                                                                    | |Dest       F8:10| | |         14, 19
 |                                                                    | |          561.0| | |        File #20 FANCNIRE
 |                                                                    | |               | | |         17, 28
 |                                                                    | |               | | |FILE N20:30 LEN:100 -       ...
 |                                                                    | |DIV                | | |F8:12 - DIV - File #6 FANCNIRL E
 |                                                                    |-|Divide             |-| |         19
 |                                                                    | |Source A   528.0| | |        File #20 FANCNIRLE
 |                                                                    | |               | | |         28
 |                                                                    | |Source B   F8:10| | |
 |                                                                    | |           561.0| | |
 |                                                                    | |Dest       F8:12| | |
 |                                                                    | |       0.9411765| | |
 |                                                                    | |               | | |
 |F8:10 - DIV - File #6 FANCNIRL -  19                                |                   |
 |             File #20 FANCNIRL -  28                                |                   |
 |N20:30 - FFL - File #13 FIFO -  10                                  |                   |
 |FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1                 |                   |
 |FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1                 |                   |
 |FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1                 |                   |
 |FILE N20:30 LEN:4 - COP - File #4 INPUTDATA -  10                   |                   |
 |                                                                    |                   |
20|------------------------------------------------------------------|DIV                 |-|-|F8:13 - MUL - File #6 FANCNIRL E
 |                                                                    |Divide             | | |         20
 |                                                                    | |Source A  N20:13| | |        File #20 FANCNIRLE
 |                                                                    | |             0| | |         29
 |                                                                    | |Source B  16383.0| | |     DIV - File #6 FANCNIRL E
 |                                                                    | |               | | |N20:13 - DIV - File #6 FANCNIRLE
 |                                                                    | |Dest       F8:13| | |         20
 |                                                                    | |           0.0| | |        File #20 FANCNIRE
 |                                                                    | |               | | |         29
 |                                                                    | |               | | |FILE N20:13 LEN:100 -       ...
 |                                                                    | |DIV                | | |F8:15 - MUL - File #6 FANCNIRL E
 |                                                                    |-|Divide             |-| |         20
 |                                                                    | |Source A   F8:14| | |        File #20 FANCNIRLE
 |                                                                    | |             0.0| | |         29
 |                                                                    | |Source B  16383.0| | |     DIV - File #6 FANCNIRL E
 |                                                                    | |               | | |F8:14 - DIV - File #6 FANCNIRL E
 |                                                                    | |Dest       F8:15| | |         20
 |                                                                    | |           0.0| | |        File #20 FANCNIRLE
 |                                                                    | |               | | |         29
 |                                                                    | |MUL                | | |F8:16 - SUB - File #6 FANCNIRL E
 |                                                                    |-|Multiply           |-| |         20
 |                                                                    | |Source A   F8:13| | |        File #20 FANCNIRLE
 |                                                                    | |             0.0| | |         29
 |                                                                    | |Source B   F8:15| | |     MUL - File #6 FANCNIRL E
 |                                                                    | |             0.0| | |         20
 |                                                                    | |Dest       F8:16| | |        File #20 FANCNIRLE
 |                                                                    | |           0.0| | |         29
 |                                                                    | |               | | |
 |                                                                    | |SUB                | | |F8:17 - SUB - File #6 FANCNIRL E
 |                                                                    |-|Subtract           |-| |         20
 |                                                                    | |Source A     1.0| | |        File #20 FANCNIRLE
 |                                                                    | |               | | |         29
 |                                                                    | |Source B   F8:16| | |     MUL - File #6 FANCNIRL E
 |                                                                    | |             0.0| | |         21
 |                                                                    | |Dest       F8:17| | |        File #20 FANCNIRLE
 |                                                                    | |             1.0| | |         30
 |                                                                    | |               | | |
 |F8:13 - DIV - File #6 FANCNIRL -  20                                |                   |
 |             File #20 FANCNIRL -  29                                |                   |
 |N20:13 - FFL - File #13 FIFO -  10                                  |                   |
 |FILE N20:13 LEN:30 - FFL - File #18 FIFOBUFFER -  1                 |                   |
 |FILE N20:13 LEN:30 - FFL - File #18 FIFOBUFFER -  1                 |                   |
 |FILE N20:13 LEN:30 - FFL - File #18 FIFOBUFFER -  1                 |                   |
 |FILE N20:13 LEN:4 - COP - File #4 INPUTDATA -  3                    |                   |
 |F8:15 - DIV - File #6 FANCNIRL -  20                                |                   |
 |             File #20 FANCNIRL -  29                                |                   |
```

```
   |                                                                  ┌─MUL──────────┐ |F8:19 - MUL - File #6 FANCNTRL E
21 |──────────────────────────────────────────────────────────────────┤Multiply      ├─|              21
   |                                                                  |Source A  N20:3| |             File #20 FANCNTRLE
   |                                                                  |           3277| |N20:3 - MOV - File #5 INTRLKS -
   |                                                                  |Source B  F8:17| |              39
   |                                                                  |            1.0| |       SUB - File #6 FANCNTRL E
   |                                                                  |Dest      F8:19| |F8:17 - SUB - File #6 FANCNTRL E
   |                                                                  |         3277.0| |              20
   |                                                                  └──────────────┘ |             File #20 FANCNTRLE
   |F8:19 - MUL - File #20 FANCNTRL -  30                                              |
   |N20:3 - SUB - File #6 FANCNTRL -  14                                               |
   |             File #20 FANCNTRL -  18                                               |
   |       MUL - File #6 FANCNTRL -  21                                                |
   |             File #20 FANCNTRL -  30                                               |
   |       LEQ - File #5 INTRLKS -  13, 39                                             |
   |       FFL - File #13 FIFO -  10                                                   |
   |FILE N20:3 LEN:4 - COP - File #4 INPUTDATA -  0                                    |
   |FILE N20:3 LEN:100 - FFL - File #13 FIFO -  10                                     |
   |F8:17 - SUB - File #20 FANCNTRL -  29                                              |
   |       MUL - File #6 FANCNTRL -  21                                                |
   |             File #20 FANCNTRL -  30                                               |
   |                                                                  ┌─RET──────────┐ |
22 |──────────────────────────────────────────────────────────────────┤Return        ├─|
   |                                                                  └──────────────┘ |
23 |──────────────────────────────────────────────────────────────────────────[END]─|
```

```
 |┌─SBR──────────┐ N20:41                  ┌─TON──────────┐ |T4:30.DN - ─┤ ├─ - File #7 MESGS
0├Subroutine     ├─┤ ├──────────────────────┤Timer On Delay ├─(EN)─┤                1
 |└──────────────┘      10                  |Timer      T4:30├─(DN)  |
 |                     [1]                  |Time Base    1.0|       |
 |                                          |Preset         1|       |
 |                                          |Accum          0|       |
 |                                          └──────────────┘        |
 | T4:30                                    ┌─MVM──────────┐ |N20:41/1 - ─( )─ - File #5 INTRE
1├─┤ ├──────────────────────────────────────┤Masked Move   ├─┤                121
 |  DN                                      |Source     N13:0|       |        ─┤ ├─ - File #5 INTRE
 |[0]                                       |             0|       |                52, 53
 |                                          |Mask       0000h|       |                File #6 FANCE
 |                                          |              |       |N13:0 - CLR - File #2 MAIN -  0
 |                                          |Dest      N20:41|       |              File #3 STARTUP -
 |                                          |          -9566|       |               1
 |                                          └──────────────┘        |       NOT - File #2 MAIN -  1
 |                                                                  |              File #3 STARTUP -
 |                                          ┌─MOV──────────┐ |N12:0 - CLR - File #7 MESGVIEW E
 |                                          ├Move          ├─┤                4
 |                                          |Source     N13:1|       |       MOV - File #7 MESGVIEW E
 |                                          |             -1|       |               1, 9          ...
 |                                          |Dest       N12:0|       |N13:1 - NOT - File #2 MAIN -  1
 |                                          |              0|       |              File #3 STARTUP -
 |                                          └──────────────┘        |               2
 |                                                                  |       MOV - File #7 MESGVIEW E
 |                                          ┌─MOV──────────┐ |N12:1 - CLR - File #7 MESGVIEW E
 |                                          ├Move          ├─┤                4
 |                                          |Source     N13:1|       |       MOV - File #7 MESGVIEW E
 |                                          |             -1|       |               1, 10
 |                                          |Dest       N12:1|       |       MVM - File #7 MESGVIEW E
 |                                          |              0|       |               6
 |                                          └──────────────┘        |       NEQ - File #7 MESGVIEW E
 |                                                                  |               2          ...
 |                                          ┌─MOV──────────┐ |N12:2 - CLR - File #7 MESGVIEW E
 |                                          ├Move          ├─┤                4
 |                                          |Source     N13:1|       |       MOV - File #7 MESGVIEW E
 |                                          |             -1|       |               1, 11
 |                                          |Dest       N12:2|       |       MVM - File #7 MESGVIEW E
 |                                          |              0|       |               7
 |                                          └──────────────┘        |       NEQ - File #7 MESGVIEW E
 |
 |N20:41/1 - ─┤ ├─ - File #6 FANCNTRL -  5
 |                  File #20 FANCNTRL -  7
 |          ─┤/├─ - File #6 FANCNTRL -  2
 |                  File #9 SIMULATE -  1
 |                  File #20 FANCNTRL -  2
 |N20:41/2 - ─┤ ├─ - File #6 FANCNTRL -  5
 |                  File #9 SIMULATE -  0
 |                  File #20 FANCNTRL -  7
 |N20:41/3 - ─(U)─ - File #9 SIMULATE -  0
 |          ─┤ ├─ - File #9 SIMULATE -  1
 |          ─┤/├─ - File #6 FANCNTRL -  4
 |                  File #20 FANCNTRL -  6
 |N20:41/5 - ─┤ ├─ - File #5 INTRLKS -  48
 |N20:41/6 - ─(L)─ - File #6 FANCNTRL -  0
 |                  File #20 FANCNTRL -  0
 |          ─(U)─ - File #6 FANCNTRL -  1, 4
 |                  File #20 FANCNTRL -  1, 6
 |          ─┤ ├─ - File #6 FANCNTRL -  16
 |                  File #20 FANCNTRL -  26
 |          ─┤/├─ - File #6 FANCNTRL -  17
 |                  File #20 FANCNTRL -  27
 |N20:41/7 - ─┤ ├─ - File #5 INTRLKS -  49
 |N20:41/8 - ─┤ ├─ - File #6 FANCNTRL -  13
 |                  File #20 FANCNTRL -  16
 |N20:41/9 - ─┤ ├─ - File #5 INTRLKS -  50
 |N20:41/10 - ─┤ ├─ - File #7 MESGVIEW -  0
 |N20:41/11 - ─┤ ├─ - File #5 INTRLKS -  51
 |N20:41/12 - ─( )─ - File #5 INTRLKS -  67
 |          ─┤ ├─ - File #5 INTRLKS -  121
 |N20:41/13 - ─( )─ - File #5 INTRLKS -  113
 |N20:41/14 - ─( )─ - File #5 INTRLKS -  114
 |N20:41/15 - ─( )─ - File #5 INTRLKS -  69
 |          ─┤ ├─ - File #5 INTRLKS -  120
```

```
|FILE N20:41 LEN:100 - FFL - File #13 FIFO -  10                          |
|N13:0 - NOT - File #3 STARTUP -  2                                       |
|        FLL - File #2 MAIN -  20                                         |
|             File #3 STARTUP -  5                                        |
|        MVM - File #3 STARTUP -  11                                      |
|             File #7 MESSGVIEW -  1                                      |
|             File #16 INTLK -  18, 23                                    |
|N13:0/0 - -┤ ├- - File #13 FIFO -  0, 1, 2, 3                            |
|                File #14 COUNTER -  0                                    |
|FILE N13:0 LEN:110 - FLL - File #2 MAIN -  20                            |
|                                File #3 STARTUP -  5                     |
|FILE N13:0 LEN:3 - FLL - File #3 STARTUP -  5                            |
|FILE N13:0 LEN:4 - FLL - File #3 STARTUP -  5                            |
|FILE N13:0 LEN:7 - FLL - File #2 MAIN -  20                              |
|                               File #3 STARTUP -  5                      |
|N12:0 - MVM - File #7 MESSGVIEW -  5                                     |
|        NEQ - File #7 MESSGVIEW -  2                                     |
|N12:0/0 - -┤ ├- - File #5 INTRLKS -  70                                  |
|N12:0/1 - -┤ ├- - File #5 INTRLKS -  71                                  |
|N12:0/2 - -┤ ├- - File #5 INTRLKS -  72                                  |
|N12:0/3 - -┤ ├- - File #5 INTRLKS -  73                                  |
|N12:0/4 - -┤ ├- - File #5 INTRLKS -  74                                  |
|N12:0/5 - -┤ ├- - File #5 INTRLKS -  75                                  |
|N12:0/6 - -┤ ├- - File #5 INTRLKS -  76                                  |
|N12:0/7 - -┤ ├- - File #5 INTRLKS -  77                                  |
|N12:0/8 - -┤ ├- - File #5 INTRLKS -  78                                  |
|N12:0/9 - -┤ ├- - File #5 INTRLKS -  79                                  |
|N12:0/10 - -┤ ├- - File #5 INTRLKS -  80                                |
|N12:0/11 - -┤ ├- - File #5 INTRLKS -  81                                |
|N12:0/12 - -┤ ├- - File #5 INTRLKS -  82                                |
|N12:0/13 - -┤ ├- - File #5 INTRLKS -  83                                |
|N12:0/14 - -┤ ├- - File #5 INTRLKS -  84                                |
|N12:0/15 - -┤ ├- - File #5 INTRLKS -  85                                |
|N13:1 - MOV - File #7 MESSGVIEW -  1                                     |
|        MVM - File #3 STARTUP -  4, 10                                   |
|             File #7 MESSGVIEW -  5, 6, 7                                |
|FILE N13:1 LEN:110 - FLL - File #2 MAIN -  20                            |
|                                File #3 STARTUP -  5                     |
|FILE N13:1 LEN:3 - FLL - File #3 STARTUP -  5                            |
|FILE N13:1 LEN:4 - FLL - File #3 STARTUP -  5                            |
|FILE N13:1 LEN:7 - FLL - File #2 MAIN -  20                              |
|                               File #3 STARTUP -  5                      |
|N12:1/0 - -┤ ├- - File #5 INTRLKS -  86                                  |
|N12:1/1 - -┤ ├- - File #5 INTRLKS -  87                                  |
|N12:1/2 - -┤ ├- - File #5 INTRLKS -  88                                  |
|N12:1/3 - -┤ ├- - File #5 INTRLKS -  89                                  |
|N12:1/4 - -┤ ├- - File #5 INTRLKS -  90                                  |
|N12:1/5 - -┤ ├- - File #5 INTRLKS -  91                                  |
|N12:1/6 - -┤ ├- - File #5 INTRLKS -  92                                  |
|N12:1/7 - -┤ ├- - File #5 INTRLKS -  93                                  |
|N12:1/8 - -┤ ├- - File #5 INTRLKS -  94                                  |
|N12:1/9 - -┤ ├- - File #5 INTRLKS -  95                                  |
|N12:1/10 - -┤ ├- - File #5 INTRLKS -  96                                |
|N12:1/11 - -┤ ├- - File #5 INTRLKS -  97                                |
|N12:1/12 - -┤ ├- - File #5 INTRLKS -  98                                |
|N12:1/13 - -┤ ├- - File #5 INTRLKS -  99                                |
|N12:1/14 - -┤ ├- - File #5 INTRLKS -  100                               |
|N12:1/15 - -┤ ├- - File #5 INTRLKS -  101                               |
|N12:2 - NEQ - File #7 MESSGVIEW -  2                                     |
|N12:2/0 - -┤ ├- - File #5 INTRLKS -  102                                |
|N12:2/1 - -┤ ├- - File #5 INTRLKS -  103                                |
|N12:2/2 - -┤ ├- - File #5 INTRLKS -  104                                |
|N12:2/3 - -┤ ├- - File #5 INTRLKS -  105                                |
|N12:2/4 - -┤ ├- - File #5 INTRLKS -  106                                |
|N12:2/5 - -┤ ├- - File #5 INTRLKS -  107                                |
|N12:2/6 - -┤ ├- - File #5 INTRLKS -  108                                |
|N12:2/7 - -┤ ├- - File #5 INTRLKS -  109                                |
|N12:2/8 - -┤ ├- - File #5 INTRLKS -  110                                |
|N12:2/9 - -┤ ├- - File #5 INTRLKS -  111                                |
|N12:2/10 - -┤ ├- - File #5 INTRLKS -  112                               |
```

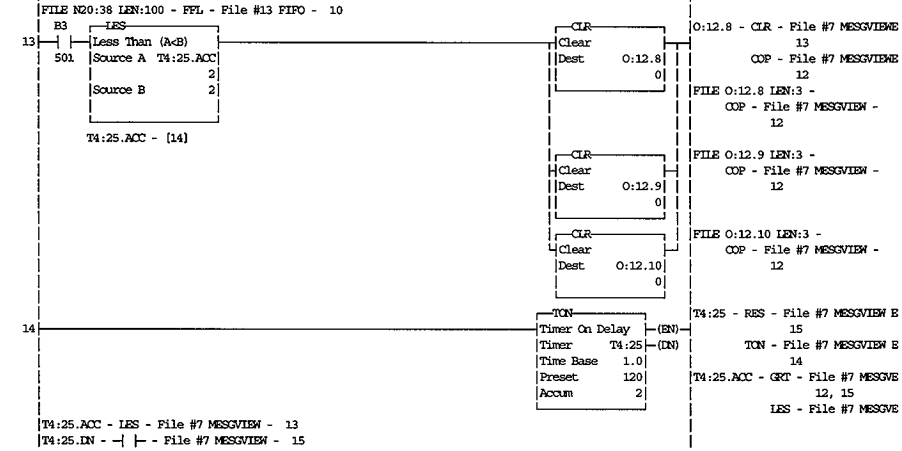
```
|  ┌─NEQ──────────┐                                                    B3  |B3/528 - -( )- - File #7 MESSGVIE
2├─┤Not Equal      ├──────────────────────────────────────────────────( )─┤                2
|  |Source A  N12:0|                                                   528  |        -┤ ├- - File #7 MESSGVIE
|  |             0|                                                        |                3
|  |Source B     0|                                                        |
|  └──────────────┘                                                        |
|  |N12:0 - [1]                                                            |
|  ┌─NEQ──────────┐                                                        |
|  ├─┤Not Equal      ├─┤                                                   |
|  |Source A  N12:1|                                                        |
|  |             0|                                                        |
|  |Source B     0|                                                        |
|  └──────────────┘                                                        |
|  |N12:1 - [1]                                                            |
|  ┌─NEQ──────────┐                                                        |
|  └─┤Not Equal      ├─┤                                                   |
|  |Source A  N12:2|                                                        |
|  |             0|                                                        |
|  |Source B     0|                                                        |
|  └──────────────┘                                                        |
|  N12:2 - [1]                                                             |
|                                                                          |
|                                                   RESET ACK WORDS        |
|                                                   ON TIMEOUT             |
|  B3                                               ┌─TON──────────┐       |T4:28.DN - -┤ ├- - File #7 MESSGE
3├─┤ ├──────────────────────────────────────────────|Timer On Delay ├─(EN)─┤                4
|  528                                              |Timer     T4:28├─(DN)|
|  [2]                                              |Time Base   1.0|      |
|                                                   |Preset        1|      |
|                                                   |Accum         0|      |
|                                                   └──────────────┘       |
|                                                                          |
|RESET ACK WORDS                                                           |
|ON TIMEOUT                                                                |
|     T4:28                                         ┌─CLR──────────┐       |N12:0 - CLR - File #7 MESSGVIEW E
4├────┤ ├──────────────────────────────────────────|Clear         ├──┤    |                4
|      DN                                           |Dest      N12:0| |    |        MOV - File #7 MESSGVIEW E
|  [3]                                              |             0| |    |              1, 9
|                                                   └──────────────┘ |    |        MVM - File #7 MESSGVIEW E
|                                                                    |    |              5            ...
|                                                   ┌─CLR──────────┐ |    |N12:1 - CLR - File #7 MESSGVIEW E
|                                                   ├─|Clear         ├─┤    |                4
|                                                   |Dest      N12:1| |    |        MOV - File #7 MESSGVIEW E
|                                                   |             0| |    |              1, 10
|                                                   └──────────────┘ |    |        MVM - File #7 MESSGVIEW E
|                                                                    |    |              6            ...
|                                                   ┌─CLR──────────┐ |    |N12:2 - CLR - File #7 MESSGVIEW E
|                                                   └─|Clear         ├─┤    |                4
|                                                   |Dest      N12:2| |    |        MOV - File #7 MESSGVIEW E
|                                                   |             0| |    |              1, 11
|                                                   └──────────────┘ |    |        MVM - File #7 MESSGVIEW E
|                                                                    |    |
|N12:0 - NEQ - File #7 MESSGVIEW -  2                                |    |
|N12:0/0 - -┤ ├- - File #5 INTRLKS -  70                              |    |
|N12:0/1 - -┤ ├- - File #5 INTRLKS -  71                              |    |
|N12:0/2 - -┤ ├- - File #5 INTRLKS -  72                              |    |
|N12:0/3 - -┤ ├- - File #5 INTRLKS -  73                              |    |
|N12:0/4 - -┤ ├- - File #5 INTRLKS -  74                              |    |
|N12:0/5 - -┤ ├- - File #5 INTRLKS -  75                              |    |
|N12:0/6 - -┤ ├- - File #5 INTRLKS -  76                              |    |
|N12:0/7 - -┤ ├- - File #5 INTRLKS -  77                              |    |
|N12:0/8 - -┤ ├- - File #5 INTRLKS -  78                              |    |
|N12:0/9 - -┤ ├- - File #5 INTRLKS -  79                              |    |
|N12:0/10 - -┤ ├- - File #5 INTRLKS -  80                             |    |
|N12:0/11 - -┤ ├- - File #5 INTRLKS -  81                             |    |
|N12:0/12 - -┤ ├- - File #5 INTRLKS -  82                             |    |
|N12:0/13 - -┤ ├- - File #5 INTRLKS -  83                             |    |
|N12:0/14 - -┤ ├- - File #5 INTRLKS -  84                             |    |
|N12:0/15 - -┤ ├- - File #5 INTRLKS -  85                             |    |
|N12:1 - NEQ - File #7 MESSGVIEW -  2                                |    |
|N12:1/0 - -┤ ├- - File #5 INTRLKS -  86                              |    |
|N12:1/1 - -┤ ├- - File #5 INTRLKS -  87                              |    |
|N12:1/2 - -┤ ├- - File #5 INTRLKS -  88                              |    |
|N12:1/3 - -┤ ├- - File #5 INTRLKS -  89                              |    |
|N12:1/4 - -┤ ├- - File #5 INTRLKS -  90                              |    |
|N12:1/5 - -┤ ├- - File #5 INTRLKS -  91                              |    |
```

```
 |N12:1/6 - -| |- - File #5 INTRLKS -  92                              |
 |N12:1/7 - -| |- - File #5 INTRLKS -  93                              |
 |N12:1/8 - -| |- - File #5 INTRLKS -  94                              |
 |N12:1/9 - -| |- - File #5 INTRLKS -  95                              |
 |N12:1/10 - -| |- - File #5 INTRLKS -  96                             |
 |N12:1/11 - -| |- - File #5 INTRLKS -  97                             |
 |N12:1/12 - -| |- - File #5 INTRLKS -  98                             |
 |N12:1/13 - -| |- - File #5 INTRLKS -  99                             |
 |N12:1/14 - -| |- - File #5 INTRLKS -  100                            |
 |N12:1/15 - -| |- - File #5 INTRLKS -  101                            |
 |N12:2 - MVM - File #7 MESGVIEW -  7                                  |
 |        NEQ - File #7 MESGVIEW -  2                                  |
 |N12:2/0 - -| |- - File #5 INTRLKS -  102                             |
 |N12:2/1 - -| |- - File #5 INTRLKS -  103                             |
 |N12:2/2 - -| |- - File #5 INTRLKS -  104                             |
 |N12:2/3 - -| |- - File #5 INTRLKS -  105                             |
 |N12:2/4 - -| |- - File #5 INTRLKS -  106                             |
 |N12:2/5 - -| |- - File #5 INTRLKS -  107                             |
 |N12:2/6 - -| |- - File #5 INTRLKS -  108                             |
 |N12:2/7 - -| |- - File #5 INTRLKS -  109                             |
 |N12:2/8 - -| |- - File #5 INTRLKS -  110                             |
 |N12:2/9 - -| |- - File #5 INTRLKS -  111                             |
 |N12:2/10 - -| |- - File #5 INTRLKS -  112                            |
 |I:12.5                                         +-MVM-----------+ |N12:0 - CLR - File #7 MESGVIEW E
5|--| |------------------------------------------|Masked Move    |-|        4
 |  15                                           |Source   N13:1| |      MOV - File #7 MESGVIEW E
 |  SN                                           |            -1| |            1, 9          ...
 |[8]                                            |Mask     8000h| |N13:1 - NOT - File #2 MAIN -  1
 |                                               |              | |            File #3 STARTUP -
 |                                               |Dest     N12:0| |            2
 |                                               |             0| |      MOV - File #7 MESGVIEW E
 |                                               +--------------+ |            1             ...
 |N12:0 - MVM - File #7 MESGVIEW -  5                              |
 |        NEQ - File #7 MESGVIEW -  2                              |
 |N12:0/0 - -| |- - File #5 INTRLKS -  70                          |
 |N12:0/1 - -| |- - File #5 INTRLKS -  71                          |
 |N12:0/2 - -| |- - File #5 INTRLKS -  72                          |
 |N12:0/3 - -| |- - File #5 INTRLKS -  73                          |
 |N12:0/4 - -| |- - File #5 INTRLKS -  74                          |
 |N12:0/5 - -| |- - File #5 INTRLKS -  75                          |
 |N12:0/6 - -| |- - File #5 INTRLKS -  76                          |
 |N12:0/7 - -| |- - File #5 INTRLKS -  77                          |
 |N12:0/8 - -| |- - File #5 INTRLKS -  78                          |
 |N12:0/9 - -| |- - File #5 INTRLKS -  79                          |
 |N12:0/10 - -| |- - File #5 INTRLKS -  80                         |
 |N12:0/11 - -| |- - File #5 INTRLKS -  81                         |
 |N12:0/12 - -| |- - File #5 INTRLKS -  82                         |
 |N12:0/13 - -| |- - File #5 INTRLKS -  83                         |
 |N12:0/14 - -| |- - File #5 INTRLKS -  84                         |
 |N12:0/15 - -| |- - File #5 INTRLKS -  85                         |
 |N13:1 - MVM - File #3 STARTUP -  4, 10                           |
 |              File #7 MESGVIEW -  5, 6, 7                        |
 |FILE N13:1 LEN:110 - FLL - File #2 MAIN -  20                    |
 |                           File #3 STARTUP -  5                  |
 |FILE N13:1 LEN:3 - FLL - File #3 STARTUP -  5                    |
 |FILE N13:1 LEN:4 - FLL - File #3 STARTUP -  5                    |
 |FILE N13:1 LEN:7 - FLL - File #2 MAIN -  20                      |
 |                         File #3 STARTUP -  5                    |
 |I:12.6                                         +-MVM-----------+ |N12:1 - CLR - File #7 MESGVIEW E
6|--| |------------------------------------------|Masked Move    |-|        4
 |  2                                            |Source   N13:1| |      MOV - File #7 MESGVIEW E
 |  SN                                           |            -1| |            1, 10         ...
 |[8]                                            |Mask     0004h| |N13:1 - NOT - File #2 MAIN -  1
 |                                               |              | |            File #3 STARTUP -
 |                                               |Dest     N12:1| |            2
 |                                               |             0| |      MOV - File #7 MESGVIEW E
 |                                               +--------------+ |            1             ...
 |N12:1 - MVM - File #7 MESGVIEW -  6                              |
 |        NEQ - File #7 MESGVIEW -  2                              |
 |N12:1/0 - -| |- - File #5 INTRLKS -  86                          |
 |N12:1/1 - -| |- - File #5 INTRLKS -  87                          |
 |N12:1/2 - -| |- - File #5 INTRLKS -  88                          |
 |N12:1/3 - -| |- - File #5 INTRLKS -  89                          |
```

```
|N12:1/4 - -| |- - File #5 INTRLKS -  90
|N12:1/5 - -| |- - File #5 INTRLKS -  91
|N12:1/6 - -| |- - File #5 INTRLKS -  92
|N12:1/7 - -| |- - File #5 INTRLKS -  93
|N12:1/8 - -| |- - File #5 INTRLKS -  94
|N12:1/9 - -| |- - File #5 INTRLKS -  95
|N12:1/10 - -| |- - File #5 INTRLKS -  96
|N12:1/11 - -| |- - File #5 INTRLKS -  97
|N12:1/12 - -| |- - File #5 INTRLKS -  98
|N12:1/13 - -| |- - File #5 INTRLKS -  99
|N12:1/14 - -| |- - File #5 INTRLKS -  100
|N12:1/15 - -| |- - File #5 INTRLKS -  101
|N13:1 - MVM - File #3 STARTUP -  4, 10
|              File #7 MESGVIEW -  5, 6, 7
|FILE N13:1 LEN:110 - FLL - File #2 MAIN -  20
|                           File #3 STARTUP -  5
|FILE N13:1 LEN:3 - FLL - File #3 STARTUP -  5
|FILE N13:1 LEN:4 - FLL - File #3 STARTUP -  5
|FILE N13:1 LEN:7 - FLL - File #2 MAIN -  20
|                         File #3 STARTUP -  5
|I:12.6                                                  ┌MVM──────────┐|N12:2 - CLR - File #7 MESGVIEW E
7|-| |-------------------------------------------------|Masked Move  |-|          4
|  3                                                     |Source   N13:1|       MOV - File #7 MESGVIEW E
|  SN                                                    |          -1 |          1, 11          ...
|[8]                                                     |Mask    0004h|N13:1 - NOT - File #2 MAIN -  1
|                                                        |             |            File #3 STARTUP -
|                                                        |Dest     N12:2|            2
|                                                        |          0  |       MOV - File #7 MESGVIEW E
|                                                        └─────────────┘          1              ...
|N12:2 - MVM - File #7 MESGVIEW -  7
|        NEQ - File #7 MESGVIEW -  2
|N12:2/0 - -| |- - File #5 INTRLKS -  102
|N12:2/1 - -| |- - File #5 INTRLKS -  103
|N12:2/2 - -| |- - File #5 INTRLKS -  104
|N12:2/3 - -| |- - File #5 INTRLKS -  105
|N12:2/4 - -| |- - File #5 INTRLKS -  106
|N12:2/5 - -| |- - File #5 INTRLKS -  107
|N12:2/6 - -| |- - File #5 INTRLKS -  108
|N12:2/7 - -| |- - File #5 INTRLKS -  109
|N12:2/8 - -| |- - File #5 INTRLKS -  110
|N12:2/9 - -| |- - File #5 INTRLKS -  111
|N12:2/10 - -| |- - File #5 INTRLKS -  112
|N13:1 - MVM - File #3 STARTUP -  4, 10
|              File #7 MESGVIEW -  5, 6, 7
|FILE N13:1 LEN:110 - FLL - File #2 MAIN -  20
|                           File #3 STARTUP -  5
|FILE N13:1 LEN:3 - FLL - File #3 STARTUP -  5
|FILE N13:1 LEN:4 - FLL - File #3 STARTUP -  5
|FILE N13:1 LEN:7 - FLL - File #2 MAIN -  20
|                         File #3 STARTUP -  5
|                                                        ┌COP──────────┐|I:12.4 - MOV - File #7 MESGVIEWE
8|-------------------------------------------------|Copy File    |-|          9
|                                                        |Source  #I:12.4|       COP - File #7 MESGVIEWE
|                                                        |Dest    #O:12.4|          8
|                                                        |Length       3|       NEQ - File #7 MESGVIEWE
|                                                        └─────────────┘          9              ...
|  ┌NEQ──────────┐                                      ┌MOV──────────┐|N12:0 - CLR - File #7 MESGVIEW E
9|-|Not Equal    |-------------------------------------|Move         |-|          4
|  |Source A  I:12.4|                                    |Source   I:12.4|       MOV - File #7 MESGVIEW E
|  |          0  |                                      |          0  |          1, 9           ...
|  |Source B     0|                                     |Dest     N12:0|I:12.4 - MOV - File #7 MESGVIEWE
|  |             |                                      |          0  |          9
|  └─────────────┘                                      └─────────────┘       COP - File #7 MESGVIEWE
|I:12.4 - [9]                                                                    8              ...
|N12:0 - MVM - File #7 MESGVIEW -  5
|        NEQ - File #7 MESGVIEW -  2
|N12:0/0 - -| |- - File #5 INTRLKS -  70
|N12:0/1 - -| |- - File #5 INTRLKS -  71
|N12:0/2 - -| |- - File #5 INTRLKS -  72
|N12:0/3 - -| |- - File #5 INTRLKS -  73
|N12:0/4 - -| |- - File #5 INTRLKS -  74
|N12:0/5 - -| |- - File #5 INTRLKS -  75
|N12:0/6 - -| |- - File #5 INTRLKS -  76
```

```
   |N12:0/7 - -| |- - File #5 INTRLKS -  77                                                  |
   |N12:0/8 - -| |- - File #5 INTRLKS -  78                                                  |
   |N12:0/9 - -| |- - File #5 INTRLKS -  79                                                  |
   |N12:0/10 - -| |- - File #5 INTRLKS -  80                                                 |
   |N12:0/11 - -| |- - File #5 INTRLKS -  81                                                 |
   |N12:0/12 - -| |- - File #5 INTRLKS -  82                                                 |
   |N12:0/13 - -| |- - File #5 INTRLKS -  83                                                 |
   |N12:0/14 - -| |- - File #5 INTRLKS -  84                                                 |
   |N12:0/15 - -| |- - File #5 INTRLKS -  85                                                 |
   |I:12.4 - NEQ - File #7 MESGVIEW -  9                                                      |
   |FILE I:12.4 LEN:3 - COP - File #7 MESGVIEW -  8                                           |
   |┌──NEQ──────────┐                                                  ┌──MOV──────────┐ |N12:1 - CLR - File #7 MESGVIEW E
10 |Not Equal       |──────────────────────────────────────────────────|Move           |─|              4
   ||Source A  I:12.5|                                                  |Source    I:12.5| |       MOV - File #7 MESGVIEW E
   ||              0|                                                  |              0| |             1, 10        ...
   ||Source B      0|                                                  |Dest      N12:1| |I:12.5 - MOV - File #7 MESGVIEWE
   ||               |                                                  |              0| |              10
   |└───────────────┘                                                  └───────────────┘ |       NEQ - File #7 MESGVIEWE
   |I:12.5 - [10]                                                                        |              10          ...
   |N12:1 - MVM - File #7 MESGVIEW -  6                                                  |
   |        NEQ - File #7 MESGVIEW -  2                                                  |
   |N12:1/0 - -| |- - File #5 INTRLKS -  86                                              |
   |N12:1/1 - -| |- - File #5 INTRLKS -  87                                              |
   |N12:1/2 - -| |- - File #5 INTRLKS -  88                                              |
   |N12:1/3 - -| |- - File #5 INTRLKS -  89                                              |
   |N12:1/4 - -| |- - File #5 INTRLKS -  90                                              |
   |N12:1/5 - -| |- - File #5 INTRLKS -  91                                              |
   |N12:1/6 - -| |- - File #5 INTRLKS -  92                                              |
   |N12:1/7 - -| |- - File #5 INTRLKS -  93                                              |
   |N12:1/8 - -| |- - File #5 INTRLKS -  94                                              |
   |N12:1/9 - -| |- - File #5 INTRLKS -  95                                              |
   |N12:1/10 - -| |- - File #5 INTRLKS -  96                                              |
   |N12:1/11 - -| |- - File #5 INTRLKS -  97                                              |
   |N12:1/12 - -| |- - File #5 INTRLKS -  98                                              |
   |N12:1/13 - -| |- - File #5 INTRLKS -  99                                              |
   |N12:1/14 - -| |- - File #5 INTRLKS -  100                                             |
   |N12:1/15 - -| |- - File #5 INTRLKS -  101                                             |
   |I:12.5/15 - -| |- - File #7 MESGVIEW -  5                                              |
   |FILE I:12.5 LEN:3 - COP - File #7 MESGVIEW -  8                                           |
   |┌──NEQ──────────┐                                                  ┌──MOV──────────┐ |N12:2 - CLR - File #7 MESGVIEW E
11 |Not Equal       |──────────────────────────────────────────────────|Move           |─|              4
   ||Source A  I:12.6|                                                  |Source    I:12.6| |       MOV - File #7 MESGVIEW E
   ||              0|                                                  |              0| |             1, 11        ...
   ||Source B      0|                                                  |Dest      N12:2| |I:12.6 - MOV - File #7 MESGVIEWE
   ||               |                                                  |              0| |              11
   |└───────────────┘                                                  └───────────────┘ |       NEQ - File #7 MESGVIEWE
   |I:12.6 - [11]                                                                        |              11          ...
   |N12:2 - MVM - File #7 MESGVIEW -  7                                                  |
   |        NEQ - File #7 MESGVIEW -  2                                                  |
   |N12:2/0 - -| |- - File #5 INTRLKS -  102                                             |
   |N12:2/1 - -| |- - File #5 INTRLKS -  103                                             |
   |N12:2/2 - -| |- - File #5 INTRLKS -  104                                             |
   |N12:2/3 - -| |- - File #5 INTRLKS -  105                                             |
   |N12:2/4 - -| |- - File #5 INTRLKS -  106                                             |
   |N12:2/5 - -| |- - File #5 INTRLKS -  107                                             |
   |N12:2/6 - -| |- - File #5 INTRLKS -  108                                             |
   |N12:2/7 - -| |- - File #5 INTRLKS -  109                                             |
   |N12:2/8 - -| |- - File #5 INTRLKS -  110                                             |
   |N12:2/9 - -| |- - File #5 INTRLKS -  111                                             |
   |N12:2/10 - -| |- - File #5 INTRLKS -  112                                             |
   |I:12.6/2 - -| |- - File #7 MESGVIEW -  6                                              |
   |I:12.6/3 - -| |- - File #7 MESGVIEW -  7                                              |
   |FILE I:12.6 LEN:3 - COP - File #7 MESGVIEW -  8                                           |
   |┌──GRT──────────┐                                                  ┌──COP──────────┐ |O:12.8 - CLR - File #7 MESGVIEWE
12 |Greater Than (A>B) |──────────────────────────────────────────────|Copy File      |─|              13
   ||Source A  T4:25.ACC|                                              |Source   #N20:38| |       COP - File #7 MESGVIEWE
   ||              2|                                                  |Dest     #O:12.8| |              12          ...
   ||Source B      2|                                                  |Length         3| |N20:38 - COP - File #7 MESGVIEWE
   ||               |                                                  |               |              12
   |└───────────────┘                                                  └───────────────┘ |       NEQ - File #5 INTRLKS E
   |T4:25.ACC - [14]                                                                     |              114         ...
```

```
N20:38 - MEQ - File #12 COUNTER -  1
N20:38/2 - -( )- - File #5 INTRLKS -  2
           -|/|- - File #5 INTRLKS -  119
N20:38/3 - -(L)- - File #5 INTRLKS -  5
           -(U)- - File #5 INTRLKS -  6
           -|/|- - File #5 INTRLKS -  5
N20:38/4 - -( )- - File #5 INTRLKS -  9
           -|/|- - File #5 INTRLKS -  119
N20:38/5 - -(L)- - File #5 INTRLKS -  12
           -(U)- - File #5 INTRLKS -  13
           -|/|- - File #5 INTRLKS -  10, 119
N20:38/6 - -(L)- - File #5 INTRLKS -  14
           -(U)- - File #5 INTRLKS -  15
           -|/|- - File #5 INTRLKS -  119
N20:38/7 - -(L)- - File #5 INTRLKS -  16
           -(U)- - File #5 INTRLKS -  18
           -| |- - File #5 INTRLKS -  45
           -|/|- - File #5 INTRLKS -  16, 119
N20:38/8 - -(L)- - File #5 INTRLKS -  17
           -(U)- - File #5 INTRLKS -  18, 45
           -|/|- - File #5 INTRLKS -  17
N20:38/9 - -(L)- - File #5 INTRLKS -  19
           -(U)- - File #5 INTRLKS -  20
           -|/|- - File #5 INTRLKS -  119
N20:38/10 - -(L)- - File #5 INTRLKS -  21
            -(U)- - File #5 INTRLKS -  23
            -| |- - File #5 INTRLKS -  46
            -|/|- - File #5 INTRLKS -  21, 120
N20:38/11 - -(L)- - File #5 INTRLKS -  22
            -(U)- - File #5 INTRLKS -  23, 46
            -|/|- - File #5 INTRLKS -  22
N20:38/12 - -(L)- - File #5 INTRLKS -  24
            -(U)- - File #5 INTRLKS -  25
            -|/|- - File #5 INTRLKS -  120
N20:38/13 - -( )- - File #5 INTRLKS -  26
            -| |- - File #5 INTRLKS -  47
            -|/|- - File #5 INTRLKS -  120
N20:38/15 - -(L)- - File #5 INTRLKS -  27
            -(U)- - File #5 INTRLKS -  28
            -|/|- - File #5 INTRLKS -  27
                    File #10 GLYCOLPMP -  0, 1
FILE N20:38 LEN:100 - FFL - File #13 FIFO -  10
```




