

Filename: SINS2.pro
Directory: C:\sslssins2\eps\SINS2
Change date: 8.3.17 13:43:27 / V2.3
Title: SSLS SINS.2 Reflectometer Branchline
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Version:
Description:

0001	PROGRAM Actuator_SM
0002	
0003	VAR CONSTANT
0004	strAddress : STRING := '192.168.1.11';
0005	wPort : WORD := 502;
0006	bID : BYTE := 1;
0007	tTCP_Timeout: TIME := t#100ms;
0008	tTCP_Watchdog : TIME := t#10s;
0009	END_VAR
0010	VAR
0011	oActuator : Actuator; (* Actuator control and status object *)
0012	
0013	uiSuccessful : UINT; (* total numbers of successful Transfers *)
0014	uiFailing : UINT; (* total numbers of failing Transfers *)
0015	END_VAR
0001	(* Actuator State Machine *)
0002	CASE oActuator.wState OF
0003	10: (* RESET: reset connection *)
0004	xActuatorReady := FALSE;
0005	oActuator.xConnect := FALSE;
0006	CONNECT();
0007	oActuator.wState := 15;
0008	
0009	15: (* INIT: Initialize connection *)
0010	oActuator.xConnect := TRUE;
0011	CONNECT();
0012	oActuator.wState := 20;
0013	
0014	20: (* CONNECTING: wait for TCP connection*)
0015	CONNECT();
0016	IF oActuator.oMBMaster.xIS_CONNECTED THEN
0017	oActuator.xBusy := FALSE;
0018	oActuator.wState := 30;
0019	END_IF
0020	
0021	30: (* INITIALIZING: wait for servo on *)
0022	STATUS_READ();
0023	IF oActuator.xDataReady THEN
0024	(* test for EMGS ON or PWR OFF *)
0025	IF (oActuator.awStatus[5].15 OR NOT oActuator.awStatus[5].13) THEN
0026	(* Wait for this condition to be satisfied *)
0027	oActuator.wState := 30;
0028	(* test for ALMH alarm *)
0029	ELSIF oActuator.awStatus[5].10 THEN
0030	(* try to reset alarm *)
0031	oActuator.wState := 31;
0032	(* test for SV servo OFF or PEND OFF *)
0033	ELSIF (NOT oActuator.awStatus[5].12) OR (NOT oActuator.awStatus[5].3) THEN
0034	(* try to turn on servo *)
0035	oActuator.wState := 33;
0036	(* test for HEND homing complete *)
0037	ELSIF NOT oActuator.awStatus[5].4 THEN
0038	(* try to HOME motor *)
0039	oActuator.wState := 35;
0040	ELSE
0041	(* ready to receive position commands *)
0042	oActuator.wState := 40;
0043	END_IF
0044	END_IF
0045	
0046	31: (* ALRS ON: reset alarm *)
0047	(* first assert ALRS *)
0048	oActuator.wCommand := 16#0100;
0049	DRG1_WRITE();
0050	IF oActuator.xDataReady THEN
0051	(* next step is to clear ALRS flag *)
0052	oActuator.wState := 32;
0053	END_IF
0054	
0055	32: (* ALRS OFF: clear flag *)
0056	(* clear ALRS flag *)
0057	oActuator.wCommand := 16#0000;

0058	DRG1_WRITE();
0059	IF oActuator.xDataReady THEN
0060	(* finish initialization *)
0061	oActuator.wState := 30;
0062	END_IF
0063	
0064	33: (* SON: turn on servo *)
0065	oActuator.wCommand := 16#1000;
0066	DRG1_WRITE();
0067	IF oActuator.xDataReady THEN
0068	(* finish initialization *)
0069	oActuator.wState := 30;
0070	END_IF
0071	
0072	35: (* HOME OFF: reset HOME flag *)
0073	(* leave SON ON *)
0074	oActuator.wCommand := 16#1000;
0075	DRG1_WRITE();
0076	IF oActuator.xDataReady THEN
0077	(* now set the flag *)
0078	oActuator.wState := 36;
0079	END_IF
0080	
0081	36: (* HOME ON: set HOME flag *)
0082	(* SON HOME *)
0083	oActuator.wCommand := 16#1010;
0084	DRG1_WRITE();
0085	IF oActuator.xDataReady THEN
0086	(* wait for HEND *)
0087	oActuator.wState := 37;
0088	END_IF
0089	
0090	37: (* HEND: wait for home to finish *)
0091	STATUS_READ();
0092	IF oActuator.xDataReady THEN
0093	(* test for HEND *)
0094	IF NOT oActuator.awStatus[5].4 THEN
0095	(* not home yet *)
0096	oActuator.wState := 37;
0097	ELSE
0098	(* ready to receive position commands *)
0099	oActuator.wState := 40;
0100	END_IF
0101	END_IF
0102	
0103	40: (* IDLING: wait for new destination *)
0104	STATUS_READ();
0105	IF oActuator.xDataReady THEN
0106	(* New target? *)
0107	IF wActuatorTarget <> wActuatorPosition THEN
0108	(* update target *)
0109	PCMD_WRITE();
0110	xActuatorReady := FALSE;
0111	oActuator.wState := 50;
0112	ELSE
0113	(* continue idling *)
0114	STATUS_READ();
0115	xActuatorReady := TRUE;
0116	oActuator.wState := 40;
0117	END_IF
0118	END_IF
0119	
0120	50: (* STARTING: set new target position*)
0121	PCMD_WRITE();
0122	IF oActuator.xDataReady THEN
0123	(* started, now test for motion complete *)
0124	STATUS_READ();
0125	oActuator.wState := 60;
0126	END_IF
0127	
0128	60: (* MOVING: wait until move is completed*)
0129	STATUS_READ();
0130	IF oActuator.xDataReady THEN

0131	(* wStatus & PEND ? *)
0132	IF oActuator.awStatus[5].3 THEN
0133	(* Move complete, goto IDLING *)
0134	uiSuccessful := uiSuccessful + 1;
0135	STATUS_READ();
0136	oActuator.wState := 40;
0137	ELSE
0138	(* Still moving, test again *)
0139	STATUS_READ();
0140	oActuator.wState := 60;
0141	END_IF
0142	END_IF
0143	
0144	ELSE (* Should never get here *)
0145	oActuator.xConnect := FALSE;
0146	oActuator.wState := 10;
0147	END_CASE

CONNECT (ST)

0001	(* CONNECT *)
0002	(* initiate TCP connection *)
0003	
0004	(* Delay before initiating connection *)
0005	(*BEGDEBUG oActuator.tonConnect(IN := oActuator.xConnect, PT := DWORD_TO_TIME((BYTE_TO_DWORD(bID) * 100)));
0006	oActuator.tonConnect(IN := oActuator.xConnect, PT := t#100ms);
0007	
0008	(* Connect *)
0009	oActuator.xSend := FALSE;
0010	oActuator.oMBMaster(
0011	xCONNECT := oActuator.tonConnect.Q,
0012	strIP_ADDRESS := strAddress,
0013	wPORT := wPort,
0014	bUNIT_ID := bID,
0015	bFUNCTION_CODE := 16#03, (*ReadHoldingCoils*)
0016	wREAD_ADDRESS:= 16#9000,
0017	wREAD_QUANTITY := 10,
0018	ptREAD_DATA := ADR(oActuator.awStatus[0]),
0019	wWRITE_ADDRESS := 0,
0020	wWRITE_QUANTITY := 0,
0021	ptSEND_DATA := 0,
0022	tTIME_OUT := tTCP_Timeout,
0023	tCON_WATCHDOG := tTCP_Watchdog,
0024	xSEND := oActuator.xSend
0025);
0026	
0027	(* Test for connection error *)
0028	IF oActuator.oMBMaster.wError <> 0 THEN
0029	(* error, return to RESET *)
0030	uiFailing := uiFailing + 1;
0031	oActuator.xConnect := FALSE;
0032	oActuator.wState := 10;
0033	END_IF

ENDDEBUG*)

DRG1_WRITE (ST)

0001	(* DRG1_WRITE*)		
0002	(* Write to DRG1 command register *)		
0003			
0004	(* check for start condition *)		
0005	IF NOT oActuator.xBusy THEN		
0006	oActuator.xBusy	:= TRUE;	
0007	oActuator.xSend	:= TRUE;	
0008	END_IF		
0009			
0010	(* set DRG1 command register *)		
0011	oActuator.OMBMaster(
0012	xCONNECT	:= oActuator.tonConnect.Q,	
0013	strIP_ADDRESS	:= strAddress,	
0014	wPORT	:= wPort,	
0015	bUNIT_ID	:= bID,	
0016	bFUNCTION_CODE	:= 16#06,	(*WriteSingleRegister*)
0017	wREAD_ADDRESS:=	0,	
0018	wREAD_QUANTITY	:= 0,	
0019	ptREAD_DATA	:= 0,	
0020	wWRITE_ADDRESS	:= 16#0D00,	

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0021     WRITE_QUANTITY      := 1,
0022     ptSEND_DATA         := ADR(oActuator.wCommand),
0023     tTIME_OUT           := tTCP_Timeout,
0024     tCON_WATCHDOG       := tTCP_Watchdog,
0025     xSEND               := oActuator.xSend
0026 );
0027
0028 (* Test for transaction complete *)
0029 IF oActuator.oMBMaster.wError <> 0 THEN
0030     (* error, return to INIT *)
0031     uiFailing := uiFailing + 1;
0032     oActuator.xConnect := FALSE;
0033     oActuator.xBusy := FALSE;
0034     oActuator.xDataReady := FALSE;
0035     oActuator.wState := 10;
0036 ELSEIF NOT oActuator.xSend THEN
0037     oActuator.xBusy := FALSE;
0038     oActuator.xDataReady := TRUE;
0039 ELSE
0040     oActuator.xDataReady := FALSE;
0041 END_IF

PCMD_WRITE (ST)
0001 (* PCMD_WRITE *)
0002 (* Write to PCMD target position register *)
0003
0004 (* check for start condition *)
0005 IF NOT oActuator.xBusy THEN
0006     oActuator.wTarget := wActuatorTarget;
0007     oActuator.xBusy := TRUE;
0008     oActuator.xSend := TRUE;
0009 END_IF
0010
0011 (* set PCMD target position *)
0012 oActuator.oMBMaster(
0013     xCONNECT      := oActuator.tonConnect.Q,
0014     strIP_ADDRESS := strAddress,
0015     wPORT         := wPort,
0016     bUNIT_ID      := bID,
0017     bFUNCTION_CODE := 16#06,          (*WriteSingleRegister*)
0018     wREAD_ADDRESS := 0,
0019     wREAD_QUANTITY := 0,
0020     ptREAD_DATA    := 0,
0021     wWRITE_ADDRESS := 16#9901,
0022     wWRITE_QUANTITY := 1,
0023     ptSEND_DATA    := ADR(oActuator.wTarget),
0024     tTIME_OUT      := tTCP_Timeout,
0025     tCON_WATCHDOG  := tTCP_Watchdog,
0026     xSEND          := oActuator.xSend
0027 );
0028
0029 (* Test for transaction complete *)
0030 IF oActuator.oMBMaster.wError <> 0 THEN
0031     (* error, return to RESET *)
0032     uiFailing := uiFailing + 1;
0033     oActuator.xConnect := FALSE;
0034     oActuator.xBusy := FALSE;
0035     oActuator.xDataReady := FALSE;
0036     oActuator.wState := 10;
0037 ELSEIF NOT oActuator.xSend THEN
0038     oActuator.xBusy := FALSE;
0039     oActuator.xDataReady := TRUE;
0040 ELSE
0041     oActuator.xDataReady := FALSE;
0042 END_IF

STATUS_READ (ST)
0001 (* STATUS_READ *)
0002 (* read status registers PNOW thru STAT *)
0003
0004 (* check for start condition *)
0005 IF NOT oActuator.xBusy THEN
0006     oActuator.xBusy := TRUE;
0007     oActuator.xSend := TRUE;

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0008	END_IF
0009	
0010	(* Get actuator status words *)
0011	oActuator.oMBMaster(
0012	xCONNECT := oActuator.tonConnect.Q,
0013	strIP_ADDRESS := strAddress,
0014	wPORT := wPort,
0015	bUNIT_ID := bID,
0016	bFUNCTION_CODE := 16#03, (*ReadHoldingCoils*)
0017	wREAD_ADDRESS:= 16#9000,
0018	wREAD_QUANTITY := 10,
0019	ptREAD_DATA := ADR(oActuator.awStatus[0]),
0020	wWRITE_ADDRESS := 0,
0021	wWRITE_QUANTITY := 0,
0022	ptSEND_DATA := 0,
0023	tTIME_OUT := tTCP_Timeout,
0024	tCON_WATCHDOG := tTCP_Watchdog,
0025	xSEND := oActuator.xSend
0026);
0027	
0028	(* Test for transaction complete *)
0029	IF oActuator.oMBMaster.wError <> 0 THEN
0030	(* error, return to RESET *)
0031	uiFailing := uiFailing + 1;
0032	oActuator.xConnect := FALSE;
0033	oActuator.xBusy := FALSE;
0034	oActuator.xDataReady := FALSE;
0035	oActuator.wState := 10;
0036	ELSIF NOT oActuator.xSend THEN
0037	wActuatorPosition := oActuator.awStatus[1];
0038	wActuatorAlarm := oActuator.awStatus[2];
0039	wActuatorStatus := oActuator.awStatus[5];
0040	oActuator.xBusy := FALSE;
0041	oActuator.xDataReady := TRUE;
0042	ELSE
0043	oActuator.xDataReady := FALSE;
0044	END_IF
PLC_PRG (PRG-ST)	
0001	PROGRAM PLC_PRG
0002	VAR CONSTANT
0003	(* Version control *)
0004	cVERSION_MAJOR : WORD := 0; (* Version major index *)
0005	cVERSION_MINOR : WORD := 1; (* Version minor index *)
0006	
0007	(* BR_SELECTOR indexes *)
0008	cSINS01 : WORD := 1; (* SINS.1 branchline *)
0009	cSINS02 : WORD := 2; (* SINS.2 branchline *)
0010	cYAG : WORD := 3; (* YAG screen *)
0011	
0012	(* Actuator Limits *)
0013	cBR_SELECTOR_UL : WORD := 10000;
0014	cACTUATOR_TARGET: ARRAY [1..3] OF WORD := 0,9566,7225;
0015	END_VAR
0016	
0017	VAR
0018	(* ***** Supervisory Control ***** *)
0019	(* PFC_OUT DISCRETES *)
0020	(* %MX0.0 .. %MX639.15 *)
0021	SC_RESET_REQUIRED AT %MX0.0:BOOL;
0022	(* 1 SPARE *)
0023	SC_ATB AT %MX0.2: BOOL := TRUE;
0024	SC_AFB AT %MX0.3: BOOL := FALSE;
0025	(* 4 SPARE *)
0026	
0027	SC_PE101_PSL AT %MX0.8:BOOL;
0028	SC_PE201_PSL AT %MX0.9:BOOL;
0029	SC_PE202_PSL AT %MX0.10:BOOL;
0030	(* 1 SPARE *)
0031	
0032	SC_RP2110_AT_SPEED AT %MX0.12:BOOL;
0033	SC_RP2111_AT_SPEED AT %MX0.13:BOOL;
0034	SC_PE2110_PSL AT %MX0.14:BOOL;
0035	SC_PE2111_PSL AT %MX0.15:BOOL;