```
T4:25.ACC - LES - File #7 MESGVIEW -  13
T4:25.DN - -| |- - File #7 MESGVIEW -  15
```

```
   |  T4:25                                                                  T4:25 |T4:25 - RES - File #7 MESGVIEW E
15 |--| |-------------------------------------------------------------------[RES]-|            15
   | |  DN                 |                                                      |       TON - File #7 MESGVIEW E
   | |[15]                 |                                                      |            14
   | |                     |                                                      |T4:25.ACC - GRT - File #7 MESGVE
   | |--GRT-------------------|                                                      |                12, 15
   | |Greater Than (A>B)   |-|                                                      |           LES - File #7 MESGVE
   | |Source A  T4:25.ACC|                                                      |                13
   | |                  2|                                                      |T4:25.DN - -| |- - File #7 MESGE
   | |Source B      N17:0|                                                      |                15
   | |                  4|                                                      |
   | |-------------------|                                                      |
   | T4:25.ACC - [15]                                                           |
   | N17:0 - [3:5]                                                              |
   |                                                                            |
   |                                                                  --RET-------|
16 |-------------------------------------------------------------------|Return   |-|
   |                                                                  |-------------|
17 |-------------------------------------------------------------------------[END]-|
```

```
|                 UNACKED ALARMS                                  UNACKED ALARMS |
|                 WORD 1/3 STATUS                                     STATUS     |
|  SBR            NEQ                                                N20:25     |N20:25 - MVM - File #4 INPUTDATE
0|Subroutine     |Not Equal                                          ( )        |            12
|                 |Source A  N20:35|                                   4         |         File #17 COPY_QUE
|                 |            0   |                                             |            3
|                 |Source B      0 |                                             |FILE N20:25/4 LEN:100 -
|                 |                |                                             |     FFL - File #13 FIFO -  10
|                 |                |                                             |FILE N20:25/4 LEN:30 -
|                 N20:35 - [3:5]                                                |     FFL - File #18 FIFOBUFFER E
|                                                                               |           1
|                 UNACKED ALARMS                                                |FILE N20:25/4 LEN:30 -
|                 WORD 2/3 STATUS                                               |     FFL - File #18 FIFOBUFFER E
|                 NEQ                                                           |           1
|                 Not Equal                                                     |FILE N20:25/4 LEN:30 -
|                 |Source A  N20:36|                                           |     FFL - File #18 FIFOBUFFER E
|                 |            0   |                                             |           1
|                 |Source B      0 |
|                 N20:36 - [5:30]
|                 UNACKED ALARMS
|                 WORD 3/3 STATUS
|                 NEQ
|                 Not Equal
|                 |Source A  N20:37|
|                 |            0   |
|                 |Source B      0 |
|                 N20:37 - [5:48]
|                                                                 MOTOR CONTACTOR
|MOTOR                                                            ON (SEE LADDER
|CONTACT                                                          4:12 - FOR WW?)
| N20:25                                                              N20:25     |N20:25 - MVM - File #4 INPUTDATE
1|---| |-------------------------------------------------------------( )        |            12
|   7                                                                  3         |         File #17 COPY_QUE
| [9:0]                                                                          |            3            ...
|N20:25/3 - FFL - File #13 FIFO -  10
|FILE N20:25/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:25/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:25/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|                                                                 MOTOR CONTACTOR
|MOTOR                                                            OFF - SEE RUNG
|CONTACT                                                          4:12 - FOR WW?)
| N20:25                                                              N20:25     |N20:25 - MVM - File #4 INPUTDATE
2|---|/|-------------------------------------------------------------( )        |            12
|   7                                                                  1         |         File #17 COPY_QUE
| [9:0]                                                                          |            3            ...
|N20:25/1 - FFL - File #13 FIFO -  10
|FILE N20:25/1 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:25/1 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:25/1 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|                                                                 RET
3|-------------------------------------------------------------Return|
|                                                                 |
4|-------------------------------------------------------------[END]|
```

```
 |When this subroutine is active, it allows the user                                  |
 |to simulate a fan running condition                                                 |
 |                                                                  MOTOR             |
 |WW START                                                          CONTACT           |
 |  N20:41   B3                                                      N20:25           |N20:25/7 - --(L)-- - File #9 SIMUE
0|--| |--[OSR]-------------------------------------------------------(L)--------------|                 0
 |   2      157                                                       7               |          --(U)-- - File #9 SIMUE
 |[7:1]                                                                               |                 1
 |                                                                                    |          -| |- - File #5 INTRE
 |                                                                  WW STOP           |                 3, 7, 14, 16
 |                                                                  N20:41            |N20:41/3 - --(U)-- - File #9 SIMUE
 |                                                                  --(U)--           |                 0
 |                                                                    3               |          -| |- - File #9 SIMUE
 |N20:25/7 - -| |- - File #5 INTRLKS -  17, 19, 21, 22, 24, 52, 53, 58, 62, 66        |
 |                File #6 FANCNTRL -  0                                               |
 |                File #8 SYSSTAT -  1                                                |
 |                File #14 COUNTER -  3                                               |
 |                File #16 INTLK -  0, 6, 22, 24                                      |
 |                File #20 FANCNTRL -  0                                              |
 |          -|/|- - File #5 INTRLKS -  15, 20, 25, 55, 57                            |
 |                File #6 FANCNTRL -  1, 12                                           |
 |                File #8 SYSSTAT -  2                                                |
 |                File #16 INTLK -  23                                                |
 |                File #20 FANCNTRL -  1, 15                                          |
 |          MVM - File #4 INPUTDATA -  12                                             |
 |               File #17 COPY_OUT -  3                                              |
 |FILE N20:25/7 LEN:100 - FFL - File #13 FIFO -  10                                   |
 |FILE N20:25/7 LEN:30 - FFL - File #18 FIFOBUFFER -  1                               |
 |FILE N20:25/7 LEN:30 - FFL - File #18 FIFOBUFFER -  1                               |
 |FILE N20:25/7 LEN:30 - FFL - File #18 FIFOBUFFER -  1                               |
 |N20:41/3 - -| |- - File #9 SIMULATE -  1                                             |
 |          -|/|- - File #6 FANCNTRL -  4                                             |
 |                File #20 FANCNTRL -  6                                              |
 |          MVM - File #7 MESGVIEW -  1                                               |
 |FILE N20:41/3 LEN:100 - FFL - File #13 FIFO -  10                                   |
 |                                                                  MOTOR             |
 |  WW STOP                                                         CONTACT           |
 |  N20:41                                                           N20:25           |N20:25/7 - --(L)-- - File #9 SIMUE
1|--| |--------------------------------------------------------------(U)--------------|                 0
 |  |  3      |                                                      7               |          --(U)-- - File #9 SIMUE
 |  |[0]      |                                                                      |                 1
 |  |         |                                                                      |          -| |- - File #5 INTRE
 |  |FAN INTLKS|                                                                     |                 3, 7, 14, 16
 |  |  N20:41 |                                                                      |                 17, 19, 21
 |  |--|/|----|                                                                      |                 22, 24, 52
 |     1                                                                              |                 53, 58, 62
 |  [5:121]                                                                           |                 66       ...
 |N20:25/7 - -| |- - File #6 FANCNTRL -  0                                             |
 |                File #8 SYSSTAT -  1                                                |
 |                File #14 COUNTER -  3                                               |
 |                File #16 INTLK -  0, 6, 22, 24                                      |
 |                File #20 FANCNTRL -  0                                              |
 |          -|/|- - File #5 INTRLKS -  15, 20, 25, 55, 57                            |
 |                File #6 FANCNTRL -  1, 12                                           |
 |                File #8 SYSSTAT -  2                                                |
 |                File #16 INTLK -  23                                                |
 |                File #20 FANCNTRL -  1, 15                                          |
 |          MVM - File #4 INPUTDATA -  12                                             |
 |               File #17 COPY_OUT -  3                                              |
 |FILE N20:25/7 LEN:100 - FFL - File #13 FIFO -  10                                   |
 |FILE N20:25/7 LEN:30 - FFL - File #18 FIFOBUFFER -  1                               |
 |FILE N20:25/7 LEN:30 - FFL - File #18 FIFOBUFFER -  1                               |
 |FILE N20:25/7 LEN:30 - FFL - File #18 FIFOBUFFER -  1                               |
 |                                                                  -RET-             |
2|-----------------------------------------------------------------|Return|-----------|
 |                                                                  -----             |
3|-----------------------------------------------------------------[END]-------------|
```

```
 |Glycol Pump Interlocks                                                                  |
 |GLYCOL PUMP        GLYCOL PUMP  GLYCOL LEVEL   GLYCOL LEVEL                             |
 |CTRLS AND INTLK    ON/OFF       LOW UNACK ALM  LOW CURR ALM                Glycol Pump  |
 |┌─SER──────────┐    N20:25        N20:35         N20:38                      N20:25    |N20:25/0 - -( )- - File #10 GLYE
0|Subroutine     ├────┤ ├──────────┤/├──────────┤/├──────────────────────────( )──────┤          0
 |└──────────────┘     6            15             15                          0        |        ┤ ├- - File #10 GLYE
 |                  [4:12]       [5:27]         [5:27]                                 |          1        ...
 |N20:25 - MVM - File #4 INPUTDATA -  12                                                |
 |              File #17 COPY_OUT -  3                                                  |
 |FILE N20:25/0 LEN:100 - FFL - File #13 FIFO -  10                                     |
 |FILE N20:25/0 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                 |
 |FILE N20:25/0 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                 |
 |FILE N20:25/0 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                 |
 |HTR AIR TEMP                                                                          |
 |HIGH UNACK    HTR AIR TMP    GLYCOL LEVEL   GLYCOL LEVEL                   Glycol Heater |
 |ALM           HIGH CURR ALM  LOW UNACK ALM  LOW CURR ALM   Glycol Pump      Contactor    |
 |   N20:36        N20:39         N20:35         N20:38        N20:25          N20:26    |N20:26 - MVM - File #4 INPUTDATE
1|────┤/├──────────┤/├──────────┤/├──────────┤/├──────────┤ ├──────────────( )──────┤         13
 |    0            0              15             15            0               1        |       File #16 INTLK -
 |[5:30]        [5:30]         [5:27]         [5:27]        [0]                      |        22, 23       ...
 |N20:26 - MVM - File #17 COPY_OUT -  4                                                 |
 |FILE N20:26/1 LEN:100 - FFL - File #13 FIFO -  10                                     |
 |FILE N20:26/1 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                 |
 |FILE N20:26/1 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                 |
 |FILE N20:26/1 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                 |
 |                                                                                      |
2|──────────────────────────────────────────────────────────────────┌─RET──────────┐──┤
 |                                                                  │Return        │  |
 |                                                                  └──────────────┘  |
3|──────────────────────────────────────────────────────────────────────────────[END]──┤
```

```
                    Major
                    Error
                    Fault
                    Code
 ┌─SBR──────────┐ ┌─EQU──────────┐                ┌─JSR──────────────┐
0├Subroutine    ├─│Equal         │────────────────│Jump To Subroutine │─┤
 └──────────────┘ │Source A    S:6│                │SBR File Number  U:15│
                  │            0  │                └──────────────────┘
                  │Source B 1112  │
                  └──────────────┘
 ┌─GRT──────────────┐                C5:7                  C5:7 - CTU - File #11 ERRSTAT -
1├Greater Than (A>B)├──────────────────(U)──────────────────┤                1
 │Source A      S:5 │                 CU                   │
 │            16384 │                                      │
 │Source B        0 │                                      │
 └──────────────────┘                                      │
 S:5 - [2]                                                 │
                                 ┌─CTU──────────┐          C5:7.CU - -(U)- - File #11 ERRSE
                                 │Count Up      ├─(CU)─┘                1
                                 │Counter    C5:7├─(DN)─┐  C5:7.DN - -┤/├- - File #11 ERRSE
                                 │Preset       120│                      2
                                 │Accum          0│
                                 └──────────────┘
 C5:7                                ┌─CLR──────────┐      S:5 - CLR - File #11 ERRSTAT -
2├─┤/├──────────────────────────────│Clear         │─┤              2
   DN                                │Dest       S:5│ │            File #15 CLRFAULT -
 [1]                                 │           16384│ │            1
                                     └──────────────┘ │      GRT - File #11 ERRSTAT -
                                                      │            1
                                     Processor        │
                                     Mode             │
                                     Status/          │
                                     Control          │
                                     ┌─CLR──────────┐ │      S:1 - CLR - File #11 ERRSTAT -
                                     └Clear         ├─┘              2
                                      Dest       S:1│              File #15 CLRFAULT -
                                                 225│              1
                                     └──────────────┘      S:1/13 - -┤ ├- - File #11 ERRSTE
 S:1/13 - -┤ ├- - File #11 ERRSTAT -  3
 S:1/15 - -┤ ├- - File #2 MAIN -  2
 Major
 Error
 Halted
   S:1                                   5 VDC STOP
3├─┤ ├──────────────────────────────────────N20:24──────────┤N20:24/3 - -( )- - File #6 FANCE
   13                                        (L)                                  4
 [2]                                         3                                File #20 FANE
 N20:24/3 - -(L)- - File #11 ERRSTAT -  3                                     6        ...
            MVM - File #4 INPUTDATA -  11
                  File #17 COPY_OUT -  2
 FILE N20:24/3 LEN:100 - FFL - File #13 FIFO -  10
 FILE N20:24/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1
 FILE N20:24/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1
 FILE N20:24/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1
                                                 ┌─RET──────────┐
4├──────────────────────────────────────────────│Return        │─┤
                                                 └──────────────┘
5├──────────────────────────────────────────────────────────────[END]─┤
```

```
  | R6:30                                                           ┌─BSL──────────────────┐          |R6:30.DN - ┤ ├ - File #12 COUE
 0├─┤/├─────────────────────────────────────────────────────────────┤Bit Shift Left         ├─(EN)─┤                  4        ...
  |   DN                                                            |File          #N17:1├─(DN)  |N17:1 - MVM - File #3 STARTUP -
  | [0]                                                             |Control        R6:30|      |                10         ...
  |                                                                 |Bit Address  N17:3/3|      |N17:3 - NEQ - File #12 COUNTER E
  |                                                                 |Length            36|      |               3
  |                                                                 └──────────────────────┘    |      MEQ - File #12 COUNTER E
  |R6:30.DN - ┤/├ - File #12 COUNTER -  0                                                       |
  |FILE R6:30 LEN:128 - FFU - File #13 FIFO -  5                                                |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  7                                                |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  9                                                |
  |FILE R6:30 LEN:100 - FFU - File #13 FIFO -  11                                               |
  |FILE R6:30 LEN:128 - FFU - File #13 FIFO -  13                                               |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  15                                               |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  17                                               |
  |FILE R6:30 LEN:100 - FFU - File #13 FIFO -  19                                               |
  |FILE R6:30 LEN:128 - FFU - File #13 FIFO -  21                                               |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  23                                               |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  25                                               |
  |FILE R6:30 LEN:100 - FFU - File #13 FIFO -  27                                               |
  |FILE R6:30 LEN:128 - FFU - File #13 FIFO -  29                                               |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  31                                               |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  33                                               |
  |FILE R6:30 LEN:100 - FFU - File #13 FIFO -  35                                               |
  |FILE R6:30 LEN:128 - FFU - File #13 FIFO -  37                                               |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  39                                               |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  41                                               |
  |FILE R6:30 LEN:100 - FFU - File #13 FIFO -  43                                               |
  |FILE R6:30 LEN:128 - FFU - File #13 FIFO -  45                                               |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  47                                               |
  |FILE R6:30 LEN:127 - FFU - File #13 FIFO -  49                                               |
  |FILE R6:30 LEN:100 - FFU - File #13 FIFO -  51                                               |
  |N17:1 - BSL - File #12 COUNTER -  0                                                          |
  |        NEQ - File #12 COUNTER -  1                                                          |
  |        MEQ - File #12 COUNTER -  1                                                          |
  |FILE N17:1 LEN:4 - FLL - File #3 STARTUP -  5                                                |
  |N17:3 - MEQ - File #12 COUNTER -  3                                                          |
  |FILE N17:3/3 LEN:4 - FLL - File #3 STARTUP -  5                                              |
  | ┌─NEQ──────────┐ ┌─MEQ──────────┐                              ┌─CTU────────────┐            |C5:5 - CTU - File #12 COUNTER -
 1├─┤Not Equal      ├─┤Masked Equal   ├──────────────────────────────┤Count Up        ├─(CU)─┤          1, 2, 3
  | |Source A  N17:1| |Source   N17:1|                              |Counter     C5:5├─(DN)  |       RES - File #12 COUNTER -
  | |              0| |             0|                              |Preset     32767|       |           4
  | |Source B      0| |Mask     N17:1|                              |Accum          2|       |C5:5.ACC - MUL - File #12 COUNTE
  | |               | |         0000h|                              └────────────────┘       |              4
  | └───────────────┘ |Compare  N20:38|                                                       |
  |N17:1 - [0]        |             0|                                                       |
  |                   └──────────────┘                                                       |
  |                   N17:1 - [0]                                                            |
  |                   N17:1 - [0]                                                            |
  |                   N20:38 - [7:12]                                                        |
  | ┌─NEQ──────────┐ ┌─MEQ──────────┐                              ┌─CTU────────────┐            |C5:5 - CTU - File #12 COUNTER -
 2├─┤Not Equal      ├─┤Masked Equal   ├──────────────────────────────┤Count Up        ├─(CU)─┤          1, 2, 3
  | |Source A  N17:2| |Source   N17:2|                              |Counter     C5:5├─(DN)  |       RES - File #12 COUNTER -
  | |              4| |             4|                              |Preset     32767|       |           4
  | |Source B      0| |Mask     N17:2|                              |Accum          2|       |C5:5.ACC - MUL - File #12 COUNTE
  | |               | |         0004h|                              └────────────────┘       |              4
  | └───────────────┘ |Compare  N20:39|                                                       |
  |N17:2 - [3:5]      |             2|                                                       |
  |                   └──────────────┘                                                       |
  |                   N17:2 - [3:5]                                                          |
  |                   N17:2 - [3:5]                                                          |
  |                   N20:39 - [5:30]                                                        |
  | ┌─NEQ──────────┐ ┌─MEQ──────────┐                              ┌─CTU────────────┐            |C5:5 - CTU - File #12 COUNTER -
 3├─┤Not Equal      ├─┤Masked Equal   ├──────────────────────────────┤Count Up        ├─(CU)─┤          1, 2, 3
  | |Source A  N17:3| |Source   N17:3|                              |Counter     C5:5├─(DN)  |       RES - File #12 COUNTER -
  | |              0| |             0|                              |Preset     32767|       |           4
  | |Source B      0| |Mask     N17:3|                              |Accum          2|       |C5:5.ACC - MUL - File #12 COUNTE
  | |               | |         0000h|                              └────────────────┘       |              4
  | └───────────────┘ |Compare  N20:40|                                                       |
  |N17:3 - [0]        |             0|                                                       |
  |                   └──────────────┘                                                       |
  |                   N17:3 - [0]                                                            |
  |                   N17:3 - [0]                                                            |
  |                   N20:40 - [5:48]                                                        |
```

```
   | N17:3 R6:30                                                  ┌─MUL──────────┐  |N17:0 - FLL - File #3 STARTUP -
 4 |─┤ ├──┤ ├──────────────────────────────────────────────────┤Multiply      ├─┤            5
   |  2     DN                                                  ||Source A  C5:5.ACC| |       MUL - File #12 COUNTER E
   |[3:5]  [0]                                                  ||             2| |C5:5 - CTU - File #12 COUNTER -
   |                                                            ||Source B    N17:4| |             1, 2, 3
   |                                                            ||             2| |       RES - File #12 COUNTER -
   |                                                            ||Dest        N17:0| |
   |                                                            ||             4| |
   |                                                            |└──────────────┘ |
   |                                                            | C5:5            |C5:5 - CTU - File #12 COUNTER -
   |                                                            └─[RES]──────────┘ |             1, 2, 3        ...
   |N17:0 - MUL - File #12 COUNTER -  4                                            |
   |        GRT - File #7 MESGVIEW -  15                                           |
   |FILE N17:0 LEN:4 - FLL - File #3 STARTUP -  5                                  |
   |C5:5 - RES - File #12 COUNTER -  4                                             |
   |C5:5 - RES - File #12 COUNTER -  4                                             |
   |C5:5.ACC - MUL - File #12 COUNTER -  4                                         |
   |                                                                               |
   |                                                                  ┌─RET──────┐ |
 5 |──────────────────────────────────────────────────────────────────┤Return    ├─┤
   |                                                                  └──────────┘ |
 6 |──────────────────────────────────────────────────────────────────────────[END]─┤
```

```
 | N13:0                                                        R6:0   |R6:0 - FFL - File #13 FIFO -  4
0|--| |--------------------------------------------------------+--( )--+|       FFU - File #13 FIFO -  5
 |  0                                                          |  EN   ||FILE R6:0.EN LEN:128 -
 | [2:0]                                                       |       ||     FFU - File #13 FIFO -  5
 |                                                             | R6:1  ||R6:1 - FFL - File #13 FIFO -  6
 |                                                             |--( )--||       FFU - File #13 FIFO -  7
 |                                                             |  EN   ||FILE R6:1.EN LEN:128 -
 |                                                             |       ||     FFU - File #13 FIFO -  5...
 |                                                             | R6:2  ||R6:2 - FFL - File #13 FIFO -  8
 |                                                             |--( )--||       FFU - File #13 FIFO -  9
 |                                                             |  EN   ||FILE R6:2.EN LEN:128 -
 |                                                             |       ||     FFU - File #13 FIFO -  5...
 |                                                             | R6:3  ||R6:3 - FFL - File #13 FIFO -  10
 |                                                             |--( )--||       FFU - File #13 FIFO -  11
 |                                                             |  EN   ||FILE R6:3.EN LEN:128 -
 |                                                             |       ||     FFU - File #13 FIFO -  5...
 |                                                             | R6:4  ||R6:4 - FFL - File #13 FIFO -  12
 |                                                             |--( )--||       FFU - File #13 FIFO -  13
 |                                                             |  EN   ||FILE R6:4.EN LEN:128 -
 |                                                             |       ||     FFU - File #13 FIFO -  5...
 |                                                             | R6:5  ||R6:5 - FFL - File #13 FIFO -  14
 |                                                             |--( )--||       FFU - File #13 FIFO -  15
 |                                                             |  EN   ||FILE R6:5.EN LEN:128 -
 |                                                             |       ||     FFU - File #13 FIFO -  5...
 |                                                             | R6:6  ||R6:6 - FFL - File #13 FIFO -  16
 |                                                             |--( )--||       FFU - File #13 FIFO -  17
 |                                                             |  EN   ||FILE R6:6.EN LEN:128 -
 |                                                             |       ||     FFU - File #13 FIFO -  5...
 |                                                             | R6:7  ||R6:7 - FFL - File #13 FIFO -  18
 |                                                             |--( )--||       FFU - File #13 FIFO -  19
 |                                                             |  EN   ||FILE R6:7.EN LEN:128 -
 |                                                             |       ||     FFU - File #13 FIFO -  5...
 |                                                             | R6:8  ||R6:8 - FFL - File #13 FIFO -  20
 |                                                             |--( )--||       FFU - File #13 FIFO -  21
 |                                                             |  EN   ||FILE R6:8.EN LEN:128 -
 |                                                             |       ||     FFU - File #13 FIFO -  5...
 |                                                             | R6:9  ||R6:9 - FFL - File #13 FIFO -  22
 |                                                             |--( )--||       FFU - File #13 FIFO -  23
 |                                                             |  EN   ||FILE R6:9.EN LEN:128 -
 |                                                             |       ||     FFU - File #13 FIFO -  5...
 |                                                             | R6:10 ||R6:10 - FFL - File #13 FIFO -
 |                                                             |--( )--||               24
 |                                                             |  EN   ||       FFU - File #13 FIFO -
 |                                                             |       ||               25          ...
 |                                                             | R6:11 ||R6:11 - FFL - File #13 FIFO -
 |                                                             +--( )--+|               26
 |                                                                EN   |       FFU - File #13 FIFO - ..
 |R6:0 - FFL - File #13 FIFO -  4                                      |
 |      FFU - File #13 FIFO -  5                                       |
 |FILE R6:0.EN LEN:128 - FFU - File #13 FIFO -  5                      |
 |R6:3 - FFL - File #13 FIFO -  10                                     |
 |      FFU - File #13 FIFO -  11                                      |
 |FILE R6:3.EN LEN:128 - FFU - File #13 FIFO -  5                      |
 |FILE R6:3.EN LEN:127 - FFU - File #13 FIFO -  7                      |
 |FILE R6:3.EN LEN:127 - FFU - File #13 FIFO -  9                      |
 |FILE R6:3.EN LEN:100 - FFU - File #13 FIFO -  11                     |
 |R6:6 - FFL - File #13 FIFO -  16                                     |
 |      FFU - File #13 FIFO -  17                                      |
 |FILE R6:6.EN LEN:128 - FFU - File #13 FIFO -  5                      |
 |FILE R6:6.EN LEN:127 - FFU - File #13 FIFO -  7                      |
 |FILE R6:6.EN LEN:127 - FFU - File #13 FIFO -  9                      |
 |FILE R6:6.EN LEN:100 - FFU - File #13 FIFO -  11                     |
 |FILE R6:6.EN LEN:128 - FFU - File #13 FIFO -  13                     |
 |FILE R6:6.EN LEN:127 - FFU - File #13 FIFO -  15                     |
 |FILE R6:6.EN LEN:127 - FFU - File #13 FIFO -  17                     |
 |    FFU - File #13 FIFO -  15                                        |
 |FILE R6:9.EN LEN:127 - FFU - File #13 FIFO -  17                     |
 |FILE R6:9.EN LEN:100 - FFU - File #13 FIFO -  19                     |
 |FILE R6:9.EN LEN:128 - FFU - File #13 FIFO -  21                     |
 |FILE R6:9.EN LEN:127 - FFU - File #13 FIFO -  23                     |
 |R6:11.EN - FFU - File #13 FIFO -  19                                 |
 |FILE R6:11.EN LEN:128 - FFU - File #13 FIFO -  21                    |
 |FILE R6:11.EN LEN:127 - FFU - File #13 FIFO -  23                    |
```