0036	
0037	SC_PE203_OK AT %MX1.0:BOOL;
0038	SC_PE203_PSL_HI AT %MX1.1:BOOL;
0039	SC_PE203_PSL_MIDHI AT %MX1.2:BOOL;
0040	SC_PE203_PSL_MIDLO AT %MX1.3:BOOL;
0041	SC_PE203_PSL_LO AT %MX1.4:BOOL;
0042	(* 3 SPARE *)
0043	
0044	SC_PE211_OK AT %MX1.8:BOOL;
0045	SC_PE211_PSL_HI AT %MX1.9:BOOL;
0046	SC_PE211_PSL_MIDHI AT %MX1.10:BOOL;
0047	SC_PE211_PSL_MIDLO AT %MX1.11:BOOL;
0048	SC_PE211_PSL_LO AT %MX1.12:BOOL;
0049	(* 3 SPARE *)
0050	
0051	SC_PE212_OK AT %MX2.0:BOOL;
0052	SC_PE212_PSL_HI AT %MX2.1:BOOL;
0053	SC_PE212_PSL_MIDHI AT %MX2.2:BOOL;
0054	SC_PE212_PSL_MIDLO AT %MX2.3:BOOL;
0055	SC_PE212_PSL_LO AT %MX2.4:BOOL;
0056	(* 3 SPARE *)
0057	
0058	SC_LL211_LID_CLOSED AT %MX2.8:BOOL;
0059	SC_LL211_ARM_RETRACTED AT %MX2.9:BOOL;
0060	(* 6 SPARE *)
0061	
0062	SC_V100_OPEN AT %MX3.0:BOOL;
0063	SC_V100_CLOSED AT %MX3.1:BOOL;
0064	(* 6 SPARE *)
0065	
0066	SC_V101_BEAM_PASS AT %MX3.8:BOOL;
0067	SC_V101_OPEN AT %MX3.9:BOOL;
0068	SC_V101_CLOSED AT %MX3.10:BOOL;
0069	SC_V101_OPEN_PERMIT AT %MX3.11:BOOL;
0070	SC_V101_CLOSE_PERMIT AT %MX3.12:BOOL;
0071	SC_V101_OPEN_CMD AT %MX3.13:BOOL;
0072	SC_V101_NOT_SYMBOL AT %MX3.14:BOOL;
0073	(* 1 SPARE *)
0074	
0075	SC_V201_BEAM_PASS AT %MX4.0 : BOOL;
0076	SC_V201_OPEN AT %MX4.1 : BOOL;
0077	SC_V201_CLOSED AT %MX4.2 : BOOL;
0078	SC_V201_OPEN_PERMIT AT %MX4.3 : BOOL;
0079	SC_V201_CLOSE_PERMIT AT %MX4.4 : BOOL;
0080	SC_V201_OPEN_CMD AT %MX4.5 : BOOL;
0081	SC_V201_NOT_SYMBOL AT %MX4.6:BOOL;
0082	(* 1 SPARE *)
0083	
0084	SC_V202_OPEN AT %MX4.8 : BOOL;
0085	SC_V202_CLOSED AT %MX4.9 : BOOL;
0086	SC_V202_BEAM_PASS AT %MX4.10 : BOOL;
0087	(* 5 SPARE *)
0088	
0089	SC_V203_BEAM_PASS AT %MX5.0 : BOOL;
0090	SC_V203_OPEN AT %MX5.1 : BOOL;
0091	SC_V203_CLOSED AT %MX5.2 : BOOL;
0092	SC_V203_OPEN_PERMIT AT %MX5.3 : BOOL;
0093	SC_V203_CLOSE_PERMIT AT %MX5.4 : BOOL;
0094	SC_V203_OPEN_CMD AT %MX5.5 : BOOL;
0095	SC_V203_NOT_SYMBOL AT %MX5.6:BOOL;
0096	(* 1 SPARE *)
0097	
0098	SC_V204_BEAM_PASS AT %MX5.8 : BOOL;
0099	SC_V204_OPEN AT %MX5.9 : BOOL;
0100	SC_V204_CLOSED AT %MX5.10 : BOOL;
0101	SC_V204_OPEN_PERMIT AT %MX5.11 : BOOL;
0102	SC_V204_CLOSE_PERMIT AT %MX5.12 : BOOL;
0103	SC_V204_OPEN_CMD AT %MX5.13 : BOOL;
0104	SC_V204_NOT_SYMBOL AT %MX5.14:BOOL;
0105	(* 1 SPARE *)
0106	
0107	(* 1 SPARE *)
0108	SC_RPV211_OPEN AT %MX6.1 : BOOL;

0109	SC_RPV211_CLOSED AT %MX6.2 : BOOL;
0110	(* 2 SPARE *)
0111	SC_RPV211_OPEN_CMD AT %MX6.5 : BOOL;
0112	(* 2 SPARE *)
0113	
0114	(* 3 SPARE *)
0115	SC_VENT211_SLOW_CMD AT %MX6.11 : BOOL;
0116	SC_VENT211_FAST_CMD AT %MX6.12 : BOOL;
0117	(* 3 SPARE *)
0118	
0119	(* 1 SPARE *)
0120	SC_TPV211_OPEN AT %MX7.1 : BOOL;
0121	SC_TPV211_CLOSED AT %MX7.2 : BOOL;
0122	(* 2 SPARE *)
0123	SC_TPV211_OPEN_CMD AT %MX7.5 : BOOL;
0124	(* 2 SPARE *)
0125	
0126	(* 1 SPARE *)
0127	SC_SLOTV211_OPEN AT %MX7.9 : BOOL;
0128	SC_SLOTV211_CLOSED AT %MX7.10 : BOOL;
0129	SC_SLOTV211_OPEN_PERMIT AT %MX7.11 : BOOL;
0130	SC_SLOTV211_CLOSE_PERMIT AT %MX7.12 : BOOL;
0131	SC_SLOTV211_OPEN_CMD AT %MX7.13 : BOOL;
0132	SC_SLOTV211_CLOSE_CMD AT %MX7.14 : BOOL;
0133	SC_SLOTV211_NOT_SYMBOL AT %MX7.15:BOOL;
0134	
0135	(* 1 SPARE *)
0136	SC_RPV212_OPEN AT %MX8.1 : BOOL;
0137	SC_RPV212_CLOSED AT %MX8.2 : BOOL;
0138	(* 2 SPARE *)
0139	SC_RPV212_OPEN_CMD AT %MX8.5 : BOOL;
0140	(* 2 SPARE *)
0141	
0142	(* 3 SPARE *)
0143	SC_VENT212_SLOW_CMD AT %MX8.11 : BOOL;
0144	SC_VENT212_FAST_CMD AT %MX8.12 : BOOL;
0145	(* 3 SPARE *)
0146	
0147	(* 1 SPARE *)
0148	SC_TPV212_OPEN AT %MX9.1 : BOOL;
0149	SC_TPV212_CLOSED AT %MX9.2 : BOOL;
0150	(* 2 SPARE *)
0151	SC_TPV212_OPEN_CMD AT %MX9.5 : BOOL;
0152	(* 2 SPARE *)
0153	
0154	SC_RP2110_ON AT %MX9.8 : BOOL;
0155	SC_RP2110_ON_CMD AT %MX9.9 : BOOL;
0156	(* 6 SPARE *)
0157	
0158	SC_RP2111_ON AT %MX10.0 : BOOL;
0159	SC_RP2111_ON_CMD AT %MX10.1 : BOOL;
0160	(* 3 SPARE *)
0161	SC_TP201_VENT_ENABLE_CMD AT %MX10.5 : BOOL;
0162	SC_TP201_VENT_NOT_SYMBOL AT %MX10.6 : BOOL;
0163	(* 1 SPARE *)
0164	
0165	SC_TP201_OK AT %MX10.8 : BOOL;
0166	SC_TP201_ON AT %MX10.9 : BOOL;
0167	SC_TP201_OFF AT %MX10.10 : BOOL;
0168	SC_TP201_ON_PERMIT AT %MX10.11 : BOOL;
0169	SC_TP201_OFF_PERMIT AT %MX10.12 : BOOL;
0170	SC_TP201_ON_CMD AT %MX10.13 : BOOL;
0171	SC_TP201_NOT_SYMBOL AT %MX10.14:BOOL;
0172	(* 1 SPARE *)
0173	
0174	SC_TP211_OK AT %MX11.0 : BOOL;
0175	SC_TP211_ON AT %MX11.1 : BOOL;
0176	SC_TP211_OFF AT %MX11.2 : BOOL;
0177	(* 5 SPARE *)
0178	
0179	SC_TP212_OK AT %MX11.8 : BOOL;
0180	SC_TP212_ON AT %MX11.9 : BOOL;
0181	SC_TP212_OFF AT %MX11.10 : BOOL;

0182	(* 5 SPARE *)
0183	
0184	SC_LL_ACTUATOR_OK AT %MX12.0 : BOOL;
0185	SC_LL_PE101_PSL AT %MX12.1 : BOOL;
0186	SC_LL_PE201_PSL AT %MX12.2 : BOOL;
0187	SC_LL_V202_OPN AT %MX12.3 : BOOL;
0188	SC_LL_PE202_PSL AT %MX12.4 : BOOL;
0189	SC_LL_PE203_OK AT %MX12.5 : BOOL;
0190	SC_LL_PE203_PSL_LO AT %MX12.6 : BOOL;
0191	SC_LL_TP201_OK AT %MX12.7 : BOOL;
0192	(* 8 SPARE *)
0193	
0194	SC_LL_ES_CONFIG_OK AT %MX13.0 : BOOL;
0195	SC_LL_LL_CONFIG_OK AT %MX13.1 : BOOL;
0196	SC_LL_PE211_OK AT %MX13.2 : BOOL;
0197	SC_LL_PE212_OK AT %MX13.3 : BOOL;
0198	SC_LL_RP2111_ON AT %MX13.4 : BOOL;
0199	SC_LL_PE2111_PSL AT %MX13.5 : BOOL;
0200	SC_LL_TP211_TURBO_OK AT %MX13.6 : BOOL;
0201	SC_LL_TP212_TURBO_OK AT %MX13.7 : BOOL;
0202	SC_LL_PE2111_PSL_ES AT %MX13.8 : BOOL;
0203	SC_LL_PE2111_PSL_LL AT %MX13.9 : BOOL;
0204	(* 6 SPARE *)
0205	
0206	(* PFC_IN DISCRETES *)
0207	(* %MX640.0 .. %MX1279.15 *)
0208	SC_RESET_REQ AT %MX640.0 : BOOL;
0209	(* 15 SPARE *)
0210	
0211	SC_V101_OPN_REQ AT %MX641.0 : BOOL;
0212	SC_V101_CLS_REQ AT %MX641.1 : BOOL;
0213	SC_V201_OPN_REQ AT %MX641.2 : BOOL;
0214	SC_V201_CLS_REQ AT %MX641.3 : BOOL;
0215	(* 2 RESERVED *)
0216	SC_V203_OPN_REQ AT %MX641.6 : BOOL;
0217	SC_V203_CLS_REQ AT %MX641.7 : BOOL;
0218	SC_V204_OPN_REQ AT %MX641.8 : BOOL;
0219	SC_V204_CLS_REQ AT %MX641.9 : BOOL;
0220	SC_TP201_ON_REQ AT %MX641.10 : BOOL;
0221	SC_TP201_OFF_REQ AT %MX641.11 : BOOL;
0222	SC_TP201_VENT_ENABLE_REQ AT %MX641.12 : BOOL;
0223	SC_TP201_VENT_DISABLE_REQ AT %MX641.13 : BOOL;
0224	(* 2 SPARE *)
0225	
0226	SC_SLOTV211_OPN_REQ AT %MX642.0 : BOOL;
0227	SC_SLOTV211_CLS_REQ AT %MX642.1 : BOOL;
0228	(* 14 SPARE *)
0229	
0230	(* PFC_OUT WORDs *)
0231	(* %MW1280 .. %MW3711 *)
0232	(* Version Numbers *)
0233	SC_VERSION_MAJOR AT %MW1280 : WORD;
0234	SC_VERSION_MINOR AT %MW1281 : WORD;
0235	(* 2 RESERVED *)
0236	
0237	(* Analog vacuum pressure *)
0238	SC_PE101_PII AT %MW1284 : WORD;
0239	SC_PE201_PII AT %MW1285 : WORD;
0240	SC_PE202_PII AT %MW1286 : WORD;
0241	SC_PE203_HI_PII AT %MW1287 : WORD;
0242	SC_PE203_LO_PII AT %MW1288 : WORD;
0243	SC_PE211_HI_PII AT %MW1289 : WORD;
0244	SC_PE211_LO_PII AT %MW1290 : WORD;
0245	SC_PE212_HI_PII AT %MW1291 : WORD;
0246	SC_PE212_LO_PII AT %MW1292 : WORD;
0247	(* 3 SPARE *)
0248	
0249	(* State Machine current command values *)
0250	SC_BR_CMD_VAL AT %MW1296 : WORD;
0251	SC_ES_CMD_VAL AT %MW1297 : WORD;
0252	SC_LL_CMD_VAL AT %MW1298 : WORD;
0253	(* 5 SPARE *)
0254	

0255	(* State Machine current values *)
0256	SC_BR_STATE AT %MW1304 : WORD;
0257	SC_ES_STATE AT %MW1305 : WORD;
0258	SC_LL_STATE AT %MW1306 : WORD;
0259	(* 5 SPARE *)
0260	
0261	
0262	(* PFC_IN WORDs *)
0263	(* %MW3712 .. %MW4927 *)
0264	(* State Machine current command requests *)
0265	SC_BR_CMD_REQ AT %MW3712 : WORD;
0266	SC_ES_CMD_REQ AT %MW3713 : WORD;
0267	SC_LL_CMD_REQ AT %MW3714 : WORD;
0268	(* 5 SPARE *)
0269	
0270	
0271	
0272	(* ***** Internal Variables ***** *)
0273	count : BYTE;
0274	count2 : BYTE;
0275	a_num : BYTE;
0276	
0277	(* Request to reset latched faults *)
0278	RESET_REQ : BOOL;
0279	
0280	(* Vacuum Interlocks *)
0281	PE101_PSL_LO: BOOL;
0282	PE201_PSL_LO: BOOL;
0283	PE202_PSL_LO: BOOL;
0284	PE203_Piy_OK: BOOL;
0285	PE203_PSH_HI: BOOL;
0286	PE203_PSH_MIDHI: BOOL;
0287	PE203_PSL_MIDLO: BOOL;
0288	PE203_PSL_LO: BOOL;
0289	PE211_Piy_OK: BOOL;
0290	PE211_PSH_HI: BOOL;
0291	PE211_PSH_MIDHI: BOOL;
0292	PE211_PSL_MIDLO: BOOL;
0293	PE211_PSL_LO: BOOL;
0294	PE212_Piy_OK: BOOL;
0295	PE212_PSH_HI: BOOL;
0296	PE212_PSH_MIDHI: BOOL;
0297	PE212_PSL_MIDLO: BOOL;
0298	PE212_PSL_LO: BOOL;
0299	RP211_PSL: BOOL;
0300	BP211_PSL: BOOL;
0301	
0302	(* Valve Positions *)
0303	V100_OPN: BOOL;
0304	V100_CSD: BOOL;
0305	V101_OPN: BOOL;
0306	V101_CSD: BOOL;
0307	V201_OPN: BOOL;
0308	V201_CSD: BOOL;
0309	V202_OPN: BOOL;
0310	V202_CSD: BOOL;
0311	V203_OPN: BOOL;
0312	V203_CSD: BOOL;
0313	V204_OPN: BOOL;
0314	V204_CSD: BOOL;
0315	VPV211_OPN: BOOL;
0316	VPV211_CSD: BOOL;
0317	RPV211_OPN: BOOL;
0318	RPV211_CSD: BOOL;
0319	TPV211_OPN: BOOL;
0320	TPV211_CSD: BOOL;
0321	LLV211_OPN: BOOL;
0322	LLV211_CSD: BOOL;
0323	VPV212_OPN: BOOL;
0324	VPV212_CSD: BOOL;
0325	RPV212_OPN: BOOL;
0326	RPV212_CSD: BOOL;
0327	TPV212_OPN: BOOL;

0328	TPV212_CSD: BOOL;
0329	
0330	(* Pump Status *)
0331	TP201_OK: BOOL;
0332	TP201_ON: BOOL;
0333	TP201_READY: BOOL;
0334	TP211_OK: BOOL;
0335	TP211_READY: BOOL;
0336	TP212_OK: BOOL;
0337	TP212_READY: BOOL;
0338	RP211_ON: BOOL;
0339	BP211_ON: BOOL;
0340	
0341	(* LoadLock Status *)
0342	LL211_LID_CLOSED: BOOL;
0343	LL211_ARM_RETRACTED: BOOL;
0344	
0345	(* Configuration Interlocks *)
0346	ES_CONFIG_OK: BOOL;
0347	LL_CONFIG_OK: BOOL;
0348	
0349	(* Latched Interlocks *)
0350	LL_ACTUATOR_OK: BOOL;
0351	LL_PE101_PSL_LO: BOOL;
0352	LL_PE201_PSL_LO: BOOL;
0353	LL_V202_OPN: BOOL;
0354	LL_PE202_PSL_LO: BOOL;
0355	LL_PE203_PIIY_OK: BOOL;
0356	LL_PE203_PSL_LO: BOOL;
0357	LL_TP201_OK: BOOL;
0358	LL_ES_CONFIG_OK: BOOL;
0359	LL_LL_CONFIG_OK: BOOL;
0360	LL_PE211_PIIY_OK: BOOL;
0361	LL_PE212_PIIY_OK: BOOL;
0362	LL_BP211_ON: BOOL;
0363	LL_TP211_OK: BOOL;
0364	LL_TP212_OK: BOOL;
0365	
0366	Reset_Required: BOOL;
0367	
0368	(* IAI Actuator Data and Commands *)
0369	ACTUATOR_AT_TARGET: WORD;
0370	ACTUATOR_CMD: WORD;
0371	ACTUATOR_OK: BOOL;
0372	
0373	(* Valve and Pump requests *)
0374	V101_OPN_REQ_SC: BOOL;
0375	V101_CLS_REQ_SC: BOOL;
0376	V201_OPN_REQ_SC: BOOL;
0377	V201_CLS_REQ_SC: BOOL;
0378	V203_OPN_REQ_SC: BOOL;
0379	V203_CLS_REQ_SC: BOOL;
0380	V204_OPN_REQ_SC: BOOL;
0381	V204_CLS_REQ_SC: BOOL;
0382	V204_CLS_REQ_ES: BOOL;
0383	VPV211_SLOW_OPN_REQ_ES: BOOL;
0384	VPV211_SLOW_CLS_REQ_ES: BOOL;
0385	VPV211_FAST_OPN_REQ_ES: BOOL;
0386	VPV211_FAST_CLS_REQ_ES: BOOL;
0387	RPV211_OPN_REQ_ES: BOOL;
0388	RPV211_CLS_REQ_ES: BOOL;
0389	TPV211_OPN_REQ_ES: BOOL;
0390	TPV211_CLS_REQ_ES: BOOL;
0391	LLV211_OPN_REQ_SC: BOOL;
0392	LLV211_CLS_REQ_SC: BOOL;
0393	LLV211_CLS_REQ_ES: BOOL;
0394	LLV211_CLS_REQ_LL: BOOL;
0395	VPV212_SLOW_OPN_REQ_LL: BOOL;
0396	VPV212_SLOW_CLS_REQ_LL: BOOL;
0397	VPV212_FAST_OPN_REQ_LL: BOOL;
0398	VPV212_FAST_CLS_REQ_LL: BOOL;
0399	RPV212_OPN_REQ_LL: BOOL;
0400	RPV212_CLS_REQ_LL: BOOL;

0401	TPV212_OPN_REQ_LL: BOOL;
0402	TPV212_CLS_REQ_LL: BOOL;
0403	
0404	TP201_ON_REQ_SC: BOOL;
0405	TP201_OFF_REQ_SC: BOOL;
0406	TP201_VENT_ENABLE_REQ_SC: BOOL;
0407	TP201_VENT_DISABLE_REQ_SC: BOOL;
0408	
0409	RP211_ON_REQ_ES: BOOL;
0410	RP211_ON_REQ_LL: BOOL;
0411	TP211_ON_REQ_ES: BOOL;
0412	TP211_OFF_REQ_ES: BOOL;
0413	TP212_ON_REQ_LL: BOOL;
0414	TP212_OFF_REQ_LL: BOOL;
0415	
0416	(* State Machine States and Controls*)
0417	BR_STATE: BR_ST := BR_ERROR;
0418	BR_REQUEST: BR_REQ := BR_NONE_REQ;
0419	ES_STATE: PV_ST := PV_ERROR;
0420	ES_REQUEST: PV_REQ := PV_NONE_REQ;
0421	LL_STATE: PV_ST := PV_ERROR;
0422	LL_REQUEST: PV_REQ := PV_NONE_REQ;
0423	
0424	(* Valves *)
0425	V101: VALVE_FB;
0426	V201: VALVE_FB;
0427	V203: VALVE_FB;
0428	V204: VALVE_FB;
0429	
0430	VPV201: VALVE_FB;
0431	VPV211_SLOW: VALVE_FB;
0432	VPV211_FAST: VALVE_FB;
0433	RPV211: VALVE_FB;
0434	TPV211: VALVE_FB;
0435	
0436	LLV211: VALVE_BI_FB;
0437	
0438	VPV212_SLOW: VALVE_FB;
0439	VPV212_FAST: VALVE_FB;
0440	RPV212: VALVE_FB;
0441	TPV212: VALVE_FB;
0442	
0443	(* Pumps *)
0444	TP201: TP_FB;
0445	
0446	RP211: RP_FB;
0447	BP211_ON_CMD: BOOL := TRUE; (* always on *)
0448	
0449	TP211: TP_FB;
0450	TP212: TP_FB;
0451	END_VAR
0452	
0001	(* Evaluate Inputs *)
0002	Process_Inputs();
0003	SC_Inputs();
0004	Actuator_Inputs();
0005	
0006	(* Temporary interlock bypasses *)
0007	Bypasses();
0008	
0009	(* Internal logic *)
0010	Fault_Logic();
0011	
0012	BR_SM();
0013	ES_SM();
0014	LL_SM();
0015	
0016	Pumps(); (* must go before Valves() *)
0017	Valves();
0018	
0019	(* Evaluate Outputs *)
0020	Actuator_Outputs();
0021	SC_Outputs();

0022	Process_Outputs();
0023	
0024	(* Clear rising edge requests *)
0025	Clear_Reqs();
Actuator_Inputs (ST)	
0001	(* Process Actuator Inputs *)
0002	
0003	ACTUATOR_OK := NOT (wActuatorStatus.10 OR wActuatorStatus.12);
0004	
0005	IF (xActuatorReady) THEN
0006	FOR count2:=1 TO 4 DO
0007	IF (wActuatorPosition = cACTUATOR_TARGET[count2]) THEN
0008	ACTUATOR_AT_TARGET := count2;
0009	EXIT;
0010	END_IF;
0011	END_FOR;
0012	ELSE
0013	ACTUATOR_AT_TARGET := 0;
0014	END_IF;
Actuator_Outputs (ST)	
0001	(* IAI Actuator Outputs *)
0002	
0003	IF ACTUATOR_CMD <> 0 THEN
0004	wActuatorTarget := cACTUATOR_TARGET[ACTUATOR_CMD] ;
0005	END_IF
BR_SM (ST)	
0001	(* State Machine for BRanchline selection *)
0002	
0003	(* Always test for BR_ERROR first *)
0004	IF NOT LL_ACTUATOR_OK THEN
0005	BR_STATE := BR_ERROR;
0006	END_IF
0007	
0008	CASE BR_STATE OF
0009	BR_ERROR:
0010	(* Leave in place *)
0011	ACTUATOR_CMD := 0;
0012	
0013	IF LL_ACTUATOR_OK THEN
0014	BR_STATE := BR_SINS1_SELECTING;
0015	END_IF
0016	
0017	BR_SINS1_SELECTING:
0018	(* Move actuator to SINS.1 *)
0019	ACTUATOR_CMD := cSINS01;
0020	
0021	(* Wait for motion to complete *)
0022	IF ACTUATOR_AT_TARGET = ACTUATOR_CMD THEN
0023	BR_STATE := BR_SINS1_READY;
0024	ELSIF BR_REQUEST = BR_SINS1_REQ THEN
0025	BR_STATE := BR_SINS1_SELECTING;
0026	ELSIF BR_REQUEST = BR_SINS2_REQ THEN
0027	BR_STATE := BR_SINS2_SELECTING;
0028	ELSIF BR_REQUEST = BR_YAG_REQ THEN
0029	BR_STATE := BR_YAG_SELECTING;
0030	END_IF
0031	
0032	BR_SINS1_READY:
0033	(* Keep at SINS.1 *)
0034	ACTUATOR_CMD := cSINS01;
0035	
0036	(* Look for state change request *)
0037	IF BR_REQUEST = BR_NONE_REQ THEN
0038	BR_STATE := BR_SINS1_READY;
0039	ELSIF BR_REQUEST = BR_SINS1_REQ THEN
0040	BR_STATE := BR_SINS1_READY;
0041	ELSIF BR_REQUEST = BR_SINS2_REQ THEN
0042	BR_STATE := BR_SINS2_SELECTING;
0043	ELSIF BR_REQUEST = BR_YAG_REQ THEN
0044	BR_STATE := BR_YAG_SELECTING;
0045	END_IF

0046	
0047	BR_SINS2_SELECTING:
0048	(* Move actuator to SINS.2 *)
0049	ACTUATOR_CMD := cSINS02;
0050	
0051	(* Wait for motion to complete *)
0052	IF ACTUATOR_AT_TARGET = ACTUATOR_CMD THEN
0053	BR_STATE := BR_SINS2_READY;
0054	(* Else look for state change request *)
0055	ELSIF BR_REQUEST = BR_SINS1_REQ THEN
0056	BR_STATE := BR_SINS1_SELECTING;
0057	ELSIF BR_REQUEST = BR_SINS2_REQ THEN
0058	BR_STATE := BR_SINS2_SELECTING;
0059	ELSIF BR_REQUEST = BR_YAG_REQ THEN
0060	BR_STATE := BR_YAG_SELECTING;
0061	END_IF
0062	
0063	BR_SINS2_READY:
0064	(* Keep at SINS.2 *)
0065	ACTUATOR_CMD := cSINS02;
0066	
0067	(* Look for state change request *)
0068	IF BR_REQUEST = BR_NONE_REQ THEN
0069	BR_STATE := BR_SINS2_READY;
0070	ELSIF BR_REQUEST = BR_SINS1_REQ THEN
0071	BR_STATE := BR_SINS1_SELECTING;
0072	ELSIF BR_REQUEST = BR_SINS2_REQ THEN
0073	BR_STATE := BR_SINS2_READY;
0074	ELSIF BR_REQUEST = BR_YAG_REQ THEN
0075	BR_STATE := BR_YAG_SELECTING;
0076	END_IF
0077	
0078	BR_YAG_SELECTING:
0079	(* Move actuator to YAG *)
0080	ACTUATOR_CMD := cYAG;
0081	
0082	(* Wait for motion to complete *)
0083	IF ACTUATOR_AT_TARGET = ACTUATOR_CMD THEN
0084	BR_STATE := BR_YAG_READY;
0085	(* Else look for state change request *)
0086	ELSIF BR_REQUEST = BR_SINS1_REQ THEN
0087	BR_STATE := BR_SINS1_SELECTING;
0088	ELSIF BR_REQUEST = BR_SINS2_REQ THEN
0089	BR_STATE := BR_SINS2_SELECTING;
0090	ELSIF BR_REQUEST = BR_YAG_REQ THEN
0091	BR_STATE := BR_YAG_SELECTING;
0092	END_IF
0093	
0094	BR_YAG_READY:
0095	(* Keep at YAG *)
0096	ACTUATOR_CMD := cYAG;
0097	
0098	(* Look for state change request *)
0099	IF BR_REQUEST = BR_NONE_REQ THEN
0100	BR_STATE := BR_YAG_READY;
0101	ELSIF BR_REQUEST = BR_SINS1_REQ THEN
0102	BR_STATE := BR_SINS1_SELECTING;
0103	ELSIF BR_REQUEST = BR_SINS2_REQ THEN
0104	BR_STATE := BR_SINS2_SELECTING;
0105	ELSIF BR_REQUEST = BR_YAG_REQ THEN
0106	BR_STATE := BR_YAG_READY;
0107	END_IF
0108	
0109	ELSE
0110	BR_STATE := BR_ERROR;
0111	END_CASE;
Bypasses (ST)	
0001	(* Temporary Bypass Logic *)
0002	(* Will remove this after initial testing *)
0003	ACTUATOR_OK := TRUE;
0004	ES_CONFIG_OK := TRUE;
0005	LL_CONFIG_OK := TRUE;
0006	