```
|FILE R6:11.EN LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:11.EN LEN:100 - FFU - File #13 FIFO -  27
| N13:0                                                                  R6:0   |R6:0 - FFL - File #13 FIFO -  4
1|--| |-------------------------------------------------------------------|--( )--|      FFU - File #13 FIFO -  5
|   0                                                                     |  EU   |FILE R6:0.EU LEN:128 -
| [2:0]                                                                   |       |     FFU - File #13 FIFO -  5
|                                                                         | R6:1  |R6:1 - FFL - File #13 FIFO -  6
|                                                                         |--( )--|      FFU - File #13 FIFO -  7
|                                                                         |  EU   |FILE R6:1.EU LEN:128 -
|                                                                         |       |     FFU - File #13 FIFO -  5...
|                                                                         | R6:2  |R6:2 - FFL - File #13 FIFO -  8
|                                                                         |--( )--|      FFU - File #13 FIFO -  9
|                                                                         |  EU   |FILE R6:2.EU LEN:128 -
|                                                                         |       |     FFU - File #13 FIFO -  5...
|                                                                         | R6:3  |R6:3 - FFL - File #13 FIFO -  10
|                                                                         |--( )--|      FFU - File #13 FIFO -  11
|                                                                         |  EU   |FILE R6:3.EU LEN:128 -
|                                                                         |       |     FFU - File #13 FIFO -  5...
|                                                                         | R6:4  |R6:4 - FFL - File #13 FIFO -  12
|                                                                         |--( )--|      FFU - File #13 FIFO -  13
|                                                                         |  EU   |FILE R6:4.EU LEN:128 -
|                                                                         |       |     FFU - File #13 FIFO -  5...
|                                                                         | R6:5  |R6:5 - FFL - File #13 FIFO -  14
|                                                                         |--( )--|      FFU - File #13 FIFO -  15
|                                                                         |  EU   |FILE R6:5.EU LEN:128 -
|                                                                         |       |     FFU - File #13 FIFO -  5...
|                                                                         | R6:6  |R6:6 - FFL - File #13 FIFO -  16
|                                                                         |--( )--|      FFU - File #13 FIFO -  17
|                                                                         |  EU   |FILE R6:6.EU LEN:128 -
|                                                                         |       |     FFU - File #13 FIFO -  5...
|                                                                         | R6:7  |R6:7 - FFL - File #13 FIFO -  18
|                                                                         |--( )--|      FFU - File #13 FIFO -  19
|                                                                         |  EU   |FILE R6:7.EU LEN:128 -
|                                                                         |       |     FFU - File #13 FIFO -  5...
|                                                                         | R6:8  |R6:8 - FFL - File #13 FIFO -  20
|                                                                         |--( )--|      FFU - File #13 FIFO -  21
|                                                                         |  EU   |FILE R6:8.EU LEN:128 -
|                                                                         |       |     FFU - File #13 FIFO -  5...
|                                                                         | R6:9  |R6:9 - FFL - File #13 FIFO -  22
|                                                                         |--( )--|      FFU - File #13 FIFO -  23
|                                                                         |  EU   |FILE R6:9.EU LEN:128 -
|                                                                         |       |     FFU - File #13 FIFO -  5...
|                                                                         | R6:10 |R6:10 - FFL - File #13 FIFO -
|                                                                         |--( )--|              24
|                                                                         |  EU   |       FFU - File #13 FIFO -
|                                                                         |       |              25          ...
|                                                                         | R6:11 |R6:11 - FFL - File #13 FIFO -
|                                                                         |--( )--|              26
|                                                                         |  EU   |       FFU - File #13 FIFO - ..
|R6:2 - FFL - File #13 FIFO -  8
|      FFU - File #13 FIFO -  9
|FILE R6:2.EU LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:2.EU LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:2.EU LEN:127 - FFU - File #13 FIFO -  9
|R6:3 - FFL - File #13 FIFO -  10
|      FFU - File #13 FIFO -  11
|FILE R6:3.EU LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:3.EU LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:3.EU LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:3.EU LEN:100 - FFU - File #13 FIFO -  11
|R6:5 - FFL - File #13 FIFO -  14
|      FFU - File #13 FIFO -  15
|FILE R6:5.EU LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:5.EU LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:5.EU LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:5.EU LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:5.EU LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:5.EU LEN:127 - FFU - File #13 FIFO -  15
|R6:8 - FFL - File #13 FIFO -  20
|      FFU - File #13 FIFO -  21
|FILE R6:8.EU LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:8.EU LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:8.EU LEN:127 - FFU - File #13 FIFO -  9
```

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|FILE R6:8.EU LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:8.EU LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:8.EU LEN:127 - FFU - File #13 FIFO -  15
|FILE R6:8.EU LEN:127 - FFU - File #13 FIFO -  17
|FILE R6:8.EU LEN:100 - FFU - File #13 FIFO -  19
|FILE R6:8.EU LEN:128 - FFU - File #13 FIFO -  21
| N13:0                                                                  R6:12   |R6:12 - FFL - File #13 FIFO -
2|--| |-------------------------------------------------------------------( )--|-|            28
|  0                                                                      EN   |        FFU - File #13 FIFO -
|[2:0]                                                                         |            29
|                                                                              |FILE R6:12.EN LEN:128 -      ...
|                                                                        R6:13 |R6:13 - FFL - File #13 FIFO -
|                                                                        -( )--|            30
|                                                                         EN   |        FFU - File #13 FIFO -
|                                                                              |            31          ...
|                                                                        R6:14 |R6:14 - FFL - File #13 FIFO -
|                                                                        -( )--|            32
|                                                                         EN   |        FFU - File #13 FIFO -
|                                                                              |            33          ...
|                                                                        R6:15 |R6:15 - FFL - File #13 FIFO -
|                                                                        -( )--|            34
|                                                                         EN   |        FFU - File #13 FIFO -
|                                                                              |            35          ...
|                                                                        R6:16 |R6:16 - FFL - File #13 FIFO -
|                                                                        -( )--|            36
|                                                                         EN   |        FFU - File #13 FIFO -
|                                                                              |            37          ...
|                                                                        R6:17 |R6:17 - FFL - File #13 FIFO -
|                                                                        -( )--|            38
|                                                                         EN   |        FFU - File #13 FIFO -
|                                                                              |            39          ...
|                                                                        R6:18 |R6:18 - FFL - File #13 FIFO -
|                                                                        -( )--|            40
|                                                                         EN   |        FFU - File #13 FIFO -
|                                                                              |            41          ...
|                                                                        R6:19 |R6:19 - FFL - File #13 FIFO -
|                                                                        -( )--|            42
|                                                                         EN   |        FFU - File #13 FIFO -
|                                                                              |            43          ...
|                                                                        R6:20 |R6:20 - FFL - File #13 FIFO -
|                                                                        -( )--|            44
|                                                                         EN   |        FFU - File #13 FIFO -
|                                                                              |            45          ...
|                                                                        R6:21 |R6:21 - FFL - File #13 FIFO -
|                                                                        -( )--|            46
|                                                                         EN   |        FFU - File #13 FIFO -
|                                                                              |            47          ...
|                                                                        R6:22 |R6:22 - FFL - File #13 FIFO -
|                                                                        -( )--|            48
|                                                                         EN   |        FFU - File #13 FIFO -
|                                                                              |            49          ...
|                                                                        R6:23 |R6:23 - FFL - File #13 FIFO -
|                                                                        -( )--|            50
|                                                                         EN   |        FFU - File #13 FIFO - ..
|     FFU - File #13 FIFO -  21
|FILE R6:14.EN LEN:127 - FFU - File #13 FIFO -  23
|FILE R6:14.EN LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:14.EN LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:14.EN LEN:128 - FFU - File #13 FIFO -  29
|FILE R6:14.EN LEN:127 - FFU - File #13 FIFO -  31
|FILE R6:14.EN LEN:127 - FFU - File #13 FIFO -  33
|     FFU - File #13 FIFO -  13
|FILE R6:15.EN LEN:127 - FFU - File #13 FIFO -  15
|FILE R6:15.EN LEN:127 - FFU - File #13 FIFO -  17
|FILE R6:15.EN LEN:100 - FFU - File #13 FIFO -  19
|FILE R6:15.EN LEN:128 - FFU - File #13 FIFO -  21
|FILE R6:15.EN LEN:127 - FFU - File #13 FIFO -  23
|FILE R6:15.EN LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:15.EN LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:15.EN LEN:128 - FFU - File #13 FIFO -  29
|FILE R6:15.EN LEN:127 - FFU - File #13 FIFO -  31
|FILE R6:15.EN LEN:127 - FFU - File #13 FIFO -  33
|FILE R6:15.EN LEN:100 - FFU - File #13 FIFO -  35
```

```
|R6:16 - FFL - File #13 FIFO -  36                                        |
|        FFU - File #13 FIFO -  37                                        |
|FILE R6:16.EN LEN:128 - FFU - File #13 FIFO -  5                         |
|FILE R6:16.EN LEN:127 - FFU - File #13 FIFO -  7                         |
|FILE R6:16.EN LEN:127 - FFU - File #13 FIFO -  9                         |
|FILE R6:16.EN LEN:100 - FFU - File #13 FIFO -  11                        |
|FILE R6:16.EN LEN:128 - FFU - File #13 FIFO -  13                        |
|FILE R6:16.EN LEN:127 - FFU - File #13 FIFO -  15                        |
|FILE R6:16.EN LEN:127 - FFU - File #13 FIFO -  17                        |
|FILE R6:16.EN LEN:100 - FFU - File #13 FIFO -  19                        |
|FILE R6:16.EN LEN:128 - FFU - File #13 FIFO -  21                        |
|FILE R6:16.EN LEN:127 - FFU - File #13 FIFO -  23                        |
|FILE R6:16.EN LEN:127 - FFU - File #13 FIFO -  25                        |
|FILE R6:16.EN LEN:100 - FFU - File #13 FIFO -  27                        |
|FILE R6:16.EN LEN:128 - FFU - File #13 FIFO -  29                        |
|FILE R6:16.EN LEN:127 - FFU - File #13 FIFO -  31                        |
|FILE R6:16.EN LEN:127 - FFU - File #13 FIFO -  33                        |
|FILE R6:16.EN LEN:100 - FFU - File #13 FIFO -  35                        |
|FILE R6:16.EN LEN:128 - FFU - File #13 FIFO -  37                        |
|     FFU - File #13 FIFO -  27                                           |
|FILE R6:17.EN LEN:128 - FFU - File #13 FIFO -  29                        |
|FILE R6:17.EN LEN:127 - FFU - File #13 FIFO -  31                        |
|FILE R6:17.EN LEN:127 - FFU - File #13 FIFO -  33                        |
|FILE R6:17.EN LEN:100 - FFU - File #13 FIFO -  35                        |
|FILE R6:17.EN LEN:128 - FFU - File #13 FIFO -  37                        |
|FILE R6:17.EN LEN:127 - FFU - File #13 FIFO -  39                        |
|R6:21 - FFL - File #13 FIFO -  46                                        |
|        FFU - File #13 FIFO -  47                                        |
|FILE R6:21.EN LEN:128 - FFU - File #13 FIFO -  5                         |
|FILE R6:21.EN LEN:127 - FFU - File #13 FIFO -  7                         |
|FILE R6:21.EN LEN:127 - FFU - File #13 FIFO -  9                         |
|FILE R6:21.EN LEN:100 - FFU - File #13 FIFO -  11                        |
|FILE R6:21.EN LEN:128 - FFU - File #13 FIFO -  13                        |
|FILE R6:21.EN LEN:127 - FFU - File #13 FIFO -  15                        |
|FILE R6:21.EN LEN:127 - FFU - File #13 FIFO -  17                        |
|FILE R6:21.EN LEN:100 - FFU - File #13 FIFO -  19                        |
|FILE R6:21.EN LEN:128 - FFU - File #13 FIFO -  21                        |
|FILE R6:21.EN LEN:127 - FFU - File #13 FIFO -  23                        |
|FILE R6:21.EN LEN:127 - FFU - File #13 FIFO -  25                        |
|FILE R6:21.EN LEN:100 - FFU - File #13 FIFO -  27                        |
|FILE R6:21.EN LEN:128 - FFU - File #13 FIFO -  29                        |
|FILE R6:21.EN LEN:127 - FFU - File #13 FIFO -  31                        |
|FILE R6:21.EN LEN:127 - FFU - File #13 FIFO -  33                        |
|FILE R6:21.EN LEN:100 - FFU - File #13 FIFO -  35                        |
|FILE R6:21.EN LEN:128 - FFU - File #13 FIFO -  37                        |
|FILE R6:21.EN LEN:127 - FFU - File #13 FIFO -  39                        |
|FILE R6:21.EN LEN:127 - FFU - File #13 FIFO -  41                        |
|FILE R6:21.EN LEN:100 - FFU - File #13 FIFO -  43                        |
|FILE R6:21.EN LEN:128 - FFU - File #13 FIFO -  45                        |
|FILE R6:21.EN LEN:127 - FFU - File #13 FIFO -  47                        |
|     FFU - File #13 FIFO -  11                                           |
|FILE R6:23.EN LEN:128 - FFU - File #13 FIFO -  13                        |
|FILE R6:23.EN LEN:127 - FFU - File #13 FIFO -  15                        |
|FILE R6:23.EN LEN:127 - FFU - File #13 FIFO -  17                        |
|FILE R6:23.EN LEN:100 - FFU - File #13 FIFO -  19                        |
|FILE R6:23.EN LEN:128 - FFU - File #13 FIFO -  21                        |
|FILE R6:23.EN LEN:127 - FFU - File #13 FIFO -  23                        |
|FILE R6:23.EN LEN:127 - FFU - File #13 FIFO -  25                        |
|FILE R6:23.EN LEN:100 - FFU - File #13 FIFO -  27                        |
|FILE R6:23.EN LEN:128 - FFU - File #13 FIFO -  29                        |
|FILE R6:23.EN LEN:127 - FFU - File #13 FIFO -  31                        |
|FILE R6:23.EN LEN:127 - FFU - File #13 FIFO -  33                        |
|FILE R6:23.EN LEN:100 - FFU - File #13 FIFO -  35                        |
|FILE R6:23.EN LEN:128 - FFU - File #13 FIFO -  37                        |
|FILE R6:23.EN LEN:127 - FFU - File #13 FIFO -  39                        |
|FILE R6:23.EN LEN:127 - FFU - File #13 FIFO -  41                        |
|FILE R6:23.EN LEN:100 - FFU - File #13 FIFO -  43                        |
|FILE R6:23.EN LEN:128 - FFU - File #13 FIFO -  45                        |
|FILE R6:23.EN LEN:127 - FFU - File #13 FIFO -  47                        |
|FILE R6:23.EN LEN:127 - FFU - File #13 FIFO -  49                        |
|FILE R6:23.EN LEN:100 - FFU - File #13 FIFO -  51                        |
```

```
| N13:0                                                                                                                  R6:12   |R6:12 - FFL - File #13 FIFO -
3|--| |-------------------------------------------------------------------------------------------------------------------|--( )--|                28
|  0                                                                                                                  |  EU   | |       FFU - File #13 FIFO -
|[2:0]                                                                                                                |       | |                29
|                                                                                                                     |       | |FILE R6:12.EU LEN:128 -      ...
|                                                                                                                     |R6:13  |R6:13 - FFL - File #13 FIFO -
|                                                                                                                     |--( )--|                30
|                                                                                                                     |  EU   | |       FFU - File #13 FIFO -
|                                                                                                                     |       | |                31          ...
|                                                                                                                     |R6:14  |R6:14 - FFL - File #13 FIFO -
|                                                                                                                     |--( )--|                32
|                                                                                                                     |  EU   | |       FFU - File #13 FIFO -
|                                                                                                                     |       | |                33          ...
|                                                                                                                     |R6:15  |R6:15 - FFL - File #13 FIFO -
|                                                                                                                     |--( )--|                34
|                                                                                                                     |  EU   | |       FFU - File #13 FIFO -
|                                                                                                                     |       | |                35          ...
|                                                                                                                     |R6:16  |R6:16 - FFL - File #13 FIFO -
|                                                                                                                     |--( )--|                36
|                                                                                                                     |  EU   | |       FFU - File #13 FIFO -
|                                                                                                                     |       | |                37          ...
|                                                                                                                     |R6:17  |R6:17 - FFL - File #13 FIFO -
|                                                                                                                     |--( )--|                38
|                                                                                                                     |  EU   | |       FFU - File #13 FIFO -
|                                                                                                                     |       | |                39          ...
|                                                                                                                     |R6:18  |R6:18 - FFL - File #13 FIFO -
|                                                                                                                     |--( )--|                40
|                                                                                                                     |  EU   | |       FFU - File #13 FIFO -
|                                                                                                                     |       | |                41          ...
|                                                                                                                     |R6:19  |R6:19 - FFL - File #13 FIFO -
|                                                                                                                     |--( )--|                42
|                                                                                                                     |  EU   | |       FFU - File #13 FIFO -
|                                                                                                                     |       | |                43          ...
|                                                                                                                     |R6:20  |R6:20 - FFL - File #13 FIFO -
|                                                                                                                     |--( )--|                44
|                                                                                                                     |  EU   | |       FFU - File #13 FIFO -
|                                                                                                                     |       | |                45          ...
|                                                                                                                     |R6:21  |R6:21 - FFL - File #13 FIFO -
|                                                                                                                     |--( )--|                46
|                                                                                                                     |  EU   | |       FFU - File #13 FIFO -
|                                                                                                                     |       | |                47          ...
|                                                                                                                     |R6:22  |R6:22 - FFL - File #13 FIFO -
|                                                                                                                     |--( )--|                48
|                                                                                                                     |  EU   | |       FFU - File #13 FIFO -
|                                                                                                                     |       | |                49          ...
|                                                                                                                     |R6:23  |R6:23 - FFL - File #13 FIFO -
|                                                                                                                     |--( )--|                50
|                                                                                                                       EU    |       FFU - File #13 FIFO - ..
|     FFU - File #13 FIFO -  27                                                                                         |
|FILE R6:12.EU LEN:128 - FFU - File #13 FIFO -  29                                                                      |
|R6:15 - FFL - File #13 FIFO -  34                                                                                      |
|       FFU - File #13 FIFO -  35                                                                                       |
|FILE R6:15.EU LEN:128 - FFU - File #13 FIFO -  5                                                                       |
|FILE R6:15.EU LEN:127 - FFU - File #13 FIFO -  7                                                                       |
|FILE R6:15.EU LEN:127 - FFU - File #13 FIFO -  9                                                                       |
|FILE R6:15.EU LEN:100 - FFU - File #13 FIFO -  11                                                                      |
|FILE R6:15.EU LEN:128 - FFU - File #13 FIFO -  13                                                                      |
|FILE R6:15.EU LEN:127 - FFU - File #13 FIFO -  15                                                                      |
|FILE R6:15.EU LEN:127 - FFU - File #13 FIFO -  17                                                                      |
|FILE R6:15.EU LEN:100 - FFU - File #13 FIFO -  19                                                                      |
|FILE R6:15.EU LEN:128 - FFU - File #13 FIFO -  21                                                                      |
|FILE R6:15.EU LEN:127 - FFU - File #13 FIFO -  23                                                                      |
|FILE R6:15.EU LEN:127 - FFU - File #13 FIFO -  25                                                                      |
|FILE R6:15.EU LEN:100 - FFU - File #13 FIFO -  27                                                                      |
|FILE R6:15.EU LEN:128 - FFU - File #13 FIFO -  29                                                                      |
|FILE R6:15.EU LEN:127 - FFU - File #13 FIFO -  31                                                                      |
|FILE R6:15.EU LEN:127 - FFU - File #13 FIFO -  33                                                                      |
|FILE R6:15.EU LEN:100 - FFU - File #13 FIFO -  35                                                                      |
|     FFU - File #13 FIFO -  27                                                                                         |
|FILE R6:16.EU LEN:128 - FFU - File #13 FIFO -  29                                                                      |
|FILE R6:16.EU LEN:127 - FFU - File #13 FIFO -  31                                                                      |
|FILE R6:16.EU LEN:127 - FFU - File #13 FIFO -  33                                                                      |
|FILE R6:16.EU LEN:100 - FFU - File #13 FIFO -  35                                                                      |
```

```
|FILE R6:16.EU LEN:128 - FFU - File #13 FIFO -  37
|     FFU - File #13 FIFO -  23
|FILE R6:18.EU LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:18.EU LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:18.EU LEN:128 - FFU - File #13 FIFO -  29
|FILE R6:18.EU LEN:127 - FFU - File #13 FIFO -  31
|FILE R6:18.EU LEN:127 - FFU - File #13 FIFO -  33
|FILE R6:18.EU LEN:100 - FFU - File #13 FIFO -  35
|FILE R6:18.EU LEN:128 - FFU - File #13 FIFO -  37
|FILE R6:18.EU LEN:127 - FFU - File #13 FIFO -  39
|FILE R6:18.EU LEN:127 - FFU - File #13 FIFO -  41
|     FFU - File #13 FIFO -  25
|FILE R6:20.EU LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:20.EU LEN:128 - FFU - File #13 FIFO -  29
|FILE R6:20.EU LEN:127 - FFU - File #13 FIFO -  31
|FILE R6:20.EU LEN:127 - FFU - File #13 FIFO -  33
|FILE R6:20.EU LEN:100 - FFU - File #13 FIFO -  35
|FILE R6:20.EU LEN:128 - FFU - File #13 FIFO -  37
|FILE R6:20.EU LEN:127 - FFU - File #13 FIFO -  39
|FILE R6:20.EU LEN:127 - FFU - File #13 FIFO -  41
|FILE R6:20.EU LEN:100 - FFU - File #13 FIFO -  43
|FILE R6:20.EU LEN:128 - FFU - File #13 FIFO -  45
|R6:23 - FFL - File #13 FIFO -  50
|       FFU - File #13 FIFO -  51
|FILE R6:23.EU LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:23.EU LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:23.EU LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  15
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  17
|FILE R6:23.EU LEN:100 - FFU - File #13 FIFO -  19
|FILE R6:23.EU LEN:128 - FFU - File #13 FIFO -  21
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  23
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:23.EU LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:23.EU LEN:128 - FFU - File #13 FIFO -  29
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  31
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  33
|FILE R6:23.EU LEN:100 - FFU - File #13 FIFO -  35
|FILE R6:23.EU LEN:128 - FFU - File #13 FIFO -  37
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  39
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  41
|FILE R6:23.EU LEN:100 - FFU - File #13 FIFO -  43
|FILE R6:23.EU LEN:128 - FFU - File #13 FIFO -  45
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  47
|FILE R6:23.EU LEN:127 - FFU - File #13 FIFO -  49
|FILE R6:23.EU LEN:100 - FFU - File #13 FIFO -  51
|                                                                                  |
4|-----------------------------------------------------------------------------|R6:0 - FFL - File #13 FIFO -  4
|                                                  ┌FFL──────────┐                 |     FFU - File #13 FIFO -  5.
|                                                  |FIFO Load    ├-(EN)-┤          |N23:128 - FFL - File #13 FIFO -
|                                                  |Source  N23:128├-(DN)          |            4
|                                                  |FIFO    #N23:0├-(EM)          |       FFU - File #13 FIFO -
|                                                  |Control    R6:0|               |            7          ...
|                                                  |Length      128|               |N23:0 - FFL - File #13 FIFO -  4
|                                                  |Position    127|               |     FFU - File #13 FIFO -  5
|                                                  └─────────────┘                 |
|R6:0.EN - -( )- - File #13 FIFO -  0                                              |
|R6:0.EU - -( )- - File #13 FIFO -  1                                              |
|FILE R6:0 LEN:128 - FFU - File #13 FIFO -  5                                      |
|                                                                                  |
5|-----------------------------------------------------------------------------|R6:0 - FFL - File #13 FIFO -  4
|                                                  ┌FFU──────────┐                 |     FFU - File #13 FIFO -  5
|                                                  |FIFO Unload  ├-(EU)-┤          |R6:0.EN - -( )- - File #13 FIFOE
|                                                  |FIFO    #N23:0├-(DN)          |            0          ...
|                                                  |Dest    N20:58├-(EM)          |N23:0 - FFL - File #13 FIFO -  4
|                                                  |Control    R6:0|               |     FFU - File #13 FIFO -  5
|                                                  |Length      128|               |FILE N20:58 LEN:100 -
|                                                  |Position    127|               |    FFL - File #13 FIFO -  10
|                                                  └─────────────┘                 |
|R6:0.EU - -( )- - File #13 FIFO -  1                                              |
```

```
  |
 6|----------------------------------------------------+-FFL-----------------+      |R6:1 - FFL - File #13 FIFO -  6
  |                                                    |FIFO Load            |-(EN)-|      FFU - File #13 FIFO -  7.
  |                                                    |Source        N24:0  |-(DN) |N24:0 - FFL - File #13 FIFO -  6
  |                                                    |FIFO       #N23:129  |-(EM) |       FFU - File #13 FIFO -  9
  |                                                    |Control        R6:1  |      |N23:129 - FFL - File #13 FIFO -
  |                                                    |Length          127  |      |         6
  |                                                    |Position        126  |      |         FFU - File #13 FIFO -
  |                                                    +---------------------+      |         7                  ...
  |R6:1.EN - -( )- - File #13 FIFO -  0                                             |
  |R6:1.EU - -( )- - File #13 FIFO -  1                                             |
  |FILE R6:1 LEN:128 - FFU - File #13 FIFO -  5                                     |
  |FILE R6:1 LEN:127 - FFU - File #13 FIFO -  7                                     |
  |N23:129 - FFL - File #13 FIFO -  4                                               |
  |                                                    +-FFU-----------------+      |R6:1 - FFL - File #13 FIFO -  6
 7|----------------------------------------------------|FIFO Unload          |-(EU)-|      FFU - File #13 FIFO -  7.
  |                                                    |FIFO       #N23:129  |-(DN) |N23:129 - FFL - File #13 FIFO -
  |                                                    |Dest        N23:128  |-(EM) |         6                  ...
  |                                                    |Control        R6:1  |      |N23:128 - FFL - File #13 FIFO -
  |                                                    |Length          127  |      |         4
  |                                                    |Position        126  |      |         FFU - File #13 FIFO -
  |                                                    +---------------------+      |         7                  ...
  |R6:1.EN - -( )- - File #13 FIFO -  0
  |R6:1.EU - -( )- - File #13 FIFO -  1
  |FILE R6:1 LEN:128 - FFU - File #13 FIFO -  5
  |N23:129 - FFU - File #13 FIFO -  7
  |FILE N23:129 LEN:128 - FFL - File #13 FIFO -  4
  |N23:128 - FFL - File #13 FIFO -  4
  |                                                    +-FFL-----------------+      |R6:2 - FFL - File #13 FIFO -  8
 8|----------------------------------------------------|FIFO Load            |-(EN)-|      FFU - File #13 FIFO -  9.
  |                                                    |Source      N24:128  |-(DN) |N24:128 - FFL - File #13 FIFO -
  |                                                    |FIFO         #N24:1  |-(EM) |         8                  ...
  |                                                    |Control        R6:2  |      |N24:1 - FFL - File #13 FIFO -  8
  |                                                    |Length          127  |      |       FFU - File #13 FIFO -  9
  |                                                    |Position        126  |      |FILE N24:1 LEN:127 -
  |                                                    +---------------------+      |    FFL - File #13 FIFO -  6
  |R6:2.EN - -( )- - File #13 FIFO -  0                                             |
  |R6:2.EU - -( )- - File #13 FIFO -  1                                             |
  |FILE R6:2 LEN:128 - FFU - File #13 FIFO -  5                                     |
  |FILE R6:2 LEN:127 - FFU - File #13 FIFO -  7                                     |
  |FILE R6:2 LEN:127 - FFU - File #13 FIFO -  9                                     |
  |N24:128 - FFU - File #13 FIFO -  11                                              |
  |                                                    +-FFU-----------------+      |R6:2 - FFL - File #13 FIFO -  8
 9|----------------------------------------------------|FIFO Unload          |-(EU)-|      FFU - File #13 FIFO -  9.
  |                                                    |FIFO         #N24:1  |-(DN) |N24:1 - FFL - File #13 FIFO -  8
  |                                                    |Dest          N24:0  |-(EM) |       FFU - File #13 FIFO -  9
  |                                                    |Control        R6:2  |      |N24:0 - FFL - File #13 FIFO -  6
  |                                                    |Length          127  |      |       FFU - File #13 FIFO -  9
  |                                                    |Position        126  |      |FILE N24:0 LEN:127 -
  |                                                    +---------------------+      |    FFL - File #13 FIFO -  6
  |R6:2.EN - -( )- - File #13 FIFO -  0                                             |
  |R6:2.EU - -( )- - File #13 FIFO -  1                                             |
  |FILE R6:2 LEN:128 - FFU - File #13 FIFO -  5                                     |
  |FILE R6:2 LEN:127 - FFU - File #13 FIFO -  7                                     |
  |N24:1 - FFL - File #13 FIFO -  6                                                 |
  |                                                    +-FFL-----------------+      |R6:3 - FFL - File #13 FIFO -  10
10|----------------------------------------------------|FIFO Load            |-(EN)-|      FFU - File #13 FIFO -  11
  |                                                    |Source        N20:3  |-(DN) |N20:3 - MOV - File #5 INTRLKS -
  |                                                    |FIFO       #N24:129  |-(EM) |         39                 ...
  |                                                    |Control        R6:3  |      |N24:129 - FFL - File #13 FIFO -
  |                                                    |Length          100  |      |         10
  |                                                    |Position         99  |      |         FFU - File #13 FIFO -
  |                                                    +---------------------+      |         11                 ...
  |R6:3.EN - -( )- - File #13 FIFO -  0                                             |
  |R6:3.EU - -( )- - File #13 FIFO -  1                                             |
  |FILE R6:3 LEN:128 - FFU - File #13 FIFO -  5                                     |
  |FILE R6:3 LEN:127 - FFU - File #13 FIFO -  7                                     |
  |FILE R6:3 LEN:127 - FFU - File #13 FIFO -  9                                     |
  |FILE R6:3 LEN:100 - FFU - File #13 FIFO -  11                                    |
  |N20:3 - SUB - File #6 FANCNTRL -  14                                             |
  |             File #20 FANCNTRL -  18                                             |
  |        MUL - File #6 FANCNTRL -  21                                             |
  |             File #20 FANCNTRL -  30                                             |
  |        LEQ - File #5 INTRLKS -  13, 39                                          |
```

```
|        FFL - File #13 FIFO -  10
|FILE N20:3 LEN:4 - COP - File #4 INPUTDATA -  0
|N24:129 - FFL - File #13 FIFO -  8
|
11|-------------------------------------------------------------------------------------------------|
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|R6:3.EN - -( )- - File #13 FIFO -  0
|R6:3.EU - -( )- - File #13 FIFO -  1
|FILE R6:3 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:3 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:3 LEN:127 - FFU - File #13 FIFO -  9
|N24:129 - FFU - File #13 FIFO -  11
|FILE N24:129 LEN:127 - FFL - File #13 FIFO -  8
|N24:128 - FFL - File #13 FIFO -  8
|
12|-------------------------------------------------------------------------------------------------|
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|R6:4.EN - -( )- - File #13 FIFO -  0
|R6:4.EU - -( )- - File #13 FIFO -  1
|FILE R6:4 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:4 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:4 LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:4 LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:4 LEN:128 - FFU - File #13 FIFO -  13
|N25:128 - FFU - File #13 FIFO -  15
|
13|-------------------------------------------------------------------------------------------------|
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|R6:4.EN - -( )- - File #13 FIFO -  0
|R6:4.EU - -( )- - File #13 FIFO -  1
|FILE R6:4 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:4 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:4 LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:4 LEN:100 - FFU - File #13 FIFO -  11
|
14|-------------------------------------------------------------------------------------------------|
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|                                                                                                 |
|R6:5.EN - -( )- - File #13 FIFO -  0
|R6:5.EU - -( )- - File #13 FIFO -  1
|FILE R6:5 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:5 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:5 LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:5 LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:5 LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:5 LEN:127 - FFU - File #13 FIFO -  15
|N26:0 - FFU - File #13 FIFO -  17
|N25:129 - FFL - File #13 FIFO -  12
```

```
FFU
FIFO Unload      -(EU)-
FIFO     #N24:129-(DN)-
Dest      N24:128-(EM)-
Control      R6:3
Length        100
Position       99

R6:3 - FFL - File #13 FIFO -  10
       FFU - File #13 FIFO -  11
N24:129 - FFL - File #13 FIFO -
                10          ...
N24:128 - FFL - File #13 FIFO -
                8
         FFU - File #13 FIFO -
                11          ...
```

```
FFL
FIFO Load        -(EN)-
Source    N25:128-(DN)-
FIFO      #N25:0-(EM)-
Control      R6:4
Length        128
Position      127

R6:4 - FFL - File #13 FIFO -  12
       FFU - File #13 FIFO -  13
N25:128 - FFL - File #13 FIFO -
                12          ...
N25:0 - FFL - File #13 FIFO -
                12
         FFU - File #13 FIFO -
                13
```

```
FFU
FIFO Unload      -(EU)-
FIFO      #N25:0-(DN)-
Dest      N20:59-(EM)-
Control      R6:4
Length        128
Position      127

R6:4 - FFL - File #13 FIFO -  12
       FFU - File #13 FIFO -  13
N25:0 - FFL - File #13 FIFO -
                12
         FFU - File #13 FIFO -
                13
FILE N20:59 LEN:100 -
     FFL - File #13 FIFO -  10
```

```
FFL
FIFO Load        -(EN)-
Source     N26:0-(DN)-
FIFO     #N25:129-(EM)-
Control      R6:5
Length        127
Position      126

R6:5 - FFL - File #13 FIFO -  14
       FFU - File #13 FIFO -  15
N26:0 - FFL - File #13 FIFO -
                14          ...
N25:129 - FFL - File #13 FIFO -
                14
         FFU - File #13 FIFO -
                15          ...
```

```
 |
15|-------------------------------------------------------------------------
 |                                                  ┌FFU──────────┐
 |                                                  |FIFO Unload  |-(EU)-
 |                                                  |FIFO   #N25:129|-(DN)
 |                                                  |Dest    N25:128|-(EM)
 |                                                  |Control   R6:5|
 |                                                  |Length     127|
 |                                                  |Position   126|
 |                                                  └─────────────┘
 |R6:5.EN - -( )- - File #13 FIFO -  0
 |R6:5.EU - -( )- - File #13 FIFO -  1
 |FILE R6:5 LEN:128 - FFU - File #13 FIFO -  5
 |FILE R6:5 LEN:127 - FFU - File #13 FIFO -  7
 |FILE R6:5 LEN:127 - FFU - File #13 FIFO -  9
 |FILE R6:5 LEN:100 - FFU - File #13 FIFO -  11
 |FILE R6:5 LEN:128 - FFU - File #13 FIFO -  13
 |N25:129 - FFU - File #13 FIFO -  15
 |FILE N25:129 LEN:128 - FFL - File #13 FIFO -  12
 |N25:128 - FFL - File #13 FIFO -  12
 |
16|-------------------------------------------------------------------------
 |                                                  ┌FFL──────────┐
 |                                                  |FIFO Load    |-(EN)-
 |                                                  |Source  N26:128|-(DN)
 |                                                  |FIFO    #N26:1|-(EM)
 |                                                  |Control   R6:6|
 |                                                  |Length     127|
 |                                                  |Position   126|
 |                                                  └─────────────┘
 |R6:6.EN - -( )- - File #13 FIFO -  0
 |R6:6.EU - -( )- - File #13 FIFO -  1
 |FILE R6:6 LEN:128 - FFU - File #13 FIFO -  5
 |FILE R6:6 LEN:127 - FFU - File #13 FIFO -  7
 |FILE R6:6 LEN:127 - FFU - File #13 FIFO -  9
 |FILE R6:6 LEN:100 - FFU - File #13 FIFO -  11
 |FILE R6:6 LEN:128 - FFU - File #13 FIFO -  13
 |FILE R6:6 LEN:127 - FFU - File #13 FIFO -  15
 |FILE R6:6 LEN:127 - FFU - File #13 FIFO -  17
 |N26:128 - FFU - File #13 FIFO -  19
 |N26:1 - FFL - File #13 FIFO -  14
 |
17|-------------------------------------------------------------------------
 |                                                  ┌FFU──────────┐
 |                                                  |FIFO Unload  |-(EU)-
 |                                                  |FIFO    #N26:1|-(DN)
 |                                                  |Dest     N26:0|-(EM)
 |                                                  |Control   R6:6|
 |                                                  |Length     127|
 |                                                  |Position   126|
 |                                                  └─────────────┘
 |R6:6.EN - -( )- - File #13 FIFO -  0
 |R6:6.EU - -( )- - File #13 FIFO -  1
 |FILE R6:6 LEN:128 - FFU - File #13 FIFO -  5
 |FILE R6:6 LEN:127 - FFU - File #13 FIFO -  7
 |FILE R6:6 LEN:127 - FFU - File #13 FIFO -  9
 |FILE R6:6 LEN:100 - FFU - File #13 FIFO -  11
 |FILE R6:6 LEN:128 - FFU - File #13 FIFO -  13
 |FILE R6:6 LEN:127 - FFU - File #13 FIFO -  15
 |N26:1 - FFU - File #13 FIFO -  17
 |FILE N26:1 LEN:127 - FFL - File #13 FIFO -  14
 |N26:0 - FFL - File #13 FIFO -  14
 |
18|-------------------------------------------------------------------------
 |                                                  ┌FFL──────────┐
 |                                                  |FIFO Load    |-(EN)-
 |                                                  |Source     S:38|-(DN)
 |                                                  |FIFO   #N26:129|-(EM)
 |                                                  |Control   R6:7|
 |                                                  |Length     100|
 |                                                  |Position    99|
 |                                                  └─────────────┘
 |R6:7.EN - -( )- - File #13 FIFO -  0
 |R6:7.EU - -( )- - File #13 FIFO -  1
 |FILE R6:7 LEN:128 - FFU - File #13 FIFO -  5
 |FILE R6:7 LEN:127 - FFU - File #13 FIFO -  7
 |FILE R6:7 LEN:127 - FFU - File #13 FIFO -  9
 |FILE R6:7 LEN:100 - FFU - File #13 FIFO -  11
 |FILE R6:7 LEN:128 - FFU - File #13 FIFO -  13
 |FILE R6:7 LEN:127 - FFU - File #13 FIFO -  15
 |FILE R6:7 LEN:127 - FFU - File #13 FIFO -  17
```

```
 |R6:5 - FFL - File #13 FIFO -  14
 |      FFU - File #13 FIFO -  15
 |N25:129 - FFL - File #13 FIFO -
 |                 14
 |                                  ...
 |N25:128 - FFL - File #13 FIFO -
 |                 12
 |        FFU - File #13 FIFO -
 |                 15               ...
 |
 |R6:6 - FFL - File #13 FIFO -  16
 |      FFU - File #13 FIFO -  17
 |N26:128 - FFL - File #13 FIFO -
 |                 16               ...
 |N26:1 - FFL - File #13 FIFO -
 |                 16
 |        FFU - File #13 FIFO -
 |                 17               ...
 |
 |R6:6 - FFL - File #13 FIFO -  16
 |      FFU - File #13 FIFO -  17
 |N26:1 - FFL - File #13 FIFO -
 |                 16               ...
 |N26:0 - FFL - File #13 FIFO -
 |                 14
 |        FFU - File #13 FIFO -
 |                 17               ...
 |
 |R6:7 - FFL - File #13 FIFO -  18
 |      FFU - File #13 FIFO -  19
 |N26:129 - FFL - File #13 FIFO -
 |                 18
 |        FFU - File #13 FIFO -
 |                 19
 |FILE N26:129 LEN:127 -
 |    FFL - File #13 FIFO -  16
```

```
    |FILE R6:7 LEN:100 - FFU - File #13 FIFO -  19
    |                                                                                  |
    |                                                  ┌─FFU──────────┐                |R6:7 - FFL - File #13 FIFO -  18
 19 |──────────────────────────────────────────────────|FIFO Unload   |─(EU)─┤         |     FFU - File #13 FIFO -  19
    |                                                  |FIFO    #N26:129|─(DN)          |N26:129 - FFL - File #13 FIFO -
    |                                                  |Dest     N26:128|─(EM)          |                18          ...
    |                                                  |Control     R6:7|               |N26:128 - FFL - File #13 FIFO -
    |                                                  |Length      100|               |                16
    |                                                  |Position     99|               |         FFU - File #13 FIFO -
    |                                                  └──────────────┘                |                19          ...
    |R6:7.EN - -( )- - File #13 FIFO -  0                                              |
    |R6:7.EU - -( )- - File #13 FIFO -  1                                              |
    |FILE R6:7 LEN:128 - FFU - File #13 FIFO -  5                                      |
    |FILE R6:7 LEN:127 - FFU - File #13 FIFO -  7                                      |
    |FILE R6:7 LEN:127 - FFU - File #13 FIFO -  9                                      |
    |FILE R6:7 LEN:100 - FFU - File #13 FIFO -  11                                     |
    |FILE R6:7 LEN:128 - FFU - File #13 FIFO -  13                                     |
    |FILE R6:7 LEN:127 - FFU - File #13 FIFO -  15                                     |
    |FILE R6:7 LEN:127 - FFU - File #13 FIFO -  17                                     |
    |N26:129 - FFU - File #13 FIFO -  19                                               |
    |FILE N26:129 LEN:127 - FFL - File #13 FIFO -  16                                  |
    |N26:128 - FFL - File #13 FIFO -  16                                               |
    |                                                                                  |
    |                                                  ┌─FFL──────────┐                |R6:8 - FFL - File #13 FIFO -  20
 20 |──────────────────────────────────────────────────|FIFO Load     |─(EN)─┤         |     FFU - File #13 FIFO -  21
    |                                                  |Source   N27:128|─(DN)          |N27:128 - FFL - File #13 FIFO -
    |                                                  |FIFO      #N27:0|─(EM)          |                20          ...
    |                                                  |Control      R6:8|              |N27:0 - FFL - File #13 FIFO -
    |                                                  |Length       128|               |                20
    |                                                  |Position     127|               |         FFU - File #13 FIFO -
    |                                                  └──────────────┘                |                21
    |R6:8.EN - -( )- - File #13 FIFO -  0                                              |
    |R6:8.EU - -( )- - File #13 FIFO -  1                                              |
    |FILE R6:8 LEN:128 - FFU - File #13 FIFO -  5                                      |
    |FILE R6:8 LEN:127 - FFU - File #13 FIFO -  7                                      |
    |FILE R6:8 LEN:127 - FFU - File #13 FIFO -  9                                      |
    |FILE R6:8 LEN:100 - FFU - File #13 FIFO -  11                                     |
    |FILE R6:8 LEN:128 - FFU - File #13 FIFO -  13                                     |
    |FILE R6:8 LEN:127 - FFU - File #13 FIFO -  15                                     |
    |FILE R6:8 LEN:127 - FFU - File #13 FIFO -  17                                     |
    |FILE R6:8 LEN:100 - FFU - File #13 FIFO -  19                                     |
    |FILE R6:8 LEN:128 - FFU - File #13 FIFO -  21                                     |
    |N27:128 - FFU - File #13 FIFO -  23                                               |
    |                                                  ┌─FFU──────────┐                |R6:8 - FFL - File #13 FIFO -  20
 21 |──────────────────────────────────────────────────|FIFO Unload   |─(EU)─┤         |     FFU - File #13 FIFO -  21
    |                                                  |FIFO      #N27:0|─(DN)          |N27:0 - FFL - File #13 FIFO -
    |                                                  |Dest     N20:60|─(EM)          |                20
    |                                                  |Control      R6:8|              |         FFU - File #13 FIFO -
    |                                                  |Length       128|               |                21
    |                                                  |Position     127|               |FILE N20:60 LEN:100 -
    |                                                  └──────────────┘                |     FFL - File #13 FIFO -  10
    |R6:8.EN - -( )- - File #13 FIFO -  0                                              |
    |R6:8.EU - -( )- - File #13 FIFO -  1                                              |
    |FILE R6:8 LEN:128 - FFU - File #13 FIFO -  5                                      |
    |FILE R6:8 LEN:127 - FFU - File #13 FIFO -  7                                      |
    |FILE R6:8 LEN:127 - FFU - File #13 FIFO -  9                                      |
    |FILE R6:8 LEN:100 - FFU - File #13 FIFO -  11                                     |
    |FILE R6:8 LEN:128 - FFU - File #13 FIFO -  13                                     |
    |FILE R6:8 LEN:127 - FFU - File #13 FIFO -  15                                     |
    |FILE R6:8 LEN:127 - FFU - File #13 FIFO -  17                                     |
    |FILE R6:8 LEN:100 - FFU - File #13 FIFO -  19                                     |
    |                                                  ┌─FFL──────────┐                |R6:9 - FFL - File #13 FIFO -  22
 22 |──────────────────────────────────────────────────|FIFO Load     |─(EN)─┤         |     FFU - File #13 FIFO -  23
    |                                                  |Source     N28:0|─(DN)          |N28:0 - FFL - File #13 FIFO -
    |                                                  |FIFO    #N27:129|─(EM)          |                22          ...
    |                                                  |Control      R6:9|              |N27:129 - FFL - File #13 FIFO -
    |                                                  |Length       127|               |                22
    |                                                  |Position     126|               |         FFU - File #13 FIFO -
    |                                                  └──────────────┘                |                23          ...
    |R6:9.EN - -( )- - File #13 FIFO -  0                                              |
    |R6:9.EU - -( )- - File #13 FIFO -  1                                              |
    |FILE R6:9 LEN:128 - FFU - File #13 FIFO -  5                                      |
    |FILE R6:9 LEN:127 - FFU - File #13 FIFO -  7                                      |
    |FILE R6:9 LEN:127 - FFU - File #13 FIFO -  9                                      |
    |FILE R6:9 LEN:100 - FFU - File #13 FIFO -  11                                     |
```

```
    |FILE R6:9 LEN:128 - FFU - File #13 FIFO -  13                                  |
    |FILE R6:9 LEN:127 - FFU - File #13 FIFO -  15                                  |
    |FILE R6:9 LEN:127 - FFU - File #13 FIFO -  17                                  |
    |FILE R6:9 LEN:100 - FFU - File #13 FIFO -  19                                  |
    |FILE R6:9 LEN:128 - FFU - File #13 FIFO -  21                                  |
    |FILE R6:9 LEN:127 - FFU - File #13 FIFO -  23                                  |
    |N28:0 - FFU - File #13 FIFO -  25                                              |
    |N27:129 - FFL - File #13 FIFO -  20                                            |
    |                                                                               |
23  |-------------------------------------------------------------------------------|
    |                                                  ┌─FFU──────────┐             |R6:9 - FFL - File #13 FIFO -  22
    |                                                  |FIFO Unload   ├─(EU)─┤       |     FFU - File #13 FIFO -  23
    |                                                  |FIFO     #N27:129├─(DN)       |N27:129 - FFL - File #13 FIFO -
    |                                                  |Dest     N27:128├─(EM)       |              22          ...
    |                                                  |Control     R6:9|            |N27:128 - FFL - File #13 FIFO -
    |                                                  |Length       127|            |              20
    |                                                  |Position     126|            |     FFU - File #13 FIFO -
    |                                                  └──────────────┘             |              23          ...
    |R6:9.EN - -( )- - File #13 FIFO -  0                                           |