0007	(* For testing during DP repair
0008	V100_OPN := TRUE;
0009	V100_CSD := FALSE;
0010	
0011	V101_OPN := TRUE;
0012	V101_CSD := FALSE;
0013	
0014	V201_OPN := TRUE;
0015	V201_CSD := FALSE;
0016	
0017	V202_OPN := FALSE;
0018	V202_CSD := TRUE;
0019	
0020	V203_OPN := FALSE;
0021	V203_CSD := TRUE;
0022	*)
Clear_Reqs (ST)	
0001	(* Clear all edge-triggered supervisory requests *)
0002	
0003	SC_RESET_REQ := 0;
0004	
0005	SC_V101_OPN_REQ := 0;
0006	SC_V101_CLS_REQ := 0;
0007	
0008	SC_V201_OPN_REQ := 0;
0009	SC_V201_CLS_REQ := 0;
0010	
0011	SC_V203_OPN_REQ := 0;
0012	SC_V203_CLS_REQ := 0;
0013	
0014	SC_V204_OPN_REQ := 0;
0015	SC_V204_CLS_REQ := 0;
0016	
0017	SC_TP201_ON_REQ := 0;
0018	SC_TP201_OFF_REQ := 0;
0019	SC_TP201_VENT_ENABLE_REQ := 0;
0020	SC_TP201_VENT_DISABLE_REQ := 0;
0021	
0022	SC_SLOTV211_OPN_REQ := 0;
0023	SC_SLOTV211_CLS_REQ := 0;
ES_SM (ST)	
0001	(* ES211 Pump/Vent State Machine *)
0002	
0003	(* Always test for PV_ERROR first *)
0004	IF NOT (LL_PE211_PIIY_OK AND LL_ES_CONFIG_OK) THEN
0005	ES_STATE := PV_ERROR;
0006	END_IF
0007	
0008	CASE ES_STATE OF
0009	PV_ERROR:
0010	V204_CLS_REQ_ES := TRUE;
0011	LLV211_CLS_REQ_ES := TRUE;
0012	RPV211_OPN_REQ_ES := FALSE;
0013	RP211_ON_REQ_ES := FALSE;
0014	VPV211_SLOW_OPN_REQ_ES := FALSE;
0015	VPV211_FAST_OPN_REQ_ES := FALSE;
0016	TPV211_OPN_REQ_ES := FALSE;
0017	TP211_ON_REQ_ES := FALSE;
0018	
0019	IF LL_PE211_PIIY_OK THEN
0020	ES_STATE := PV_ISOLATING;
0021	END_IF
0022	
0023	PV_ISOLATING:
0024	V204_CLS_REQ_ES := TRUE;
0025	LLV211_CLS_REQ_ES := TRUE;
0026	RPV211_OPN_REQ_ES := FALSE;
0027	RP211_ON_REQ_ES := FALSE;
0028	VPV211_SLOW_OPN_REQ_ES := FALSE;
0029	VPV211_FAST_OPN_REQ_ES := FALSE;
0030	TPV211_OPN_REQ_ES := FALSE;
0031	TP211_ON_REQ_ES := FALSE;

0032	
0033	IF V204_CSD AND LLV211_CSD AND RPV211_CSD THEN
0034	ES_STATE := PV_ISOLATED;
0035	END_IF
0036	
0037	PV_ISOLATED:
0038	V204_CLS_REQ_ES := TRUE;
0039	LLV211_CLS_REQ_ES := TRUE;
0040	RPV211_OPN_REQ_ES := FALSE;
0041	RP211_ON_REQ_ES := FALSE;
0042	VPV211_SLOW_OPN_REQ_ES := FALSE;
0043	VPV211_FAST_OPN_REQ_ES := FALSE;
0044	TPV211_OPN_REQ_ES := FALSE;
0045	TP211_ON_REQ_ES := FALSE;
0046	
0047	IF (ES_REQUEST = PV_VENT_REQ) THEN
0048	ES_STATE := PV_SLOW_VENTING;
0049	ELSIF (ES_REQUEST = PV_PUMP_REQ) AND PE211_PSL_MIDLO AND TP211_OK THEN
0050	ES_STATE := PV_TP_PUMPING;
0051	ELSIF (ES_REQUEST = PV_PUMP_REQ) THEN
0052	ES_STATE := PV_RP_STARTING;
0053	END_IF
0054	
0055	PV_SLOW_VENTING:
0056	V204_CLS_REQ_ES := TRUE;
0057	LLV211_CLS_REQ_ES := TRUE;
0058	RPV211_OPN_REQ_ES := FALSE;
0059	RP211_ON_REQ_ES := FALSE;
0060	VPV211_SLOW_OPN_REQ_ES := TRUE;
0061	VPV211_FAST_OPN_REQ_ES := FALSE;
0062	TPV211_OPN_REQ_ES := FALSE;
0063	TP211_ON_REQ_ES := FALSE;
0064	
0065	IF (ES_REQUEST = PV_NONE_REQ) THEN
0066	ES_STATE := PV_SLOW_VENTING;
0067	ELSIF NOT (ES_REQUEST = PV_VENT_REQ) THEN
0068	ES_STATE := PV_ISOLATING;
0069	ELSIF (PE211_PSH_MIDHI) THEN
0070	ES_STATE := PV_FAST_VENTING;
0071	END_IF
0072	
0073	PV_FAST_VENTING:
0074	V204_CLS_REQ_ES := TRUE;
0075	LLV211_CLS_REQ_ES := TRUE;
0076	RPV211_OPN_REQ_ES := FALSE;
0077	RP211_ON_REQ_ES := FALSE;
0078	VPV211_SLOW_OPN_REQ_ES := TRUE;
0079	VPV211_FAST_OPN_REQ_ES := TRUE;
0080	TPV211_OPN_REQ_ES := FALSE;
0081	TP211_ON_REQ_ES := FALSE;
0082	
0083	IF (ES_REQUEST = PV_NONE_REQ) THEN
0084	ES_STATE := PV_FAST_VENTING;
0085	ELSIF NOT (ES_REQUEST = PV_VENT_REQ) THEN
0086	ES_STATE := PV_ISOLATING;
0087	ELSIF (PE211_PSH_HI) THEN
0088	ES_STATE := PV_VENTED;
0089	END_IF
0090	
0091	PV_VENTED:
0092	V204_CLS_REQ_ES := TRUE;
0093	LLV211_CLS_REQ_ES := FALSE; (* LLV211 can be opened when both ES211 and LL211 are vented *)
0094	RPV211_OPN_REQ_ES := FALSE;
0095	RP211_ON_REQ_ES := FALSE;
0096	VPV211_SLOW_OPN_REQ_ES := FALSE;
0097	VPV211_FAST_OPN_REQ_ES := FALSE;
0098	TPV211_OPN_REQ_ES := FALSE;
0099	TP211_ON_REQ_ES := FALSE;
0100	
0101	IF (ES_REQUEST = PV_NONE_REQ) THEN
0102	ES_STATE := PV_VENTED;
0103	ELSIF NOT (ES_REQUEST = PV_VENT_REQ) THEN
0104	ES_STATE := PV_ISOLATING;

0105	ELSIF (NOT PE211_PSH_HI) THEN
0106	ES_STATE := PV_FAST_VENTING;
0107	END_IF
0108	
0109	PV_RP_STARTING:
0110	V204_CLS_REQ_ES := TRUE;
0111	LLV211_CLS_REQ_ES := TRUE;
0112	RPV211_OPN_REQ_ES := FALSE;
0113	RP211_ON_REQ_ES := TRUE;
0114	VPV211_SLOW_OPN_REQ_ES := FALSE;
0115	VPV211_FAST_OPN_REQ_ES := FALSE;
0116	TPV211_OPN_REQ_ES := FALSE;
0117	TP211_ON_REQ_ES := FALSE;
0118	
0119	IF (ES_REQUEST = PV_NONE_REQ) THEN
0120	ES_STATE := PV_RP_STARTING;
0121	ELSIF NOT (ES_REQUEST = PV_PUMP_REQ) THEN
0122	ES_STATE := PV_ISOLATING;
0123	ELSIF (RP211_ON) THEN
0124	(* ignore RP211_PSL *)
0125	ES_STATE := PV_RP_PUMPING;
0126	END_IF
0127	
0128	PV_RP_PUMPING:
0129	V204_CLS_REQ_ES := TRUE;
0130	LLV211_CLS_REQ_ES := TRUE;
0131	RPV211_OPN_REQ_ES := TRUE;
0132	RP211_ON_REQ_ES := TRUE;
0133	VPV211_SLOW_OPN_REQ_ES := FALSE;
0134	VPV211_FAST_OPN_REQ_ES := FALSE;
0135	TPV211_OPN_REQ_ES := FALSE;
0136	TP211_ON_REQ_ES := FALSE;
0137	
0138	IF (ES_REQUEST = PV_NONE_REQ) THEN
0139	ES_STATE := PV_RP_PUMPING;
0140	ELSIF NOT (ES_REQUEST = PV_PUMP_REQ) THEN
0141	ES_STATE := PV_ISOLATING;
0142	ELSIF (PE211_PSL_MIDLO) THEN
0143	ES_STATE := PV_RP_PUMPED;
0144	END_IF
0145	
0146	PV_RP_PUMPED:
0147	V204_CLS_REQ_ES := TRUE;
0148	LLV211_CLS_REQ_ES := TRUE;
0149	RPV211_OPN_REQ_ES := TRUE;
0150	RP211_ON_REQ_ES := TRUE;
0151	VPV211_SLOW_OPN_REQ_ES := FALSE;
0152	VPV211_FAST_OPN_REQ_ES := FALSE;
0153	TPV211_OPN_REQ_ES := FALSE;
0154	TP211_ON_REQ_ES := FALSE;
0155	
0156	IF (ES_REQUEST = PV_NONE_REQ) THEN
0157	ES_STATE := PV_RP_PUMPED;
0158	ELSIF NOT (ES_REQUEST = PV_PUMP_REQ) THEN
0159	ES_STATE := PV_ISOLATING;
0160	ELSIF (NOT PE211_PSL_MIDLO) THEN
0161	ES_STATE := PV_RP_PUMPING;
0162	ELSIF (TP211_OK) THEN
0163	(* First isolate, then go to TP_STARTING *)
0164	ES_STATE := PV_ISOLATING;
0165	END_IF
0166	
0167	PV_TP_PUMPING:
0168	V204_CLS_REQ_ES := TRUE;
0169	LLV211_CLS_REQ_ES := TRUE;
0170	RPV211_OPN_REQ_ES := FALSE;
0171	RP211_ON_REQ_ES := TRUE; (* Leave on in case MIDLO false *)
0172	VPV211_SLOW_OPN_REQ_ES := FALSE;
0173	VPV211_FAST_OPN_REQ_ES := FALSE;
0174	TPV211_OPN_REQ_ES := TRUE;
0175	TP211_ON_REQ_ES := TRUE;
0176	
0177	IF (ES_REQUEST = PV_NONE_REQ) THEN

0178	ES_STATE := PV_TP_PUMPING;
0179	ELSIF NOT (ES_REQUEST = PV_PUMP_REQ) THEN
0180	ES_STATE := PV_ISOLATING;
0181	ELSIF (NOT PE211_PSL_MIDLO) THEN
0182	ES_STATE := PV_RP_PUMPING;
0183	ELSIF (PE211_PSL_LO) THEN
0184	ES_STATE := PV_PUMPED;
0185	END_IF
0186	
0187	PV_PUMPED:
0188	V204_CLS_REQ_ES := FALSE;
0189	LLV211_CLS_REQ_ES := FALSE; (* LLV211 can be opened when both ES211 and LL211 are pumped *)
0190	RPV211_OPN_REQ_ES := FALSE;
0191	RP211_ON_REQ_ES := FALSE;
0192	VPV211_SLOW_OPN_REQ_ES := FALSE;
0193	VPV211_FAST_OPN_REQ_ES := FALSE;
0194	TPV211_OPN_REQ_ES := TRUE;
0195	TP211_ON_REQ_ES := TRUE;
0196	
0197	IF (ES_REQUEST = PV_NONE_REQ) THEN
0198	ES_STATE := PV_PUMPED;
0199	ELSIF NOT (ES_REQUEST = PV_PUMP_REQ) THEN
0200	ES_STATE := PV_ISOLATING;
0201	ELSIF (NOT PE211_PSL_MIDLO) THEN
0202	(* return to PV_RP_PUMPING via PV_ISOLATING *)
0203	ES_STATE := PV_ISOLATING;
0204	ELSIF (PE211_PSL_LO) THEN
0205	ES_STATE := PV_PUMPED;
0206	END_IF
0207	
0208	ELSE
0209	(* Invalid State, should never get here *)
0210	ES_STATE := PV_ERROR;
0211	
0212	END_CASE
0213	

Fault_Logic (ST)