    |R6:9.EU - -( )- - File #13 FIFO -  1                                           |
    |FILE R6:9 LEN:128 - FFU - File #13 FIFO -  5                                   |
    |FILE R6:9 LEN:127 - FFU - File #13 FIFO -  7                                   |
    |FILE R6:9 LEN:127 - FFU - File #13 FIFO -  9                                   |
    |FILE R6:9 LEN:100 - FFU - File #13 FIFO -  11                                  |
    |FILE R6:9 LEN:128 - FFU - File #13 FIFO -  13                                  |
    |FILE R6:9 LEN:127 - FFU - File #13 FIFO -  15                                  |
    |FILE R6:9 LEN:127 - FFU - File #13 FIFO -  17                                  |
    |FILE R6:9 LEN:100 - FFU - File #13 FIFO -  19                                  |
    |FILE R6:9 LEN:128 - FFU - File #13 FIFO -  21                                  |
    |N27:129 - FFU - File #13 FIFO -  23                                            |
    |FILE N27:129 LEN:128 - FFL - File #13 FIFO -  20                               |
    |N27:128 - FFL - File #13 FIFO -  20                                            |
    |                                                                               |
24  |-------------------------------------------------------------------------------|
    |                                                  ┌─FFL──────────┐             |R6:10 - FFL - File #13 FIFO -
    |                                                  |FIFO Load     ├─(EN)─┤       |              24          ...
    |                                                  |Source   N28:128├─(DN)       |N28:128 - FFL - File #13 FIFO -
    |                                                  |FIFO     #N28:1 ├─(EM)       |              24          ...
    |                                                  |Control    R6:10|            |N28:1 - FFL - File #13 FIFO -
    |                                                  |Length       127|            |              24
    |                                                  |Position     126|            |     FFU - File #13 FIFO -
    |                                                  └──────────────┘             |              25          ...
    |R6:10 - FFU - File #13 FIFO -  25                                              |
    |R6:10.EN - -( )- - File #13 FIFO -  0                                          |
    |R6:10.EU - -( )- - File #13 FIFO -  1                                          |
    |FILE R6:10 LEN:128 - FFU - File #13 FIFO -  5                                  |
    |FILE R6:10 LEN:127 - FFU - File #13 FIFO -  7                                  |
    |FILE R6:10 LEN:127 - FFU - File #13 FIFO -  9                                  |
    |FILE R6:10 LEN:100 - FFU - File #13 FIFO -  11                                 |
    |FILE R6:10 LEN:128 - FFU - File #13 FIFO -  13                                 |
    |FILE R6:10 LEN:127 - FFU - File #13 FIFO -  15                                 |
    |FILE R6:10 LEN:127 - FFU - File #13 FIFO -  17                                 |
    |FILE R6:10 LEN:100 - FFU - File #13 FIFO -  19                                 |
    |FILE R6:10 LEN:128 - FFU - File #13 FIFO -  21                                 |
    |FILE R6:10 LEN:127 - FFU - File #13 FIFO -  23                                 |
    |FILE R6:10 LEN:127 - FFU - File #13 FIFO -  25                                 |
    |N28:128 - FFU - File #13 FIFO -  27                                            |
    |N28:1 - FFL - File #13 FIFO -  22                                              |
    |                                                                               |
25  |-------------------------------------------------------------------------------|
    |                                                  ┌─FFU──────────┐             |R6:10 - FFL - File #13 FIFO -
    |                                                  |FIFO Unload   ├─(EU)─┤       |              24          ...
    |                                                  |FIFO     #N28:1 ├─(DN)       |N28:1 - FFL - File #13 FIFO -
    |                                                  |Dest      N28:0 ├─(EM)       |              24          ...
    |                                                  |Control    R6:10|            |N28:0 - FFL - File #13 FIFO -
    |                                                  |Length       127|            |              22
    |                                                  |Position     126|            |     FFU - File #13 FIFO -
    |                                                  └──────────────┘             |              25          ...
    |R6:10 - FFU - File #13 FIFO -  25                                              |
    |R6:10.EN - -( )- - File #13 FIFO -  0                                          |
    |R6:10.EU - -( )- - File #13 FIFO -  1                                          |
    |FILE R6:10 LEN:128 - FFU - File #13 FIFO -  5                                  |
    |FILE R6:10 LEN:127 - FFU - File #13 FIFO -  7                                  |
    |FILE R6:10 LEN:127 - FFU - File #13 FIFO -  9                                  |
    |FILE R6:10 LEN:100 - FFU - File #13 FIFO -  11                                 |
    |FILE R6:10 LEN:128 - FFU - File #13 FIFO -  13                                 |
    |FILE R6:10 LEN:127 - FFU - File #13 FIFO -  15                                 |
    |FILE R6:10 LEN:127 - FFU - File #13 FIFO -  17                                 |
    |FILE R6:10 LEN:100 - FFU - File #13 FIFO -  19                                 |
```

```
|FILE R6:10 LEN:128 - FFU - File #13 FIFO -  21
|FILE R6:10 LEN:127 - FFU - File #13 FIFO -  23
|N28:1 - FFU - File #13 FIFO -  25
|FILE N28:1 LEN:127 - FFL - File #13 FIFO -  22
|N28:0 - FFL - File #13 FIFO -  22
|
26|-------------------------------------------------------------------------|
|                                                  ┌FFL──────────┐          |R6:11 - FFL - File #13 FIFO -
|                                                  |FIFO Load    ├─(EN)─┤          26            ...
|                                                  |Source     S:39├─(DN)  |FILE S:39 LEN:100 -
|                                                  |FIFO    #N28:129├─(EM)  |    FFL - File #13 FIFO -  18..
|                                                  |Control    R6:11|       |N28:129 - FFL - File #13 FIFO -
|                                                  |Length      100|       |                26
|                                                  |Position     99|       |        FFU - File #13 FIFO -
|                                                  └─────────────┘          |                27          ...
|R6:11 - FFU - File #13 FIFO -  27                                          |
|R6:11.EN - -( )- - File #13 FIFO -  0                                      |
|R6:11.EU - -( )- - File #13 FIFO -  1                                      |
|FILE R6:11 LEN:128 - FFU - File #13 FIFO -  5                              |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  7                              |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  9                              |
|FILE R6:11 LEN:100 - FFU - File #13 FIFO -  11                             |
|FILE R6:11 LEN:128 - FFU - File #13 FIFO -  13                             |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  15                             |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  17                             |
|FILE R6:11 LEN:100 - FFU - File #13 FIFO -  19                             |
|FILE R6:11 LEN:128 - FFU - File #13 FIFO -  21                             |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  23                             |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  25                             |
|FILE R6:11 LEN:100 - FFU - File #13 FIFO -  27                             |
|N28:129 - FFL - File #13 FIFO -  24                                        |
|                                                                           |
27|-------------------------------------------------------------------------|
|                                                  ┌FFU──────────┐          |R6:11 - FFL - File #13 FIFO -
|                                                  |FIFO Unload  ├─(EU)─┤          26            ...
|                                                  |FIFO    #N28:129├─(DN)  |N28:129 - FFL - File #13 FIFO -
|                                                  |Dest      N28:128├─(EM)  |                26          ...
|                                                  |Control    R6:11|       |N28:128 - FFL - File #13 FIFO -
|                                                  |Length      100|       |                24
|                                                  |Position     99|       |        FFU - File #13 FIFO -
|                                                  └─────────────┘          |                27          ...
|R6:11 - FFU - File #13 FIFO -  27                                          |
|R6:11.EN - -( )- - File #13 FIFO -  0                                      |
|R6:11.EU - -( )- - File #13 FIFO -  1                                      |
|FILE R6:11 LEN:128 - FFU - File #13 FIFO -  5                              |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  7                              |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  9                              |
|FILE R6:11 LEN:100 - FFU - File #13 FIFO -  11                             |
|FILE R6:11 LEN:128 - FFU - File #13 FIFO -  13                             |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  15                             |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  17                             |
|FILE R6:11 LEN:100 - FFU - File #13 FIFO -  19                             |
|FILE R6:11 LEN:128 - FFU - File #13 FIFO -  21                             |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  23                             |
|FILE R6:11 LEN:127 - FFU - File #13 FIFO -  25                             |
|N28:129 - FFU - File #13 FIFO -  27                                        |
|FILE N28:129 LEN:127 - FFL - File #13 FIFO -  24                           |
|N28:128 - FFL - File #13 FIFO -  24                                        |
|                                                                           |
28|-------------------------------------------------------------------------|
|                                                  ┌FFL──────────┐          |R6:12 - FFL - File #13 FIFO -
|                                                  |FIFO Load    ├─(EN)─┤          28            ...
|                                                  |Source    N29:128├─(DN)  |N29:128 - FFL - File #13 FIFO -
|                                                  |FIFO     #N29:0├─(EM)  |                28          ...
|                                                  |Control    R6:12|       |N29:0 - FFL - File #13 FIFO -
|                                                  |Length      128|       |                28
|                                                  |Position    127|       |        FFU - File #13 FIFO -
|                                                  └─────────────┘          |                29
|R6:12 - FFU - File #13 FIFO -  29                                          |
|R6:12.EN - -( )- - File #13 FIFO -  2                                      |
|R6:12.EU - -( )- - File #13 FIFO -  3                                      |
|FILE R6:12 LEN:128 - FFU - File #13 FIFO -  5                              |
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  7                              |
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  9                              |
|FILE R6:12 LEN:100 - FFU - File #13 FIFO -  11                             |
|FILE R6:12 LEN:128 - FFU - File #13 FIFO -  13                             |
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  15                             |
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  17                             |
|FILE R6:12 LEN:100 - FFU - File #13 FIFO -  19                             |
```

```
|FILE R6:12 LEN:128 - FFU - File #13 FIFO -  21
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  23
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:12 LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:12 LEN:128 - FFU - File #13 FIFO -  29
|N29:128 - FFU - File #13 FIFO -  31
|
29|-------------------------------------------------------------------------|
|                                                  ┌─FFU──────────┐
|                                                  |FIFO Unload   ├─(EU)─┤
|                                                  |FIFO     #N29:0├─(DN)
|                                                  |Dest     N20:61├─(EM)
|                                                  |Control   R6:12|
|                                                  |Length     128|
|                                                  |Position   127|
|                                                  └──────────────┘
|R6:12 - FFU - File #13 FIFO -  29
|R6:12.EN - -( )- - File #13 FIFO -  2
|R6:12.EU - -( )- - File #13 FIFO -  3
|FILE R6:12 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:12 LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:12 LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  15
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  17
|FILE R6:12 LEN:100 - FFU - File #13 FIFO -  19
|FILE R6:12 LEN:128 - FFU - File #13 FIFO -  21
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  23
|FILE R6:12 LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:12 LEN:100 - FFU - File #13 FIFO -  27
|
30|-------------------------------------------------------------------------|
|                                                  ┌─FFL──────────┐
|                                                  |FIFO Load     ├─(EN)─┤
|                                                  |Source   N30:0 ├─(DN)
|                                                  |FIFO    #N29:129├─(EM)
|                                                  |Control   R6:13|
|                                                  |Length     127|
|                                                  |Position   126|
|                                                  └──────────────┘
|R6:13 - FFU - File #13 FIFO -  31
|R6:13.EN - -( )- - File #13 FIFO -  2
|R6:13.EU - -( )- - File #13 FIFO -  3
|FILE R6:13 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:13 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:13 LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:13 LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:13 LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:13 LEN:127 - FFU - File #13 FIFO -  15
|FILE R6:13 LEN:127 - FFU - File #13 FIFO -  17
|FILE R6:13 LEN:100 - FFU - File #13 FIFO -  19
|FILE R6:13 LEN:128 - FFU - File #13 FIFO -  21
|FILE R6:13 LEN:127 - FFU - File #13 FIFO -  23
|FILE R6:13 LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:13 LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:13 LEN:128 - FFU - File #13 FIFO -  29
|FILE R6:13 LEN:127 - FFU - File #13 FIFO -  31
|N30:0 - FFU - File #13 FIFO -  33
|N29:129 - FFL - File #13 FIFO -  28
|
31|-------------------------------------------------------------------------|
|                                                  ┌─FFU──────────┐
|                                                  |FIFO Unload   ├─(EU)─┤
|                                                  |FIFO    #N29:129├─(DN)
|                                                  |Dest    N29:128├─(EM)
|                                                  |Control   R6:13|
|                                                  |Length     127|
|                                                  |Position   126|
|                                                  └──────────────┘
|R6:13 - FFU - File #13 FIFO -  31
|R6:13.EN - -( )- - File #13 FIFO -  2
|R6:13.EU - -( )- - File #13 FIFO -  3
|FILE R6:13 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:13 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:13 LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:13 LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:13 LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:13 LEN:127 - FFU - File #13 FIFO -  15
```

```
|R6:12 - FFL - File #13 FIFO -
|            28            ...
|N29:0 - FFL - File #13 FIFO -
|            28
|      FFU - File #13 FIFO -
|            29
|FILE N20:61 LEN:100 -
|    FFL - File #13 FIFO -  10
|
|R6:13 - FFL - File #13 FIFO -
|            30            ...
|N30:0 - FFL - File #13 FIFO -
|            30            ...
|N29:129 - FFL - File #13 FIFO -
|            30
|      FFU - File #13 FIFO -
|            31            ...
|
|R6:13 - FFL - File #13 FIFO -
|            30            ...
|N29:129 - FFL - File #13 FIFO -
|            30            ...
|N29:128 - FFL - File #13 FIFO -
|            28
|      FFU - File #13 FIFO -
|            31            ...
```

```
    |FILE R6:13 LEN:127 - FFU - File #13 FIFO -  17                            |
    |FILE R6:13 LEN:100 - FFU - File #13 FIFO -  19                            |
    |FILE R6:13 LEN:128 - FFU - File #13 FIFO -  21                            |
    |FILE R6:13 LEN:127 - FFU - File #13 FIFO -  23                            |
    |FILE R6:13 LEN:127 - FFU - File #13 FIFO -  25                            |
    |FILE R6:13 LEN:100 - FFU - File #13 FIFO -  27                            |
    |FILE R6:13 LEN:128 - FFU - File #13 FIFO -  29                            |
    |N29:129 - FFU - File #13 FIFO -  31                                       |
    |FILE N29:129 LEN:128 - FFL - File #13 FIFO -  28                          |
    |N29:128 - FFL - File #13 FIFO -  28                                       |
    |                                           +-FFL---------------+          |R6:14 - FFL - File #13 FIFO -
  32|-------------------------------------------|FIFO Load          |-(EN)-----|      32                 ...
    |                                           |Source     N30:128|-(DN)      |N30:128 - FFL - File #13 FIFO -
    |                                           |FIFO       #N30:1 |-(EM)      |      32                 ...
    |                                           |Control     R6:14 |           |N30:1 - FFL - File #13 FIFO -
    |                                           |Length        127 |           |      32
    |                                           |Position      126 |           |   FFU - File #13 FIFO -
    |                                           +------------------+           |      33                 ...
    |R6:14 - FFU - File #13 FIFO -  33                                         |
    |R6:14.EN - -( )- - File #13 FIFO -  2                                     |
    |R6:14.EU - -( )- - File #13 FIFO -  3                                     |
    |FILE R6:14 LEN:128 - FFU - File #13 FIFO -  5                             |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  7                             |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  9                             |
    |FILE R6:14 LEN:100 - FFU - File #13 FIFO -  11                            |
    |FILE R6:14 LEN:128 - FFU - File #13 FIFO -  13                            |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  15                            |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  17                            |
    |FILE R6:14 LEN:100 - FFU - File #13 FIFO -  19                            |
    |FILE R6:14 LEN:128 - FFU - File #13 FIFO -  21                            |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  23                            |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  25                            |
    |FILE R6:14 LEN:100 - FFU - File #13 FIFO -  27                            |
    |FILE R6:14 LEN:128 - FFU - File #13 FIFO -  29                            |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  31                            |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  33                            |
    |N30:128 - FFU - File #13 FIFO -  35                                       |
    |N30:1 - FFL - File #13 FIFO -  30                                         |
    |                                           +-FFU---------------+          |R6:14 - FFL - File #13 FIFO -
  33|-------------------------------------------|FIFO Unload        |-(EU)-----|      32                 ...
    |                                           |FIFO       #N30:1 |-(DN)      |N30:1 - FFL - File #13 FIFO -
    |                                           |Dest        N30:0 |-(EM)      |      32                 ...
    |                                           |Control     R6:14 |           |N30:0 - FFL - File #13 FIFO -
    |                                           |Length        127 |           |      30
    |                                           |Position      126 |           |   FFU - File #13 FIFO -
    |                                           +------------------+           |      33                 ...
    |R6:14 - FFU - File #13 FIFO -  33                                         |
    |R6:14.EN - -( )- - File #13 FIFO -  2                                     |
    |R6:14.EU - -( )- - File #13 FIFO -  3                                     |
    |FILE R6:14 LEN:128 - FFU - File #13 FIFO -  5                             |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  7                             |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  9                             |
    |FILE R6:14 LEN:100 - FFU - File #13 FIFO -  11                            |
    |FILE R6:14 LEN:128 - FFU - File #13 FIFO -  13                            |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  15                            |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  17                            |
    |FILE R6:14 LEN:100 - FFU - File #13 FIFO -  19                            |
    |FILE R6:14 LEN:128 - FFU - File #13 FIFO -  21                            |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  23                            |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  25                            |
    |FILE R6:14 LEN:100 - FFU - File #13 FIFO -  27                            |
    |FILE R6:14 LEN:128 - FFU - File #13 FIFO -  29                            |
    |FILE R6:14 LEN:127 - FFU - File #13 FIFO -  31                            |
    |N30:1 - FFU - File #13 FIFO -  33                                         |
    |FILE N30:1 LEN:127 - FFL - File #13 FIFO -  30                            |
    |N30:0 - FFL - File #13 FIFO -  30                                         |
    |                                           +-FFL---------------+          |R6:15 - FFL - File #13 FIFO -
  34|-------------------------------------------|FIFO Load          |-(EN)-----|      34                 ...
    |                                           |Source       S:40 |-(DN)      |FILE S:40 LEN:100 -
    |                                           |FIFO      #N30:129|-(EM)      |   FFL - File #13 FIFO -  18..
    |                                           |Control     R6:15 |           |N30:129 - FFL - File #13 FIFO -
    |                                           |Length        100 |           |      34
    |                                           |Position       99 |           |   FFU - File #13 FIFO -
    |                                           +------------------+           |      35                 ...
```

```
|R6:15 - FFU - File #13 FIFO -  35                                                  |
|R6:15.EN - -( )- - File #13 FIFO -  2                                              |
|R6:15.EU - -( )- - File #13 FIFO -  3                                              |
|FILE R6:15 LEN:128 - FFU - File #13 FIFO -  5                                      |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  7                                      |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  9                                      |
|FILE R6:15 LEN:100 - FFU - File #13 FIFO -  11                                     |
|FILE R6:15 LEN:128 - FFU - File #13 FIFO -  13                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  15                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  17                                     |
|FILE R6:15 LEN:100 - FFU - File #13 FIFO -  19                                     |
|FILE R6:15 LEN:128 - FFU - File #13 FIFO -  21                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  23                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  25                                     |
|FILE R6:15 LEN:100 - FFU - File #13 FIFO -  27                                     |
|FILE R6:15 LEN:128 - FFU - File #13 FIFO -  29                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  31                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  33                                     |
|FILE R6:15 LEN:100 - FFU - File #13 FIFO -  35                                     |
|S:40 - FFL - File #13 FIFO -  26                                                   |
|N30:129 - FFL - File #13 FIFO -  32                                                |
|                                                                                   |
35|-------------------------------------------------------------------------------|R6:15 - FFL - File #13 FIFO -
|                                                                                   |              34          ...
|                                                                                   |N30:129 - FFL - File #13 FIFO -
|                                                                                   |              34          ...
|                                                                                   |N30:128 - FFL - File #13 FIFO -
|                                                                                   |              32
|                                                                                   |        FFU - File #13 FIFO -
|                                                                                   |              35          ...
|R6:15 - FFU - File #13 FIFO -  35                                                  |
|R6:15.EN - -( )- - File #13 FIFO -  2                                              |
|R6:15.EU - -( )- - File #13 FIFO -  3                                              |
|FILE R6:15 LEN:128 - FFU - File #13 FIFO -  5                                      |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  7                                      |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  9                                      |
|FILE R6:15 LEN:100 - FFU - File #13 FIFO -  11                                     |
|FILE R6:15 LEN:128 - FFU - File #13 FIFO -  13                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  15                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  17                                     |
|FILE R6:15 LEN:100 - FFU - File #13 FIFO -  19                                     |
|FILE R6:15 LEN:128 - FFU - File #13 FIFO -  21                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  23                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  25                                     |
|FILE R6:15 LEN:100 - FFU - File #13 FIFO -  27                                     |
|FILE R6:15 LEN:128 - FFU - File #13 FIFO -  29                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  31                                     |
|FILE R6:15 LEN:127 - FFU - File #13 FIFO -  33                                     |
|N30:129 - FFU - File #13 FIFO -  35                                                |
|FILE N30:129 LEN:127 - FFL - File #13 FIFO -  32                                   |
|N30:128 - FFL - File #13 FIFO -  32                                                |
|                                                                                   |
36|-------------------------------------------------------------------------------|R6:16 - FFL - File #13 FIFO -
|                                                                                   |              36          ...
|                                                                                   |N31:128 - FFL - File #13 FIFO -
|                                                                                   |              36          ...
|                                                                                   |N31:0 - FFL - File #13 FIFO -
|                                                                                   |              36
|                                                                                   |        FFU - File #13 FIFO -
|                                                                                   |              37
|R6:16 - FFU - File #13 FIFO -  37                                                  |
|R6:16.EN - -( )- - File #13 FIFO -  2                                              |
|R6:16.EU - -( )- - File #13 FIFO -  3                                              |
|FILE R6:16 LEN:128 - FFU - File #13 FIFO -  5                                      |
|FILE R6:16 LEN:127 - FFU - File #13 FIFO -  7                                      |
|FILE R6:16 LEN:127 - FFU - File #13 FIFO -  9                                      |
|FILE R6:16 LEN:100 - FFU - File #13 FIFO -  11                                     |
|FILE R6:16 LEN:128 - FFU - File #13 FIFO -  13                                     |
|FILE R6:16 LEN:127 - FFU - File #13 FIFO -  15                                     |
|FILE R6:16 LEN:127 - FFU - File #13 FIFO -  17                                     |
|FILE R6:16 LEN:100 - FFU - File #13 FIFO -  19                                     |
|FILE R6:16 LEN:128 - FFU - File #13 FIFO -  21                                     |
|FILE R6:16 LEN:127 - FFU - File #13 FIFO -  23                                     |
|FILE R6:16 LEN:127 - FFU - File #13 FIFO -  25                                     |
|FILE R6:16 LEN:100 - FFU - File #13 FIFO -  27                                     |
```

```
FFU
FIFO Unload      -(EU)-
FIFO    #N30:129 -(DN)-
Dest     N30:128 -(EM)-
Control    R6:15
Length       100
Position      99
```

```
FFL
FIFO Load        -(EN)-
Source   N31:128 -(DN)-
FIFO      #N31:0 -(EM)-
Control    R6:16
Length       128
Position     127
```

```
      |FILE R6:16 LEN:128 - FFU - File #13 FIFO -  29                               |
      |FILE R6:16 LEN:127 - FFU - File #13 FIFO -  31                               |
      |FILE R6:16 LEN:127 - FFU - File #13 FIFO -  33                               |
      |FILE R6:16 LEN:100 - FFU - File #13 FIFO -  35                               |
      |FILE R6:16 LEN:128 - FFU - File #13 FIFO -  37                               |
      |N31:128 - FFU - File #13 FIFO -  39                                          |
      |                                              +-FFU-----------+              |R6:16 - FFL - File #13 FIFO -
    37|----------------------------------------------+FIFO Unload    +-(EU)-+       36                    ...
      |                                              |FIFO   #N31:0  +-(DN)  |N31:0 - FFL - File #13 FIFO -
      |                                              |Dest   N20:62  +-(EM)  |      36
      |                                              |Control  R6:16|        |      FFU - File #13 FIFO -
      |                                              |Length     128|        |      37
      |                                              |Position   127|        |FILE N20:62 LEN:100 -
      |                                              +--------------+        |      FFL - File #13 FIFO -  10
      |R6:16 - FFU - File #13 FIFO -  37                                     |
      |R6:16.EN - -( )- - File #13 FIFO -  2                                 |
      |R6:16.EU - -( )- - File #13 FIFO -  3                                 |
      |FILE R6:16 LEN:128 - FFU - File #13 FIFO -  5                         |
      |FILE R6:16 LEN:127 - FFU - File #13 FIFO -  7                         |
      |FILE R6:16 LEN:127 - FFU - File #13 FIFO -  9                         |
      |FILE R6:16 LEN:100 - FFU - File #13 FIFO -  11                        |
      |FILE R6:16 LEN:128 - FFU - File #13 FIFO -  13                        |
      |FILE R6:16 LEN:127 - FFU - File #13 FIFO -  15                        |
      |FILE R6:16 LEN:127 - FFU - File #13 FIFO -  17                        |
      |FILE R6:16 LEN:100 - FFU - File #13 FIFO -  19                        |
      |FILE R6:16 LEN:128 - FFU - File #13 FIFO -  21                        |
      |FILE R6:16 LEN:127 - FFU - File #13 FIFO -  23                        |
      |FILE R6:16 LEN:127 - FFU - File #13 FIFO -  25                        |
      |FILE R6:16 LEN:100 - FFU - File #13 FIFO -  27                        |
      |FILE R6:16 LEN:128 - FFU - File #13 FIFO -  29                        |
      |FILE R6:16 LEN:127 - FFU - File #13 FIFO -  31                        |
      |FILE R6:16 LEN:127 - FFU - File #13 FIFO -  33                        |
      |FILE R6:16 LEN:100 - FFU - File #13 FIFO -  35                        |
      |                                              +-FFL-----------+       |R6:17 - FFL - File #13 FIFO -
    38|----------------------------------------------+FIFO Load      +-(EN)-+       38                    ...
      |                                              |Source   N32:0 +-(DN)  |N32:0 - FFL - File #13 FIFO -
      |                                              |FIFO  #N31:129 +-(EM)  |      38                    ...
      |                                              |Control  R6:17|        |N31:129 - FFL - File #13 FIFO -
      |                                              |Length     127|        |      38
      |                                              |Position   126|        |      FFU - File #13 FIFO -
      |                                              +--------------+        |      39                    ...
      |R6:17 - FFU - File #13 FIFO -  39                                     |
      |R6:17.EN - -( )- - File #13 FIFO -  2                                 |
      |R6:17.EU - -( )- - File #13 FIFO -  3                                 |
      |FILE R6:17 LEN:128 - FFU - File #13 FIFO -  5                         |
      |FILE R6:17 LEN:127 - FFU - File #13 FIFO -  7                         |
      |FILE R6:17 LEN:127 - FFU - File #13 FIFO -  9                         |
      |FILE R6:17 LEN:100 - FFU - File #13 FIFO -  11                        |
      |FILE R6:17 LEN:128 - FFU - File #13 FIFO -  13                        |
      |FILE R6:17 LEN:127 - FFU - File #13 FIFO -  15                        |
      |FILE R6:17 LEN:127 - FFU - File #13 FIFO -  17                        |
      |FILE R6:17 LEN:100 - FFU - File #13 FIFO -  19                        |
      |FILE R6:17 LEN:128 - FFU - File #13 FIFO -  21                        |
      |FILE R6:17 LEN:127 - FFU - File #13 FIFO -  23                        |
      |FILE R6:17 LEN:127 - FFU - File #13 FIFO -  25                        |
      |FILE R6:17 LEN:100 - FFU - File #13 FIFO -  27                        |
      |FILE R6:17 LEN:128 - FFU - File #13 FIFO -  29                        |
      |FILE R6:17 LEN:127 - FFU - File #13 FIFO -  31                        |
      |FILE R6:17 LEN:127 - FFU - File #13 FIFO -  33                        |
      |FILE R6:17 LEN:100 - FFU - File #13 FIFO -  35                        |
      |FILE R6:17 LEN:128 - FFU - File #13 FIFO -  37                        |
      |FILE R6:17 LEN:127 - FFU - File #13 FIFO -  39                        |
      |N32:0 - FFU - File #13 FIFO -  41                                     |
      |N31:129 - FFL - File #13 FIFO -  36                                   |
      |                                              +-FFU-----------+       |R6:17 - FFL - File #13 FIFO -
    39|----------------------------------------------+FIFO Unload    +-(EU)-+       38                    ...
      |                                              |FIFO  #N31:129 +-(DN)  |N31:129 - FFL - File #13 FIFO -
      |                                              |Dest   N31:128 +-(EM)  |      38                    ...
      |                                              |Control  R6:17|        |N31:128 - FFL - File #13 FIFO -
      |                                              |Length     127|        |      36
      |                                              |Position   126|        |      FFU - File #13 FIFO -
      |                                              +--------------+        |      39                    ...
```

```
|R6:17 - FFU - File #13 FIFO -  39
|R6:17.EN - -( )- - File #13 FIFO -  2
|R6:17.EU - -( )- - File #13 FIFO -  3
|FILE R6:17 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:17 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:17 LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:17 LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:17 LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:17 LEN:127 - FFU - File #13 FIFO -  15
|FILE R6:17 LEN:127 - FFU - File #13 FIFO -  17
|FILE R6:17 LEN:100 - FFU - File #13 FIFO -  19
|FILE R6:17 LEN:128 - FFU - File #13 FIFO -  21
|FILE R6:17 LEN:127 - FFU - File #13 FIFO -  23
|FILE R6:17 LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:17 LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:17 LEN:128 - FFU - File #13 FIFO -  29
|FILE R6:17 LEN:127 - FFU - File #13 FIFO -  31
|FILE R6:17 LEN:127 - FFU - File #13 FIFO -  33
|FILE R6:17 LEN:100 - FFU - File #13 FIFO -  35
|FILE R6:17 LEN:128 - FFU - File #13 FIFO -  37
|N31:129 - FFU - File #13 FIFO -  39
|FILE N31:129 LEN:128 - FFL - File #13 FIFO -  36
|N31:128 - FFL - File #13 FIFO -  36
|
40|-----------------------------------------------------------------------|R6:18 - FFL - File #13 FIFO -
|                                                                        |                40          ...
|                                                                        |N32:128 - FFL - File #13 FIFO -
|                                                                        |                40          ...
|                                                                        |N32:1 - FFL - File #13 FIFO -
|                                                                        |                40
|                                                                        |        FFU - File #13 FIFO -
|                                                                        |                41          ...
|
|R6:18 - FFU - File #13 FIFO -  41
|R6:18.EN - -( )- - File #13 FIFO -  2
|R6:18.EU - -( )- - File #13 FIFO -  3
|FILE R6:18 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:18 LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:18 LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  15
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  17
|FILE R6:18 LEN:100 - FFU - File #13 FIFO -  19
|FILE R6:18 LEN:128 - FFU - File #13 FIFO -  21
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  23
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:18 LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:18 LEN:128 - FFU - File #13 FIFO -  29
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  31
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  33
|FILE R6:18 LEN:100 - FFU - File #13 FIFO -  35
|FILE R6:18 LEN:128 - FFU - File #13 FIFO -  37
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  39
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  41
|N32:128 - FFU - File #13 FIFO -  43
|N32:1 - FFL - File #13 FIFO -  38
|
41|-----------------------------------------------------------------------|R6:18 - FFL - File #13 FIFO -
|                                                                        |                40          ...
|                                                                        |N32:1 - FFL - File #13 FIFO -
|                                                                        |                40          ...
|                                                                        |N32:0 - FFL - File #13 FIFO -
|                                                                        |                38
|                                                                        |        FFU - File #13 FIFO -
|                                                                        |                41          ...
|
|R6:18 - FFU - File #13 FIFO -  41
|R6:18.EN - -( )- - File #13 FIFO -  2
|R6:18.EU - -( )- - File #13 FIFO -  3
|FILE R6:18 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:18 LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:18 LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  15
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  17
```

```
FFL
FIFO Load        -(EN)-
Source   N32:128 -(DN)-
FIFO     #N32:1  -(EM)-
Control   R6:18
Length       127
Position     126
```

```
FFU
FIFO Unload      -(EU)-
FIFO     #N32:1  -(DN)-
Dest      N32:0  -(EM)-
Control   R6:18
Length       127
Position     126
```

```
|FILE R6:18 LEN:100 - FFU - File #13 FIFO -  19
|FILE R6:18 LEN:128 - FFU - File #13 FIFO -  21
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  23
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:18 LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:18 LEN:128 - FFU - File #13 FIFO -  29
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  31
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  33
|FILE R6:18 LEN:100 - FFU - File #13 FIFO -  35
|FILE R6:18 LEN:128 - FFU - File #13 FIFO -  37
|FILE R6:18 LEN:127 - FFU - File #13 FIFO -  39
|N32:1 - FFU - File #13 FIFO -  41
|FILE N32:1 LEN:127 - FFL - File #13 FIFO -  38
|N32:0 - FFL - File #13 FIFO -  38
|
42|-------------------------------------------------------------------------|
|                                                  ┌FFL──────────┐          |R6:19 - FFL - File #13 FIFO -
|                                                  |FIFO Load    ├─(EN)─┤   42          ...
|                                                  |Source    S:41 ├─(DN)   |FILE S:41 LEN:100 -
|                                                  |FIFO   #N32:129├─(EM)   |   FFL - File #13 FIFO -  18..
|                                                  |Control   R6:19|        |N32:129 - FFL - File #13 FIFO -
|                                                  |Length     100|        |   42
|                                                  |Position    99|        |   FFU - File #13 FIFO -
|                                                  └─────────────┘          |   43          ...
|R6:19 - FFU - File #13 FIFO -  43
|R6:19.EN - -( )- - File #13 FIFO -  2
|R6:19.EU - -( )- - File #13 FIFO -  3
|FILE R6:19 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:19 LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:19 LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  15
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  17
|FILE R6:19 LEN:100 - FFU - File #13 FIFO -  19
|FILE R6:19 LEN:128 - FFU - File #13 FIFO -  21
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  23
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:19 LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:19 LEN:128 - FFU - File #13 FIFO -  29
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  31
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  33
|FILE R6:19 LEN:100 - FFU - File #13 FIFO -  35
|FILE R6:19 LEN:128 - FFU - File #13 FIFO -  37
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  39
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  41
|FILE R6:19 LEN:100 - FFU - File #13 FIFO -  43
|S:41 - FFL - File #13 FIFO -  26
|FILE S:41 LEN:100 - FFL - File #13 FIFO -  34
|N32:129 - FFL - File #13 FIFO -  40
|
43|-------------------------------------------------------------------------|
|                                                  ┌FFU──────────┐          |R6:19 - FFL - File #13 FIFO -
|                                                  |FIFO Unload  ├─(EU)─┤   42          ...
|                                                  |FIFO   #N32:129├─(DN)   |N32:129 - FFL - File #13 FIFO -
|                                                  |Dest    N32:128├─(EM)   |   42          ...
|                                                  |Control   R6:19|        |N32:128 - FFL - File #13 FIFO -
|                                                  |Length     100|        |   40
|                                                  |Position    99|        |   FFU - File #13 FIFO -
|                                                  └─────────────┘          |   43          ...
|R6:19 - FFU - File #13 FIFO -  43
|R6:19.EN - -( )- - File #13 FIFO -  2
|R6:19.EU - -( )- - File #13 FIFO -  3
|FILE R6:19 LEN:128 - FFU - File #13 FIFO -  5
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  7
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  9
|FILE R6:19 LEN:100 - FFU - File #13 FIFO -  11
|FILE R6:19 LEN:128 - FFU - File #13 FIFO -  13
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  15
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  17
|FILE R6:19 LEN:100 - FFU - File #13 FIFO -  19
|FILE R6:19 LEN:128 - FFU - File #13 FIFO -  21
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  23
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  25
|FILE R6:19 LEN:100 - FFU - File #13 FIFO -  27
|FILE R6:19 LEN:128 - FFU - File #13 FIFO -  29
|FILE R6:19 LEN:127 - FFU - File #13 FIFO -  31
```

```
    |FILE R6:19 LEN:127 - FFU - File #13 FIFO -  33                                  |
    |FILE R6:19 LEN:100 - FFU - File #13 FIFO -  35                                  |
    |FILE R6:19 LEN:128 - FFU - File #13 FIFO -  37                                  |
    |FILE R6:19 LEN:127 - FFU - File #13 FIFO -  39                                  |
    |FILE R6:19 LEN:127 - FFU - File #13 FIFO -  41                                  |
    |N32:129 - FFU - File #13 FIFO -  43                                             |
    |FILE N32:129 LEN:127 - FFL - File #13 FIFO -  40                                |
    |N32:128 - FFL - File #13 FIFO -  40                                             |
    |                                                                                |
    |                                                  ┌FFL──────────┐               |R6:20 - FFL - File #13 FIFO -
 44 |──────────────────────────────────────────────────│FIFO Load    │─(EN)─┤        44          ...
    |                                                  │Source  N33:128│─(IN)  |N33:128 - FFL - File #13 FIFO -
    |                                                  │FIFO    #N33:0│─(EM)  |        44          ...
    |                                                  │Control   R6:20│       |N33:0 - FFL - File #13 FIFO -
    |                                                  │Length      128│       |        44
    |                                                  │Position    127│       |      FFU - File #13 FIFO -
    |                                                  └─────────────┘         |        45
    |R6:20 - FFU - File #13 FIFO -  45                                               |
    |R6:20.EN - —( )— - File #13 FIFO -  2                                           |
    |R6:20.EU - —( )— - File #13 FIFO -  3                                           |
    |FILE R6:20 LEN:128 - FFU - File #13 FIFO -  5                                   |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  7                                   |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  9                                   |
    |FILE R6:20 LEN:100 - FFU - File #13 FIFO -  11                                  |
    |FILE R6:20 LEN:128 - FFU - File #13 FIFO -  13                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  15                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  17                                  |
    |FILE R6:20 LEN:100 - FFU - File #13 FIFO -  19                                  |
    |FILE R6:20 LEN:128 - FFU - File #13 FIFO -  21                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  23                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  25                                  |
    |FILE R6:20 LEN:100 - FFU - File #13 FIFO -  27                                  |
    |FILE R6:20 LEN:128 - FFU - File #13 FIFO -  29                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  31                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  33                                  |
    |FILE R6:20 LEN:100 - FFU - File #13 FIFO -  35                                  |
    |FILE R6:20 LEN:128 - FFU - File #13 FIFO -  37                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  39                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  41                                  |
    |FILE R6:20 LEN:100 - FFU - File #13 FIFO -  43                                  |
    |FILE R6:20 LEN:128 - FFU - File #13 FIFO -  45                                  |
    |N33:128 - FFU - File #13 FIFO -  47                                             |
    |                                                                                |
    |                                                  ┌FFU──────────┐               |R6:20 - FFL - File #13 FIFO -
 45 |──────────────────────────────────────────────────│FIFO Unload  │─(EU)─┤        44          ...
    |                                                  │FIFO    #N33:0│─(IN)  |N33:0 - FFL - File #13 FIFO -
    |                                                  │Dest    N20:63│─(EM)  |        44
    |                                                  │Control   R6:20│       |      FFU - File #13 FIFO -
    |                                                  │Length      128│       |        45
    |                                                  │Position    127│       |FILE N20:63 LEN:100 -
    |                                                  └─────────────┘         |    FFL - File #13 FIFO -  10
    |R6:20 - FFU - File #13 FIFO -  45                                               |
    |R6:20.EN - —( )— - File #13 FIFO -  2                                           |
    |R6:20.EU - —( )— - File #13 FIFO -  3                                           |
    |FILE R6:20 LEN:128 - FFU - File #13 FIFO -  5                                   |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  7                                   |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  9                                   |
    |FILE R6:20 LEN:100 - FFU - File #13 FIFO -  11                                  |
    |FILE R6:20 LEN:128 - FFU - File #13 FIFO -  13                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  15                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  17                                  |
    |FILE R6:20 LEN:100 - FFU - File #13 FIFO -  19                                  |
    |FILE R6:20 LEN:128 - FFU - File #13 FIFO -  21                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  23                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  25                                  |
    |FILE R6:20 LEN:100 - FFU - File #13 FIFO -  27                                  |
    |FILE R6:20 LEN:128 - FFU - File #13 FIFO -  29                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  31                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  33                                  |
    |FILE R6:20 LEN:100 - FFU - File #13 FIFO -  35                                  |
    |FILE R6:20 LEN:128 - FFU - File #13 FIFO -  37                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  39                                  |
    |FILE R6:20 LEN:127 - FFU - File #13 FIFO -  41                                  |
    |FILE R6:20 LEN:100 - FFU - File #13 FIFO -  43                                  |
```

```
|                                                                                  |R6:21 - FFL - File #13 FIFO -
46|------------------------------------------------------------------FFL-----------|                46                ...
|                                                                    |FIFO Load    |-(EN)-|N34:0 - FFL - File #13 FIFO -
|                                                                    |Source   N34:0|-(DN)-|                46                ...
|                                                                    |FIFO   #N33:129|-(EM)-|N33:129 - FFL - File #13 FIFO -
|                                                                    |Control   R6:21|      |                46
|                                                                    |Length     127|      |        FFU - File #13 FIFO -
|                                                                    |Position   126|      |                47            ...
|                                                                    |_____________|      |
|R6:21 - FFU - File #13 FIFO -  47                                                        |
|R6:21.EN - -( )- - File #13 FIFO -  2                                                    |
|R6:21.EU - -( )- - File #13 FIFO -  3                                                    |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  5                                            |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  7                                            |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  9                                            |
|FILE R6:21 LEN:100 - FFU - File #13 FIFO -  11                                           |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  13                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  15                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  17                                           |
|FILE R6:21 LEN:100 - FFU - File #13 FIFO -  19                                           |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  21                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  23                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  25                                           |
|FILE R6:21 LEN:100 - FFU - File #13 FIFO -  27                                           |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  29                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  31                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  33                                           |
|FILE R6:21 LEN:100 - FFU - File #13 FIFO -  35                                           |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  37                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  39                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  41                                           |
|FILE R6:21 LEN:100 - FFU - File #13 FIFO -  43                                           |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  45                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  47                                           |
|N34:0 - FFU - File #13 FIFO -  49                                                        |
|N33:129 - FFL - File #13 FIFO -  44                                                      |
|                                                                                  |R6:21 - FFL - File #13 FIFO -
47|------------------------------------------------------------------FFU-----------|                46                ...
|                                                                    |FIFO Unload  |-(EU)-|N33:129 - FFL - File #13 FIFO -
|                                                                    |FIFO   #N33:129|-(DN)-|                46                ...
|                                                                    |Dest   N33:128|-(EM)-|N33:128 - FFL - File #13 FIFO -
|                                                                    |Control   R6:21|      |                44
|                                                                    |Length     127|      |        FFU - File #13 FIFO -
|                                                                    |Position   126|      |                47            ...
|                                                                    |_____________|      |
|R6:21 - FFU - File #13 FIFO -  47                                                        |
|R6:21.EN - -( )- - File #13 FIFO -  2                                                    |
|R6:21.EU - -( )- - File #13 FIFO -  3                                                    |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  5                                            |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  7                                            |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  9                                            |
|FILE R6:21 LEN:100 - FFU - File #13 FIFO -  11                                           |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  13                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  15                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  17                                           |
|FILE R6:21 LEN:100 - FFU - File #13 FIFO -  19                                           |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  21                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  23                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  25                                           |
|FILE R6:21 LEN:100 - FFU - File #13 FIFO -  27                                           |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  29                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  31                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  33                                           |
|FILE R6:21 LEN:100 - FFU - File #13 FIFO -  35                                           |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  37                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  39                                           |
|FILE R6:21 LEN:127 - FFU - File #13 FIFO -  41                                           |
|FILE R6:21 LEN:100 - FFU - File #13 FIFO -  43                                           |
|FILE R6:21 LEN:128 - FFU - File #13 FIFO -  45                                           |
|N33:129 - FFU - File #13 FIFO -  47                                                      |
|FILE N33:129 LEN:128 - FFL - File #13 FIFO -  44                                         |
|N33:128 - FFL - File #13 FIFO -  44                                                      |
```

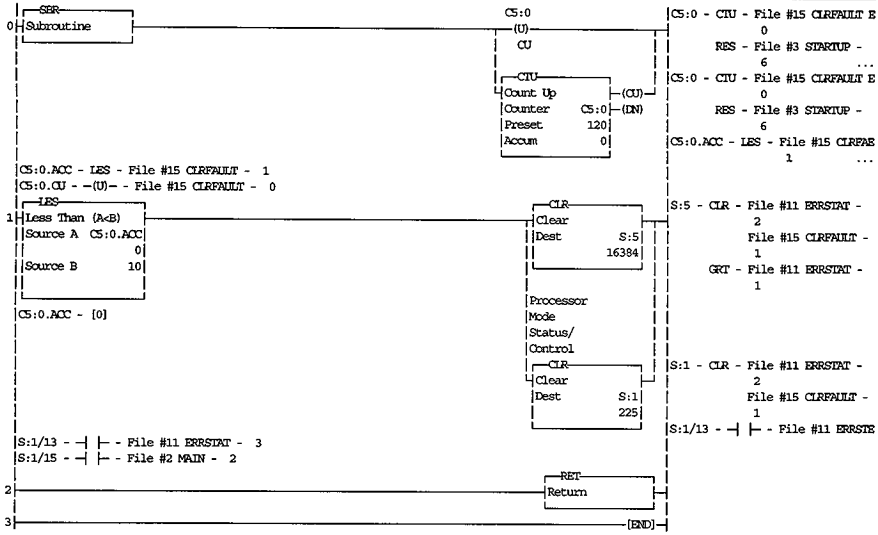
```
   |                                                                                  R6:22 - FFL - File #13 FIFO -
48 |------------------------------------------------------------------------------------------------------------------
   |                                                                                                48          ...
   |                                                                                  N34:128 - FFL - File #13 FIFO -
   |                                                                                                48          ...
   |                                                                                  N34:1 - FFL - File #13 FIFO -
   |                                                                                                48
   |                                                                                        FFU - File #13 FIFO -
   |                                                                                                49          ...
   |R6:22 - FFU - File #13 FIFO -  49
   |R6:22.EN - -( )- - File #13 FIFO -  2
   |R6:22.EU - -( )- - File #13 FIFO -  3
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  5
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  7
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  9
   |FILE R6:22 LEN:100 - FFU - File #13 FIFO -  11
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  13
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  15
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  17
   |FILE R6:22 LEN:100 - FFU - File #13 FIFO -  19
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  21
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  23
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  25
   |FILE R6:22 LEN:100 - FFU - File #13 FIFO -  27
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  29
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  31
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  33
   |FILE R6:22 LEN:100 - FFU - File #13 FIFO -  35
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  37
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  39
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  41
   |FILE R6:22 LEN:100 - FFU - File #13 FIFO -  43
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  45
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  47
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  49
   |N34:128 - FFU - File #13 FIFO -  51
   |N34:1 - FFL - File #13 FIFO -  46
   |                                                                                  R6:22 - FFL - File #13 FIFO -
49 |------------------------------------------------------------------------------------------------------------------
   |                                                                                                48          ...
   |                                                                                  N34:1 - FFL - File #13 FIFO -
   |                                                                                                48          ...
   |                                                                                  N34:0 - FFL - File #13 FIFO -
   |                                                                                                46
   |                                                                                        FFU - File #13 FIFO -
   |                                                                                                49          ...
   |R6:22 - FFU - File #13 FIFO -  49
   |R6:22.EN - -( )- - File #13 FIFO -  2
   |R6:22.EU - -( )- - File #13 FIFO -  3
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  5
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  7
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  9
   |FILE R6:22 LEN:100 - FFU - File #13 FIFO -  11
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  13
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  15
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  17
   |FILE R6:22 LEN:100 - FFU - File #13 FIFO -  19
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  21
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  23
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  25
   |FILE R6:22 LEN:100 - FFU - File #13 FIFO -  27
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  29
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  31
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  33
   |FILE R6:22 LEN:100 - FFU - File #13 FIFO -  35
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  37
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  39
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  41
   |FILE R6:22 LEN:100 - FFU - File #13 FIFO -  43
   |FILE R6:22 LEN:128 - FFU - File #13 FIFO -  45
   |FILE R6:22 LEN:127 - FFU - File #13 FIFO -  47
   |N34:1 - FFU - File #13 FIFO -  49
   |FILE N34:1 LEN:127 - FFL - File #13 FIFO -  46
```

```
   |N34:0 - FFL - File #13 FIFO -  46
   |                                                                  |
   |                                          ┌─FFL──────────┐        |R6:23 - FFL - File #13 FIFO -
50 |──────────────────────────────────────────│FIFO Load     ├─(EN)─┤          50              ...
   |                                          |Source     S:42├─(DN)  |FILE S:42 LEN:100 -
   |                                          |FIFO    #N34:129├─(EM)  |     FFL - File #13 FIFO -  18..
   |                                          |Control    R6:23|       |N34:129 - FFL - File #13 FIFO -
   |                                          |Length      100|       |                50
   |                                          |Position     99|       |         FFU - File #13 FIFO -
   |                                          └──────────────┘        |                51          ...
   |R6:23 - FFU - File #13 FIFO -  51                                 |
   |R6:23.EN - -( )- - File #13 FIFO -  2                             |
   |R6:23.EU - -( )- - File #13 FIFO -  3                             |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  5                     |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  7                     |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  9                     |
   |FILE R6:23 LEN:100 - FFU - File #13 FIFO -  11                    |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  13                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  15                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  17                    |
   |FILE R6:23 LEN:100 - FFU - File #13 FIFO -  19                    |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  21                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  23                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  25                    |
   |FILE R6:23 LEN:100 - FFU - File #13 FIFO -  27                    |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  29                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  31                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  33                    |
   |FILE R6:23 LEN:100 - FFU - File #13 FIFO -  35                    |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  37                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  39                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  41                    |
   |FILE R6:23 LEN:100 - FFU - File #13 FIFO -  43                    |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  45                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  47                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  49                    |
   |FILE R6:23 LEN:100 - FFU - File #13 FIFO -  51                    |
   |S:42 - FFL - File #13 FIFO -  26                                  |
   |FILE S:42 LEN:100 - FFL - File #13 FIFO -  34                     |
   |FILE S:42 LEN:100 - FFL - File #13 FIFO -  42                     |
   |N34:129 - FFL - File #13 FIFO -  48                               |
   |                                          ┌─FFU──────────┐        |R6:23 - FFL - File #13 FIFO -
51 |──────────────────────────────────────────│FIFO Unload   ├─(EU)─┤          50              ...
   |                                          |FIFO    #N34:129├─(DN)  |N34:129 - FFL - File #13 FIFO -
   |                                          |Dest      N34:128├─(EM)  |                50          ...
   |                                          |Control    R6:23|       |N34:128 - FFL - File #13 FIFO -
   |                                          |Length      100|       |                48
   |                                          |Position     99|       |         FFU - File #13 FIFO -
   |                                          └──────────────┘        |                51          ...
   |R6:23 - FFU - File #13 FIFO -  51                                 |
   |R6:23.EN - -( )- - File #13 FIFO -  2                             |
   |R6:23.EU - -( )- - File #13 FIFO -  3                             |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  5                     |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  7                     |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  9                     |
   |FILE R6:23 LEN:100 - FFU - File #13 FIFO -  11                    |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  13                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  15                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  17                    |
   |FILE R6:23 LEN:100 - FFU - File #13 FIFO -  19                    |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  21                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  23                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  25                    |
   |FILE R6:23 LEN:100 - FFU - File #13 FIFO -  27                    |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  29                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  31                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  33                    |
   |FILE R6:23 LEN:100 - FFU - File #13 FIFO -  35                    |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  37                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  39                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  41                    |
   |FILE R6:23 LEN:100 - FFU - File #13 FIFO -  43                    |
   |FILE R6:23 LEN:128 - FFU - File #13 FIFO -  45                    |
   |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  47                    |
```

```
    |FILE R6:23 LEN:127 - FFU - File #13 FIFO -  49
    |N34:129 - FFU - File #13 FIFO -  51
    |FILE N34:129 LEN:127 - FFL - File #13 FIFO -  48
    |N34:128 - FFL - File #13 FIFO -  48
    |                                                                  ┌─RET──────┐
 52 |──────────────────────────────────────────────────────────────────┤Return    ├─┤
    |                                                                  └──────────┘
 53 |──────────────────────────────────────────────────────────────────────────[END]─┤
```

```
 0 |┌──SBR──────┐ N13:0                                                  C5:1   |C5:1 - CTU - File #14 COUNTER -
   |Subroutine  ├─┤ ├──────────────────────────────────────────────────┬─( )─┬─┤          1
   |└──────────┘  0                                                    |  CU  | |      RES - File #14 COUNTER -
   |                [2:0]                                              |      | |          2
   |                                                                   |      | |      MOV - File #14 COUNTER -
   |                                                                   | C5:3 | |C5:3 - CTU - File #14 COUNTER -
   |                                                                   └─( )─┘ |          3
   |                                                                     CU    |      RES - File #14 COUNTER -
   |C5:1.ACC - MOV - File #14 COUNTER -  5                                     |
   |C5:3 - RES - File #14 COUNTER -  4                                         |
   |      MOV - File #14 COUNTER -  7                                          |
   |                                                                           |
   |                                                                           |
 1 |──────────────────────────────────────────────────────────┌─CTU──────┐    |C5:1 - CTU - File #14 COUNTER -
   |                                                          |Count Up   ├─(CU)─┤          1
   |                                                          |Counter  C5:1├─(DN) |      RES - File #14 COUNTER -
   |                                                          |Preset  31680|    |          2
   |                                                          |Accum    6880|    |C5:1.ACC - MOV - File #14 COUNTE
   |                                                          └──────────┘    |          5          ...
   |C5:1.CU - -( )- - File #14 COUNTER -  0                                    |
   |C5:1.DN - -┤ ├- - File #14 COUNTER -  2                                    |
   | C5:1                                                                      |
 2 |─┤ ├──────────────────────────────────────────────────┌─CTU──────┐    |C5:2.ACC - MOV - File #14 COUNTE
   |  DN                                                  |Count Up   ├─(CU)─┤          6
   |[2]                                                   |Counter  C5:2├─(DN) |
   |                                                      |Preset  32767|    |
   |                                                      |Accum       7|    |
   |                                                      |  C5:1             |
   |                                                      └─[RES]──────────┘  |C5:1 - CTU - File #14 COUNTER -
   |C5:1 - RES - File #14 COUNTER -  2                                         |          1          ...
   |C5:1.ACC - MOV - File #14 COUNTER -  5                                     |
   |C5:1.CU - -( )- - File #14 COUNTER -  0                                    |
   |C5:1.DN - -┤ ├- - File #14 COUNTER -  2                                    |
   |MOTOR                                                                      |
   |CONTACT                                                                    |
   | N20:25                                                                    |
 3 |─┤ ├──────────────────────────────────────────────────┌─CTU──────┐    |C5:3 - CTU - File #14 COUNTER -
   |   7                                                  |Count Up   ├─(CU)─┤          3
   |[9:0]                                                 |Counter  C5:3├─(DN) |      RES - File #14 COUNTER -
   |                                                      |Preset  31680|    |          4
   |                                                      |Accum    4358|    |C5:3.ACC - MOV - File #14 COUNTE
   |                                                      └──────────┘    |          7          ...
   |C5:3.CU - -( )- - File #14 COUNTER -  0                                    |
   |C5:3.DN - -┤ ├- - File #14 COUNTER -  4                                    |
   | C5:3                                                                      |
 4 |─┤ ├──────────────────────────────────────────────────┌─CTU──────┐    |C5:4.ACC - MOV - File #14 COUNTE
   |  DN                                                  |Count Up   ├─(CU)─┤          8
   |[4]                                                   |Counter  C5:4├─(DN) |
   |                                                      |Preset  32767|    |
   |                                                      |Accum       2|    |
   |                                                      |  C5:3             |
   |                                                      └─[RES]──────────┘  |C5:3 - CTU - File #14 COUNTER -
   |C5:3 - RES - File #14 COUNTER -  4                                         |          3          ...
   |C5:3.ACC - MOV - File #14 COUNTER -  7                                     |
   |C5:3.CU - -( )- - File #14 COUNTER -  0                                    |
   |C5:3.DN - -┤ ├- - File #14 COUNTER -  4                                    |
   |                                                                           |
 5 |──────────────────────────────────────────────────────────┌─MOV──────┐    |FILE N20:32 LEN:100 -
   |                                                          |Move       ├─┤      FFL - File #13 FIFO -  10
   |                                                          |Source  C5:1.ACC|  |FILE N20:32 LEN:30 -          ...
   |                                                          |           6880|  |C5:1 - CTU - File #14 COUNTER -
   |                                                          |Dest     N20:32|  |          1
   |                                                          |           6880|  |      RES - File #14 COUNTER -
   |                                                          └──────────┘    |          2
   |N20:32 - FFL - File #18 FIFOBUFFER -  1                                    |
   |FILE N20:32 LEN:30 - FFL - File #18 FIFOBUFFER -  1                        |
   |FILE N20:32 LEN:30 - FFL - File #18 FIFOBUFFER -  1                        |
   |                                                                           |
 6 |──────────────────────────────────────────────────────────┌─MOV──────┐    |FILE N20:33 LEN:100 -
   |                                                          |Move       ├─┤      FFL - File #13 FIFO -  10
   |                                                          |Source  C5:2.ACC|  |FILE N20:33 LEN:30 -
   |                                                          |            7|  |      FFL - File #18 FIFOBUFFER E
   |                                                          |Dest     N20:33|  |          1          ...
   |                                                          |            7|  |C5:2 - CTU - File #14 COUNTER -
   |                                                          └──────────┘    |          2
   |N20:33 - FFL - File #18 FIFOBUFFER -  1                                    |
   |FILE N20:33 LEN:30 - FFL - File #18 FIFOBUFFER -  1                        |
```

```
  |                                                              +-MOV-----------+ |FILE N20:34 LEN:100 -
 7|--------------------------------------------------------------+Move           +-|     FFL - File #13 FIFO -  10
  |                                                              |Source  C5:3.ACC| |FILE N20:34 LEN:30 -        ...
  |                                                              |           4358| |C5:3 - CTU - File #14 COUNTER -
  |                                                              |Dest     N20:34| |                3
  |                                                              |           4358| |      RES - File #14 COUNTER -
  |                                                              +---------------+ |                4
  |N20:34 - FFL - File #18 FIFOBUFFER -  1                                         |
  |FILE N20:34 LEN:30 - FFL - File #18 FIFOBUFFER -  1                             |
  |                                                              +-MOV-----------+ |FILE N20:64 LEN:100 -
 8|--------------------------------------------------------------+Move           +-|     FFL - File #13 FIFO -  10
  |                                                              |Source  C5:4.ACC| |C5:4 - CTU - File #14 COUNTER -
  |                                                              |              2| |                4
  |                                                              |Dest     N20:64| |
  |                                                              |              2| |
  |                                                              +---------------+ |
  |                                                              +-RET-----------+ |
 9|--------------------------------------------------------------+Return         +-|
  |                                                              +---------------+ |
10|----------------------------------------------------------------------------[END]-|
```