0001	(* Latched interlocks *)
0002	
0003	LL_ACTUATOR_OK := ACTUATOR_OK AND (LL_ACTUATOR_OK OR RESET_REQ);
0004	LL_PE101_PSL_LO := PE101_PSL_LO AND (LL_PE101_PSL_LO OR RESET_REQ);
0005	LL_PE201_PSL_LO := PE201_PSL_LO AND (LL_PE201_PSL_LO OR RESET_REQ);
0006	LL_V202_OPN := V202_OPN AND (LL_V202_OPN OR RESET_REQ);
0007	LL_PE202_PSL_LO := PE202_PSL_LO AND (LL_PE202_PSL_LO OR RESET_REQ);
0008	LL_PE203_PSL_LO := PE203_PSL_LO AND (LL_PE203_PSL_LO OR RESET_REQ);
0009	
0010	LL_ES_CONFIG_OK := ES_CONFIG_OK AND (LL_ES_CONFIG_OK OR RESET_REQ);
0011	LL_LL_CONFIG_OK := LL_CONFIG_OK AND (LL_LL_CONFIG_OK OR RESET_REQ);
0012	
0013	LL_PE203_PIIY_OK := PE203_PIIY_OK AND (LL_PE203_PIIY_OK OR RESET_REQ);
0014	LL_PE211_PIIY_OK := PE211_PIIY_OK AND (LL_PE211_PIIY_OK OR RESET_REQ);
0015	LL_PE212_PIIY_OK := PE212_PIIY_OK AND (LL_PE212_PIIY_OK OR RESET_REQ);
0016	
0017	LL_BP211_ON := BP211_ON AND (LL_BP211_ON OR RESET_REQ);
0018	
0019	LL_TP201_OK := TP201_OK AND (LL_TP201_OK OR RESET_REQ);
0020	LL_TP211_OK := TP211_OK AND (LL_TP211_OK OR RESET_REQ);
0021	LL_TP212_OK := TP212_OK AND (LL_TP212_OK OR RESET_REQ);
0022	
0023	Reset_Required := (ACTUATOR_OK AND NOT LL_ACTUATOR_OK) OR
0024	(PE101_PSL_LO AND NOT LL_PE101_PSL_LO) OR
0025	(PE201_PSL_LO AND NOT LL_PE201_PSL_LO) OR
0026	(V202_OPN AND NOT LL_V202_OPN) OR
0027	(PE202_PSL_LO AND NOT LL_PE202_PSL_LO) OR
0028	(PE203_PSL_LO AND NOT LL_PE203_PSL_LO) OR
0029	(ES_CONFIG_OK AND NOT LL_ES_CONFIG_OK) OR
0030	(LL_CONFIG_OK AND NOT LL_LL_CONFIG_OK) OR
0031	(PE203_PIIY_OK AND NOT LL_PE203_PIIY_OK) OR
0032	(PE211_PIIY_OK AND NOT LL_PE211_PIIY_OK) OR
0033	(PE212_PIIY_OK AND NOT LL_PE212_PIIY_OK) OR
0034	(BP211_ON AND NOT LL_BP211_ON) OR
0035	(TP201_OK AND NOT LL_TP201_OK) OR
0036	(TP211_OK AND NOT LL_TP211_OK) OR

0037	(TP212_OK AND NOT LL_TP212_OK);
0038	
LL_SM (ST)	
0001	(* LL211 Pump/Vent State Machine *)
0002	
0003	(* Always test for PV_ERROR first *)
0004	IF NOT (LL_PE212_PIIY_OK AND LL_LL_CONFIG_OK) THEN
0005	LL_STATE := PV_ERROR;
0006	END_IF
0007	
0008	CASE LL_STATE OF
0009	
0010	PV_ERROR:
0011	LLV211_CLS_REQ_LL := TRUE;
0012	RPV212_OPN_REQ_LL := FALSE;
0013	RP211_ON_REQ_LL := FALSE;
0014	VPV212_SLOW_OPN_REQ_LL := FALSE;
0015	VPV212_FAST_OPN_REQ_LL := FALSE;
0016	TPV212_OPN_REQ_LL := FALSE;
0017	TP212_ON_REQ_LL := FALSE;
0018	
0019	IF LL_PE212_PIIY_OK THEN
0020	LL_STATE := PV_ISOLATING;
0021	END_IF
0022	
0023	PV_ISOLATING:
0024	LLV211_CLS_REQ_LL := TRUE;
0025	RPV212_OPN_REQ_LL := FALSE;
0026	RP211_ON_REQ_LL := FALSE;
0027	VPV212_SLOW_OPN_REQ_LL := FALSE;
0028	VPV212_FAST_OPN_REQ_LL := FALSE;
0029	TPV212_OPN_REQ_LL := FALSE;
0030	TP212_ON_REQ_LL := FALSE;
0031	
0032	IF LLV211_CSD AND RPV212_CSD THEN
0033	LL_STATE := PV_ISOLATED;
0034	END_IF
0035	
0036	PV_ISOLATED:
0037	LLV211_CLS_REQ_LL := TRUE;
0038	RPV212_OPN_REQ_LL := FALSE;
0039	RP211_ON_REQ_LL := FALSE;
0040	VPV212_SLOW_OPN_REQ_LL := FALSE;
0041	VPV212_FAST_OPN_REQ_LL := FALSE;
0042	TPV212_OPN_REQ_LL := FALSE;
0043	TP212_ON_REQ_LL := FALSE;
0044	
0045	IF (LL_REQUEST = PV_VENT_REQ) THEN
0046	LL_STATE := PV_SLOW_VENTING;
0047	ELSIF (LL_REQUEST = PV_PUMP_REQ) AND PE212_PSL_MIDLO AND TP212_OK THEN
0048	LL_STATE := PV_TP_PUMPING;
0049	ELSIF (LL_REQUEST = PV_PUMP_REQ) THEN
0050	LL_STATE := PV_RP_STARTING;
0051	END_IF
0052	
0053	PV_SLOW_VENTING:
0054	LLV211_CLS_REQ_LL := TRUE;
0055	RPV212_OPN_REQ_LL := FALSE;
0056	RP211_ON_REQ_LL := FALSE;
0057	VPV212_SLOW_OPN_REQ_LL := TRUE;
0058	VPV212_FAST_OPN_REQ_LL := FALSE;
0059	TPV212_OPN_REQ_LL := FALSE;
0060	TP212_ON_REQ_LL := FALSE;
0061	
0062	IF (LL_REQUEST = PV_NONE_REQ) THEN
0063	LL_STATE := PV_SLOW_VENTING;
0064	ELSIF NOT (LL_REQUEST = PV_VENT_REQ) THEN
0065	LL_STATE := PV_ISOLATING;
0066	ELSIF (PE212_PSH_MIDHI) THEN
0067	LL_STATE := PV_FAST_VENTING;
0068	END_IF
0069	
0070	PV_FAST_VENTING:

0071	LLV211_CLS_REQ_LL := TRUE;
0072	RPV212_OPN_REQ_LL := FALSE;
0073	RP211_ON_REQ_LL := FALSE;
0074	VPV212_SLOW_OPN_REQ_LL := TRUE;
0075	VPV212_FAST_OPN_REQ_LL := TRUE;
0076	TPV212_OPN_REQ_LL := FALSE;
0077	TP212_ON_REQ_LL := FALSE;
0078	
0079	IF (LL_REQUEST = PV_NONE_REQ) THEN
0080	LL_STATE := PV_FAST_VENTING;
0081	ELSIF NOT (LL_REQUEST = PV_VENT_REQ) THEN
0082	LL_STATE := PV_ISOLATING;
0083	ELSIF (PE212_PSH_HI) THEN
0084	LL_STATE := PV_VENTED;
0085	END_IF
0086	
0087	PV_VENTED:
0088	LLV211_CLS_REQ_LL := FALSE; (* LLV211 can be opened when both ES211 and LL211 are vented *)
0089	RPV212_OPN_REQ_LL := FALSE;
0090	RP211_ON_REQ_LL := FALSE;
0091	VPV212_SLOW_OPN_REQ_LL := FALSE;
0092	VPV212_FAST_OPN_REQ_LL := FALSE;
0093	TPV212_OPN_REQ_LL := FALSE;
0094	TP212_ON_REQ_LL := FALSE;
0095	
0096	IF (LL_REQUEST = PV_NONE_REQ) THEN
0097	LL_STATE := PV_VENTED;
0098	ELSIF NOT (LL_REQUEST = PV_VENT_REQ) THEN
0099	LL_STATE := PV_ISOLATING;
0100	ELSIF (NOT PE212_PSH_HI) THEN
0101	LL_STATE := PV_FAST_VENTING;
0102	END_IF
0103	
0104	PV_RP_STARTING:
0105	LLV211_CLS_REQ_ES := TRUE;
0106	RPV212_OPN_REQ_LL := FALSE;
0107	RP211_ON_REQ_LL := TRUE;
0108	VPV212_SLOW_OPN_REQ_LL := FALSE;
0109	VPV212_FAST_OPN_REQ_LL := FALSE;
0110	TPV212_OPN_REQ_LL := FALSE;
0111	TP212_ON_REQ_LL := FALSE;
0112	
0113	IF (LL_REQUEST = PV_NONE_REQ) THEN
0114	LL_STATE := PV_RP_STARTING;
0115	ELSIF NOT (LL_REQUEST = PV_PUMP_REQ) THEN
0116	LL_STATE := PV_ISOLATING;
0117	ELSIF (RP211_ON) THEN
0118	(* ignore RP211_PSL *)
0119	LL_STATE := PV_RP_PUMPING;
0120	END_IF
0121	
0122	PV_RP_PUMPING:
0123	LLV211_CLS_REQ_LL := TRUE;
0124	RPV212_OPN_REQ_LL := TRUE;
0125	RP211_ON_REQ_LL := TRUE;
0126	VPV212_SLOW_OPN_REQ_LL := FALSE;
0127	VPV212_FAST_OPN_REQ_LL := FALSE;
0128	TPV212_OPN_REQ_LL := FALSE;
0129	TP212_ON_REQ_LL := FALSE;
0130	
0131	IF (LL_REQUEST = PV_NONE_REQ) THEN
0132	LL_STATE := PV_RP_PUMPING;
0133	ELSIF NOT (LL_REQUEST = PV_PUMP_REQ) THEN
0134	LL_STATE := PV_ISOLATING;
0135	ELSIF (PE212_PSL_MIDLO) THEN
0136	LL_STATE := PV_RP_PUMPED;
0137	END_IF
0138	
0139	PV_RP_PUMPED:
0140	LLV211_CLS_REQ_LL := TRUE;
0141	RPV212_OPN_REQ_LL := TRUE;
0142	RP211_ON_REQ_LL := TRUE;
0143	VPV212_SLOW_OPN_REQ_LL := FALSE;

0144	VPV212_FAST_OPN_REQ_LL := FALSE;
0145	TPV212_OPN_REQ_LL := FALSE;
0146	TP212_ON_REQ_LL := FALSE;
0147	
0148	IF (LL_REQUEST = PV_NONE_REQ) THEN
0149	LL_STATE := PV_RP_PUMPED;
0150	ELSIF NOT (LL_REQUEST = PV_PUMP_REQ) THEN
0151	LL_STATE := PV_ISOLATING;
0152	ELSIF (NOT PE212_PSL_MIDLO) THEN
0153	LL_STATE := PV_RP_PUMPING;
0154	ELSIF (TP212_OK) THEN
0155	(* First isolate, then go to TP_STARTING *)
0156	LL_STATE := PV_ISOLATING;
0157	END_IF
0158	
0159	PV_TP_PUMPING:
0160	LLV211_CLS_REQ_LL := TRUE;
0161	RPV212_OPN_REQ_LL := FALSE;
0162	RP211_ON_REQ_LL := TRUE; (* Leave on in case MIDLO false *)
0163	VPV212_SLOW_OPN_REQ_LL := FALSE;
0164	VPV212_FAST_OPN_REQ_LL := FALSE;
0165	TPV212_OPN_REQ_LL := TRUE;
0166	TP212_ON_REQ_LL := TRUE;
0167	
0168	IF (LL_REQUEST = PV_NONE_REQ) THEN
0169	LL_STATE := PV_TP_PUMPING;
0170	ELSIF NOT (LL_REQUEST = PV_PUMP_REQ) THEN
0171	LL_STATE := PV_ISOLATING;
0172	ELSIF (NOT PE212_PSL_MIDLO) THEN
0173	LL_STATE := PV_RP_PUMPING;
0174	ELSIF (PE212_PSL_LO) THEN
0175	LL_STATE := PV_PUMPED;
0176	END_IF
0177	
0178	PV_PUMPED:
0179	LLV211_CLS_REQ_LL := FALSE; (* LLV211 can be opened when both ES211 and LL211 are pumped *)
0180	RPV212_OPN_REQ_LL := FALSE;
0181	RP211_ON_REQ_LL := FALSE;
0182	VPV212_SLOW_OPN_REQ_LL := FALSE;
0183	VPV212_FAST_OPN_REQ_LL := FALSE;
0184	TPV212_OPN_REQ_LL := TRUE;
0185	TP212_ON_REQ_LL := TRUE;
0186	
0187	IF (LL_REQUEST = PV_NONE_REQ) THEN
0188	LL_STATE := PV_PUMPED;
0189	ELSIF NOT (LL_REQUEST = PV_PUMP_REQ) THEN
0190	LL_STATE := PV_ISOLATING;
0191	ELSIF (NOT PE212_PSL_MIDLO) THEN
0192	(* return to PV_RP_PUMPING via PV_ISOLATING *)
0193	LL_STATE := PV_ISOLATING;
0194	ELSIF (PE212_PSL_LO) THEN
0195	LL_STATE := PV_PUMPED;
0196	END_IF
0197	
0198	ELSE
0199	(* Invalid State, should never get here *)
0200	LL_STATE := PV_ERROR;
0201	
0202	END_CASE
Process_Inputs (ST)	
0001	(*== Processed Inputs *)
0002	(* DISCRETE IN *)
0003	PE101_PSL_LO := DI_PE101_PSL_LO;
0004	PE201_PSL_LO := DI_PE201_PSL_LO;
0005	PE202_PSL_LO := DI_PE202_PSL_LO;
0006	
0007	RP211_ON := DI_RP2110_ON;
0008	BP211_ON := DI_RP2111_ON;
0009	RP211_PSL := DI_PE2110_PSL;
0010	BP211_PSL := DI_PE2111_PSL;
0011	
0012	PE203_Piy_OK := DI_PE203_Piy_OK;
0013	PE203_PSH_HI := DI_PE203_Piy_OK AND NOT DI_PE203_PSL_HI;