SBR
0
Subroutine
C5:0
(U)
CU
CTU
Count Up
(CU)
Counter C5:0
(DN)
Preset 120
Accum 0
C5:0 - CTU - File #15 CLRFAULT E
0
RES - File #3 STARTUP -
6
...
C5:0 - CTU - File #15 CLRFAULT E
0
RES - File #3 STARTUP -
6
C5:0.ACC - LES - File #15 CLRFAE
1
...
C5:0.ACC - LES - File #15 CLRFAULT - 1
C5:0.CU - -(U)- - File #15 CLRFAULT - 0
LES
1
Less Than (A<B)
Source A C5:0.ACC
0
Source B 10
C5:0.ACC - [0]
CLR
Clear
Dest S:5
16384
Processor
Mode
Status/
Control
CLR
Clear
Dest S:1
225
S:5 - CLR - File #11 ERRSTAT -
2
File #15 CLRFAULT -
1
GRT - File #11 ERRSTAT -
1
S:1 - CLR - File #11 ERRSTAT -
2
File #15 CLRFAULT -
1
S:1/13 - - File #11 ERRSTE
S:1/13 - - File #11 ERRSTAT - 3
S:1/15 - - File #2 MAIN - 2
RET
2
Return
3
[END]

```
|MOTOR    MODULE 6 5 VDC
|CONTACT  RC ANALOG INPUT
| N20:25  ┌LEQ──────────────┐                          ┌TON──────────┐  |T4:21.ACC - GRT - File #16 INTLK
0├──┤ ├──┤Less Than or Eql (A<=B)├──────────────────────┤Timer On Delay ├─(EN)─┤                1
|   7   |Source A        N20:22|                       |Timer      T4:21├─(DN)  |T4:21.DN - ─┤ ├─ - File #16 INTLK
|[9:0]  |                    0|                       |Time Base    1.0|       |                2
|       |Source B        N19:21|                       |Preset        20|       |
|       |                  4096|                       |Accum          0|       |
|       └────────────────┘                            └─────────────┘       |
|       N20:22 - [25]
| ┌GRT──────────────┐  B3                                  N20:36            |N20:36/5 - ─(L)─ - File #16 INTLK
1├─Greater Than (A>B) ├─[OSR]──────────────────────────────────────(L)──┤                1
|Source A  T4:21.ACC|  150                                  |   5    |       |          ─(U)─ - File #5 INTRLKS
|                 0|                                       |        |       |                91
|Source B     N16:21|                                       |        |       |          ─┤ ├─ - File #16 INTLK
|                 8|                                       |        |       |                20
|                  |                                       |        |       |          ─┤/├─ - File #16 INTLK
|T4:21.ACC - [0]                                           |        |       |                21
|                                                          |        |       |          NEQ - File #5 INTRLKS
|                                                          |N20:39  |       |N20:39 - NEQ - File #5 INTRLKS E
|                                                          └─( )────┘       |                114
|                                                             5             |        MEQ - File #12 COUNTERE
|N20:36 - NEQ - File #5 INTRLKS -  113
|               File #8 SYSSTAT -  0
|FILE N20:36/5 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:36/5 LEN:3 - FLL - File #3 STARTUP -  5
|                      COP - File #5 INTRLKS -  116
|N20:39 - MEQ - File #12 COUNTER -  2
|FILE N20:39/5 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:39/5 LEN:3 - COP - File #7 MESGVIEW -  12
|                                                       LOW INPUT INTLK
| T4:21                                                    N20:42            |N20:42/13 - ─( )─ - File #16 INTLK
2├──┤ ├──────────────────────────────────────────────────────────( )──┤                2
|   DN                                                        13             |          ─┤/├─ - File #5 INTRLKS
|[0]                                                                         |                121     ...
|N20:42/13 - FFL - File #13 FIFO -  10
|MODULE 6 5 VDC
|RC ANALOG INPUT
| ┌GEQ──────────────┐ N20:39                          ┌TON──────────┐  |T4:22.DN - ─┤ ├─ - File #16 INTLK
3├─Grtr Than or Eql (A>=B) ├──┤/├──────────────────────┤Timer On Delay ├─(EN)─┤                4
|Source A        N20:22|   6                           |Timer      T4:22├─(DN)  |
|                    0| [4]                            |Time Base    1.0|       |
|Source B        N19:22|                                |Preset        20|       |
|                12287|                                |Accum          0|       |
|                     |                                └─────────────┘       |
|N20:22 - [25]
| T4:22                                                    N20:39            |N20:39/6 - ─(L)─ - File #16 INTLK
4├──┤ ├──────────────────────────────────────────────────────────(L)──┤                4
|   DN                                                        6              |          ─(U)─ - File #16 INTLK
|[3]                                                                         |                5
|                                                          |        |       |          ─┤/├─ - File #16 INTLK
|                                                          |N20:36  |       |N20:36/6 - ─(L)─ - File #16 INTLK
|                                                          └─(L)────┘       |                4
|                                                             6             |          ─(U)─ - File #5 INTRLKS
|N20:39/6 - ─┤/├─ - File #16 INTLK -  3
|           NEQ - File #5 INTRLKS -  114
|           MEQ - File #12 COUNTER -  2
|FILE N20:39/6 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:39/6 LEN:3 - COP - File #7 MESGVIEW -  12
|N20:36/6 - ─(U)─ - File #5 INTRLKS -  92
|           NEQ - File #5 INTRLKS -  113
|               File #8 SYSSTAT -  0
|FILE N20:36/6 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:36/6 LEN:3 - FLL - File #3 STARTUP -  5
|                      COP - File #5 INTRLKS -  116
```

```
 |MODULE 6 5 VDC
 |RC ANALOG INPUT
 |┌─LEQ──────────────┐ B3                                                    |
5├┤Less Than or Eql (A<=B)├─[OSR]──────────────────────────────────────N20:39 |N20:39/6 - -(L)- - File #16 INTE
 |│Source A        N20:22│  151                                          (U)─┤                  4
 |│                     0│                                                6  |          -(U)- - File #16 INTE
 |│Source B       N18:22│                                                   |                  5
 |│                  9500│                                                   |          -┤/├- - File #16 INTE
 |└──────────────────────┘                                                   |                  3
 |N20:22 - [25]                                                              |          NEQ - File #5 INTRLKE
 |N20:39 - MEQ - File #12 COUNTER -  2                                       |                114        ...
 |FILE N20:39/6 LEN:100 - FFL - File #13 FIFO -  10
 |FILE N20:39/6 LEN:3 - COP - File #7 MESGVIEW -  12
 |MOTOR
 |CONTACT
 | N20:25  ┌─LEQ──────────────┐                                            |
6├─┤ ├─┤Less Than or Eql (A<=B)├──────────────────┌─TON──────┐──(EN)─┤T4:23.ACC - GRT - File #16 INTLE
 |   7     │Source A        N20:23│                │Timer On Delay │       |                  7
 |[9:0]    │                     0│                │Timer      T4:23│──(DN) |T4:23.IN - -┤ ├- - File #16 INTE
 |         │Source B        N19:23│                │Time Base    1.0│       |                  8
 |         │                  4096│                │Preset        20│       |
 |         └──────────────────────┘                │Accum          0│       |
 |         N20:23 - [27]                            └──────────────┘       |
 |┌─GRT──────────────┐ B3                                                   |
7├┤Greater Than (A>B) ├─[OSR]──────────────────────────────────────N20:36   |N20:36/7 - -(L)- - File #16 INTE
 |│Source A  T4:23.ACC│  152                                          (L)─┤                  7
 |│                 0│                                                7  |          -(U)- - File #5 INTRE
 |│Source B     N16:23│                                                   |                 93
 |│                  8│                                                   |          -┤ ├- - File #16 INTE
 |└──────────────────┘                                                   |                 20
 |T4:23.ACC - [6]                                                        |          -┤/├- - File #16 INTE
 |                                                                       |                 21
 |                                                                       |          NEQ - File #5 INTRLKE
 |                                                                 N20:39 |N20:39 - NEQ - File #5 INTRLKS E
 |                                                                 └─( )─┘|                114
 |                                                                   7   |        MEQ - File #12 COUNTERE
 |N20:36 - NEQ - File #5 INTRLKS -  113
 |              File #8 SYSSTAT -  0
 |FILE N20:36/7 LEN:100 - FFL - File #13 FIFO -  10
 |FILE N20:36/7 LEN:3 - FLL - File #3 STARTUP -  5
 |                COP - File #5 INTRLKS -  116
 |N20:39 - MEQ - File #12 COUNTER -  2
 |FILE N20:39/7 LEN:100 - FFL - File #13 FIFO -  10
 |FILE N20:39/7 LEN:3 - COP - File #7 MESGVIEW -  12
 | T4:23                                                                   |
8├─┤ ├──────────────────────────────────────────────────────────N20:42     |N20:42/14 - -( )- - File #16 INE
 |   DN                                                              ( )─┤                  8
 |[6]                                                                 14  |          -┤/├- - File #5 INTE
 |N20:42/14 - FFL - File #13 FIFO -  10                                   |                121      ...
 |┌─GEQ──────────────┐ N20:39                                             |
9├┤Grtr Than or Eql (A>=B)├─┤/├──────────────┌─TON──────┐──(EN)─┤T4:24.DN - -┤ ├- - File #16 INTE
 |│Source A        N20:23│   8               │Timer On Delay │       |                 10
 |│                     0│ [10]              │Timer      T4:24│──(DN) |
 |│Source B        N19:24│                   │Time Base    1.0│       |
 |│                 12287│                   │Preset        10│       |
 |└──────────────────────┘                   │Accum          0│       |
 |N20:23 - [27]                              └──────────────┘       |
 | T4:24                                                                   |
10├─┤ ├──────────────────────────────────────────────────────────N20:39     |N20:39/8 - -(L)- - File #16 INTE
 |   DN                                                              (L)─┤                 10
 |[9]                                                                  8  |          -(U)- - File #16 INTE
 |                                                                       |                 11
 |                                                                       |          -┤/├- - File #16 INTE
 |                                                                 N20:36 |N20:36/8 - -(L)- - File #16 INTE
 |                                                                 └─(L)─┘|                 10
 |                                                                   8   |          -(U)- - File #5 INTRE
 |N20:39/8 - -┤/├- - File #16 INTLK -  9
 |          NEQ - File #5 INTRLKS -  114
 |          MEQ - File #12 COUNTER -  2
 |FILE N20:39/8 LEN:100 - FFL - File #13 FIFO -  10
 |FILE N20:39/8 LEN:3 - COP - File #7 MESGVIEW -  12
 |N20:36/8 - -(U)- - File #5 INTRLKS -  94
 |          NEQ - File #5 INTRLKS -  113
 |              File #8 SYSSTAT -  0
 |FILE N20:36/8 LEN:100 - FFL - File #13 FIFO -  10
```

```
    |FILE N20:36/8 LEN:3 - FLL - File #3 STARTUP -  5
    |                     COP - File #5 INIRLKS -  116
    |┌─LEQ──────────────┐ B3                                                    N20:39 |N20:39/8 - —(L)— - File #16 INIE
 11 ├┤Less Than or Eql (A<=B)├─[OSR]──────────────────────────────────────────────(U)──┤                10
    ||Source A        N20:23| 153                                                  8  |          —(U)— - File #16 INIE
    ||                     0|                                                          |                11
    ||Source B        N18:24|                                                          |          —|/|— - File #16 INIE
    ||                  9500|                                                          |                 9
    |└──────────────────┘                                                              |          NEQ - File #5 INIRLKE
    |N20:23 - [27]                                                                     |                114        ...
    |N20:39 - NEQ - File #12 COUNTER -  2                                              |
    |FILE N20:39/8 LEN:100 - FFL - File #13 FIFO -  10                                 |
    |FILE N20:39/8 LEN:3 - COP - File #7 MESGVIEW -  12                                |
    |N20:25 N20:25                                                                     |
    |                                                N20:26   N20:39                   |N20:39/9 - —( )— - File #16 INIE
 12 ├─┤ ├──┤ ├──────────────────────────────────────────┤/├──────( )──────────────────┤                12
    |  9     10                                          |  6    |  9                  |          —|/|— - File #5 INIRE
    |[4:12]  [4:12]                                      |[22]   |                     |                121
    |                                                    |       |                     |          NEQ - File #5 INIRLKE
    |                                                    |       B3   N20:39 N20:36    |N20:36/9 - —(L)— - File #16 INIE
    |                                                    |      ├─[OSR]──┤/├──────(L)──┤                12
    |                                                    |       154     12      9     |          —(U)— - File #5 INIRE
    |                                                    |            [5:42]           |                95
    |                                                    |                             |          NEQ - File #5 INIRLKE
    |                                                    |      |N20:27                |N20:27 - MVM - File #4 INPUTDATE
    |                                                    |      └──( )──────────────────┤                14
    |                                                    |          0                  |          File #17 COPY_CUE
    |                                                    |                             |                5          ...
    |                                                    |N20:26   N20:39              |N20:39/10 - —( )— - File #16 INE
    |                                                    └─┤/├──────( )──────────────┤                12
    |                                                      7    |  10                 |          —|/|— - File #5 INIE
    |                                                    [22]   |                     |                121
    |                                                           |                     |          NEQ - File #5 INIRLE
    |                                                           B3   N20:36           |N20:36/10 - —(L)— - File #16 INE
    |                                                           └─[OSR]──(L)──────────┤                12
    |                                                            155     10           |          —(U)— - File #5 INIE
    |N20:39 - NEQ - File #5 INIRLKS -  114                                            |
    |         MEQ - File #12 COUNTER -  2                                              |
    |FILE N20:39/9 LEN:100 - FFL - File #13 FIFO -  10                                 |
    |FILE N20:39/9 LEN:3 - COP - File #7 MESGVIEW -  12                                |
    |N20:36 - NEQ - File #5 INIRLKS -  113                                             |
    |                File #8 SYSSTAT -  0                                              |
    |FILE N20:36/9 LEN:100 - FFL - File #13 FIFO -  10                                 |
    |FILE N20:36/9 LEN:3 - FLL - File #3 STARTUP -  5                                  |
    |                     COP - File #5 INIRLKS -  116                                 |
    |N20:27/0 - FFL - File #13 FIFO -  10                                              |
    |FILE N20:27/0 LEN:30 - FFL - File #18 FIFOBUFFER -  1                             |
    |FILE N20:27/0 LEN:30 - FFL - File #18 FIFOBUFFER -  1                             |
    |FILE N20:27/0 LEN:30 - FFL - File #18 FIFOBUFFER -  1                             |
    |N20:39 - NEQ - File #5 INIRLKS -  114                                             |
    |         MEQ - File #12 COUNTER -  2                                              |
    |FILE N20:39/10 LEN:100 - FFL - File #13 FIFO -  10                                |
    |FILE N20:39/10 LEN:3 - COP - File #7 MESGVIEW -  12                               |
    |N20:36/10 - —(U)— - File #5 INIRLKS -  96                                         |
    |            NEQ - File #5 INIRLKS -  113                                          |
    |                File #8 SYSSTAT -  0                                              |
    |FILE N20:36/10 LEN:100 - FFL - File #13 FIFO -  10                                |
    |FILE N20:36/10 LEN:3 - FLL - File #3 STARTUP -  5                                 |
    |                     COP - File #5 INIRLKS -  116                                 |
    |                                                                                  |
    |                                                          ┌─MOV──────────┐        |T4:40.PRE - MOV - File #16 INILE
 13 ├──────────────────────────────────────────────────────────┤Move          ├────────┤                13
    |                                                          |Source   N20:66|        |          SUB - File #16 INILE
    |                                                          |            50|        |                14
    |                                                          |Dest   T4:40.PRE|        |          RES - File #16 INILE
    |                                                          |            50|        |FILE N20:66 LEN:100 -
    |                                                          └──────────────┘        |     FFL - File #13 FIFO -  10
    |T4:40 - RES - File #16 INILK -  16                                                |
    |        TON - File #16 INILK -  17                                                |
```

```
 14 |-------------------------------------------------------------------------|
    |                                                   SUB                   |N20:65 - MOV - File #16 INTLK -
    |                                                 Subtract                |        15
    |                                                 Source A  T4:40.PRE     |     SUB - File #16 INTLK -
    |                                                                50       |T4:40.PRE - MOV - File #16 INTLK
    |                                                 Source B  T4:40.ACC     |            13
    |                                                                 0       |     SUB - File #16 INTLK
    |                                                 Dest         N20:65     |T4:40 - RES - File #16 INTLK -
    |                                                                50       |        16
    |                                                                         |   TON - File #16 INTLK - .
    |N20:65 - SUB - File #16 INTLK -  14                                      |
    |FILE N20:65 LEN:100 - FFL - File #13 FIFO -  10                          |
    |T4:40.PRE - SUB - File #16 INTLK -  14                                   |
    |           RES - File #16 INTLK -  16                                    |
    |           TON - File #16 INTLK -  17                                    |
    |T4:40 - TON - File #16 INTLK -  17                                       |
    |                                                                         |
 15 |-------------------------------------------------------------------------|
    |                                                   MOV                   |N20:65 - MOV - File #16 INTLK -
    |                                                 Move                    |        15
    |                                                 Source     N20:65       |     SUB - File #16 INTLK -
    |                                                                50       |        14
    |                                                 Dest      O:12.11       |FILE N20:65 LEN:100 -
    |                                                                50       |   FFL - File #13 FIFO -  10
    |N20:26                                                                   |
 16 |-| |-------------------------------------------------------------------|
    |  8                                                B3    N20:42          |N20:42/12 - -(L)- - File #16 INE
    |[22]                                             [OSR]  -(L)-            |        16
    |                                                  50     12              |     -(U)- - File #3 STAE
    |                                                                         |        8
    |                                                                         |      File #5 INTE
    |                                                 T4:40                   |T4:40 - RES - File #16 INTLK -
    |                                                [RES]                    |        16          ...
    |N20:42/12 - -(U)- - File #5 INTRLKS -  68                                |
    |           -| |- - File #5 INTRLKS -  42, 121                            |
    |                File #16 INTLK -  17                                     |
    |FILE N20:42/12 LEN:100 - FFL - File #13 FIFO -  10                       |
    |T4:40 - TON - File #16 INTLK -  17                                       |
    |T4:40.ACC - SUB - File #16 INTLK -  14                                   |
    |T4:40.IN - -| |- - File #5 INTRLKS -  68                                 |
    |T4:40.PRE - MOV - File #16 INTLK -  13                                   |
    |           SUB - File #16 INTLK -  14                                    |
    |N20:42                                                                   |
 17 |-| |-------------------------------------------------------------------|
    |  12                                               TON                   |T4:40 - RES - File #16 INTLK -
    |[16]                                             Timer On Delay  -(EN)-  |        16
    |                                                 Timer       T4:40 -(DN) |   TON - File #16 INTLK -
    |                                                 Time Base     1.0       |        17
    |                                                 Preset         50       |T4:40.ACC - SUB - File #16 INTLK
    |                                                 Accum           0       |        14
    |                                                                         |T4:40.IN - -| |- - File #5 INTRE
    |T4:40.IN - -| |- - File #5 INTRLKS -  68                                |
    |T4:40.PRE - MOV - File #16 INTLK -  13                                   |
    |           SUB - File #16 INTLK -  14                                    |
    |                                                                         |
 18 |-------------------------------------------------------------------------|
    |                                                   MVM                   |N13:3 - CLR - File #3 STARTUP -
    |                                                 Masked Move             |        3
    |                                                 Source       N13:0      |   MVM - File #3 STARTUP -
    |                                                                 0       |        4          ...
    |                                                 Mask        0FFF3h      |N13:0 - CLR - File #2 MAIN -  0
    |                                                                         |        File #3 STARTUP -
    |                                                 Dest         N13:3      |        1
    |                                                                 4       |   NOT - File #2 MAIN -  1
    |                                                                         |        File #3 STARTUP -
    |N13:3 - MVM - File #16 INTLK -  18, 22                                   |
    |       MUL - File #16 INTLK -  19, 20                                    |
    |       DIV - File #16 INTLK -  19, 20                                    |
    |N13:3/2 - -| |- - File #16 INTLK -  19, 20                               |
    |N13:3/3 - -| |- - File #16 INTLK -  19, 20                               |
    |FILE N13:3 LEN:110 - FLL - File #2 MAIN -  20                            |
    |                         File #3 STARTUP -  5                            |
    |FILE N13:3 LEN:4 - FLL - File #3 STARTUP -  5                            |
    |FILE N13:3 LEN:7 - FLL - File #2 MAIN -  20                              |
    |                         File #3 STARTUP -  5                            |
    |N13:0 - NOT - File #3 STARTUP -  2                                       |
    |       FLL - File #2 MAIN -  20                                          |
    |            File #3 STARTUP -  5                                         |
    |       MVM - File #3 STARTUP -  11                                       |
    |            File #7 MESSGVIEW -  1                                       |
    |            File #16 INTLK -  18, 23                                     |
```

```
N13:0/0 - -| |- - File #13 FIFO -  0, 1, 2, 3
                File #14 COUNTER -  0
FILE N13:0 LEN:110 - FLL - File #2 MAIN -  20
                         File #3 STARTUP -  5
FILE N13:0 LEN:3 - FLL - File #3 STARTUP -  5
FILE N13:0 LEN:4 - FLL - File #3 STARTUP -  5
FILE N13:0 LEN:7 - FLL - File #2 MAIN -  20
                         File #3 STARTUP -  5
  N20:26
19|-| |-------------------------------------------------------------------------
  | | 10 |
  | |[22]|
  | |    |
  | |    |
  | |    |
  | |    |
  | |    |
  | |    |
  |N20:26|
  |-| |-|
    11
  [22]

N20:26 N13:3 ┌MUL──────────┐
-| |-| |-|Multiply        |-|
  11    2 |Source A   N13:3|
[22]   [19]|            4|
           |Source B     2|
           |             |
           |Dest       N13:3|
           |            4|
           └─────────────┘

N20:26 N13:3 ┌DIV──────────┐
-| |-| |-|Divide          |-|
  10    3 |Source A   N13:3|
[22]   [19]|            4|
           |Source B     2|
           |             |
           |Dest       N13:3|
           |            4|
           └─────────────┘

N20:42
-( )-
  8

N13:3 - CLR - File #3 STARTUP -
                3
      MVM - File #3 STARTUP -
                4
            File #16 INTLK -
                18, 22
      MUL - File #16 INTLK -
                19, 20
      DIV - File #16 INTLK -
                19, 20
N13:3/2 - -| |- - File #16 INTLK
                19, 20
N13:3/3 - -| |- - File #16 INTLK
                19, 20
FILE N13:3 LEN:110 -
     FLL - File #2 MAIN -  20
           File #3 STARTUP -  5
FILE N13:3 LEN:4 -
     FLL - File #3 STARTUP -  5
FILE N13:3 LEN:7 -
     FLL - File #2 MAIN -  20
           File #3 STARTUP -  5

N20:42/8 - -( )- - File #16 INTLK
                19
         -| |- - File #16 INTLK

N20:42/8 - -| |- - File #16 INTLK -  22
         -|/|- - File #16 INTLK -  20, 23
FILE N20:42/8 LEN:100 - FFL - File #13 FIFO -  10
```

```
                              PUMP COUNT BIT                  PUMP COUNT BIT
     N20:36   N20:42  B3      N20:42              N13:3      N20:42       +-MUL-----------+        |N13:3 - CLR - File #3 STARTUP -
20 +--] [----+--]/[---[OSR]---]/[-----------+-----] [---------]/[---------+Multiply       +--+--+  |            3
   |  5      |   8    160       9           |      2           9          |Source A  N13:3|  |  |  |      MVM - File #3 STARTUP -
   | [1]     |  [19]          [20]          |    [20]        [20]         |             4 |  |  |  |            4
   |         |                              |                             |Source B     2 |  |  |  |            File #16 INTLK -
   |         |                              |                             |Dest     N13:3 |  |  |  |            18, 22
   |         |                              |                             |             4 |  |  |  |      MUL - File #16 INTLK -
   | N20:36  |                              |                             +---------------+  |  |  |            19, 20
   +--] [----+                              |                                                |  |  |      DIV - File #16 INTLK -
       7                                    |                             PUMP COUNT BIT     |  |  |            19, 20
      [7]                                   |                                N20:42          |  |  |N13:3/2 - -] [- - File #16 INTLE
                                            |                             ------(L)----------+  |  |            19, 20
                                            |                                  9                |  |N13:3/3 - -] [- - File #16 INTLE
                                            |           PUMP COUNT BIT                          |  |            19, 20
                                            |   N13:3      N20:42        +-DIV-----------+      |  |FILE N13:3 LEN:110 -        ...
                                            +---] [---+----]/[-----------+Divide         +--+---+  |N20:42/9 - -(L)- - File #16 INTE
                                            |    3    |     9            |Source A  N13:3|  |      |            20
                                            |  [20]   |   [20]           |             4 |  |      |          -(U)- - File #6 FANCE
                                            |         |                  |Source B     2 |  |      |            0, 1
                                            |         |                  |Dest     N13:3 |  |      |            File #16 INTE
                                            |         |                  |             4 |  |      |            21
                                            |         |                  +---------------+  |      |            File #20 FANE
                                            |         |PUMP COUNT BIT                       |      |            0, 1
                                            |         |   N20:42                            |      |          -]/[- - File #16 INTE
                                            |         +----(L)------------------------------+      |            20
                                            |              9                                       |FILE N20:42/9 LEN:100 -
                                            |  T4:32                                               |     FFL - File #13 FIFO - 10
                                            +--[RES]-----------------------------------------------+
                                            |                                                      |T4:32 - RES - File #16 INTLK -
                                            |  T4:34                                               |            20, 24
                                            +--[RES]-----------------------------------------------+T4:32.EN - -]/[- - File #16 INTE
                                                                                                   |T4:34 - RES - File #16 INTLK -
                                                                                                   |            20, 24      ...
   |N13:3 - FLL - File #2 MAIN - 20
   |              File #3 STARTUP - 5
   |FILE N13:3 LEN:4 - FLL - File #3 STARTUP - 5
   |FILE N13:3 LEN:7 - FLL - File #2 MAIN - 20
   |                         File #3 STARTUP - 5
   |T4:32.EN - -]/[- - File #16 INTLK - 21
   |T4:34.EN - -]/[- - File #16 INTLK - 21
   |                                                                           PUMP COUNT BIT
   | T4:32  T4:34  N20:36  N20:42                                                 N20:42
21 +--]/[----]/[----]/[----]/[----------------------------------------------------(U)-----+N20:42/9 - -(L)- - File #16 INTE
   |   EN     EN     5      7                                                       9      |            20
   | [20]   [20]    [1]    [7]                                                             |          -(U)- - File #6 FANCE
   |N20:42/9 - -(U)- - File #16 INTLK - 21                                                 |            0, 1      ...
   |                   File #20 FANCNTRL - 0, 1
   |           -]/[- - File #16 INTLK - 20
   |FILE N20:42/9 LEN:100 - FFL - File #13 FIFO - 10
   | MOTOR                                                              WW TRANSFER
   | CONTACT                                                            WORD?
   |  N20:25                                                            +-MVM-----------+      |N20:26 - MVM - File #4 INPUTDATE
22 +--] [----+--------------------------------------------------------+Masked Move    +-     |            13
   |   7     |                                                          |Source   N13:3|      |            File #16 INTLK -
   | [9:0]   |                                                          |            4 |      |            22, 23
   |         |                                                          |Mask     000Ch|      |            File #17 COPY_QUE
   |         |                                                          |Dest    N20:26|      |            4
   |         |                                                          |            0 |      |N20:26/1 - -( )- - File #10 GLYE
   |         |                                                          +--------------+      |N13:3 - CLR - File #3 STARTUP -
   |N20:42   |                                                                                |            3
   +--] [----+                                                                                |      MVM - File #3 STARTUP -
       8                                                                                      |            4
     [19]                                                                                     |            File #16 INTLK -
                                                                                              |            18, 22
                                                                                              |      MUL - File #16 INTLK - .
```

```
|N20:26/1 - -( )- - File #10 GLYCOLPMP -  1
|N20:26/4 - -( )- - File #16 INTLK -  37
|N20:26/5 - -( )- - File #16 INTLK -  38
|N20:26/6 - -|/|- - File #16 INTLK -  12
|N20:26/7 - -|/|- - File #16 INTLK -  12
|N20:26/8 - -| |- - File #16 INTLK -  16
|N20:26/10 - -| |- - File #16 INTLK -  19
|N20:26/11 - -| |- - File #16 INTLK -  19
|FILE N20:26 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|N13:3 - MUL - File #16 INTLK -  19, 20
|        DIV - File #16 INTLK -  19, 20
|N13:3/2 - -| |- - File #16 INTLK -  19, 20
|N13:3/3 - -| |- - File #16 INTLK -  19, 20
|FILE N13:3 LEN:110 - FLL - File #2 MAIN -  20
|                          File #3 STARTUP -  5
|FILE N13:3 LEN:4 - FLL - File #3 STARTUP -  5
|FILE N13:3 LEN:7 - FLL - File #2 MAIN -  20
|                         File #3 STARTUP -  5
|       MOTOR                                                  WW TRANSFER
|       CONTACT                                                WORD?
|N20:42  N20:25                                                ┌─MVM──────────┐ |N20:26 - MVM - File #4 INPUTDATE
23 |─┤/├──────┤/├──────────────────────────────────────────────┤Masked Move   ├─┤              13
|   8      7                                                   |Source     N13:0| |              File #16 INTLK -
|[19]    [9:0]                                                 |              0| |              22, 23        ...
|                                                              |Mask       000Ch| |N13:0 - CLR - File #2 MAIN -  0
|                                                              |                | |              File #3 STARTUP -
|                                                              |Dest       N20:26| |              1
|                                                              |              0| |        NOT - File #2 MAIN -  1
|                                                              └──────────────┘ |              File #3 STARTUP -
|N20:26 - MVM - File #17 COPY_OUT -  4
|N20:26/1 - -( )- - File #10 GLYCOLPMP -  1
|N20:26/4 - -( )- - File #16 INTLK -  37
|N20:26/5 - -( )- - File #16 INTLK -  38
|N20:26/6 - -|/|- - File #16 INTLK -  12
|N20:26/7 - -|/|- - File #16 INTLK -  12
|N20:26/8 - -| |- - File #16 INTLK -  16
|N20:26/10 - -| |- - File #16 INTLK -  19
|N20:26/11 - -| |- - File #16 INTLK -  19
|FILE N20:26 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|N13:0 - NOT - File #3 STARTUP -  2
|        FLL - File #2 MAIN -  20
|             File #3 STARTUP -  5
|        MVM - File #3 STARTUP -  11
|             File #7 MESGVIEW -  1
|             File #16 INTLK -  18, 23
|N13:0/0 - -| |- - File #13 FIFO -  0, 1, 2, 3
|                File #14 COUNTER -  0
|FILE N13:0 LEN:110 - FLL - File #2 MAIN -  20
|                          File #3 STARTUP -  5
|FILE N13:0 LEN:3 - FLL - File #3 STARTUP -  5
|FILE N13:0 LEN:4 - FLL - File #3 STARTUP -  5
|FILE N13:0 LEN:7 - FLL - File #2 MAIN -  20
|                         File #3 STARTUP -  5
|MOTOR
|CONTACT
| N20:25   B3                                                  T4:32  |T4:32 - RES - File #16 INTLK -
24 |─┤ |──[OSR]──────────────────────────────────────────────┬─[RES]─┬─┤              20, 24
|   7     149                                                 |       | |T4:32.EN - -|/|- - File #16 INTE
|[9:0]                                                        |       | |              21
|                                                              | T4:34 | |T4:34 - RES - File #16 INTLK -
|                                                              └─[RES]─┘ |              20, 24        ...
|T4:34.EN - -|/|- - File #16 INTLK -  21
```

```
    |MODULE 6 5 VDC
    |RC ANALOG INPUT
    |┌─LEQ──────────────┐
 25 ├┤Less Than or Eql (A<=B)├──────────────────────────────┤( )├──────────┤
    ||Source A       N20:22|                                 | 25          |
    ||                    0|                                 |             |
    ||Source B        3277|                                 |             |
    |└──────────────────┘                                   |             |
    |N20:22 - [25]                                          |MODULE 6 5 VDC |
    |                                                       |RC ANALOG INPUT |
    |                                                       |┌─MOV──────────┐| |N20:22 - MOV - File #16 INTLK -
    |                                                       └┤Move          ├┘|            25
    |                                                        |Source    3277|  |      COP - File #4 INPUTDATE
    |                                                        |              |  |            5
    |                                                        |Dest    N20:22|  |      GRT - File #16 INTLK -
    |                                                        |           0|  |            26
    |                                                        └──────────────┘  |      GEQ - File #16 INTLK -
    |N20:22 - GEQ - File #16 INTLK -  3                                        |
    |         LEQ - File #16 INTLK -  0, 5, 25                                 |
    |         PID - File #16 INTLK -  29                                       |
    |FILE N20:22 LEN:100 - FFL - File #13 FIFO -  10                           |
    |FILE N20:22 LEN:30 - FFL - File #18 FIFOBUFFER -  1                       |
    |FILE N20:22 LEN:30 - FFL - File #18 FIFOBUFFER -  1                       |
    |FILE N20:22 LEN:30 - FFL - File #18 FIFOBUFFER -  1                       |
    |FILE N20:22 LEN:2 - COP - File #4 INPUTDATA -  5                          |
    |MODULE 6 5 VDC                                                            |
    |RC ANALOG INPUT                                                           |
    |┌─GRT──────────┐                                                         |
 26 ├┤Greater Than (A>B)├──────────────────────────────┤(L)├──────────┤
    ||Source A    N20:22|                                 | 26          |
    ||                 0|                                 |             |
    ||Source B     16384|                                 |             |
    |└──────────────┘                                     |             |
    |N20:22 - [25]                                        |             |
    |                                                     |┌─MOV──────────┐| |I:1.3 - MOV - File #5 INTRLKS -
    |                                                     └┤Move          ├┘|            40
    |                                                      |Source    16384|  |            File #16 INTLK -
    |                                                      |              |  |            26
    |                                                      |Dest      I:1.3|  |      GRT - File #5 INTRLKS -
    |                                                      |           3251|  |            40
    |                                                      └──────────────┘  |FILE I:1.3 LEN:4 -          ...
    |I:1.3 - COP - File #4 INPUTDATA -  0                                      |
    |┌─LEQ──────────────┐                                                     |
 27 ├┤Less Than or Eql (A<=B)├──────────────────────────────┤( )├──────────┤
    ||Source A       N20:23|                                 | 27          |
    ||                    0|                                 |             |
    ||Source B        3277|                                 |             |
    |└──────────────────┘                                   |             |
    |N20:23 - [27]                                          |             |
    |                                                       |┌─MOV──────────┐| |N20:23 - MOV - File #16 INTLK -
    |                                                       └┤Move          ├┘|            27, 28
    |                                                        |Source    3277|  |      GRT - File #16 INTLK -
    |                                                        |              |  |            28
    |                                                        |Dest    N20:23|  |      GEQ - File #16 INTLK -
    |                                                        |           0|  |            9
    |                                                        └──────────────┘  |      LEQ - File #16 INTLK -
    |N20:23 - LEQ - File #16 INTLK -  6, 11, 27                                |
    |         PID - File #16 INTLK -  30                                       |
    |FILE N20:23 LEN:100 - FFL - File #13 FIFO -  10                           |
    |FILE N20:23 LEN:30 - FFL - File #18 FIFOBUFFER -  1                       |
    |FILE N20:23 LEN:30 - FFL - File #18 FIFOBUFFER -  1                       |
    |FILE N20:23 LEN:30 - FFL - File #18 FIFOBUFFER -  1                       |
    |FILE N20:23 LEN:2 - COP - File #4 INPUTDATA -  5                          |
```

```
   ┌─GRT──────────┐                                                  B3
28 ├Greater Than (A>B)├──────────────────────────────────────────┬─(L)──────────┬─┤
   │Source A    N20:23│                                          │  28          │ │
   │              0│                                          │              │ │
   │Source B    16384│                                          │              │ │
   └──────────────┘                                          │              │ │
   N20:23 - [28]                                             │              │ │
                                                             │ ┌─MOV──────────┐ │ N20:23 - MOV - File #16 INTLK -
                                                             └─Move          ├─┘ │          27, 28
                                                             │Source    16384│ │       GRT - File #16 INTLK -
                                                             │              │ │          28
                                                             │Dest      N20:23│ │       GEQ - File #16 INTLK -
                                                             │              0│ │          9
                                                             └──────────────┘ │       LEQ - File #16 INTLK -
   N20:23 - LEQ - File #16 INTLK -  6, 11, 27
           PID - File #16 INTLK -  30
   FILE N20:23 LEN:100 - FFL - File #13 FIFO -  10
   FILE N20:23 LEN:30 - FFL - File #18 FIFOBUFFER -  1
   FILE N20:23 LEN:30 - FFL - File #18 FIFOBUFFER -  1
   FILE N20:23 LEN:30 - FFL - File #18 FIFOBUFFER -  1
   FILE N20:23 LEN:2 - COP - File #4 INPUTDATA -  5
                                                             ┌─PID──────────────┐ N10:30/1 - -( )- - File #16 INTE
29 ├──────────────────────────────────────────────────────────┤PID               ├─┤          32        ...
                                                             │Control Block    N10:30│ N20:22 - MOV - File #16 INTLK -
                                                             │Process Variable N20:22│          25        ...
                                                             │Control Variable N20:20│ N20:20 - COP - File #16 INTLK -
                                                             │Control Block Length 23│          31, 32
                                                             └──────────────────┘          File #17 COPY_OUE
   N20:22 - COP - File #4 INPUTDATA -  5
           GRT - File #16 INTLK -  26
           GEQ - File #16 INTLK -  3
           LEQ - File #16 INTLK -  0, 5, 25
           PID - File #16 INTLK -  29
   FILE N20:22 LEN:100 - FFL - File #13 FIFO -  10
   FILE N20:22 LEN:30 - FFL - File #18 FIFOBUFFER -  1
   FILE N20:22 LEN:30 - FFL - File #18 FIFOBUFFER -  1
   FILE N20:22 LEN:30 - FFL - File #18 FIFOBUFFER -  1
   FILE N20:22 LEN:2 - COP - File #4 INPUTDATA -  5
   N20:20 - COP - File #17 COPY_OUT -  1
           PID - File #16 INTLK -  29
   FILE N20:20 LEN:100 - FFL - File #13 FIFO -  10
   FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
   FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
   FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
   FILE N20:20 LEN:1 - COP - File #16 INTLK -  31, 32
   FILE N20:20 LEN:2 - COP - File #17 COPY_OUT -  1

                   Auto/Manual......: AUTO          Time Mode................: 0 TM
                   Mode.............: STI           Auto/Manual..............: 0 AM
                   Control..........: E=SP-PV       Control Mode.............: 0 CM
                   Setpoint (SP)....:   9011        Output Limiting Enable...: 0 OL
                   Process (PV).....:   3277        Reset and Gain Range.....: 1 RG
                   Scaled Error.....:   5734        Scale Setpoint Flag......: 0 SC
                   Deadband.........:      0        Loop Update Time Too Fast: 0 TF
                   Output (CV)......:      0 %      Derivative (rate) Action.: 0 DA
                                                    Set when Error is in DB..: 0 DB
                   Loop Update......:     30 (.01 secs) Output Alarm, Upper Limit: 0 UL
                   Gain.............:    199 (/100)   Output Alarm, Lower Limit: 0 LL
                   Reset............:      9 (/100 m/r) Setpoint Out of Range....: 0 SP
                   Rate.............:      0 (/100 min) Process Var Out of Range.: 0 PV
                   Min Scaled.......:      0         PID Done.................: 0 DN
                   Max Scaled.......:  16383
                   Output (CV) Limit: NO            PID Enabled..............: 0 EN
                   Output (CV) Min..:      0 %
                   Output (CV) Max..:    100 %

                                                             ┌─PID──────────────┐ N10:60/1 - -( )- - File #16 INTE
30 ├──────────────────────────────────────────────────────────┤PID               ├─┤          35        ...
                                                             │Control Block    N10:60│ N20:23 - MOV - File #16 INTLK -
                                                             │Process Variable N20:23│          27, 28        ...
                                                             │Control Variable N20:21│ N20:21 - COP - File #16 INTLK -
                                                             │Control Block Length 23│          34, 35
                                                             └──────────────────┘       PID - File #16 INTLK -
```

```
N20:23 - GRT - File #16 INTLK -  28
         GEQ - File #16 INTLK -  9
         LEQ - File #16 INTLK -  6, 11, 27
         PID - File #16 INTLK -  30
FILE N20:23 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:23 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:23 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:23 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:23 LEN:2 - COP - File #4 INPUTDATA -  5
N20:21 - PID - File #16 INTLK -  30
FILE N20:21 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:21 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:21 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:21 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:21 LEN:2 - COP - File #17 COPY_OUT -  1
FILE N20:21 LEN:1 - COP - File #16 INTLK -  34, 35

                    Auto/Manual......: AUTO          Time Mode................: 0 TM
                    Mode.............: STI           Auto/Manual..............: 0 AM
                    Control..........: B-SP-PV       Control Mode.............: 0 CM
                    Setpoint (SP)....:   9011        Output Limiting Enable...: 0 OL
                    Process (PV).....:   3277        Reset and Gain Range.....: 1 RG
                    Scaled Error.....:   5734        Scale Setpoint Flag......: 0 SC
                    Deadband.........:      0        Loop Update Time Too Past: 0 TF
                    Output (CV)......:      0 %      Derivative (rate) Action.: 0 DA
                                                     Set when Error is in DB..: 0 DB
                    Loop Update......:     30 (.01 secs) Output Alarm, Upper Limit: 0 UL
                    Gain.............:     99 (/100)    Output Alarm, Lower Limit: 0 LL
                    Reset............:      9 (/100 m/r) Setpoint Out of Range....: 0 SP
                    Rate.............:      0 (/100 min) Process Var Out of Range.: 0 PV
                    Min Scaled.......:      0           PID Done.................: 0 DN
                    Max Scaled.......:  16383
                    Output (CV) Limit: NO               PID Enabled..............: 0 EN
                    Output (CV) Min..:      0 %
                    Output (CV) Max..:    100 %

N20:42
31 --| |-------------------------------------------------------------------------------
  4                                                                  COP
[6:0]                                                              Copy File
                                                                   Source    #N20:20
                                                                   Dest      #N20:48
                                                                   Length          1

N20:48 - COP - File #16 INTLK -  31, 32
FILE N20:48 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:48 LEN:1 - COP - File #16 INTLK -  31, 32
N20:20 - COP - File #17 COPY_OUT -  1
         PID - File #16 INTLK -  29
FILE N20:20 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:20 LEN:1 - COP - File #16 INTLK -  31, 32
FILE N20:20 LEN:2 - COP - File #17 COPY_OUT -  1
N20:42
32 --|/|-------------------------------------------------------------------------------
  4                                                                  COP
[6:0]                                                              Copy File
                                                                   Source    #N20:48
                                                                   Dest      #N20:20
                                                                   Length          1

                                                                   N10:30
                                                                   ( )
                                                                     1

N20:20 - COP - File #17 COPY_OUT -  1
         PID - File #16 INTLK -  29
FILE N20:20 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:20 LEN:1 - COP - File #16 INTLK -  31, 32
FILE N20:20 LEN:2 - COP - File #17 COPY_OUT -  1

N20:48 - CLR - File #6 FANCNTRLE
                 12
         COP - File #16 INTLK -
N20:20 - COP - File #16 INTLK -
                 31, 32
                File #17 COPY_OUE

N20:20 - COP - File #16 INTLK -
                 31, 32
                File #17 COPY_OUE
N20:48 - CLR - File #6 FANCNTRLE
                 12
         COP - File #16 INTLK -
                 31, 32          ...
N10:30 - PID - File #16 INTLK -
                 29
FILE N10:30/1 LEN:23 -          ...
```

```
|N20:48 - FFL - File #13 FIFO -  10
|FILE N20:48 LEN:1 - COP - File #16 INTLK -  31, 32
|N10:30/1 - PID - File #16 INTLK -  29
|
33|------------------------------------------------------------------|COP|------------|FILE N10:32 LEN:23 -
|                                                                    |Copy File      |H|     PID - File #16 INTLK -  29
|                                                                    |Source   #N20:49|FILE N20:49 LEN:100 -
|                                                                    |Dest     #N10:32|     FFL - File #13 FIFO -  10
|                                                                    |Length        4|
|                                                                    |___________|
|N20:42
34|-| |-----------------------------------------------------------|COP|------------|N20:53 - CLR - File #6 FANCNTRLE
|  5                                                                 |Copy File      |H|              12
|[6:0]                                                               |Source   #N20:21|       COP - File #16 INTLK -
|                                                                    |Dest     #N20:53|N20:21 - COP - File #16 INTLK -
|                                                                    |Length        1|              34, 35
|                                                                    |___________|       PID - File #16 INTLK -
|N20:53 - COP - File #16 INTLK -  34, 35
|FILE N20:53 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:53 LEN:1 - COP - File #16 INTLK -  34, 35
|N20:21 - PID - File #16 INTLK -  30
|FILE N20:21 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:21 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:21 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:21 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:21 LEN:2 - COP - File #17 COPY_OUT -  1
|FILE N20:21 LEN:1 - COP - File #16 INTLK -  34, 35
|N20:42
35|-|/|-----------------------------------------------------------|COP|------------|N20:21 - COP - File #16 INTLK -
|  5                                                                 |Copy File      |H|              34, 35
|[6:0]                                                               |Source   #N20:53|       PID - File #16 INTLK -
|                                                                    |Dest     #N20:21|N20:53 - CLR - File #6 FANCNTRLE
|                                                                    |Length        1|              12
|                                                                    |___________|       COP - File #16 INTLK -
|                                                                    |                |              34, 35       ...
|                                                                    |N10:60          |N10:60 - PID - File #16 INTLK -
|                                                                    |-( )-------------|              30
|                                                                    |  1             |FILE N10:60/1 LEN:23 -       ...
|N20:21 - PID - File #16 INTLK -  30
|FILE N20:21 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:21 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:21 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:21 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:21 LEN:2 - COP - File #17 COPY_OUT -  1
|FILE N20:21 LEN:1 - COP - File #16 INTLK -  34, 35
|N20:53 - FFL - File #13 FIFO -  10
|FILE N20:53 LEN:1 - COP - File #16 INTLK -  34, 35
|N10:60/1 - PID - File #16 INTLK -  30
|
36|------------------------------------------------------------------|COP|------------|FILE N10:62 LEN:23 -
|                                                                    |Copy File      |H|     PID - File #16 INTLK -  30
|                                                                    |Source   #N20:54|FILE N20:54 LEN:100 -
|                                                                    |Dest     #N10:62|     FFL - File #13 FIFO -  10
|                                                                    |Length        4|
|                                                                    |___________|
|N20:25                                                                N20:26 |N20:26 - MMM - File #4 INFUDATE
37|-| |-----------------------------------------------------------( )-|                13
|  9                                                                   4            File #16 INTLK -
|[4:12]                                                                             22, 23       ...
|N20:26 - MMM - File #17 COPY_OUT -  4
|FILE N20:26/4 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:26/4 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:26/4 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:26/4 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|N20:25                                                                N20:26 |N20:26 - MMM - File #4 INFUDATE
38|-| |-----------------------------------------------------------( )-|                13
|  10                                                                  5            File #16 INTLK -
|[4:12]                                                                             22, 23       ...
|N20:26 - MMM - File #17 COPY_OUT -  4
|FILE N20:26/5 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:26/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:26/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:26/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|
39|------------------------------------------------------------------|RET|------------|
|                                                                    |Return         |H|
|                                                                    |___________|
```