0014	PE203_PSH_MIDHI := DI_PE203_PIIY_OK AND NOT DI_PE203_PSL_MIDHI;
0015	PE203_PSL_MIDLO := DI_PE203_PSL_MIDLO;
0016	PE203_PSL_LO := DI_PE203_PSL_LO;
0017	
0018	PE211_PIIY_OK := DI_PE211_PIIY_OK;
0019	PE211_PSH_HI := DI_PE211_PIIY_OK AND NOT DI_PE211_PSL_HI;
0020	PE211_PSH_MIDHI := DI_PE211_PIIY_OK AND NOT DI_PE211_PSL_MIDHI;
0021	PE211_PSL_MIDLO := DI_PE211_PSL_MIDLO;
0022	PE211_PSL_LO := DI_PE211_PSL_LO;
0023	
0024	PE212_PIIY_OK := DI_PE212_PIIY_OK;
0025	PE212_PSH_HI := DI_PE212_PIIY_OK AND NOT DI_PE212_PSL_HI;
0026	PE212_PSH_MIDHI := DI_PE212_PIIY_OK AND NOT DI_PE212_PSL_MIDHI;
0027	PE212_PSL_MIDLO := DI_PE212_PSL_MIDLO;
0028	PE212_PSL_LO := DI_PE212_PSL_LO;
0029	
0030	V100_OPN := DI_V100_OPEN;
0031	V100_CSD := DI_V100_CLOSED;
0032	
0033	V101_OPN := DI_V101_OPEN AND DO_V101_OPEN_CMD;
0034	V101_CSD := DI_V101_CLOSED AND NOT DO_V101_OPEN_CMD;
0035	
0036	V201_OPN := DI_V201_OPEN AND DO_V201_OPEN_CMD;
0037	V201_CSD := DI_V201_CLOSED AND NOT DO_V201_OPEN_CMD;
0038	
0039	V202_OPN := DI_V202_OPEN;
0040	V202_CSD := DI_V202_CLOSED;
0041	
0042	V203_OPN := DI_V203_OPEN AND DO_V203_OPEN_CMD;
0043	V203_CSD := DI_V203_CLOSED AND NOT DO_V203_OPEN_CMD;
0044	
0045	V204_OPN := DI_V204_OPEN AND DO_V204_OPEN_CMD;
0046	V204_CSD := DI_V204_CLOSED AND NOT DO_V204_OPEN_CMD;
0047	
0048	TP201_OK := DI_TP201_TURBO_OK;
0049	TP201_ON := TP201_OK AND DO_TP201_ON_CMD;
0050	TP201_READY := TP201_ON AND DI_TP201_AT_SPEED;
0051	
0052	VPV211_OPN := DO_VENT211_SLOW_CMD OR DO_VENT211_FAST_CMD;
0053	VPV211_CSD := NOT VPV211_OPN;
0054	
0055	RPV211_OPN := DI_RPV211_OPEN AND DO_RPV211_OPEN_CMD;
0056	RPV211_CSD := DI_RPV211_CLOSED AND NOT DO_RPV211_OPEN_CMD;
0057	
0058	TPV211_OPN := DI_TPV211_OPEN AND DO_TPV211_OPEN_CMD;
0059	TPV211_CSD := DI_TPV211_CLOSED AND NOT DO_TPV211_OPEN_CMD;
0060	
0061	TP211_OK := DI_TP211_TURBO_OK;
0062	TP211_READY := DI_TP211_AT_SPEED AND DO_TP211_ON_CMD;
0063	
0064	VPV212_OPN := DO_VENT212_SLOW_CMD OR DO_VENT212_FAST_CMD;
0065	VPV212_CSD := NOT VPV212_OPN;
0066	
0067	RPV212_OPN := DI_RPV212_OPEN AND DO_RPV212_OPEN_CMD;
0068	RPV212_CSD := DI_RPV212_CLOSED AND NOT DO_RPV212_OPEN_CMD;
0069	
0070	TPV212_OPN := DI_TPV212_OPEN AND DO_TPV212_OPEN_CMD;
0071	TPV212_CSD := DI_TPV212_CLOSED AND NOT DO_TPV212_OPEN_CMD;
0072	
0073	TP212_OK := DI_TP212_TURBO_OK;
0074	TP212_READY := DI_TP212_AT_SPEED AND DO_TP212_ON_CMD;
0075	
0076	LLV211_OPN := DI_SLOTV211_OPEN;
0077	LLV211_CSD := DI_SLOTV211_CLOSED;
0078	
0079	LL211_LID_CLOSED := DI_LL211_LID_CLOSED;
0080	LL211_ARM_RETRACTED := DI_LL211_ARM_RETRACTED;

Process_Outputs (ST)

0001	(* Process Outputs *)
0002	
0003	DO_RP2110_ON_CMD := RP211.on_cmd;
0004	DO_RP2111_ON_CMD := BP211.ON_CMD;
0005	DO_V101_OPEN_CMD := V101.open_cmd;

0006	DO_V201_OPEN_CMD := V201.open_cmd;
0007	DO_V203_OPEN_CMD := V203.open_cmd;
0008	DO_V204_OPEN_CMD := V204.open_cmd;
0009	DO_TP201_ON_CMD := TP201.on_cmd;
0010	DO_TP201_VENT_ENABLE_CMD := VPV201.open_cmd;
0011	
0012	DO_TP211_ON_CMD := TP211.on_cmd;
0013	DO_TPV211_OPEN_CMD := TPV211.open_cmd;
0014	DO_RPV211_OPEN_CMD := RPV211.open_cmd;
0015	DO_VENT211_SLOW_CMD := VPV211_SLOW.open_cmd;
0016	DO_VENT211_FAST_CMD := VPV211_FAST.open_cmd;
0017	
0018	DO_SLOTV211_OPEN_CMD := LLV211.open_cmd;
0019	DO_SLOTV211_CLOSE_CMD := LLV211.close_cmd;
0020	
0021	DO_TP212_ON_CMD := TP212.on_cmd;
0022	DO_TPV212_OPEN_CMD := TPV212.open_cmd;
0023	DO_RPV212_OPEN_CMD := RPV212.open_cmd;
0024	DO_VENT212_SLOW_CMD := VPV212_SLOW.open_cmd;
0025	DO_VENT212_FAST_CMD := VPV212_FAST.open_cmd;

Pumps (ST)

0001	(* Pump Control Logic *)
0002	
0003	(* BP211 *)
0004	BP211_ON_CMD := TRUE; (* always on *)
0005	
0006	(* RP211 *)
0007	RP211.on_ena := TRUE;
0008	RP211.off_ena := RPV211_CSD AND RPV212_CSD;
0009	RP211.on_req := RP211_ON_REQ_ES OR RP211_ON_REQ_LL;
0010	RP211.off_req := NOT RP211.on_req;
0011	RP211();
0012	
0013	(* TP201 *)
0014	TP201.on_intlk := LL_PE203_PIIY_OK;
0015	TP201.on_ena := TRUE;
0016	TP201.off_ena := V203_CSD AND V204_CSD;
0017	TP201.on_req := TP201_ON_REQ_SC;
0018	TP201.off_req := TP201_OFF_REQ_SC;
0019	TP201();
0020	
0021	(* TP211 *)
0022	TP211.on_intlk := LL_BP211_ON;
0023	TP211.on_ena := TPV211_CSD;
0024	TP211.off_ena := TPV211_CSD;
0025	TP211.on_req := TP211_ON_REQ_ES;
0026	TP211.off_req := NOT TP211.on_req;
0027	TP211();
0028	
0029	(* TP212 *)
0030	TP212.on_intlk := LL_BP211_ON;
0031	TP212.on_ena := TPV212_CSD;
0032	TP212.off_ena := TPV212_CSD;
0033	TP212.on_req := TP212_ON_REQ_LL;
0034	TP212.off_req := NOT TP212.on_req;
0035	TP212();

SC_Inputs (ST)

0001	(* Supervisory Control Inputs *)
0002	RESET_REQ := SC_RESET_REQ;
0003	
0004	(* Level-Triggered signals *)
0005	
0006	(* Edge-Triggered signals *)
0007	V101_OPN_REQ_SC := SC_V101_OPN_REQ;
0008	V101_CLS_REQ_SC := SC_V101_CLS_REQ;
0009	V201_OPN_REQ_SC := SC_V201_OPN_REQ;
0010	V201_CLS_REQ_SC := SC_V201_CLS_REQ;
0011	V203_OPN_REQ_SC := SC_V203_OPN_REQ;
0012	V203_CLS_REQ_SC := SC_V203_CLS_REQ;
0013	V204_OPN_REQ_SC := SC_V204_OPN_REQ;
0014	V204_CLS_REQ_SC := SC_V204_CLS_REQ;
0015	TP201_ON_REQ_SC := SC_TP201_ON_REQ;

0016	TP201_OFF_REQ_SC := SC_TP201_OFF_REQ;
0017	TP201_VENT_ENABLE_REQ_SC := SC_TP201_VENT_ENABLE_REQ;
0018	TP201_VENT_DISABLE_REQ_SC := SC_TP201_VENT_DISABLE_REQ;
0019	LLV211_OPN_REQ_SC := SC_SLOTV211_OPN_REQ;
0020	LLV211_CLS_REQ_SC := SC_SLOTV211_CLS_REQ;
0021	
0022	(* BR_REQ *)
0023	CASE SC_BR_CMD_REQ OF
0024	0:
0025	BR_REQUEST := BR_NONE_REQ;
0026	1:
0027	BR_REQUEST := BR_SINS1_REQ;
0028	2:
0029	BR_REQUEST := BR_SINS2_REQ;
0030	3:
0031	BR_REQUEST := BR_YAG_REQ;
0032	ELSE
0033	BR_REQUEST := BR_NONE_REQ;
0034	END_CASE;
0035	
0036	(* ES_REQ *)
0037	CASE SC_ES_CMD_REQ OF
0038	0:
0039	ES_REQUEST := PV_NONE_REQ;
0040	1:
0041	ES_REQUEST := PV_ISOLATE_REQ;
0042	2:
0043	ES_REQUEST := PV_PUMP_REQ;
0044	3:
0045	ES_REQUEST := PV_VENT_REQ;
0046	ELSE
0047	ES_REQUEST := PV_NONE_REQ;
0048	END_CASE;
0049	
0050	
0051	(* LL_REQ *)
0052	CASE SC_LL_CMD_REQ OF
0053	0:
0054	LL_REQUEST := PV_NONE_REQ;
0055	1:
0056	LL_REQUEST := PV_ISOLATE_REQ;
0057	2:
0058	LL_REQUEST := PV_PUMP_REQ;
0059	3:
0060	LL_REQUEST := PV_VENT_REQ;
0061	ELSE
0062	LL_REQUEST := PV_NONE_REQ;
0063	END_CASE;
0064	
0065	
0066	
0067	

SC_Outputs (ST)

0001	(* Supervisory Control Outputs *)
0002	SC_RESET_REQUIRED := Reset_Required;
0003	SC_ATB := TRUE;
0004	SC_AFB := FALSE;
0005	
0006	(* Inputs *)
0007	SC_PE101_PSL := PE101_PSL_LO;
0008	SC_PE201_PSL := PE201_PSL_LO;
0009	SC_PE202_PSL := PE202_PSL_LO;
0010	
0011	SC_RP2110_AT_SPEED := DI_RP2110_ON;
0012	SC_RP2111_AT_SPEED := DI_RP2111_ON;
0013	SC_PE2110_PSL := DI_PE2110_PSL;
0014	SC_PE2111_PSL := DI_PE2111_PSL;
0015	
0016	SC_PE203_OK := DI_PE203_PII_OK;
0017	SC_PE203_PSL_HI := DI_PE203_PSL_HI;
0018	SC_PE203_PSL_MIDHI := DI_PE203_PSL_MIDHI;
0019	SC_PE203_PSL_MIDLO := DI_PE203_PSL_MIDLO;
0020	SC_PE203_PSL_LO := DI_PE203_PSL_LO;