40 [END]

```
 0 SBR
   Subroutine

                                                    COP
                                                    Copy File
                                                    Source    #N20:8
                                                    Dest      #O:3.0
                                                    Length         2
                                                                                N20:8 - COP - File #17 COPY_OUTE
                                                                                         0
                                                                                   SCL - File #6 FANCNTRL E
                                                                                        11
                                                                                       File #20 FANCNTRLE
                                                                                        14            ...
N20:8 - FFL - File #13 FIFO -  10
FILE N20:8 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:8 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:8 LEN:30 - FFL - File #18 FIFOBUFFER -  1

 1                                                  COP
                                                    Copy File
                                                    Source    #N20:20
                                                    Dest      #O:6.0
                                                    Length         2
                                                                                N20:20 - COP - File #16 INTLK -
                                                                                        31, 32
                                                                                       File #17 COPY_OUE
                                                                                        1
                                                                                  PID - File #16 INTLK -
                                                                                        29            ...
N20:20 - FFL - File #13 FIFO -  10
FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:20 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:20 LEN:1 - COP - File #16 INTLK -  31, 32

 2                                                  MVM
                                                    Masked Move
                                                    Source    N20:24
                                                              616
                                                    Mask      003Fh
                                                    Dest      O:7.0
                                                              40
                                                                                N20:24 - MVM - File #4 INPUTDATE
                                                                                        11
                                                                                       File #17 COPY_OUE
                                                                                        2
                                                                                N20:24/2 - -( )- - File #6 FANCE
                                                                                                5
                                                                                       File #20 FANE
                                                                                        7
                                                                                     -| |- - File #2 MAINE
N20:24/2 - -| |- - File #2 MAIN -  18
N20:24/3 - -( )- - File #6 FANCNTRL -  4
                   File #20 FANCNTRL -  6
          -(L)- - File #11 ERRSTAT -  3
N20:24/5 - -( )- - File #6 FANCNTRL -  6
                   File #20 FANCNTRL -  8
N20:24/6 - -| |- - File #6 FANCNTRL -  4
                   File #20 FANCNTRL -  6
N20:24/7 - -| |- - File #6 FANCNTRL -  5
                   File #20 FANCNTRL -  7
N20:24/9 - -| |- - File #6 FANCNTRL -  6
                   File #20 FANCNTRL -  8
FILE N20:24 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:24 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:24 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:24 LEN:30 - FFL - File #18 FIFOBUFFER -  1

                                                    GLYCOL PUMP
                                                    120 VAC OUT
 3                                                  MVM
                                                    Masked Move
                                                    Source    N20:25
                                                              2
                                                    Mask      003Fh
                                                    Dest      O:8.0
                                                              2
                                                                                N20:25 - MVM - File #4 INPUTDATE
                                                                                        12
                                                                                       File #17 COPY_OUE
                                                                                        3
                                                                                N20:25/0 - -( )- - File #10 GLYE
                                                                                                0
                                                                                     -| |- - File #10 GLYE
                                                                                                1
                                                                                N20:25/1 - -( )- - File #8 SYSSE
N20:25/1 - -( )- - File #8 SYSSTAT -  2
N20:25/2 - -(L)- - File #19 SEALPOTEMP -  0
          -(U)- - File #19 SEALPOTEMP -  1
N20:25/3 - -( )- - File #8 SYSSTAT -  1
N20:25/4 - -( )- - File #8 SYSSTAT -  0
N20:25/5 - -(L)- - File #6 FANCNTRL -  13
                   File #20 FANCNTRL -  16
          -(U)- - File #3 STARTUP -  7
N20:25/6 - -| |- - File #10 GLYCOLPMP -  0
          -|/|- - File #5 INTRLKS -  32
N20:25/7 - -(L)- - File #9 SIMULATE -  0
          -(U)- - File #9 SIMULATE -  1
          -| |- - File #5 INTRLKS -  3, 7, 14, 16, 17, 19, 21, 22, 24, 52, 53, 58, 62, 66
                   File #6 FANCNTRL -  0
                   File #8 SYSSTAT -  1
                   File #14 COUNTER -  3
```

```
|                File #16 INTLK -  0, 6, 22, 24
|                File #20 FANCNTRL -  0
|          -|/|- - File #5 INTRLKS -  15, 20, 25, 55, 57
|                File #6 FANCNTRL -  1, 12
|                File #8 SYSSTAT -  2
|                File #16 INTLK -  23
|                File #20 FANCNTRL -  1, 15
|N20:25/9 - -| |- - File #16 INTLK -  12, 37
|          -|/|- - File #5 INTRLKS -  43
|N20:25/10 - -| |- - File #16 INTLK -  12, 38
|           -|/|- - File #5 INTRLKS -  44
|FILE N20:25 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:25 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:25 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:25 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|
|                                                  EXHAUSTER
|                                                  RUNNING STATUS
|                                                  ┌─MVM──────────┐
4├──────────────────────────────────────────────────┤Masked Move   ├─┤N20:26 - MVM - File #4 INPUTDATE
|                                                  |Source    N20:26|              13
|                                                  |              0|              File #16 INTLK -
|                                                  |Mask      003Fh|              22, 23
|                                                  |               |              File #17 COPY_OUE
|                                                  |Dest      O:9.0|              4
|                                                  |              0|N20:26/1 - -( )- - File #10 GLYE
|                                                  └───────────────┘                1
|                                                                  |N20:26/4 - -( )- - File #16 INTE
|N20:26/4 - -( )- - File #16 INTLK -  37
|N20:26/5 - -( )- - File #16 INTLK -  38
|N20:26/6 - -|/|- - File #16 INTLK -  12
|N20:26/7 - -|/|- - File #16 INTLK -  12
|N20:26/8 - -| |- - File #16 INTLK -  16
|N20:26/10 - -| |- - File #16 INTLK -  19
|N20:26/11 - -| |- - File #16 INTLK -  19
|FILE N20:26 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:26 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|                                                  CAM BEACON?
|                                                  ┌─MVM──────────┐
5├──────────────────────────────────────────────────┤Masked Move   ├─┤N20:27 - MVM - File #4 INPUTDATE
|                                                  |Source    N20:27|              14
|                                                  |              0|              File #17 COPY_OUE
|                                                  |Mask      003Fh|              5
|                                                  |               |N20:27/0 - -( )- - File #16 INTE
|                                                  |Dest      O:10.0|                12
|                                                  |              0|FILE N20:27 LEN:100 -
|                                                  └───────────────┘      FFL - File #13 FIFO -  10
|                                                                  |FILE N20:27 LEN:30 -        ...
|N20:27 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:27 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:27 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|                                                  ┌─RET──────────┐
6├──────────────────────────────────────────────────┤Return        ├─┤
|                                                  └───────────────┘
7├──────────────────────────────────────────────────────────────[END]─┤
```

```
 |THIS SUB RUNS ONLY WHEN THE FAN IS ON (B3/34)
 |                                                  |
 |                                  FIFO LOAD TIMER |
 |                                  ┌─TON──────────┐ |T4:37 - TON - File #18 FIFOBUFFE
0|──────────────────────────────────┤Timer On Delay ├─(EN)─┤          0
 |                                  |Timer      T4:37 ├─(DN)  |     RES - File #18 FIFOBUFFE
 |                                  |Time Base   0.01 |     |          1
 |                                  |Preset       100 |     |T4:37.DN - ─┤ ├─ - File #18 FIFE
 |                                  |Accum         80 |     |                1
 |                                  └──────────────┘     |
```

```
FIFO LOAD TIMER
      T4:37
1 ──┤ ├──────────────────────────────────────────────────────────────────
     DN
[1]

                                                   FILTER 1 DP ROC
                                                   FIFO CONTROL
                                                   ┌─FFL──────────┐
                                                   │FIFO Load     ├─(EN)─┤
                                                   │Source    N20:4 ├─(DN)  │
                                                   │FIFO    #N35:0 ├─(EM)  │
                                                   │Control   R6:35 │
                                                   │Length      30 │
                                                   │Position    29 │
                                                   └──────────────┘

                                                   FILTER 1 DP ROC
                                                   FIFO CONTROL
                                                   ┌─FFU──────────┐
                                                   │FIFO Unload   ├─(EU)─┤
                                                   │FIFO    #N35:0 ├─(DN)  │
                                                   │Dest     N14:36 ├─(EM)  │
                                                   │Control   R6:35 │
                                                   │Length      30 │
                                                   │Position    29 │
                                                   └──────────────┘

                                                   FILTER 2 DP ROC
                                                   FIFO CONTROL
                                                   ┌─FFL──────────┐
                                                   │FIFO Load     ├─(EN)─┤
                                                   │Source    N20:5 ├─(DN)  │
                                                   │FIFO   #N35:40 ├─(EM)  │
                                                   │Control   R6:36 │
                                                   │Length      30 │
                                                   │Position    29 │
                                                   └──────────────┘

                                                   FILTER 2 DP ROC
                                                   FIFO CONTROL
                                                   ┌─FFU──────────┐
                                                   │FIFO Unload   ├─(EU)─┤
                                                   │FIFO   #N35:40 ├─(DN)  │
                                                   │Dest     N14:37 ├─(EM)  │
                                                   │Control   R6:36 │
                                                   │Length      30 │
                                                   │Position    29 │
                                                   └──────────────┘

                                                   FILTER 1&2 DP
                                                   ROC FIFO CTRL
                                                   ┌─FFL──────────┐
                                                   │FIFO Load     ├─(EN)─┤
                                                   │Source    N20:6 ├─(DN)  │
                                                   │FIFO   #N35:80 ├─(EM)  │
                                                   │Control   R6:37 │
                                                   │Length      30 │
                                                   │Position    29 │
                                                   └──────────────┘

                                                   FILTER 1&2 DP
                                                   ROC FIFO CTRL
                                                   ┌─FFU──────────┐
                                                   │FIFO Unload   ├─(EU)─┤
                                                   │FIFO   #N35:80 ├─(DN)  │
                                                   │Dest     N14:38 ├─(EM)  │
                                                   │Control   R6:37 │
                                                   │Length      30 │
                                                   │Position    29 │
                                                   └──────────────┘

                                                   FIFO LOAD TIMER
                                                         T4:37
                                                   └──────[RES]──────────┘

FFL - File #13 FIFO -  10
FILE N20:5 LEN:4 - COP - File #4 INPUTDATA -  1
                    1
FILE N14:37 LEN:7 - FLL - File #2 MAIN -  20
                          File #3 STARTUP -  5

R6:35 - FFL - File #18 FIFOBUFFE
                    1
        FFU - File #18 FIFOBUFFE
N20:4 - COP - File #4 INPUTDATAE
                    1
        SUB - File #18 FIFOBUFFE
N35:0 - FLL - File #2 MAIN -  20
              File #3 STARTUP -
              5
        FFL - File #18 FIFOBUFFE
                    1                ...
N14:36 - FLL - File #2 MAIN -
                    20
              File #3 STARTUP E
              5
        SUB - File #18 FIFOBUFFE
                    2
        FFU - File #18 FIFOBUFFE
                    1
FILE N14:36 LEN:7 -
     FLL - File #2 MAIN -  20
           File #3 STARTUP -  5
R6:36 - FFL - File #18 FIFOBUFFE
                    1
        FFU - File #18 FIFOBUFFE
N20:5 - SUB - File #18 FIFOBUFFE
                    2
        GEQ - File #5 INTRLKS -
N35:40 - FFL - File #18 FIFOBUFE
                    1
        FFU - File #18 FIFOBUFE
                    1
FILE N35:40 LEN:110 -            ...
N14:37 - SUB - File #18 FIFOBUFE
                    2
        FFU - File #18 FIFOBUFE
                    1
FILE N14:37 LEN:7 -
     FLL - File #2 MAIN -  20
           File #3 STARTUP -  5

R6:37 - FFL - File #18 FIFOBUFFE
                    1
        FFU - File #18 FIFOBUFFE
N20:6 - SUB - File #18 FIFOBUFFE
                    2
        GEQ - File #5 INTRLKS -
N35:80 - FFL - File #18 FIFOBUFE
                    1
        FFU - File #18 FIFOBUFE
                    1
FILE N35:80 LEN:110 -            ...
N14:38 - SUB - File #18 FIFOBUFFE
                    2
        FFU - File #18 FIFOBUFFE
                    1
FILE N14:38 LEN:7 -
     FLL - File #2 MAIN -  20
           File #3 STARTUP -  5

T4:37 - TON - File #18 FIFOBUFFE
                    0            ...
```

```
 |         1
 |FILE R6:37 LEN:128 - FFU - File #13 FIFO -  5
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  7
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  9
 |FILE R6:37 LEN:100 - FFU - File #13 FIFO -  11
 |FILE R6:37 LEN:128 - FFU - File #13 FIFO -  13
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  15
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  17
 |FILE R6:37 LEN:100 - FFU - File #13 FIFO -  19
 |FILE R6:37 LEN:128 - FFU - File #13 FIFO -  21
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  23
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  25
 |FILE R6:37 LEN:100 - FFU - File #13 FIFO -  27
 |FILE R6:37 LEN:128 - FFU - File #13 FIFO -  29
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  31
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  33
 |FILE R6:37 LEN:100 - FFU - File #13 FIFO -  35
 |FILE R6:37 LEN:128 - FFU - File #13 FIFO -  37
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  39
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  41
 |FILE R6:37 LEN:100 - FFU - File #13 FIFO -  43
 |FILE R6:37 LEN:128 - FFU - File #13 FIFO -  45
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  47
 |FILE R6:37 LEN:127 - FFU - File #13 FIFO -  49
 |FILE R6:37 LEN:100 - FFU - File #13 FIFO -  51
 |FILE R6:37 LEN:30 - FFU - File #18 FIFOBUFFER -  1
 |FILE R6:37 LEN:30 - FFU - File #18 FIFOBUFFER -  1
 |FILE R6:37 LEN:30 - FFU - File #18 FIFOBUFFER -  1
 |                                                      +-SUB--------------+   |N14:40 - SUB - File #18 FIFOBUFE
2|------------------------------------------------------+-|Subtract          |-+-|          2
 |                                                      | |Source A   N14:36| | |       GEQ - File #5 INTRLKS E
 |                                                      | |                0| | |N14:36 - FLL - File #2 MAIN -
 |                                                      | |Source B    N20:4| | |          20
 |                                                      | |             3267| | |         File #3 STARTUP E
 |                                                      | |Dest       N14:40| | |N20:4 - COP - File #4 INPUTDATAE
 |                                                      | |                0| | |          1
 |                                                      | +-----------------+ | |      SUB - File #18 FIFOBUFFE
 |                                                      |                     | |          2               ...
 |                                                      | +-SUB-------------+ | |N14:41 - SUB - File #18 FIFOBUFE
 |                                                      +-|Subtract         |-+ |          2
 |                                                      | |Source A   N14:37| | |       GEQ - File #5 INTRLKS E
 |                                                      | |                0| | |N14:37 - SUB - File #18 FIFOBUFE
 |                                                      | |Source B    N20:5| | |          2
 |                                                      | |             3291| | |       FFU - File #18 FIFOBUFE
 |                                                      | |Dest       N14:41| | |N20:5 - SUB - File #18 FIFOBUFFE
 |                                                      | |                0| | |          2
 |                                                      | +-----------------+ | |      GEQ - File #5 INTRLKS -
 |                                                      |                     | |          21, 22        ...
 |                                                      | +-SUB-------------+ | |FILE N14:42 LEN:7 -
 |                                                      +-|Subtract         |-+ |   FLL - File #2 MAIN -  20
 |                                                        |Source A   N14:38|   |        File #3 STARTUP -  5
 |                                                        |                0|   |N14:38 - SUB - File #18 FIFOBUFE
 |                                                        |Source B    N20:6|   |          2
 |                                                        |             3255|   |       FFU - File #18 FIFOBUFE
 |                                                        |Dest       N14:42|   |N20:6 - SUB - File #18 FIFOBUFFE
 |                                                        |                0|   |          2
 |                                                        +-----------------+   |      GEQ - File #5 INTRLKS -
 |N14:40 - GEQ - File #5 INTRLKS -  52                                          |
 |FILE N14:40 LEN:7 - FLL - File #2 MAIN -  20                                  |
 |                          File #3 STARTUP -  5                                |
 |N14:36 - FLL - File #3 STARTUP -  5                                           |
 |         SUB - File #18 FIFOBUFFER -  2                                       |
 |         FFU - File #18 FIFOBUFFER -  1                                       |
 |FILE N14:36 LEN:7 - FLL - File #2 MAIN -  20                                  |
 |                          File #3 STARTUP -  5                                |
 |N20:4 - GEQ - File #5 INTRLKS -  16, 17                                       |
 |        LEQ - File #5 INTRLKS -  14, 18                                       |
 |        FFL - File #18 FIFOBUFFER -  1                                        |
 |FILE N20:4 LEN:100 - FFL - File #13 FIFO -  10                                |
 |FILE N20:4 LEN:30 - FFL - File #18 FIFOBUFFER -  1                            |
 |FILE N20:4 LEN:4 - COP - File #4 INPUTDATA -  1                               |
```

```
|N14:41 - GEQ - File #5 INTRLKS -  53
|FILE N14:41 LEN:7 - FLL - File #2 MAIN -  20
|                         File #3 STARTUP -  5
|N14:37 - FFU - File #18 FIFOBUFFER -  1
|FILE N14:37 LEN:7 - FLL - File #2 MAIN -  20
|                         File #3 STARTUP -  5
|N20:5 - LEQ - File #5 INTRLKS -  19, 23
|       FFL - File #18 FIFOBUFFER -  1
|FILE N20:5 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:5 LEN:4 - COP - File #4 INPUTDATA -  1
|FILE N20:5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|N14:38 - FFU - File #18 FIFOBUFFER -  1
|FILE N14:38 LEN:7 - FLL - File #2 MAIN -  20
|                         File #3 STARTUP -  5
|N20:6 - GEQ - File #5 INTRLKS -  26
|       LEQ - File #5 INTRLKS -  24
|       FFL - File #18 FIFOBUFFER -  1
|FILE N20:6 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:6 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:6 LEN:4 - COP - File #4 INPUTDATA -  1
|FILE N20:6 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:6 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|                                                                  ┌─RET─────┐
3|──────────────────────────────────────────────────────────────────┤Return   ├─┤
|                                                                  └─────────┘
4|──────────────────────────────────────────────────────────────────────────────[END]─┤
```

```
|SEAL POT PUMP      SEAL POT LEVEL                                  SEAL POT PUMP |
|CONTROL            PUMP ON AT 70%                                  RELAY         |
|                   LT185                                                         |
|┌─SBR──────────┐┌─GRT──────────────┐                                N20:25     |N20:25/2 - -(L)- - File #19 SEAE
0├─Subroutine   ├─Greater Than (A>B) ├──────────────────────────────────(L)──────┤                 0
|└──────────────┘|Source A    N20:11|                                  2        |          -(U)- - File #19 SEAE
|                |             10688|                                           |                 1
|                |Source B     12551|                                           |          MVM - File #4 INPUTDE
|                |                  |                                           |                12
|                └──────────────────┘                                           |              File #17 COPY_E
|                                                                               |                3          ...
|                N20:11 - [13:10]                                               |
|N20:25/2 - FFL - File #13 FIFO -  10                                           |
|FILE N20:25/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1                          |
|FILE N20:25/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1                          |
|FILE N20:25/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1                          |
|SEAL POT LEVEL                                                   SEAL POT PUMP |
|PUMP ON AT 70%                                                   RELAY         |
|LT185                                                                          |
|┌─LES──────────┐                                                N20:25     |N20:25/2 - -(L)- - File #19 SEAE
1├─Less Than (A<B) ├──────────────────────────────────────────────(U)──────┤                 0
||Source A  N20:11|                                                  2        |          -(U)- - File #19 SEAE
||            10688|                                                           |                 1
||Source B    8700|                                                           |          MVM - File #4 INPUTDE
||                |                                                           |                12
|└──────────────┘                                                           |              File #17 COPY_E
|N20:11 - [13:10]                                                               |                3          ...
|N20:25/2 - FFL - File #13 FIFO -  10                                           |
|FILE N20:25/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1                          |
|FILE N20:25/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1                          |
|FILE N20:25/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1                          |
|                                                                               |
|                                                                 ┌─RET──────────┐
2├──────────────────────────────────────────────────────────────────┤Return      ├─┤
|                                                                 └──────────────┘
3├──────────────────────────────────────────────────────────────────────────[END]─┤
```

```
 |EXHAUST FAN
 |CIRL ON SUCTION    MOTOR
 |PRESSURE           CONTACT                                          FAN AUTO/MAN
 |┌─SBR──────────┐   N20:25   B3                                        N20:41                          |N20:41/6 - -(L)- - File #6 FANCE
0|Subroutine     ├──┤ ├──[OSR]──────────────────────────────────────────(L)──────────────────────────────|                    0
 |└──────────────┘    7     117                                          6                                |                File #20 FANE
 |                   [9:0]                                                                                |                    0
 |                                                                                                        |          -(U)- - File #6 FANCE
 |                                                                       PUMP COUNT BIT                   |                    1, 4     ...
 |                                                                          N20:42                        |N20:42/9 - -(L)- - File #16 INTE
 |                                                                       ├──(U)──────────┤               |                   20
 |                                                                          9                             |          -(U)- - File #6 FANCE
 |                                                                                                        |                    0, 1     ...
 |                                                                       N20:42    N20:42                 |N20:42/4 - -(L)- - File #6 FANCE
 |                                                                       └─┤ ├──┬──(L)──┬               |                    0
 |                                                                          0     │   4   │               |                File #20 FANE
 |                                                                        [13:10]  │       │               |                    0
 |                                                                                 │       │               |          -(U)- - File #6 FANCE
 |                                                                                 │N20:42 │               |N20:42/5 - -(L)- - File #6 FANCE
 |                                                                                 └──(L)──┘               |                    0
 |                                                                                    5                    |                File #20 FANE
 |
 |N20:41/6 - -(U)- - File #20 FANCNTRL -  1, 6
 |          ─┤ ├─ - File #6 FANCNTRL -  16
 |                File #20 FANCNTRL -  26
 |          ─┤/├─ - File #6 FANCNTRL -  17
 |                File #20 FANCNTRL -  27
 |          MVM - File #7 MESGVIEW -  1
 |FILE N20:41/6 LEN:100 - FFL - File #13 FIFO -  10
 |N20:42/9 - -(U)- - File #16 INTLK -  21
 |                File #20 FANCNTRL -  0, 1
 |          ─┤/├─ - File #16 INTLK -  20
 |FILE N20:42/9 LEN:100 - FFL - File #13 FIFO -  10
 |N20:42/4 - -(U)- - File #6 FANCNTRL -  1
 |                File #20 FANCNTRL -  1
 |          ─┤ ├─ - File #16 INTLK -  31
 |          ─┤/├─ - File #16 INTLK -  32
 |FILE N20:42/4 LEN:100 - FFL - File #13 FIFO -  10
 |N20:42/5 - -(L)- - File #20 FANCNTRL -  0
 |          ─(U)─ - File #6 FANCNTRL -  1
 |                File #20 FANCNTRL -  1
 |          ─┤ ├─ - File #16 INTLK -  34
 |          ─┤/├─ - File #16 INTLK -  35
 |FILE N20:42/5 LEN:100 - FFL - File #13 FIFO -  10
 |MOTOR
 |CONTACT                                                           FAN AUTO/MAN
 | N20:25   B3                                                          N20:41                          |N20:41/6 - -(L)- - File #6 FANCE
1├──┤/├──[OSR]──────────────────────────────────────────────────────────(U)──────────────────────────────|                    0
 |   7     118                                                          6                                |                File #20 FANE
 |[9:0]                                                                                                   |                    0
 |                                                                                                        |          -(U)- - File #6 FANCE
 |                                                                       PUMP COUNT BIT                   |                    1, 4     ...
 |                                                                          N20:42                        |N20:42/9 - -(L)- - File #16 INTE
 |                                                                       ├──(U)──────────┤               |                   20
 |                                                                          9                             |          -(U)- - File #6 FANCE
 |                                                                                                        |                    0, 1     ...
 |                                                                       N20:42                           |N20:42/4 - -(L)- - File #6 FANCE
 |                                                                       ├─(U)───────────┤               |                    0
 |                                                                          4                             |                File #20 FANE
 |                                                                                                        |                    0        ...
 |                                                                       N20:42                           |N20:42/5 - -(L)- - File #6 FANCE
 |                                                                       └─(U)───────────┘               |                    0
 |                                                                          5                             |                File #20 FANE
 |
 |N20:41/6 - -(U)- - File #20 FANCNTRL -  1, 6
 |          ─┤ ├─ - File #6 FANCNTRL -  16
 |                File #20 FANCNTRL -  26
 |          ─┤/├─ - File #6 FANCNTRL -  17
 |                File #20 FANCNTRL -  27
 |          MVM - File #7 MESGVIEW -  1
 |FILE N20:41/6 LEN:100 - FFL - File #13 FIFO -  10
 |N20:42/9 - -(U)- - File #16 INTLK -  21
 |                File #20 FANCNTRL -  0, 1
 |          ─┤/├─ - File #16 INTLK -  20
 |FILE N20:42/9 LEN:100 - FFL - File #13 FIFO -  10
```

```
   |N20:42/4 - -(U)- - File #6 FANCNTRL -  1                                                        |
   |                   File #20 FANCNTRL -  1                                                       |
   |          -| |- - File #16 INTLK -  31                                                          |
   |          -|/|- - File #16 INTLK -  32                                                          |
   |FILE N20:42/4 LEN:100 - FFL - File #13 FIFO -  10                                               |
   |N20:42/5 - -(L)- - File #20 FANCNTRL -  0                                                       |
   |          -(U)- - File #6 FANCNTRL -  1                                                         |
   |                   File #20 FANCNTRL -  1                                                       |
   |          -| |- - File #16 INTLK -  34                                                          |
   |          -|/|- - File #16 INTLK -  35                                                          |
   |FILE N20:42/5 LEN:100 - FFL - File #13 FIFO -  10                                               |
   |FAN INTLKS                                                                                      |
   |  N20:41                                         +--TON-----------+      |T4:1 - TON - File #6 FANCNTRL -
  2|----|/|------------------------------------------+Timer On Delay  +-(EN)-|          2
   |     1                                           |Timer      T4:1 +-(DN) |        File #20 FANCNTRL E
   |[5:121]                                          |Time Base   1.0 |      |          2
   |                                                 |Preset        2 |      |T4:1.TT - -|/|- - File #6 FANCNE
   |                                                 |Accum         0 |      |          4
   |                                                 +----------------+      |            File #20 FANCE
   |T4:1.TT - -|/|- - File #20 FANCNTRL -  6                                                        |
   |                                                    STACK FLOW LOW                              |
   |                                                    SETPOINT                                    |
   |                                                   +--COP----------+     |N19:4 - COP - File #6 FANCNTRL E
  3|---------------------------------------------------+Copy File      +-----|          3
   |                                                   |Source #N36:26 |     |        File #20 FANCNTRLE
   |                                                   |Dest    #N19:4 |     |          3
   |                                                   |Length       2 |     |     LEQ - File #5 INTRLKS -
   |                                                   +---------------+     |          7            ...
   |N19:4 - COP - File #6 FANCNTRL -  3                                                             |
   |               File #20 FANCNTRL -  3                                                           |
   |HI VACUUM MODE                                                                                  |
   |(SEAL POT PLUG)                                     INLET VACUUM                                |
   |SELECTED                                            LOW                                         |
   |     B3                                            +--COP----------+     |N19:25 - COP - File #20 FANCNTRE
  4|----|/|--------------------------------------------+Copy File      +-----|          4, 5
   |     1                                             |Source #N36:28 |     |     LEQ - File #5 INTRLKS E
   |                                                   |Dest   #N19:25 |     |          3
   |                                                   |Length       2 |     |FILE N19:25 LEN:2 -
   |                                                   +---------------+     |     COP - File #20 FANCNTRL - .
   |N19:25 - COP - File #20 FANCNTRL -  4, 5                                                        |
   |IF SEAL POT PLUG MODE IS SELECTED, COPY DIFFERENT INTERLOCK SETPOINTS                           |
   |HI VACUUM MODE                                                                                  |
   |(SEAL POT PLUG)                                     INLET VACUUM                                |
   |SELECTED                                            LOW                                         |
   |     B3                                            +--COP----------+     |N19:25 - COP - File #20 FANCNTRE
  5|----| |--------------------------------------------+Copy File      +-----|          4, 5
   |     1                                             |Source #N36:38 |     |     LEQ - File #5 INTRLKS E
   |                                                   |Dest   #N19:25 |     |          3
   |                                                   |Length       2 |     |FILE N19:25 LEN:2 -
   |                                                   +---------------+     |     COP - File #20 FANCNTRL - .
   |N19:25 - COP - File #20 FANCNTRL -  4, 5                                                        |
   |120 VAC STOP      WW STOP                      5 VDC STOP                                       |
   |  N20:24     T4:1  N20:41                        N20:24                  |N20:24/3 - -( )- - File #6 FANCE
  6|----| |-------|/|----|/|-----------------------+----( )-----------------+-|          4
   |      6        TT    3                         |     3                   | |        File #20 FANE
   |[4:11]        [2]  [9:0]                       |                         | |          6
   |                                               |                         | |     -(L)- - File #11 ERRE
   |                                               |       FAN AUTO/MAN      | |          3          ...
   |                                               | B3         N20:41       | |N20:41/6 - -(L)- - File #6 FANCE
   |                                               +-[OSR]-------(U)---------+ |          0
   |                                               | 145          6          | |        File #20 FANE
   |                                               |                         | |          0
   |                                               |       FAN               | |     -(U)- - File #6 FANCE
   |                                               |       ENABLED           | |          1, 4       ...
   |                                               | B3         B3           | |B3/34 - -(L)- - File #2 MAIN -
   |                                               +-[OSR]------(U)----------+ |          18
   |                                                 77         34             |     -(U)- - File #6 FANCNTRE
   |N20:24 - MVM - File #4 INPUTDATA -  11                                                          |
   |                File #17 COPY_OUT -  2                                                          |
   |FILE N20:24/3 LEN:100 - FFL - File #13 FIFO -  10                                               |
   |FILE N20:24/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                           |
   |FILE N20:24/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                           |
   |FILE N20:24/3 LEN:30 - FFL - File #18 FIFOBUFFER -  1                                           |
```

```
|N20:41/6 - -(U)- - File #20 FANCNTRL -  1, 6
|          -| |- - File #6 FANCNTRL -  16
|                File #20 FANCNTRL -  26
|          -|/|- - File #6 FANCNTRL -  17
|                File #20 FANCNTRL -  27
|         MVM - File #7 MESGVIEW -  1
|FILE N20:41/6 LEN:100 - FFL - File #13 FIFO -  10
|B3/34 - -(U)- - File #6 FANCNTRL -  4
|                File #20 FANCNTRL -  6
|       -| |- - File #2 MAIN -  19
|                File #5 INTRLKS -  1, 58
|       -|/|- - File #2 MAIN -  20
|       MVM - File #3 STARTUP -  11
|
|                                                                  5 VDC
|                                                                  FAN
|  START PBUTTON    FAN INTLKS                                     START
|      N20:24          N20:41                                      N20:24 |N20:24/2 - -( )- - File #6 FANCE
7|-------| |---------| |-------------------------------------------( )-|                  5
|  |       7         |  1                                            2  |                File #20 FANE
|  |[4:11]           |[5:121]                                           |                  7
|  |                 |                                                  |          -| |- - File #2 MAINE
|  |WW START         |                                                  |                 18
|  | N20:41          |                                                  |         MVM - File #4 INPUTDE
|  |-----| |---------|                                                  |                 11
|     2                                                                |              File #17 COPY_E
|  [7:1]                                                               |                2          ...
|N20:24/2 - FFL - File #13 FIFO -  10
|FILE N20:24/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:24/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:24/2 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|N20:24
|                                                                  N20:24 |N20:24/5 - -( )- - File #6 FANCE
8|-| |-------------------------------------------------------------( )-|                  6
|  9                                                                5  |                File #20 FANE
|[4:11]                                                                |                  8          ...
|N20:24 - MVM - File #4 INPUTDATA -  11
|                File #17 COPY_OUT -  2
|FILE N20:24/5 LEN:100 - FFL - File #13 FIFO -  10
|FILE N20:24/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:24/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:24/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
```

```
COPY PID SETTINGS FROM FILE

                                                                    PROPORTIONAL
                                                                    GAIN
    B3                                                              ┌─COP──────────┐
 9 ├─{OSR}──────────────────────────────────────────────────────────┤Copy File     ├─┤
    129                                                             │Source  #N36:23│ │
                                                                    │Dest    #N10:3 │ │
                                                                    │Length       3 │ │
                                                                    └──────────────┘ │
                                                                    FAN CTRL PID
                                                                    BIT SETTINGS
                                                                    ┌─COP──────────┐
                                                                    ├Copy File     ├─┤
                                                                    │Source  #N36:20│ │
                                                                    │Dest    #N10:0 │ │
                                                                    │Length       1 │ │
                                                                    └──────────────┘ │
                                                                    FAN PID
                                                                    DEADBAND
                                                                    ┌─COP──────────┐
                                                                    ├Copy File     ├─┤
                                                                    │Source  #N36:21│ │
                                                                    │Dest    #N10:9 │ │
                                                                    │Length       1 │ │
                                                                    └──────────────┘ │
                                                                    FAN PID CALC
                                                                    INTERVAL /100s
                                                                    ┌─COP──────────┐
                                                                    └Copy File     ┘─┤
                                                                     Source  #N36:22 │
                                                                     Dest    #N10:13 │
                                                                     Length       1  │
                                                                     ───────────────┘

N10:3 - PID - File #6 FANCNTRL -  10
              File #20 FANCNTRL -  12
FILE N10:3 LEN:3 - COP - File #6 FANCNTRL -  7, 18
                         File #20 FANCNTRL -  9
N10:0 - PID - File #6 FANCNTRL -  10
              File #20 FANCNTRL -  12
N10:0/1 - -( )- - File #6 FANCNTRL -  17
                File #20 FANCNTRL -  27
FILE N10:0 LEN:1 - COP - File #6 FANCNTRL -  7
                         File #20 FANCNTRL -  9
FILE N10:0 LEN:23 - PID - File #6 FANCNTRL -  10
                          File #20 FANCNTRL -  12
N10:9 - PID - File #6 FANCNTRL -  10
              File #20 FANCNTRL -  12
FILE N10:9 LEN:1 - COP - File #6 FANCNTRL -  7
                         File #20 FANCNTRL -  9
N10:13 - PID - File #6 FANCNTRL -  10
               File #20 FANCNTRL -  12
FILE N10:13 LEN:1 - COP - File #6 FANCNTRL -  7
                          File #20 FANCNTRL -  9

                                                                    FAN PID PV
10 ├─────────────────────────────────────────────────────────────── ┌─SCL──────────┐
                                                                    ├Scale         ├─┤
                                                                    │Source     N20:0│
                                                                    │             3275│
                                                                    │Rate [/10000] 12499│
                                                                    │                 │
                                                                    │Offset      -4096│
                                                                    │                 │
                                                                    │Dest       N10:28│
                                                                    │            -1   │
                                                                    └──────────────┘

N10:28 - PID - File #6 FANCNTRL -  10
               File #20 FANCNTRL -  12
N20:0 - SCL - File #20 FANCNTRL -  10
FILE N20:0 LEN:4 - COP - File #4 INPUTDATA -  0

N10:3 - COP - File #6 FANCNTRL E
              7, 18
              File #20 FANCNTRLE
              9                ...
N10:0 - COP - File #6 FANCNTRL E
              7
              File #20 FANCNTRLE
              9                ...
N10:9 - COP - File #6 FANCNTRL E
              7
              File #20 FANCNTRLE
              9                ...
N10:13 - COP - File #6 FANCNTRLE
               7
               File #20 FANCNTRE
               9
FILE N10:13 LEN:23 -
     PID - File #6 FANCNTRL - ..

N10:28 - SCL - File #6 FANCNTRLE
               8
               File #20 FANCNTRE
               10
        PID - File #6 FANCNTRLE
N20:0 - COP - File #4 INPUTDATAE
              0
       GEQ - File #5 INTRLKS -
              58, 62
       LEQ - File #5 INTRLKS -
              2, 3, 61, 65  ...
```

```
                                                                                  PID SETPOINT
                                                                                  (RAW UNITS, IN
                                                                                  CONTROL BLOCK)
                                                                                  ┌─MUL──────────┐
11 ──────────────────────────────────────────────────────────────────────────────┤Multiply      ├─┤N10:2 - MUL - File #6 FANCNTRL E
                                                                                  │Source A    F8:7│          9
                                                                                  │            12.0│          File #20 FANCNTRLE
                                                                                  │Source B   819.2│          11
                                                                                  │                │FILE N10:2 LEN:23 -
                                                                                  │                │     PID - File #6 FANCNTRL -
                                                                                  │Dest       N10:2│          10
                                                                                  │            9830│          File #20 FANCNTRL -
                                                                                  └────────────────┘          12
   HI VACUUM MODE
   (SEAL POT PLUG)
   SELECTED                                                                       FAN CTRL PID
         B3                                                                       BIT SETTINGS
12 ──────┤/├──────────────────────────────────────────────────────────────────────┌─PID──────────────┐
         1                                                                        │PID                ├─┤N10:0 - COP - File #6 FANCNTRL E
                                                                                  │Control Block     N10:0│          7          ...
                                                                                  │Process Variable  N10:28│N10:28 - SCL - File #6 FANCNTRLE
                                                                                  │Control Variable  N10:29│          8          ...
                                                                                  │Control Block Length  23│N10:29 - MOV - File #20 FANCNTRE
                                                                                  └────────────────────┘          13
                                                                                                          COP - File #6 FANCNTRLE
   N10:0 - COP - File #20 FANCNTRL -  9
           PID - File #6 FANCNTRL -  10
                File #20 FANCNTRL -  12
   N10:0/1 - -( )- - File #6 FANCNTRL -  17
                     File #20 FANCNTRL -  27
   FILE N10:0 LEN:1 - COP - File #6 FANCNTRL -  7
                           File #20 FANCNTRL -  9
   FILE N10:0 LEN:23 - PID - File #6 FANCNTRL -  10
                           File #20 FANCNTRL -  12
   N10:28 - SCL - File #20 FANCNTRL -  10
            PID - File #6 FANCNTRL -  10
                 File #20 FANCNTRL -  12
   N10:29 - COP - File #6 FANCNTRL -  16, 17
                 File #20 FANCNTRL -  26, 27
            SCL - File #6 FANCNTRL -  11
                 File #20 FANCNTRL -  14
            PID - File #6 FANCNTRL -  10
                 File #20 FANCNTRL -  12
   FILE N10:29 LEN:1 - COP - File #6 FANCNTRL -  16, 17
                           File #20 FANCNTRL -  26, 27

                         Auto/Manual......: MANUAL          Time Mode................: 0 TM
                         Mode.............: STI              Auto/Manual..............: 1 AM
                         Control..........: E=SP-PV         Control Mode.............: 0 CM
                         Setpoint (SP)....:   9830          Output Limiting Enable...: 1 OL
                         Process (PV).....:      0          Reset and Gain Range.....: 0 RG
                         Scaled Error.....:   9830          Scale Setpoint Flag......: 1 SC
                         Deadband.........:     50          Loop Update Time Too Fast: 0 TF
                         Output (CV)......:     92 %        Derivative (rate) Action.: 0 DA
                                                            Set when Error is in DB..: 0 DB
                         Loop Update......:    125 (.01 secs) Output Alarm, Upper Limit: 0 UL
                         Gain.............:     10 (/10)     Output Alarm, Lower Limit: 0 LL
                         Reset............:     50 (/10 m/r) Setpoint Out of Range....: 0 SP
                         Rate.............:     10 (/100 min) Process Var Out of Range.: 0 PV
                         Min Scaled.......:      0          PID Done.................: 0 DN
                         Max Scaled.......:      0
                         Output (CV) Limit: YES             PID Enabled..............: 0 EN
                         Output (CV) Min..:      0 %
                         Output (CV) Max..:    100 %

   HI VACUUM MODE
   (SEAL POT PLUG)                                                                  PID OUTPUT TO
   SELECTED                                                                       FAN VFD
         B3                                                                       ┌─MOV──────────┐
13 ──────┤ ├──────────────────────────────────────────────────────────────────────┤Move          ├─┤N10:29 - MOV - File #20 FANCNTRE
         1                                                                        │Source      16384│          13
                                                                                  │                │          COP - File #6 FANCNTRLE
                                                                                  │                │          16, 17
                                                                                  │Dest       N10:29│          File #20 FANCNTRE
                                                                                  │            16384│          26, 27
                                                                                  └────────────────┘          SCL - File #6 FANCNTRLE
```

```
N10:29 - SCL - File #6 FANCNTRL -  11
               File #20 FANCNTRL -  14
         PID - File #6 FANCNTRL -  10
               File #20 FANCNTRL -  12
FILE N10:29 LEN:1 - COP - File #6 FANCNTRL -  16, 17
                        File #20 FANCNTRL -  26, 27

                                                   VFD INPUT DATA
                                                   ┌─SCL──────────┐
14 ──────────────────────────────────────────────────┤Scale         ├─┤
                                                   │Source     N10:29│
                                                   │            16384│
                                                   │Rate [/10000] 15239│
                                                   │                 │
                                                   │Offset      6242│
                                                   │                 │
                                                   │Dest       N20:8│
                                                   │           31210│
                                                   └─────────────────┘
N20:8 - SCL - File #20 FANCNTRL -  14
FILE N20:8 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:8 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:8 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:8 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:8 LEN:2 - COP - File #17 COPY_OUT -  0
N10:29 - SCL - File #6 FANCNTRL -  11
               File #20 FANCNTRL -  14
         PID - File #6 FANCNTRL -  10
               File #20 FANCNTRL -  12
FILE N10:29 LEN:1 - COP - File #6 FANCNTRL -  16, 17
                        File #20 FANCNTRL -  26, 27
MOTOR
CONTACT                                            STACK PIC OUT
 N20:25   B3                                       ┌─CLR──────────┐
15 ──┤/├──[OSR]──────────────────────────────────────┤Clear         ├─┤
    7     147                                      │Dest       N36:43│
[9:0]                                              │             0│
                                                   │                 │
                                                   │RECORD SAMPLER   │
                                                   │PIC OUTPUT       │
                                                   │┌─CLR──────────┐│
                                                   ├┤Clear         ├─┤
                                                   │Dest       N36:48│
                                                   │             0│
                                                   │                 │
                                                   │CAM PIC OUTPUT   │
                                                   │┌─CLR──────────┐│
                                                   └┤Clear         ├─┘
                                                   │Dest       N36:53│
                                                   │             0│
                                                   └─────────────────┘
N20:41  B3                                                      N20:25
16 ──┤ ├──[OSR]──────────────────────────────────────────────────(L)──
    8    231                                                      5
[7:1]
N20:25/5 - —(U)— - File #3 STARTUP -  7
           MVM - File #4 INPUTDATA -  12
                 File #17 COPY_OUT -  3
FILE N20:25/5 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:25/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:25/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:25/5 LEN:30 - FFL - File #18 FIFOBUFFER -  1
                                                   CORRECTED
                                                   TEMPERATURE
                                                   VALUE
                                                   ┌─ADD──────────┐
17 ──────────────────────────────────────────────────┤Add           ├─┤
                                                   │Source A   N20:30│
                                                   │            101│
                                                   │Source B     460│
                                                   │                 │
                                                   │Dest       N14:0│
                                                   │            561│
                                                   └─────────────────┘
```

```
N20:8 - COP - File #17 COPY_OUTE
                0
      SCL - File #6 FANCNTRL E
               11
            File #20 FANCNTRLE
N10:29 - MOV - File #20 FANCNTRE
                13
        COP - File #6 FANCNTRLE
               16, 17
            File #20 FANCNTRE
               26, 27        ...

N20:25/5 - —(L)— - File #6 FANCE
                13
            File #20 FANE
               16        ...

N14:0 - ADD - File #6 FANCNTRL E
               14
            File #20 FANCNTRLE
               17            ...
N20:30 - ADD - File #6 FANCNTRLE
               14, 19
            File #20 FANCNTRE
               17, 28
FILE N20:30 LEN:100 -         ...
```

```
N14:0 - DIV - File #6 FANCNTRL -  14
              File #20 FANCNTRL -  21
N20:30 - FFL - File #13 FIFO -  10
FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:30 LEN:4 - COP - File #4 INPUTDATA -  10

                                                  STACK DP IN
                                                  ARBITRARY UNITS
                                                  ┌─SUB──────────┐
18 ──────────────────────────────────────────────┤Subtract      ├─┤N14:1 - SUB - File #6 FANCNTRL E
                                                  │Source A  N20:3│          14
                                                  │          3277│          File #20 FANCNTRLE
                                                  │Source B  3277│          18          ...
                                                  │              │N20:3 - MOV - File #5 INTRLKS -
                                                  │              │          39
                                                  │Dest     N14:1│      SUB - File #6 FANCNTRL E
                                                  │             0│          14
                                                  └──────────────┘          File #20 FANCNTRLE
N14:1 - DIV - File #6 FANCNTRL -  14
              File #20 FANCNTRL -  19
N20:3 - SUB - File #20 FANCNTRL -  18
        MUL - File #6 FANCNTRL -  21
              File #20 FANCNTRL -  30
        LEQ - File #5 INTRLKS -  13, 39
        FFL - File #13 FIFO -  10
FILE N20:3 LEN:4 - COP - File #4 INPUTDATA -  0
FILE N20:3 LEN:100 - FFL - File #13 FIFO -  10

                                                  SCALED DP VALUE
                                                  (IN W.C.)
                                                  ┌─DIV──────────┐
19 ──────────────────────────────────────────────┤Divide        ├─┤F8:0 - MUL - File #6 FANCNTRL -
                                                  │Source A  N14:1│          14
                                                  │             0│          File #20 FANCNTRL E
                                                  │Source B 3276.75│          20          ...
                                                  │              │N14:1 - SUB - File #6 FANCNTRL E
                                                  │              │          14
                                                  │Dest       F8:0│          File #20 FANCNTRLE
                                                  │            0.0│          18
                                                  └──────────────┘      DIV - File #6 FANCNTRL E
F8:0 - DIV - File #6 FANCNTRL -  14
             File #20 FANCNTRL -  19
N14:1 - DIV - File #6 FANCNTRL -  14
              File #20 FANCNTRL -  19

                                                  FLOW CALC
                                                  INTERMEDIATE
                                                  VALUE
                                                  ┌─MUL──────────┐
20 ──────────────────────────────────────────────┤Multiply      ├─┤F8:1 - MUL - File #6 FANCNTRL -
                                                  │Source A  F8:0│          14
                                                  │            0.0│          File #20 FANCNTRL E
                                                  │Source B 410.47│          20          ...
                                                  │              │F8:0 - MUL - File #6 FANCNTRL -
                                                  │              │          14
                                                  │Dest       F8:1│          File #20 FANCNTRL E
                                                  │            0.0│          20
                                                  └──────────────┘      DIV - File #6 FANCNTRL -
F8:1 - DIV - File #6 FANCNTRL -  14
             File #20 FANCNTRL -  21
F8:0 - DIV - File #6 FANCNTRL -  14
             File #20 FANCNTRL -  19

                                                  FLOW CALC
                                                  INTERMEDIATE
                                                  VALUE
                                                  ┌─DIV──────────┐
21 ──────────────────────────────────────────────┤Divide        ├─┤F8:2 - DIV - File #6 FANCNTRL -
                                                  │Source A  F8:1│          14
                                                  │            0.0│          File #20 FANCNTRL E
                                                  │Source B N14:0│F8:1 - MUL - File #6 FANCNTRL -
                                                  │           561│          14
                                                  │Dest       F8:2│          File #20 FANCNTRL E
                                                  │            0.0│N14:0 - ADD - File #6 FANCNTRL E
                                                  └──────────────┘          14
                                                                            File #20 FANCNTRLE
F8:2 - DIV - File #20 FANCNTRL -  21
       SQR - File #6 FANCNTRL -  14
             File #20 FANCNTRL -  22
```

```
F8:1 - MUL - File #20 FANCNTRL -  20
       DIV - File #6 FANCNTRL -  14
             File #20 FANCNTRL -  21
N14:0 - ADD - File #20 FANCNTRL -  17
        DIV - File #6 FANCNTRL -  14
              File #20 FANCNTRL -  21

                                                  FLOW CALC
                                                  INTERMEDIATE
                                                  VALUE
                                                  ┌─SQR──────────┐
22 ──────────────────────────────────────────────┤Square Root   ├─┤
                                                  │Source     F8:2│
                                                  │            0.0│
                                                  │Dest       F8:3│
                                                  │            0.0│
                                                  └──────────────┘
F8:3 - MUL - File #20 FANCNTRL -  23
       SQR - File #6 FANCNTRL -  14
             File #20 FANCNTRL -  22
F8:2 - SQR - File #6 FANCNTRL -  14
             File #20 FANCNTRL -  22

                                                  CALCULATED FLOW
                                                  (SCFM)
                                                  ┌─MUL──────────┐
23 ──────────────────────────────────────────────┤Multiply      ├─┤
                                                  │Source A   F8:3│
                                                  │            0.0│
                                                  │Source B 667.116│
                                                  │               │
                                                  │Dest       F8:4│
                                                  │            0.0│
                                                  └──────────────┘
F8:3 - SQR - File #6 FANCNTRL -  14
             File #20 FANCNTRL -  22

                                                  FLOW CALC
                                                  INTERMEDIATE
                                                  ┌─MUL──────────┐
24 ──────────────────────────────────────────────┤Multiply      ├─┤
                                                  │Source A   F8:4│
                                                  │            0.0│
                                                  │Source B 20.9095│
                                                  │               │
                                                  │Dest       F8:5│
                                                  │            0.0│
                                                  └──────────────┘
F8:5 - MUL - File #6 FANCNTRL -  14
             File #20 FANCNTRL -  24

                                                  CALC FLOW
                                                  OUTPUT VALUE
                                                  (SCFM)
                                                  ┌─ADD──────────┐
25 ──────────────────────────────────────────────┤Add           ├─┤
                                                  │Source A   F8:5│
                                                  │            0.0│
                                                  │Source B 6242.0│
                                                  │               │
                                                  │Dest      N20:9│
                                                  │          6242│
                                                  └──────────────┘
N20:9 - ADD - File #20 FANCNTRL -  25
        GEQ - File #5 INTRLKS -  10
        LEQ - File #5 INTRLKS -  7
        SCL - File #6 FANCNTRL -  8
FILE N20:9 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:9 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:9 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:9 LEN:30 - FFL - File #18 FIFOBUFFER -  1
FILE N20:9 LEN:2 - COP - File #17 COPY_OUT -  0
F8:5 - MUL - File #6 FANCNTRL -  14
             File #20 FANCNTRL -  24
```

```
F8:3 - MUL - File #6 FANCNTRL -
             14
             File #20 FANCNTRL E
F8:2 - DIV - File #6 FANCNTRL -
             14
             File #20 FANCNTRL E
             21                ...

F8:4 - MUL - File #6 FANCNTRL -
             14
             File #20 FANCNTRL E
             23, 24
F8:3 - MUL - File #6 FANCNTRL -
             14
             File #20 FANCNTRL E
             23
       SQR - File #6 FANCNTRL -

F8:5 - ADD - File #6 FANCNTRL -
             14
             File #20 FANCNTRL E
             25
       MUL - File #6 FANCNTRL -
F8:4 - MUL - File #6 FANCNTRL -
             14
             File #20 FANCNTRL E
             23, 24

N20:9 - MOV - File #6 FANCNTRL E
             15
       ADD - File #6 FANCNTRL E
             14                ...
F8:5 - ADD - File #6 FANCNTRL -
             14
             File #20 FANCNTRL E
             25
       MUL - File #6 FANCNTRL -
```

```
FAN AUTO/MAN                                                    LAST PID RESULT
    N20:41                                                      ┌─COP──────────┐
26 ──┤ ├──────────────────────────────────────────────────────── │Copy File     │
      6                                                         │Source  #N10:29│
[6]                                                             │Dest    #N20:43│
                                                                │Length      1  │
                                                                └──────────────┘

N20:43 - COP - File #6 FANCNTRL -  16, 17
             File #20 FANCNTRL -  26, 27
FILE N20:43 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:43 LEN:1 - COP - File #6 FANCNTRL -  16, 17
                        File #20 FANCNTRL -  26, 27
N10:29 - COP - File #6 FANCNTRL -  16, 17
             File #20 FANCNTRL -  26, 27
       SCL - File #6 FANCNTRL -  11
             File #20 FANCNTRL -  14
       PID - File #6 FANCNTRL -  10
             File #20 FANCNTRL -  12
FILE N10:29 LEN:1 - COP - File #6 FANCNTRL -  16, 17
                        File #20 FANCNTRL -  26, 27

                                                                PID OUTPUT TO
                                                                FAN VFD
FAN AUTO/MAN                                                    ┌─COP──────────┐
    N20:41                                                      │Copy File     │
27 ──┤/├──────────────────────────────────────────────────────── │Source  #N20:43│
      6                                                         │Dest    #N10:29│
[6]                                                             │Length      1  │
                                                                └──────────────┘
                                                                PID AUTO/MAN
                                                                STATUS
                                                                    N10:0
                                                                ──────( )──────
                                                                       1

N10:29 - COP - File #20 FANCNTRL -  26, 27
       SCL - File #6 FANCNTRL -  11
             File #20 FANCNTRL -  14
       PID - File #6 FANCNTRL -  10
             File #20 FANCNTRL -  12
FILE N10:29 LEN:1 - COP - File #6 FANCNTRL -  16, 17
                        File #20 FANCNTRL -  26, 27
N20:43 - COP - File #20 FANCNTRL -  26, 27
FILE N20:43 LEN:100 - FFL - File #13 FIFO -  10
FILE N20:43 LEN:1 - COP - File #6 FANCNTRL -  16, 17
                        File #20 FANCNTRL -  26, 27
N10:0/1 - ─( )─ - File #20 FANCNTRL -  27
          COP - File #6 FANCNTRL -  7
                File #20 FANCNTRL -  9
          PID - File #6 FANCNTRL -  10
                File #20 FANCNTRL -  12
FILE N10:0/1 LEN:1 - COP - File #6 FANCNTRL -  7
                         File #20 FANCNTRL -  9
FILE N10:0/1 LEN:23 - PID - File #6 FANCNTRL -  10
                            File #20 FANCNTRL -  12

                                                                ┌─ADD──────────┐
28 ──────────────────────────────────────────────────────────── │Add           │
                                                                │Source A  N20:30│
                                                                │             101│
                                                                │Source B  460.0 │
                                                                │                │
                                                                │Dest      F8:10 │
                                                                │          561.0 │
                                                                └──────────────┘
                                                                ┌─DIV──────────┐
                                                                │Divide        │
                                                                │Source A  528.0 │
                                                                │                │
                                                                │Source B  F8:10 │
                                                                │          561.0 │
                                                                │Dest      F8:12 │
                                                                │       0.9411765│
                                                                └──────────────┘

N20:43 - CLR - File #6 FANCNTRLE
                12
        COP - File #6 FANCNTRLE
N10:29 - MOV - File #20 FANCNTRE
                13
        COP - File #6 FANCNTRLE

N10:29 - MOV - File #20 FANCNTRE
                13
        COP - File #6 FANCNTRLE
                16, 17        ...
N20:43 - CLR - File #6 FANCNTRLE
                12
        COP - File #6 FANCNTRLE
                16, 17
                File #20 FANCNTRE
N10:0/1 - ─( )─ - File #6 FANCNE
                  17
                File #20 FANCE

F8:10 - ADD - File #6 FANCNTRL E
              19
            File #20 FANCNTRLE
              28
      DIV - File #6 FANCNTRL E
N20:30 - ADD - File #6 FANCNTRLE
               14, 19
             File #20 FANCNTRE
               17, 28
FILE N20:30 LEN:100 -         ...
F8:12 - DIV - File #6 FANCNTRL E
              19
            File #20 FANCNTRLE
              28
```

```
|F8:10 - DIV - File #6 FANCNTRL -  19
|              File #20 FANCNTRL -  28
|N20:30 - FFL - File #13 FIFO -  10
|FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:30 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:30 LEN:4 - COP - File #4 INPUTDATA -  10
|
29|-------------------------------------------------------------------------------
|                                                  ┌DIV──────────┐   |F8:13 - MUL - File #6 FANCNTRL E
|                                                  ├Divide       ├──┤            20
|                                                  |Source A  N20:13|  |          File #20 FANCNTRLE
|                                                  |           0    |  |            29
|                                                  |Source B 16383.0|  |      DIV - File #6 FANCNTRL E
|                                                  |                |  |N20:13 - DIV - File #6 FANCNTRLE
|                                                  |Dest       F8:13|  |            20
|                                                  |           0.0  |  |          File #20 FANCNTRE
|                                                  └────────────────┘  |            29
|                                                                      |FILE N20:13 LEN:100 -        ...
|                                                  ┌DIV──────────┐   |F8:15 - MUL - File #6 FANCNTRL E
|                                                  ├Divide       ├──┤            20
|                                                  |Source A   F8:14|  |          File #20 FANCNTRLE
|                                                  |           0.0  |  |            29
|                                                  |Source B 16383.0|  |      DIV - File #6 FANCNTRL E
|                                                  |                |  |F8:14 - DIV - File #6 FANCNTRL E
|                                                  |Dest       F8:15|  |            20
|                                                  |           0.0  |  |          File #20 FANCNTRLE
|                                                  └────────────────┘  |            29
|                                                  ┌MUL──────────┐   |F8:16 - SUB - File #6 FANCNTRL E
|                                                  ├Multiply     ├──┤            20
|                                                  |Source A   F8:13|  |          File #20 FANCNTRLE
|                                                  |           0.0  |  |            29
|                                                  |Source B   F8:15|  |      MUL - File #6 FANCNTRL E
|                                                  |           0.0  |  |            20
|                                                  |Dest       F8:16|  |          File #20 FANCNTRLE
|                                                  |           0.0  |  |            29
|                                                  └────────────────┘  |
|                                                  ┌SUB──────────┐   |F8:17 - SUB - File #6 FANCNTRL E
|                                                  └Subtract     ├──┘            20
|                                                  |Source A     1.0|            File #20 FANCNTRLE
|                                                  |                |            29
|                                                  |Source B   F8:16|      MUL - File #6 FANCNTRL E
|                                                  |           0.0  |            21
|                                                  |Dest       F8:17|          File #20 FANCNTRLE
|                                                  |           1.0  |            30
|                                                  └────────────────┘
|
|F8:13 - DIV - File #6 FANCNTRL -  20
|              File #20 FANCNTRL -  29
|N20:13 - FFL - File #13 FIFO -  10
|FILE N20:13 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:13 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:13 LEN:30 - FFL - File #18 FIFOBUFFER -  1
|FILE N20:13 LEN:4 - COP - File #4 INPUTDATA -  3
|F8:15 - DIV - File #6 FANCNTRL -  20
|              File #20 FANCNTRL -  29
|
30|-------------------------------------------------------------------------------
|                                                  ┌MUL──────────┐   |F8:19 - MUL - File #6 FANCNTRL E
|                                                  ├Multiply     ├──┤            21
|                                                  |Source A  N20:3 |          File #20 FANCNTRLE
|                                                  |         3277   |  |N20:3 - MOV - File #5 INTRLKS -
|                                                  |Source B   F8:17|  |            39
|                                                  |           1.0  |      SUB - File #6 FANCNTRL E
|                                                  |Dest       F8:19|  |F8:17 - SUB - File #6 FANCNTRL E
|                                                  |       3277.0   |  |            20
|                                                  └────────────────┘  |          File #20 FANCNTRLE
|
|F8:19 - MUL - File #20 FANCNTRL -  30
|N20:3 - SUB - File #6 FANCNTRL -  14
|              File #20 FANCNTRL -  18
|       MUL - File #6 FANCNTRL -  21
|              File #20 FANCNTRL -  30
|       LEQ - File #5 INTRLKS -  13, 39
|       FFL - File #13 FIFO -  10
|FILE N20:3 LEN:4 - COP - File #4 INPUTDATA -  0
|FILE N20:3 LEN:100 - FFL - File #13 FIFO -  10
|
```

```
   |F8:17 - SUB - File #20 FANCNTRL -  29                                    |
   |        MUL - File #6 FANCNTRL -  21                                     |
   |              File #20 FANCNTRL -  30                                    |
   |                                                                         |
   |                                                                 ┌─RET──────┐ |
31 |─────────────────────────────────────────────────────────────────┤Return    ├─┤
   |                                                                 └──────────┘ |
32 |─────────────────────────────────────────────────────────────────────[END]─┤
```

```
WARNING: DESCRIPTION XREF REPORT WILL ONLY PRINT ADDRESSES THAT HAVE
         DESCRIPTIONS ENTERED INTO THE DATA BASE AND ARE USED IN THE
         LADDER PROGRAM!

N20:41    - [7]1,{1},[5]52,53,121,[6]/2,5,[9]/1,[20]/2,7,{2},[6]5,[9]0
            [20]7,{3},[6]/4,[9]0,1,[20]/6,{5},[5]48,{6},[6]0,1,4,16,/17
            [20]0,1,6,26,/27,{7},[5]49,{8},[6]13,[20]16,{9},[5]50,{10}
            [7]0,{11},[5]51,{12}67,121,{13}113,{14}114,{15}69,120,[13]
            f10
N20:38    - [5]114,[7]12,[12]1,{2},[5]2,/119,{3}5,/5,6,{4}9,/119,{5}/10
            12,13,/119,{6}14,15,/119,{7}16,/16,18,45,/119,{8}17,/17,18
            45,{9}19,20,/119,{10}21,/21,23,46,/120,{11}22,/22,23,46
            {12}24,25,/120,{13}26,47,/120,{15}27,/27,28,[10]/0,/1,[13]
            f10,[7]f12
N20:39    - [5]114,[12]2,{0},[5]/29,30,31,[10]/1,{1},[5]32,{2}33,/33,34
            {3}35,36,/120,{4}37,/37,38,/121,{5},[16]1,[6]73,4,5,{7}7
            {8}/9,10,11,{9},[5]/121,[16]12,{10},[5]/121,[16]12,{11},[5]
            41,/121,{12}42,[16]/12,{13},[5]43,{14}44,47,[13]f10,[7]f12
N16:7     - [4]6,11
B3/128    - [5]4
N12:2     - [7]1,2,4,7,11,{0},[5]102,{1}103,{2}104,{3}105,{4}106,{5}107
            {6}108,{7}109,{8}110,{9}111,{10}112
B3/126    - [5]63
N20:38/2  - [5]2,/119,w114,w[7]w12,w[12]w1,[13]wf10,[7]wf12
N16:10    - [4]9,14
N16:9     - [4]8,13
N16:8     - [4]7,12
N20:40    - [5]114,[12]3,{0},[5]48,/69,{1}49,/69,{2}50,/69,{3}51,/69
            {4}54,55,/67,{5}56,57,/67,{6}/67,{7}60,61,/67,{8}66,/67
            {10}4,{11}64,65,/120,[13]f10,[7]f12
B3/129    - [6]7,[20]9
N20:41/15 - [5]69,120,[7]w1,[13]wf10
N20:42/1  - [5]48,49,50,51,/120,[13]wf10
N20:42/6  - [5]120,121,[13]wf10
N20:42/3  - [5]119,120,[13]wf10
N20:38/13 - [5]26,47,/120,w114,w[7]w12,w[12]w1,[13]wf10,[7]wf12
N20:39/3  - [5]35,36,/120,w114,w[12]w2,[13]wf10,[7]wf12
B3/130    - [5]35
T4:5.DN   - [5]9,8
B3/73     - [5]59
C5:0      - [3]6,[15]0,{ACC}1,{CU}0
N19:21    - [16]0
B3:2      - [3]11,{32},[5]119,{33}121,{34},[2]18,19,/20,[5]1,58,[6]4
            [20]6
T4:4.DN   - [5]8,7
B3/16     - [5]55
B3/17     - [5]57
B3/109    - [5]19
B3/106    - [5]14
B3/112    - [5]24
B3/0      - OFLOW/VAC CTRL BIT (OFF=FLOW, ON=VAC)
            /6,7,[5]/2,3,/58,62,119
I:9.0     - 120 VAC GEM HIGH BETA
            [4]8
N20:24/6  - 120 VAC STOP
            [6]4,[20]6,[4]w11,w[17]w2,[13]wf10,[18]wf1,wf1,wf1
I:7.0     - 120 VAC STOP COMMAND
            [4]6
N20:24/3  - 5 VDC STOP
            [6]4,[11]3,[20]6,[4]w11,w[17]w2,[13]wf10,[18]wf1,wf1,wf1
N20:24/2  - 5 VDC FAN START
            18,[6]5,[20]7,[4]w11,w[17]w2,[13]wf10,[18]wf1,wf1,wf1
I:10.0    - ???
            [4]9
N12:2/10  - ACK INLET VAC HI ALARM
            [5]112,[7]w1,w2,w4,w7,w11
N12:2/9   - ACK INLET VAC LO ALARM
            [5]111,[7]w1,w2,w4,w7,w11
N13:0     - ALL BITS OFF FOR MASKING
            0,1,20,[3]1,2,5,11,[7]1,[16]18,23,{0},[13]0,1,2,3,[14]0,[2]
            f20,f[3]f5,f5,f5,[2]f20,f[3]f5
N13:1     - ALL BITS ON
            1,[3]2,4,10,[7]1,5,6,7,[2]f20,f[3]f5,f5,f5,[2]f20,f[3]f5
```

```
B3/2       - BYPASS
             [6]15
N20:9      - CALC FLOW OUTPUT VALUE (SCFM)
             [5]7,10,[6]8,14,15,[20]25,[13]f10,[18]f1,f1,f1,[17]f0
F8:4       - CALCULATED FLOW (SCFM)
             [6]14,[20]23,24
O:10.0     - CAM BEACON?
             [17]5
N36:53     - CAM PIC OUTPUT
             [20]15
N14:0      - CORRECTED TEMPERATURE VALUE
             [6]14,[20]17,21
S:39       - Clock Calendar Day
             [13]26,f18,f26
S:40       - Clock Calendar Hours
             [13]34,f18,f26,f34
S:41       - Clock Calendar Minutes
             [13]42,f18,f26,f34,f42
S:38       - Clock Calendar Month
             [13]18,f18
S:42       - Clock Calendar Seconds
             [13]50,f18,f26,f34,f42,f50
U:6        - EXHAUST FAN CTRL ON STACK FLOW
             6
U:20       - EXHAUST FAN CTRL ON SUCTION PRESSURE
             7
O:9.0      - EXHAUSTER RUNNING STATUS
             [17]4
N20:41/6   - FAN AUTO/MAN
             [6]0,1,4,16,/17,[20]0,1,6,26,/27,[7]w1,[13]wf10
N10:0      - FAN CTRL PID BIT SETTINGS
             [6]7,10,[20]9,12,{1},[6]17,[20]27,[6]f7,f[20]f9,[6]f10
             f[20]f12
U:5        - FAN INTERLOCKS AND ALARMS
             5
N20:41/1   - FAN INTLKS
             [5]52,53,121,[6]/2,5,[9]/1,[20]/2,7,[7]w1,[13]wf10
N10:13     - FAN PID CALC INTERVAL /100s
             [6]7,[20]9,[6]f10,f[20]f12,[6]f7,f[20]f9
N10:28     - FAN PID PV
             [6]8,10,[20]10,12
N10:9      - FAN PID DEADBAND
             [6]7,[20]9,[6]f10,f[20]f12,[6]f7,f[20]f9
T4:20      - FAN STARTUP TIMER ALARM BYPASS
             [5]1,{DN}3,7,14,19,24,58
B3/34      - FAN ENABLED
             18,19,/20,[5]1,58,[6]4,[20]6,[3]w11
T4:37      - FIFO LOAD TIMER
             [18]0,1,{DN}1
T4:2       - FILTER #1 ROC TIMER
             [5]52,{DN}54
N20:38/11  - FILTER #2 DP HI
             [5]22,/22,23,46,w114,w[7]w12,w[12]w1,[13]wf10,[7]wf12
N20:38/10  - FILTER #2 DP HI HI
             [5]21,/21,23,46,/120,w114,w[7]w12,w[12]w1,[13]wf10,[7]wf12
T4:3       - FILTER #2 ROC TIMER
             [5]53,{DN}56
N20:38/8   - FILTER 1 DP HI
             [5]17,/17,18,45,w114,w[7]w12,w[12]w1,[13]wf10,[7]wf12
N20:35/8   - FILTER 1 DP HI
             [5]17,45,78,[3]w5,w[5]w113,w116,w[8]w0,[13]wf10,[18]wf1,[3]
             wf5,wf[5]wf116
N20:38/6   - FILTER 1 DP LO
             [5]14,15,/119,w114,w[7]w12,w[12]w1,[13]wf10,[7]wf12
N20:35/6   - FILTER 1 DP LO
             [5]14,/15,76,[3]w5,w[5]w113,w116,w[8]w0,[13]wf10,[18]wf1
             [3]wf5,wf[5]wf116
R6:35      - FILTER 1 DP ROC FIFO CONTROL
             [18]1,[13]f5,f7,f9,f11,f13,f15,f17,f19,f21,f23,f25,f27,f29
             f31,f33,f35,f37,f39,f41,f43,f45,f47,f49,f51,[18]f1
N20:4      - FILTER 1 DP DATA
             [4]1,[5]14,16,17,18,[18]1,2,[13]f10,[18]f1,[4]f1
N35:0      - FILTER 1 DP FIFO BUFFER
             20,[3]5,[18]1,[2]f20,f[3]f5
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N20:38/7 - FILTER 1 DP HI HI
           [5]16,/16,18,45,/119,w114,w[7]w12,w[12]w1,[13]wf10,[7]wf12
N20:35/7 - FILTER 1 DP HI HI
           [5]16,77,[3]w5,w[5]w113,w116,w[8]w0,[13]wf10,[18]wf1,[3]wf5
           wf[5]wf116
N20:40/4 - FILTER 1 ROC INTERLOCK
           [5]54,55,/67,w114,w[12]w3,[13]wf10,[7]wf12
N35:80   - FILTER 1&2 DP FIFO BUFFER
           [18]1,[2]f20,f[3]f5
R6:37    - FILTER 1&2 DP ROC FIFO CTRL
           [18]1,[13]f5,f7,f9,f11,f13,f15,f17,f19,f21,f23,f25,f27,f29
           f31,f33,f35,f37,f39,f41,f43,f45,f47,f49,f51,[18]f1,f1,f1
N20:38/12 - FILTER 1&2 DP LO
            [5]24,25,/120,w114,w[7]w12,w[12]w1,[13]wf10,[7]wf12
N20:35/12 - FILTER 1&2 DP LO
            [5]24,/25,82,[3]w5,w[5]w113,w116,w[8]w0,[13]wf10,[18]wf1
            [3]wf5,wf[5]wf116
N20:35/11 - FILTER 2 DP HI
            [5]22,46,81,[3]w5,w[5]w113,w116,w[8]w0,[13]wf10,[18]wf1
            [3]wf5,wf[5]wf116
N20:38/9 - FILTER 2 DP LO
           [5]19,20,/119,w114,w[7]w12,w[12]w1,[13]wf10,[7]wf12
N20:35/9 - FILTER 2 DP LO
           [5]19,/20,79,[3]w5,w[5]w113,w116,w[8]w0,[13]wf10,[18]wf1
           [3]wf5,wf[5]wf116
R6:36    - FILTER 2 DP ROC FIFO CONTROL
           [18]1,[13]f5,f7,f9,f11,f13,f15,f17,f19,f21,f23,f25,f27,f29
           f31,f33,f35,f37,f39,f41,f43,f45,f47,f49,f51,[18]f1,f1
N20:5    - FILTER 2 DP DATA
           [5]19,21,22,23,[18]1,2,[13]f10,[18]f1,[4]f1,[18]f1
N35:40   - FILTER 2 DP FIFO BUFFER
           [18]1,[2]f20,f[3]f5
N20:35/10 - FILTER 2 DP HI HI
            [5]21,80,[3]w5,w[5]w113,w116,w[8]w0,[13]wf10,[18]wf1,[3]
            wf5,wf[5]wf116
N20:40/5 - FILTER 2 ROC INTERLOCK
           [5]56,57,/67,w114,w[12]w3,[13]wf10,[7]wf12
N20:6    - FILTERS 1&2 DP DATA
           [5]24,26,[18]1,2,[13]f10,[18]f1,[4]f1,[18]f1,f1
C5:0.ACC - FIRST 10 PROCESSOR SCANS
           [15]1,[3]6,[15]0
F8:5     - FLOW CALC INTERMEDIATE
           [6]14,[20]24,25
F8:1     - FLOW CALC INTERMEDIATE VALUE
           [6]14,[20]20,21
F8:2     - FLOW CALC INTERMEDIATE VALUE
           [6]14,[20]21,22
F8:3     - FLOW CALC INTERMEDIATE VALUE
           [6]14,[20]22,23
N36:10   - FLOW CTRL PID BIT SETTINGS (WORD 0)
           [6]7,f7
N36:12   - FLOW CTRL PID CALC PERIOD /100s (WORD 13)
           [6]7,f7
N36:13   - FLOW CTRL PID PROPORTIONAL GAIN
           [6]7,18,f7,f18
N36:11   - FLOW PID CTRL DEADBAND (WORD 9)
           [6]7,f7
S:1/15   - First Pass
           2,[11]w2,w[15]w1
N20:10   - GLYCOL LEVEL DATA
           [4]2,[5]27,28,[13]f10,[18]f1,f1,f1,[4]f2
N20:38/15 - GLYCOL LEVEL LOW CURR ALM
            [5]27,/27,28,[10]/0,/1,[5]w114,w[7]w12,w[12]w1,[13]wf10
            [7]wf12
N20:35/15 - GLYCOL LEVEL LOW UNACK ALM
            [5]27,85,[10]/0,/1,[3]w5,w[5]w113,w116,w[8]w0,[13]wf10
            [18]wf1,[3]wf5,wf[5]wf116
O:8.0    - GLYCOL PUMP 120 VAC OUT
           [17]3
U:10     - GLYCOL PUMP CTRLS AND INTLK
           10
N20:25/6 - GLYCOL PUMP ON/OFF
           [5]/32,[10]0,[4]w12,w[17]w3,[13]wf10,[18]wf1,wf1,wf1
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I:8.0      - GLYCOL PUMP ON/OFF
             [4]7
N20:26/1   - Glycol Heater Contactor
             [10]1,[4]w13,w[16]w22,w23,w[17]w4,[13]wf10,[18]wf1,wf1,wf1
N20:25/0   - Glycol Pump
             [10]0,1,[4]w12,w[17]w3,[13]wf10,[18]wf1,wf1,wf1
B3/1       - HI VACUUM MODE (SEAL POT PLUG) SELECTED
             [5]/35,/37,119,[20]/4,5,/12,13
N20:36/0   - HTR AIR TEMP HIGH UNACK ALM
             [5]30,86,[10]/1,[5]w113,w[8]w0,[13]wf10,[3]wf5,wf[5]wf116
N20:39/0   - HTR AIR TMP HIGH CURR ALM
             [5]/29,30,31,[10]/1,[5]w114,w[12]w2,[13]wf10,[7]wf12
N20:40/11  - INLET VAC HI
             [5]64,65,/120,w114,w[12]w3,[13]wf10,[7]wf12
N20:37/11  - INLET VAC HI
             [5]63,112,w113,w[8]w0,[13]wf10,[3]wf5,wf[5]wf116
T4:13      - INLET VAC HI INITIAL DELAY
             [5]62,{DN}63
T4:14      - INLET VAC HI SHUTDN INTLK TIMER
             [5]63,{DN}64
N20:40/10  - INLET VAC LO
             [5]4,w114,w[12]w3,[13]wf10,[7]wf12
N20:37/10  - INLET VAC LO
             [5]4,111,w113,w[8]w0,[13]wf10,[3]wf5,wf[5]wf116
T4:10      - INLET VAC LO TIMER
             [5]3,{DN}4
T4:13.DN   - INLET VACUUM HI INITIAL DELAY TIMER DONE
             [5]63,62
N19:26     - INLET VACUUM HIGH
             [5]62,65,[20]f4,f5
N19:25     - INLET VACUUM LOW
             [5]3,[20]4,5,f4,f5
N20:43     - LAST PID RESULT
             [6]12,16,17,[20]26,27,[13]f10,[6]f16,f17,f[20]f26,f27
N36:38     - LO VAC SPT FOR HI-VAC MODE
             [20]5,f5
N36:28     - LO VAC SPT FOR VAC CTRL
             [20]4,f4
T4:37.DN   - LOAD FIFO ONCE PER SECOND
             [18]1,0,1
N20:42/13  - LOW INPUT INTLK
             [5]/121,[16]2,[13]wf10
I:11.0     - MODULE 11 INPUT FILE
             [4]10,f10
N20:28     - MODULE 11 DATAGRAM
             [4]10,[13]f10,[18]f1,f1,f1,[4]f10
N20:12     - MODULE 4 DATAGRAM
             [4]3,[13]f10,[18]f1,f1,f1,[4]f3
I:4.0      - MODULE 4 INPUT FILE
             [4]3,f3
I:5.0      - MODULE 5 INPUT FILE
             [4]4,f4
N20:16     - MODULE 5 DATAGRAM
             [4]4,[5]48,[13]f10,[18]f1,f1,f1,[4]f4
N20:22     - MODULE 6 5 VDC RC ANALOG INPUT
             [4]5,[16]0,3,5,25,26,29,[13]f10,[18]f1,f1,f1,[4]f5
I:6.0      - MODULE 6 INPUT FILE
             [4]5,f5
N20:25/1   - MOTOR CONTACTOR OFF - SEE RUNG 4:12 - FOR WW?)
             [8]2,[4]w12,w[17]w3,[13]wf10,[18]wf1,wf1,wf1
N20:25/3   - MOTOR CONTACTOR ON (SEE LADDER 4:12 - FOR WW?)
             [8]1,[4]w12,w[17]w3,[13]wf10,[18]wf1,wf1,wf1
N20:25/7   - MOTOR CONTACT
             [5]3,7,14,/15,16,17,19,/20,21,22,24,/25,52,53,/55,/57,58,62
             66,[6]0,/1,/12,[8]1,/2,[9]0,1,[14]3,[16]0,6,22,/23,24,[20]0
             /1,/15,[4]w12,w[17]w3,[13]wf10,[18]wf1,wf1,wf1
S:6        - Major Error Fault Code
             [11]0
S:1/13     - Major Error Halted
             [11]3,w2,w[15]w1
U:4        - NORMAL MODE - TRANSFERS TO I/O IMAGES ARE ENABLED
             3
S:15       - Node Address/ Baud Rate
             [3]9
```

```
B3/105    - OSR ON STACK FLOW HI LATCH
            [5]11
N10:0/1   - PID AUTO/MAN STATUS
            [6]17,[20]27,[6]w7,w10,w[20]w9,w12,[6]wf7,wf[20]wf9,[6]wf10
            wf[20]wf12
N10:29    - PID OUTPUT TO FAN VFD
            [6]10,11,16,17,[20]12,13,14,26,27,[6]f16,f17,f[20]f26,f27
N10:2     - PID SETPOINT (RAW UNITS, IN CONTROL BLOCK)
            [6]9,[20]11,[6]f10,f[20]f12
F8:6      - PID SETPOINT FOR FLOW
            [6]9
F8:7      - PID SETPOINT FOR VACUUM (FAN INLET PRESSURE)
            [20]11
N20:37/7  - PLENUM 1 PRESS HI (ACK ALM)
            [5]59,109,w113,w[8]w0,[13]wf10,[3]wf5,wf[5]wf116
N20:40/7  - PLENUM 1 PRESS HI (CURR ALM)
            [5]60,61,/67,w114,w[12]w3,[13]wf10,[7]wf12
T4:15     - PLENUM 1 PRESS HI ALARM TMR
            [5]58,{DN}59
T4:17     - PLENUM 1 PRESS HI SHUTDOWN TMR
            [5]59,{DN}60
PDI-170   - PLENUM 1 PRESSURE DATA
            [4]0,[5]2,3,58,61,62,65,[20]10,[4]f0
N20:7     - PLENUM 2 PRESSURE DATA
            [5]41,66,[13]f10,[18]f1,[4]f1,[18]f1,f1
N20:2     - PRE-FILTER DATA
            [5]5,6,[4]f0
N10:3     - PROPORTIONAL GAIN
            [6]7,18,[20]9,[6]f10,f[20]f12,[6]f7,f18,f[20]f9
N20:42/9  - PUMP COUNT BIT
            [6]0,1,[16]20,/20,21,[20]0,1,[13]wf10
S:1       - Processor Mode Status/ Control
            [11]2,[15]1,[13],[11]3,[15],[2]2
N36:48    - RECORD SAMPLER PIC OUTPUT
            [20]15
T4:28     - RESET ACK WORDS ON TIMEOUT
            [7]3,{DN}4
U:3       - RUN ONCE TO INIT DATA TABLE
            2
F8:0      - SCALED DP VALUE (IN W.C.)
            [6]14,[20]19,20
LT185     - SEAL POT LEVEL PUMP ON AT 70%
            [5]35,36,37,38,[19]0,1,[13]f10,[18]f1,f1,f1,[4]f2
U:19      - SEAL POT PUMP CONTROL
            21
N20:25/2  - SEAL POT PUMP RELAY
            [19]0,1,[4]w12,w[17]w3,[13]wf10,[18]wf1,wf1,wf1
N20:42/2  - SIMULATE MODE IF BIT IS TRUE
            /3,4,/17,[13]wf10
U:9       - SIMULATE MODE ON (NO TRANSFER TO I/O IMAGE FILES)
            4
N20:3     - STACK DP FROM INPUT IMAGE FILE
            [5]13,39,[6]14,21,[13]10,[20]18,30,[4]f0,[13]f10
N14:1     - STACK DP IN ARBITRARY UNITS
            [6]14,[20]18,19
N20:38/5  - STACK FLOW HI INTLK
            [5]/10,12,13,/119,w114,w[7]w12,w[12]w1,[13]wf10,[7]wf12
N20:35/5  - STACK FLOW HI LATCH ALARM
            [5]11,75,[3]w5,w[5]w113,w116,w[8]w0,[13]wf10,[18]wf1,[3]wf5
            wf[5]wf116
T4:8      - STACK FLOW HI SHUTDOWN TIMER
            [5]11,{DN}12
T4:7      - STACK FLOW HI TIMER
            [5]10,{DN}11
N20:38/4  - STACK FLOW LO
            [5]9,/119,w114,w[7]w12,w[12]w1,[13]wf10,[7]wf12
T4:5      - STACK FLOW LO SHUTDOWN INTLK TIMER
            [5]8,{DN}9
T4:4      - STACK FLOW LO TIMER
            [5]7,{DN}8
N19:4     - STACK FLOW LOW SETPOINT
            [5]7,[6]3,[20]3,[6]f3,f[20]f3
N36:16    - STACK FLOW LOW SETPOINT FOR FLOW CTRL
            [6]3,f3
```

```
N36:26    - STACK FLOW LOW SETPOINT FOR VAC CTRL
            [20]3,f3
N36:43    - STACK PIC OUT
            [20]15
N20:30    - STACK TEMP
            [6]14,19,[20]17,28,[13]f10,[18]f1,f1,f1,[4]f10
N20:24/7  - START PBUTTON
            [6]5,[20]7,[4]w11,w[17]w2,[13]wf10,[18]wf1,wf1,wf1
N20:25/4  - UNACKED ALARMS STATUS
            [8]0,[4]w12,w[17]w3,[13]wf10,[18]wf1,wf1,wf1
N20:35    - UNACKED ALARMS WORD 1/3 STATUS
            [3]5,[5]113,116,[8]0,{0},[5]70,{1}71,{2}2,72,{3}5,73,{4}8
            74,{5}11,75,{6}14,/15,76,{7}16,77,{8}17,45,78,{9}19,/20,79
            {10}21,80,{11}22,46,81,{12}24,/25,82,{13}26,83,{14}84,{15}
            27,85,[10]/0,/1,[13]f10,[18]f1,[3]f5,f[5]f116
N20:36    - UNACKED ALARMS WORD 2/3 STATUS
            [5]113,[8]0,{0},[5]30,86,[10]/1,{1},[5]32,87,{2}33,88,{3}35
            89,{4}37,90,{5}91,[16]1,20,/21,{6},[5]92,[16]4,{7},[5]93
            [16]7,20,/21,{8},[5]94,[16]10,{9},[5]95,[16]12,{10},[5]96
            [16]12,{11},[5]41,97,{12}98,{13}99,{14}47,100,{15}101,[13]
            f10,[3]f5,f[5]f116
N20:37    - UNACKED ALARMS WORD 3/3 STATUS
            [5]113,[8]0,{0},[5]48,102,{1}49,103,{2}50,104,{3}51,105,{4}
            54,106,/119,{5}56,107,/119,{6}108,{7}59,109,{8}66,110,{10}4
            111,{11}63,112,[13]f10,[3]f5,f[5]f116
N36:20    - VAC CTRL PID BIT SETTINGS (WORD 0)
            [20]9,f9
N36:22    - VAC CTRL PID CALC PERIOD /100s (WORD 13)
            [20]9,f9
N36:23    - VAC CTRL PID PROPORTIONAL GAIN
            [20]9,f9
N36:21    - VAC PID CTRL DEADBAND (WORD 9)
            [20]9,f9
N20:8     - VFD INPUT DATA
            [6]11,[17]0,[20]14,[13]f10,[18]f1,f1,f1,[17]f0
N20:41/2  - WW START
            [6]5,[9]0,[20]7,[7]w1,[13]wf10
N20:41/3  - WW STOP
            [6]/4,[9]0,1,[20]/6,[7]w1,[13]wf10
N20:25    - WW TRANSFER WORD?
            [4]12,[17]3,{0},[10]0,1,{1},[8]2,{2},[19]0,1,{3},[8]1,{4}0
            {5},[3]7,[6]13,[20]16,{6},[5]/32,[10]0,{7},[5]3,7,14,/15,16
            17,19,/20,21,22,24,/25,52,53,/55,/57,58,62,66,[6]0,/1,/12
            [8]1,/2,[9]0,1,[14]3,[16]0,6,22,/23,24,[20]0,/1,/15,{9},[5]
            /43,[16]12,37,{10},[5]/44,[16]12,38,[13]f10,[18]f1,f1,f1
N20:26    - WW TRANSFER WORD?
            [4]13,[16]22,23,[17]4,{1},[10]1,{4},[16]37,{5}38,{6}/12,{7}
            /12,{8}16,{10}19,{11}19,[13]f10,[18]f1,f1,f1
N20:24    - WW TRANSFER WORD?
            [4]11,[17]2,{2},[2]18,[6]5,[20]7,{3},[6]4,[11]3,[20]6,{5}
            [6]6,[20]8,{6},[6]4,[20]6,{7},[6]5,[20]7,{9},[6]6,[20]8
            [13]f10,[18]f1,f1,f1
N20:27    - WW TRANSFER WORD?
            [4]14,[17]5,{0},[16]12,[13]f10,[18]f1,f1,f1
```

Data File #0 Type:O Output Elements:48 Words:48

Address	15 ---- Data ---- 0	Address	15 ---- Data ---- 0	Address	15 ---- Data ---- 0
O:3.0	XXXX XXXX XXXX XXXX	O:12.0	XXXX XXXX XXXX XXXX	O:12.16	0000 0000 0000 0000
O:3.1	XXXX XXXX XXXX XXXX	O:12.1	XXXX XXXX XXXX XXXX	O:12.17	0000 0000 0000 0000
O:6.0	XXXX XXXX XXXX XXXX	O:12.2	XXXX XXXX XXXX XXXX	O:12.18	0000 0000 0000 0000
O:6.1	XXXX XXXX XXXX XXXX	O:12.3	0000 0000 0000 0000	O:12.19	0000 0000 0000 0000
O:7.0	XX XXXX	O:12.4	XXXX XXXX XXXX XXXX	O:12.20	0000 0000 0000 0000
O:8.0	XX XXXX	O:12.5	0000 0000 0000 0000	O:12.21	0000 0000 0000 0000
O:9.0	XX XXXX	O:12.6	0000 0000 0000 0000	O:12.22	0000 0000 0000 0000
O:10.0	XX XXXX	O:12.7	0000 0000 0000 0000	O:12.23	0000 0000 0000 0000
O:11.0	XXXX XXXX XXXX XXXX	O:12.8	XXXX XXXX XXXX XXXX	O:12.24	0000 0000 0000 0000
O:11.1	XXXX XXXX XXXX XXXX	O:12.9	XXXX XXXX XXXX XXXX	O:12.25	0000 0000 0000 0000
O:11.2	XXXX XXXX XXXX XXXX	O:12.10	XXXX XXXX XXXX XXXX	O:12.26	0000 0000 0000 0000
O:11.3	XXXX XXXX XXXX XXXX	O:12.11	XXXX XXXX XXXX XXXX	O:12.27	0000 0000 0000 0000
O:11.4	0000 0000 0000 0000	O:12.12	0000 0000 0000 0000	O:12.28	0000 0000 0000 0000
O:11.5	0000 0000 0000 0000	O:12.13	0000 0000 0000 0000	O:12.29	0000 0000 0000 0000
O:11.6	0000 0000 0000 0000	O:12.14	0000 0000 0000 0000	O:12.30	0000 0000 0000 0000
O:11.7	0000 0000 0000 0000	O:12.15	0000 0000 0000 0000	O:12.31	0000 0000 0000 0000

Data File #1 Type:I Input Elements:64 Words:64

Address	15 ---- Data ---- 0	Address	15 ---- Data ---- 0	Address	15 ---- Data ---- 0
I:1.0	XXXX XXXX XXXX XXXX	I:9.0	XX XXXX	I:12.12	0000 0000 0000 0000
I:1.1	XXXX XXXX XXXX XXXX	I:10.0	XX XXXX	I:12.13	0000 0000 0000 0000
I:1.2	XXXX XXXX XXXX XXXX	I:11.0	XXXX XXXX XXXX XXXX	I:12.14	0000 0000 0000 0000
I:1.3	XXXX XXXX XXXX XXXX	I:11.1	XXXX XXXX XXXX XXXX	I:12.15	0000 0000 0000 0000
I:2.0	XXXX XXXX XXXX XXXX	I:11.2	XXXX XXXX XXXX XXXX	I:12.16	0000 0000 0000 0000
I:2.1	XXXX XXXX XXXX XXXX	I:11.3	XXXX XXXX XXXX XXXX	I:12.17	0000 0000 0000 0000
I:2.2	XXXX XXXX XXXX XXXX	I:11.4	0000 0000 0000 0000	I:12.18	0000 0000 0000 0000
I:2.3	XXXX XXXX XXXX XXXX	I:11.5	0000 0000 0000 0000	I:12.19	0000 0000 0000 0000
I:3.0	XXXX XXXX XXXX XXXX	I:11.6	0000 0000 0000 0000	I:12.20	0000 0000 0000 0000
I:3.1	XXXX XXXX XXXX XXXX	I:11.7	0000 0000 0000 0000	I:12.21	0000 0000 0000 0000
I:4.0	XXXX XXXX XXXX XXXX	I:12.0	XXXX XXXX XXXX XXXX	I:12.22	0000 0000 0000 0000
I:4.1	XXXX XXXX XXXX XXXX	I:12.1	XXXX XXXX XXXX XXXX	I:12.23	0000 0000 0000 0000
I:4.2	XXXX XXXX XXXX XXXX	I:12.2	XXXX XXXX XXXX XXXX	I:12.24	0000 0000 0000 0000
I:4.3	XXXX XXXX XXXX XXXX	I:12.3	0000 0000 0000 0000	I:12.25	0000 0000 0000 0000
I:5.0	XXXX XXXX XXXX XXXX	I:12.4	XXXX XXXX XXXX XXXX	I:12.26	0000 0000 0000 0000
I:5.1	XXXX XXXX XXXX XXXX	I:12.5	XXXX XXXX XXXX XXXX	I:12.27	0000 0000 0000 0000
I:5.2	XXXX XXXX XXXX XXXX	I:12.6	XXXX XXXX XXXX XXXX	I:12.28	0000 0000 0000 0000
I:5.3	XXXX XXXX XXXX XXXX	I:12.7	0000 0000 0000 0000	I:12.29	0000 0000 0000 0000
I:6.0	XXXX XXXX XXXX XXXX	I:12.8	0000 0000 0000 0000	I:12.30	0000 0000 0000 0000
I:6.1	XXXX XXXX XXXX XXXX	I:12.9	0000 0000 0000 0000	I:12.31	0000 0000 0000 0000
I:7.0	XX XXXX	I:12.10	0000 0000 0000 0000		
I:8.0	XX XXXX	I:12.11	0000 0000 0000 0000		

Data File #2 Type:S Status Elements:83 Words:83

```
                        1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
S2:0       X       X X               X                                       X X X X X
S2:50
```

Data File #3 Type:B Binary Elements:35 Words:35

Address	15 ---- Data ---- 0	Address	15 ---- Data ---- 0	Address	15 ---- Data ---- 0
B3/00000	0000 0000 0000 0XXX	B3/00192	X000 X000 0000 0000	B3/00384	0000 0000 0000 0000
B3/00016	000X XXXX X000 00XX	B3/00208	0000 0000 X000 0X00	B3/00400	0000 0000 0000 0000
B3/00032	XXXX XXXX XXXX XXXX	B3/00224	0000 0000 XX00 0000	B3/00416	0000 0000 0000 0000
B3/00048	XXXX 0000 0000 XX00	B3/00240	0000 0000 0000 0000	B3/00432	0000 0000 0000 0000
B3/00064	00XX XXXX 0000 0000	B3/00256	0000 0000 0000 0000	B3/00448	0000 0000 0000 0000
B3/00080	0000 0000 0000 0000	B3/00272	0000 0000 0000 0000	B3/00464	0000 0000 0000 0000
B3/00096	00X0 0XX0 XX00 0000	B3/00288	0000 0000 0000 0000	B3/00480	0000 0000 0000 0000
B3/00112	0X00 0000 XXXX XX0X	B3/00304	0000 0000 0000 0000	B3/00496	0000 0000 00X0 0000
B3/00128	XXX0 0000 00XX XXXX	B3/00320	0000 0000 0000 0000	B3/00512	0000 0000 0000 0000
B3/00144	00X0 XXXX XXX0 XXXX	B3/00336	0000 0000 0000 0000	B3/00528	0000 0000 0000 000X
B3/00160	0000 0000 0000 00XX	B3/00352	0000 0000 0000 0000	B3/00544	0000 0000 0000 0000
B3/00176	0000 0000 0000 0000	B3/00368	0000 0000 0000 0000		

```
Data File #4  Type:T Timer  Elements:52  Words:156

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
T4:0      X X X X X   X X   X     X X X X X     X X X X X X     X   X   X   X   X X X   X
T4:50    X X

Data File #5  Type:C Counter  Elements:36  Words:108

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
C5:0     X X X X X X   X

Data File #6  Type:R Control  Elements:38  Words:114

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
R6:0     X X X X X X X X X X X X X X X X X X X X X X X X X           X       X X X

Data File #7  Type:N Integer  Elements:1  Words:1

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N7:0

Data File #8  Type:F Float  Elements:20  Words:40

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
F8:0     X X X X X X X X     X   X X X X X X   X

Data File #9  Type:N Integer  Elements:4  Words:4

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N9:0     X X X X

Data File #10  Type:N Integer  Elements:91  Words:91

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N10:0    X X X X X X X X X X X X X X X X X X X X X X X X X         X X X X X X X X X X X X X X X X X X X X X
N10:50   X X X           X X X X X X X X X X X X X X X X X X X X X X X

Data File #11  Type:N Integer  Elements:37  Words:37

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N11:0

Data File #12  Type:N Integer  Elements:3  Words:3

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N12:0    X X X

Data File #13  Type:N Integer  Elements:4  Words:4

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N13:0    X X X X
```

```
Data File #14  Type:N Integer  Elements:43  Words:43

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N14:0    X X     X                                                   X X X X X X

Data File #15  Type:N Integer  Elements:110  Words:110

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N15:0
N15:50
N15:100

Data File #16  Type:N Integer  Elements:35  Words:35

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N16:0                X X X X                 X   X

Data File #17  Type:N Integer  Elements:21  Words:21

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N17:0    X X X X X         X X X

Data File #18  Type:N Integer  Elements:36  Words:36

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N18:0        X   X     X    X      X X   X X X   X   X

Data File #19  Type:N Integer  Elements:43  Words:43

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N19:0       X X X X X X X X X X X   X X   X X X X X X X X X       X X X X X X   X X

Data File #20  Type:N Integer  Elements:129  Words:129

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N20:0    X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N20:50   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N20:100  X X X

Data File #21  Type:N Integer  Elements:7  Words:7

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N21:0

Data File #22  Type:N Integer  Elements:11  Words:11

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N22:0

Data File #23  Type:N Integer  Elements:256  Words:256

                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address  0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N23:0     X
N23:50
N23:100                                                 X X X X X X X X X X X X X X X X X X X X X X X X X X
N23:150   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N23:200   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N23:250   X X X X X X
```

Data File #24 Type:N Integer Elements:256 Words:256

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N24:0     X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N24:50    X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N24:100   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N24:150   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N24:200   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N24:250   X X X X X
```

Data File #25 Type:N Integer Elements:256 Words:256

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N25:0     X
N25:50
N25:100                                                 X X X X X X X X X X X X X X X X X X X X X X X X X X
N25:150   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N25:200   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N25:250   X X X X X X
```

Data File #26 Type:N Integer Elements:256 Words:256

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N26:0     X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N26:50    X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N26:100   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N26:150   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N26:200   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N26:250   X X X X X
```

Data File #27 Type:N Integer Elements:256 Words:256

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N27:0     X
N27:50
N27:100                                                 X X X X X X X X X X X X X X X X X X X X X X X X X X
N27:150   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N27:200   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N27:250   X X X X X X
```

Data File #28 Type:N Integer Elements:229 Words:229

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N28:0     X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N28:50    X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N28:100   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N28:150
N28:200
```

Data File #29 Type:N Integer Elements:256 Words:256

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N29:0     X
N29:50
N29:100                                                                 X X X X X X X X X X X X X X X X X X X X
N29:150   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N29:200   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N29:250   X X X X X X
```

Data File #30 Type:N Integer Elements:229 Words:229

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N30:0     X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N30:50    X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N30:100   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N30:150
N30:200
```

Data File #31 Type:N Integer Elements:256 Words:256

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N31:0     X
N31:50
N31:100                                                                 X X X X X X X X X X X X X X X X X X X X
N31:150   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N31:200   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N31:250   X X X X X X
```

Data File #32 Type:N Integer Elements:229 Words:229

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N32:0     X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N32:50    X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N32:100   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N32:150
N32:200
```

Data File #33 Type:N Integer Elements:256 Words:256

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N33:0     X
N33:50
N33:100                                                                 X X X X X X X X X X X X X X X X X X X X
N33:150   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N33:200   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N33:250   X X X X X X
```

Data File #34 Type:N Integer Elements:229 Words:229

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N34:0     X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N34:50    X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N34:100   X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N34:150
N34:200
```

Data File #35 Type:N Integer Elements:140 Words:140

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N35:0     X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
```

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N35:50    X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X
N35:100   X X X X X X X X X X
```

Data File #36 Type:N Integer Elements:93 Words:93

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N36:0                 X X X X X X X X   X X X X X X X X X X             X X     X       X
N36:50          X
```

Data File #40 Type:N Integer Elements:43 Words:43

```
                    1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4
Address   0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9
-------   - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
N40:0
```

Slot	Part #	Card Description
0	1747-L532	5/03 CPU - 12K Memory - OS301
1	1746-NI4	4 Channel Analog Input Module
2	1746-NI4	4 Channel Analog Input Module
3	1746-NIO4I	2/2 Channel Analog I/O Module
4	1746-NI4	4 Channel Analog Input Module
5	1746-NI4	4 Channel Analog Input Module
6	1746-NIO4V	2/2 Channel Analog I/O Module
7	1746-IO12	6-Input 100/120 VAC, 6-Output (RLY)
8	1746-IO12	6-Input 100/120 VAC, 6-Output (RLY)
9	1746-IO12	6-Input 100/120 VAC, 6-Output (RLY)
10	1746-IO12	6-Input 100/120 VAC, 6-Output (RLY)
11	1746-NT4	4 Ch. Thermocouple Input Module
12	1747-SN	RIO Scanner

Quantity	Part #	Card Description
4	1746-IO12	6-Input 100/120 VAC, 6-Output (RLY)
4	1746-NI4	4 Channel Analog Input Module
1	1746-NIO4I	2/2 Channel Analog I/O Module
1	1746-NIO4V	2/2 Channel Analog I/O Module
1	1747-SN	RIO Scanner
1	1746-NT4	4 Ch. Thermocouple Input Module

I/O Point	I/O (Symbol) Description	Device Description	Upper DES	Lower DES