0021	
0022	SC_PE211_OK := DI_PE211_PIIY_OK;
0023	SC_PE211_PSL_HI := DI_PE211_PSL_HI;
0024	SC_PE211_PSL_MIDHI := DI_PE211_PSL_MIDHI;
0025	SC_PE211_PSL_MIDLO := DI_PE211_PSL_MIDLO;
0026	SC_PE211_PSL_LO := DI_PE211_PSL_LO;
0027	
0028	SC_PE212_OK := DI_PE212_PIIY_OK;
0029	SC_PE212_PSL_HI := DI_PE212_PSL_HI;
0030	SC_PE212_PSL_MIDHI := DI_PE212_PSL_MIDHI;
0031	SC_PE212_PSL_MIDLO := DI_PE212_PSL_MIDLO;
0032	SC_PE212_PSL_LO := DI_PE212_PSL_LO;
0033	
0034	SC_LL211_LID_CLOSED := DI_LL211_LID_CLOSED;
0035	SC_LL211_ARM_RETRACTED := DI_LL211_ARM_RETRACTED;
0036	
0037	SC_V100_OPEN := V100_OPN;
0038	SC_V100_CLOSED := V100_CSD;
0039	
0040	SC_V101_BEAM_PASS := (NOT V100_CSD) AND (NOT V101_CSD) AND (BR_STATE = BR_SINS1_READY);
0041	SC_V101_OPEN := V101_OPN;
0042	SC_V101_CLOSED := V101_CSD;
0043	SC_V101_OPEN_PERMIT := V101.open_ena;
0044	SC_V101_CLOSE_PERMIT := V101.close_ena;
0045	SC_V101_OPEN_CMD := V101.open_cmd;
0046	SC_V101_NOT_SYMBOL := V101.not_symbol;
0047	
0048	SC_V201_BEAM_PASS := (NOT V100_CSD) AND (NOT V201_CSD) AND (BR_STATE = BR_SINS2_READY);
0049	SC_V201_OPEN := V201_OPN;
0050	SC_V201_CLOSED := V201_CSD;
0051	SC_V201_OPEN_PERMIT := V201.open_ena;
0052	SC_V201_CLOSE_PERMIT := V201.close_ena;
0053	SC_V201_OPEN_CMD := V201.open_cmd;
0054	SC_V201_NOT_SYMBOL := V201.not_symbol;
0055	
0056	SC_V202_OPEN := V202_OPN;
0057	SC_V202_CLOSED := V202_CSD;
0058	SC_V202_BEAM_PASS := SC_V201_BEAM_PASS AND (NOT V202_CSD);
0059	
0060	SC_V203_BEAM_PASS := SC_V202_BEAM_PASS AND (NOT V203_CSD);
0061	SC_V203_OPEN := V203_OPN;
0062	SC_V203_CLOSED := V203_CSD;
0063	SC_V203_OPEN_PERMIT := V203.open_ena;
0064	SC_V203_CLOSE_PERMIT := V203.close_ena;
0065	SC_V203_OPEN_CMD := V203.open_cmd;
0066	SC_V203_NOT_SYMBOL := V203.not_symbol;
0067	
0068	SC_V204_BEAM_PASS := SC_V203_BEAM_PASS AND (NOT V204_CSD);
0069	SC_V204_OPEN := V204_OPN;
0070	SC_V204_CLOSED := V204_CSD;
0071	SC_V204_OPEN_PERMIT := V204.open_ena;
0072	SC_V204_CLOSE_PERMIT := V204.close_ena;
0073	SC_V204_OPEN_CMD := V204.open_cmd;
0074	SC_V204_NOT_SYMBOL := V204.not_symbol;
0075	
0076	SC_RPV211_OPEN := RPV211_OPN;
0077	SC_RPV211_CLOSED := RPV211_CSD;
0078	SC_RPV211_OPEN_CMD := RPV211.open_cmd;
0079	
0080	SC_VENT211_SLOW_CMD := VPV211_SLOW.open_cmd;
0081	SC_VENT211_FAST_CMD := VPV211_FAST.open_cmd;
0082	
0083	SC_TPV211_OPEN := TPV211_OPN;
0084	SC_TPV211_CLOSED := TPV211_CSD;
0085	SC_TPV211_OPEN_CMD := TPV211.open_cmd;
0086	
0087	SC_SLOTV211_OPEN := LLV211_OPN;
0088	SC_SLOTV211_CLOSED := LLV211_CSD;
0089	SC_SLOTV211_OPEN_PERMIT := LLV211.open_ena;
0090	SC_SLOTV211_CLOSE_PERMIT := LLV211.close_ena;
0091	SC_SLOTV211_OPEN_CMD := LLV211.open_cmd;
0092	SC_SLOTV211_CLOSE_CMD := LLV211.close_cmd;
0093	SC_SLOTV211_NOT_SYMBOL := LLV211.not_symbol;

0094	
0095	SC_RPV212_OPEN := RPV212_OPN;
0096	SC_RPV212_CLOSED := RPV212_CSD;
0097	SC_RPV212_OPEN_CMD := RPV212.open_cmd;
0098	
0099	SC_VENT212_SLOW_CMD := VPV212_SLOW.open_cmd;
0100	SC_VENT212_FAST_CMD := VPV212_FAST.open_cmd;
0101	
0102	SC_TPV212_OPEN := TPV212_OPN;
0103	SC_TPV212_CLOSED := TPV212_CSD;
0104	SC_TPV212_OPEN_CMD := TPV212.open_cmd;
0105	
0106	SC_RP2110_ON := RP211_ON;
0107	SC_RP2110_ON_CMD := RP211.on_cmd;
0108	
0109	SC_RP2111_ON := BP211_ON;
0110	SC_RP2111_ON_CMD := BP211_ON_CMD;
0111	
0112	SC_TP201_VENT_ENABLE_CMD := VPV201.open_cmd;
0113	SC_TP201_VENT_NOT_SYMBOL := VPV201.not_symbol;
0114	
0115	SC_TP201_OK := TP201_OK;
0116	SC_TP201_ON := TP201_ON;
0117	SC_TP201_OFF := NOT TP201.on_cmd;
0118	SC_TP201_ON_PERMIT := TP201.on_ena;
0119	SC_TP201_OFF_PERMIT := TP201.off_ena;
0120	SC_TP201_ON_CMD := TP201.on_cmd;
0121	SC_TP201_NOT_SYMBOL := TP201.not_symbol;
0122	
0123	SC_TP211_OK := TP211_OK;
0124	SC_TP211_ON := TP211_READY;
0125	SC_TP211_OFF := NOT TP211.on_cmd;
0126	
0127	SC_TP212_OK := TP212_OK;
0128	SC_TP212_ON := TP212_READY;
0129	SC_TP212_OFF := NOT TP212.on_cmd;
0130	
0131	
0132	(* INTERLOCKS *)
0133	SC_LL_ACTUATOR_OK := LL_ACTUATOR_OK;
0134	SC_LL_PE101_PSL := LL_PE101_PSL_LO;
0135	SC_LL_PE201_PSL := LL_PE201_PSL_LO;
0136	SC_LL_V202_OPN := LL_V202_OPN;
0137	SC_LL_PE202_PSL := LL_PE202_PSL_LO;
0138	SC_LL_PE203_OK := LL_PE203_PIIY_OK;
0139	SC_LL_PE203_PSL_LO := LL_PE203_PSL_LO;
0140	SC_LL_TP201_OK := LL_TP201_OK;
0141	
0142	SC_LL_ES_CONFIG_OK := LL_ES_CONFIG_OK;
0143	SC_LL_LL_CONFIG_OK := LL_LL_CONFIG_OK;
0144	SC_LL_PE211_OK := LL_PE211_PIIY_OK;
0145	SC_LL_PE212_OK := LL_PE212_PIIY_OK;
0146	SC_LL_RP2111_ON := LL_BP211_ON;
0147	SC_LL_PE2111_PSL := BP211_PSL; (* This is just in case LabView needs it *)
0148	SC_LL_TP211_TURBO_OK := LL_TP211_OK;
0149	SC_LL_TP212_TURBO_OK := LL_TP212_OK;
0150	
0151	
0152	(* PLC_OUT REGISTERS *)
0153	
0154	
0155	(* Version Numbers *)
0156	SC_VERSION_MAJOR := cVERSION_MAJOR;
0157	SC_VERSION_MINOR := cVERSION_MINOR;
0158	
0159	(* Analog vacuum pressure *)
0160	SC_PE101_PIIY := AI_PE101_PIIY;
0161	SC_PE201_PIIY := AI_PE201_PIIY;
0162	SC_PE202_PIIY := AI_PE202_PIIY;
0163	SC_PE203_HI_PIIY := AI_PE203_HI_PIIY;
0164	SC_PE203_LO_PIIY := AI_PE203_LO_PIIY;
0165	SC_PE211_HI_PIIY := AI_PE211_HI_PIIY;
0166	SC_PE211_LO_PIIY := AI_PE211_LO_PIIY;

0167	SC_PE212_HI_Piy := AI_PE212_HI_Piy;
0168	SC_PE212_LO_Piy := AI_PE212_LO_Piy;
0169	
0170	(* Current BR_REQ *)
0171	CASE BR_REQUEST OF
0172	BR_NONE_REQ:
0173	SC_BR_CMD_VAL := 0;
0174	BR_SINS1_REQ:
0175	SC_BR_CMD_VAL := 1;
0176	BR_SINS2_REQ:
0177	SC_BR_CMD_VAL := 2;
0178	BR_YAG_REQ:
0179	SC_BR_CMD_VAL := 3;
0180	ELSE
0181	(* should never get here *)
0182	SC_BR_CMD_VAL := 0;
0183	END_CASE;
0184	
0185	(* Current ES_REQ *)
0186	CASE ES_REQUEST OF
0187	PV_NONE_REQ:
0188	SC_ES_CMD_VAL := 0;
0189	PV_ISOLATE_REQ:
0190	SC_ES_CMD_VAL := 1;
0191	PV_PUMP_REQ:
0192	SC_ES_CMD_VAL := 2;
0193	PV_VENT_REQ:
0194	SC_ES_CMD_VAL := 3;
0195	ELSE
0196	(* should never get here *)
0197	SC_ES_CMD_VAL := 0;
0198	END_CASE;
0199	
0200	(* Current LL_REQ *)
0201	CASE LL_REQUEST OF
0202	PV_NONE_REQ:
0203	SC_LL_CMD_VAL := 0;
0204	PV_ISOLATE_REQ:
0205	SC_LL_CMD_VAL := 1;
0206	PV_PUMP_REQ:
0207	SC_LL_CMD_VAL := 2;
0208	PV_VENT_REQ:
0209	SC_LL_CMD_VAL := 3;
0210	ELSE
0211	(* should never get here *)
0212	SC_LL_CMD_VAL := 0;
0213	END_CASE;
0214	
0215	
0216	(* Current BR_STATE *)
0217	CASE BR_STATE OF
0218	BR_ERROR:
0219	SC_BR_STATE := 0;
0220	BR_SINS1_READY:
0221	(* SINS.1 *)
0222	SC_BR_STATE := 1;
0223	BR_SINS2_READY:
0224	(* SINS.2 *)
0225	SC_BR_STATE := 2;
0226	BR_YAG_READY:
0227	(* YAG *)
0228	SC_BR_STATE := 3;
0229	BR_SINS1_SELECTING, BR_SINS2_SELECTING, BR_YAG_SELECTING:
0230	(* BUSY *)
0231	SC_BR_STATE := 5;
0232	ELSE
0233	(* should never get here *)
0234	SC_BR_STATE := 16#FFFF;
0235	END_CASE;
0236	
0237	(* Current ES_STATE *)
0238	CASE ES_STATE OF
0239	PV_ERROR:

0240	SC_ES_STATE := 0;
0241	PV_ISOLATING:
0242	SC_ES_STATE := 1;
0243	PV_ISOLATED:
0244	SC_ES_STATE := 2;
0245	PV_SLOW_VENTING:
0246	SC_ES_STATE := 3;
0247	PV_FAST_VENTING:
0248	SC_ES_STATE := 4;
0249	PV_VENTED:
0250	SC_ES_STATE := 5;
0251	PV_RP_STARTING:
0252	SC_ES_STATE := 6;
0253	PV_RP_PUMPING:
0254	SC_ES_STATE := 7;
0255	PV_RP_PUMPED:
0256	SC_ES_STATE := 8;
0257	PV_TP_PUMPING:
0258	SC_ES_STATE := 9;
0259	PV_PUMPED:
0260	SC_ES_STATE := 10;
0261	ELSE
0262	(* should never get here *)
0263	SC_ES_STATE := 16#FFFF;
0264	END_CASE;
0265	
0266	(* Current LL_STATE *)
0267	CASE LL_STATE OF
0268	PV_ERROR:
0269	SC_LL_STATE := 0;
0270	PV_ISOLATING:
0271	SC_LL_STATE := 1;
0272	PV_ISOLATED:
0273	SC_LL_STATE := 2;
0274	PV_SLOW_VENTING:
0275	SC_LL_STATE := 3;
0276	PV_FAST_VENTING:
0277	SC_LL_STATE := 4;
0278	PV_VENTED:
0279	SC_LL_STATE := 5;
0280	PV_RP_STARTING:
0281	SC_LL_STATE := 6;
0282	PV_RP_PUMPING:
0283	SC_LL_STATE := 7;
0284	PV_RP_PUMPED:
0285	SC_LL_STATE := 8;
0286	PV_TP_PUMPING:
0287	SC_LL_STATE := 9;
0288	PV_PUMPED:
0289	SC_LL_STATE := 10;
0290	ELSE
0291	(* should never get here *)
0292	SC_LL_STATE := 16#FFFF;
0293	END_CASE;
Valves (ST)	
0001	(* Valve Control Logic *)
0002	
0003	(* V101 *)
0004	V101.open_intlk := LL_PE101_PSL_LO AND LL_PE201_PSL_LO;
0005	V101.open_ena := TRUE;
0006	V101.close_ena := TRUE;
0007	V101.open_req := V101_OPN_REQ_SC;
0008	V101.close_req := V101_CLS_REQ_SC;
0009	V101();
0010	
0011	(* V201 *)
0012	V201.open_intlk := LL_PE201_PSL_LO AND LL_V202_OPN AND LL_PE202_PSL_LO;
0013	V201.open_ena := TRUE;
0014	V201.close_ena := TRUE;
0015	V201.open_req := V201_OPN_REQ_SC;
0016	V201.close_req := V201_CLS_REQ_SC;
0017	V201();
0018	

0019	(* V203 *)
0020	V203.open_intlk := LL_PE202_PSL_LO AND LL_TP201_OK AND LL_PE203_PSL_LO;
0021	V203.open_ena := TP201_READY;
0022	V203.close_ena := TRUE;
0023	V203.open_req := V203_OPN_REQ_SC;
0024	V203.close_req := V203_CLS_REQ_SC;
0025	V203();
0026	
0027	(* VPV201 *)
0028	VPV201.open_intlk := V203_CSD AND V204_CSD AND NOT TP201_ON;
0029	VPV201.open_ena := NOT TP201.on_cmd;
0030	VPV201.close_ena := TRUE;
0031	VPV201.open_req := TP201_VENT_ENABLE_REQ_SC;
0032	VPV201.close_req := TP201_VENT_DISABLE_REQ_SC;
0033	VPV201();
0034	
0035	(* V204 *)
0036	V204.open_intlk := LL_PE203_PSL_LO AND LL_TP201_OK AND PE211_PSL_LO;
0037	V204.open_ena := (ES_STATE = PV_PUMPED) AND LLV211_CSD AND TP201_READY;
0038	V204.close_ena := TRUE;
0039	V204.open_req := V204_OPN_REQ_SC;
0040	V204.close_req := V204_CLS_REQ_SC OR V204_CLS_REQ_ES;
0041	V204();
0042	
0043	(* LLV211 *)
0044	LLV211.open_intlk := ((ES_STATE = PV_PUMPED) AND (LL_STATE = PV_PUMPED)) OR
0045	((ES_STATE = PV_VENTED) AND (LL_STATE = PV_VENTED));
0046	LLV211.open_ena := V204_CSD;
0047	LLV211.close_intlk := LL211_ARM_RETRACTED OR LLV211_CSD;
0048	LLV211.close_ena:= LL211_ARM_RETRACTED;
0049	LLV211.open_req := LLV211_OPN_REQ_SC;
0050	LLV211.close_req:= LLV211_CLS_REQ_SC OR LLV211_CLS_REQ_ES OR LLV211_CLS_REQ_LL;
0051	LLV211();
0052	
0053	(* VPV211_SLOW *)
0054	VPV211_SLOW.open_intlk := V204_CSD AND LLV211_CSD AND TPV211_CSD AND RPV211_CSD;
0055	VPV211_SLOW.open_ena:= TRUE;
0056	VPV211_SLOW.close_ena := TRUE;
0057	VPV211_SLOW.open_req:= VPV211_SLOW_OPN_REQ_ES;
0058	VPV211_SLOW.close_req := NOT VPV211_SLOW_OPN_REQ_ES;
0059	VPV211_SLOW();
0060	
0061	(* VPV211_FAST *)
0062	VPV211_FAST.open_intlk := V204_CSD AND LLV211_CSD AND TPV211_CSD AND RPV211_CSD;
0063	VPV211_FAST.open_ena:= TRUE;
0064	VPV211_FAST.close_ena := TRUE;
0065	VPV211_FAST.open_req:= VPV211_FAST_OPN_REQ_ES;
0066	VPV211_FAST.close_req := NOT VPV211_FAST_OPN_REQ_ES;
0067	VPV211_FAST();
0068	
0069	(* RPV211 *)
0070	RPV211.open_intlk := RP211_ON AND V204_CSD AND LLV211_CSD AND VPV211_CSD;
0071	RPV211.open_ena := NOT PE211_PSL_MIDLO AND RPV212_CSD;
0072	RPV211.close_ena:= TRUE;
0073	RPV211.open_req := RPV211_OPN_REQ_ES;
0074	RPV211.close_req:= NOT RPV211_OPN_REQ_ES;
0075	RPV211();
0076	
0077	(* TPV211 *)
0078	TPV211.open_intlk := PE211_PSL_MIDLO AND LL_BP211_ON AND LL_PE211_PII_OK AND TP211.on_cmd;
0079	TPV211.open_ena := TRUE;
0080	TPV211.close_ena:= V204_CSD AND LLV211_CSD;
0081	TPV211.open_req := TPV211_OPN_REQ_ES;
0082	TPV211.close_req:= NOT TPV211_OPN_REQ_ES;
0083	TPV211();
0084	
0085	(* VPV212_SLOW *)
0086	VPV212_SLOW.open_intlk := LLV211_CSD AND TPV212_CSD AND RPV212_CSD;
0087	VPV212_SLOW.open_ena:= TRUE;
0088	VPV212_SLOW.close_ena := TRUE;
0089	VPV212_SLOW.open_req:= VPV212_SLOW_OPN_REQ_LL;
0090	VPV212_SLOW.close_req := NOT VPV212_SLOW_OPN_REQ_LL;
0091	VPV212_SLOW();

0092	
0093	(* VPV212_FAST *)
0094	VPV212_FAST.open_intlk := LLV211_CSD AND TPV212_CSD AND RPV212_CSD;
0095	VPV212_FAST.open_ena:= TRUE;
0096	VPV212_FAST.close_ena := TRUE;
0097	VPV212_FAST.open_req:= VPV212_FAST_OPN_REQ_LL;
0098	VPV212_FAST.close_req := NOT VPV212_FAST_OPN_REQ_LL;
0099	VPV212_FAST();
0100	
0101	(* RPV212 *)
0102	RPV212.open_intlk := RP211_ON AND LLV211_CSD AND VPV212_CSD;
0103	RPV212.open_ena := NOT PE212_PSL_MIDLO AND RPV211_CSD;
0104	RPV212.close_ena:= TRUE;
0105	RPV212.open_req := RPV212_OPN_REQ_LL;
0106	RPV212.close_req:= NOT RPV212_OPN_REQ_LL;
0107	RPV212();
0108	
0109	(* TPV212 *)
0110	TPV212.open_intlk := PE212_PSL_MIDLO AND LL_BP211_ON AND LL_PE212_PIIY_OK AND TP212.on_cmd;
0111	TPV212.open_ena := TRUE;
0112	TPV212.close_ena:= LLV211_CSD;
0113	TPV212.open_req := TPV212_OPN_REQ_LL;
0114	TPV212.close_req:= NOT TPV212_OPN_REQ_LL;
0115	TPV212();
0116	
RP_FB (FB-ST)	
0001	(* ROUGH PUMP CONTROL *)
0002	FUNCTION_BLOCK RP_FB
0003	VAR_INPUT
0004	on_ena: BOOL;
0005	off_ena: BOOL;
0006	
0007	on_req : BOOL;
0008	off_req : BOOL;
0009	END_VAR
0010	VAR_OUTPUT
0011	on_cmd: BOOL;
0012	not_symbol: BOOL;
0013	END_VAR
0014	VAR
0015	END_VAR
0001	on_cmd := (NOT off_req OR NOT off_ena) AND
0002	((on_ena AND on_req) OR on_cmd);
0003	
0004	not_symbol := (on_cmd AND NOT off_ena) OR (NOT on_cmd AND NOT on_ena);
TP_FB (FB-ST)	
0001	FUNCTION_BLOCK TP_FB
0002	VAR_INPUT
0003	on_intlk : BOOL;
0004	on_ena : BOOL;
0005	off_ena : BOOL;
0006	
0007	on_req : BOOL;
0008	off_req : BOOL;
0009	END_VAR
0010	VAR_OUTPUT
0011	on_cmd : BOOL;
0012	not_symbol : BOOL;
0013	END_VAR
0014	VAR
0015	END_VAR
0001	on_cmd := on_intlk AND
0002	(NOT (off_ena AND off_req)) AND
0003	((on_ena AND on_req) OR on_cmd);
0004	
0005	not_symbol := (on_cmd AND NOT off_ena) OR
0006	(NOT on_cmd AND NOT (on_intlk AND on_ena));
VALVE_BI_FB (FB-ST)	
0001	FUNCTION_BLOCK VALVE_BI_FB
0002	VAR_INPUT
0003	open_intlk : BOOL; (* open command interlock *)

0004	open_ena	: BOOL; (* open command enable *)
0005	close_intlk	: BOOL; (* close command interlock *)
0006	close_ena	: BOOL; (* close command enable *)
0007		
0008	open_req	: BOOL; (* open command request *)
0009	close_req	: BOOL; (* close command request *)
0010	END_VAR	
0011	VAR_OUTPUT	
0012	open_cmd	: BOOL; (* open command *)
0013	close_cmd	: BOOL; (* close command *)
0014	not_symbol	: BOOL; (* state change prohibited *)
0015	END_VAR	
0016	VAR	
0017	END_VAR	
0001		
0002	open_cmd:=	open_intlk AND
0003		(NOT (close_ena AND close_req)) AND
0004		((open_ena AND open_req) OR open_cmd);
0005		
0006	close_cmd	:= close_intlk AND
0007		(NOT (open_ena AND open_req)) AND
0008		((close_ena AND close_req) OR close_cmd);
0009		
0010	not_symbol	:= (open_cmd AND NOT (close_intlk AND close_ena)) OR
0011		(close_cmd AND NOT (open_intlk AND open_ena));
VALVE_FB (FB-ST)		
0001	FUNCTION_BLOCK VALVE_FB	
0002	VAR_INPUT	
0003	open_intlk	: BOOL; (* open command interlock *)
0004	open_ena	: BOOL; (* open command enable *)
0005	close_ena	: BOOL; (* close command enable *)
0006		
0007	open_req	: BOOL; (* open command request *)
0008	close_req	: BOOL; (* close command request *)
0009	END_VAR	
0010	VAR_OUTPUT	
0011	open_cmd	: BOOL; (* open command *)
0012	not_symbol	: BOOL; (* state change prohibited *)
0013	END_VAR	
0014	VAR	
0015	END_VAR	
0001	open_cmd:=	open_intlk AND
0002		(NOT (close_ena AND close_req)) AND
0003		((open_ena AND open_req) OR open_cmd);
0004		
0005	not_symbol	:= (open_cmd AND NOT close_ena) OR
0006		(NOT open_cmd AND NOT (open_intlk AND open_ena));
Actuator		
0001	TYPE Actuator :	
0002	STRUCT	
0003	awStatus:	ARRAY [0..9] OF WORD; (* actuator status words, incoming*)
0004	wCommand:	WORD; (* actuator control command, outgoing *)
0005	wTarget	: WORD; (* actuator target position, outgoing *)
0006		
0007	oMBMaster	: ETHERNET_MODBUSMASTER_TCP;
0008	tonConnect	: TON; (* connection delay timer *)
0009		
0010	xConnect:	BOOL; (* initiate TCP connection *)
0011	xSend	: BOOL; (* Initiate MB transaction *)
0012	xBusy	: BOOL; (* Transaction in progress *)
0013	xDataReady	: BOOL; (* Transaction data ready *)
0014		
0015	wState	: WORD := 10; (* sequencer state *)
0016	END_STRUCT	
0017	END_TYPE	
BR_REQ		
0001	TYPE BR_REQ :	
0002	(
0003	BR_NONE_REQ	:= 0,
0004	BR_SINS1_REQ,	
0005	BR_SINS2_REQ,	

```
0006      BR_SINS3_REQ,
0007      BR_YAG_REQ
0008    );
0009  END_TYPE
```

BR_ST

```
0001  TYPE BR_ST :
0002    (
0003      BR_ERROR := 0,
0004      BR_SINS1_SELECTING,
0005      BR_SINS1_READY,
0006      BR_SINS2_SELECTING,
0007      BR_SINS2_READY,
0008      BR_YAG_SELECTING,
0009      BR_YAG_READY
0010    );
0011  END_TYPE
```

PV_REQ

```
0001  TYPE PV_REQ :
0002    (
0003      PV_NONE_REQ := 0,
0004      PV_ISOLATE_REQ,
0005      PV_PUMP_REQ,
0006      PV_VENT_REQ
0007    );
0008  END_TYPE
```

PV_ST

```
0001  TYPE PV_ST :
0002    (
0003      PV_ERROR := 0,
0004      PV_ISOLATING,
0005      PV_ISOLATED,
0006      PV_SLOW_VENTING,
0007      PV_FAST_VENTING,
0008      PV_VENTED,
0009      PV_RP_STARTING,
0010      PV_RP_PUMPING,
0011      PV_RP_PUMPED,
0012      PV_TP_PUMPING,
0013      PV_PUMPED
0014    );
0015  END_TYPE
```

ACTUATOR_VISU

ACTUATORS

[Request](#) [Readback](#) [Position](#) [Target](#)

BR_SELECTOR	<div>SINS.1</div>	<div>SINS.2</div>	<div>YAG</div>	%d	%d	%d
-------------	-------------------	-------------------	----------------	----	----	----

AUTO_VISU

AUTO STATE MACHINES

[Request](#) [CMD](#) [EXT_VAL](#) [INT_VAL](#)

BR_SELECTOR	<div>NONE</div>	<div>SINS.1</div>	<div>SINS.2</div>	<div>YAG</div>	%d	%d	%s
ES_PUMPVENT	<div>NONE</div>	<div>ISOLATE</div>	<div>PUMP</div>	<div>VENT</div>	%d	%d	%s
LL_PUMPVENT	<div>NONE</div>	<div>ISOLATE</div>	<div>PUMP</div>	<div>VENT</div>	%d	%d	%s

INTLKS_VISU

Interlocks

EPS Reset

Reset

Branchline


Endstation


ACTUATOR_OK 

ES_CONFIG_OK 


PE101_PSL 


LL_CONFIG_OK 


PE201_PSL 


PE211_OK 


V202_OPN 

PE212_OK 


PE202_PSL 


RP2111_ON 

PE203_OK 

TP211_OK 

PE203_PSL_LO 

TP212_OK 

TP201_OK 

PUMPS_VISU

PUMPS

Requests

Name

PMT

ON

On Cmd

RP2110

☐☐

RP2111

☐☐

On

Off

TP201

☐☐

TP211

☐☐

TP212

☐☐

SIGNALS_VISU

Signals

BR

☐ PE101_PSL

☐ PE201_PSL

☐ PE202_PSL

PE203

 OK

☐ PSL_HI

☐ PSL_MIDHI

☐ PSL_MIDLO

☐ PSL_LO

PE211

 OK

☐ PSL_HI

☐ PSL_MIDHI

☐ PSL_MIDLO

☐ PSL_LO

PE212

 OK

☐ PSL_HI

☐ PSL_MIDHI

☐ PSL_MIDLO


☐ PSL_LO


RP2110

 ON

 PSL

TP201

 TURBO_OK


 AT_SPEED


TP211

 TURBO_OK

 AT_SPEED

TP212

 TURBO_OK


 AT_SPEED

RP2111

 ON

 PSL

LL211

 LID_CLOSED

 ARM_RETRACTED

VALVES

Requests		Name	PMT	OPN	CSD	Commands		
		V100		<input type="checkbox"/>	<input type="checkbox"/>			
<input type="button" value="Open"/>	<input type="button" value="Close"/>	V101	<div></div>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Open	<input type="checkbox"/> Beam
<input type="button" value="Open"/>	<input type="button" value="Close"/>	V201	<div></div>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Open	<input type="checkbox"/> Beam
		V202		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/> Beam
<input type="button" value="Open"/>	<input type="button" value="Close"/>	V203	<div></div>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Open	<input type="checkbox"/> Beam
<input type="button" value="Enable"/>	<input type="button" value="Disable"/>	VENT201	<div></div>			<input type="checkbox"/>	Enabled	
<input type="button" value="Open"/>	<input type="button" value="Close"/>	V204	<div></div>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Open	<input type="checkbox"/> Beam
		VENT211		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Slow	<input type="checkbox"/> Fast
		RPV211		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Open	
		TPV211		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Open	
<input type="button" value="Open"/>	<input type="button" value="Close"/>	SLOTV211	<div></div>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Open	<input type="checkbox"/> Close
		VENT212		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Slow	<input type="checkbox"/> Fast
		RPV212		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Open	
		TPV212		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Open	

Global_Variables

0001	VAR_GLOBAL		
0002	xActuatorReady	:	BOOL; (* In Position *)
0003	wActuatorStatus	:	WORD; (* Current Status *)
0004	wActuatorPosition	:	WORD; (* Current Position *)
0005	wActuatorAlarm	:	WORD; (* Current Alarm *)
0006	END_VAR		
0007	VAR_GLOBAL RETAIN		
0008	wActuatorTarget	:	WORD; (* Target Position *)
0009	END_VAR		

Variable_Configuration

0001	VAR_CONFIG
0002	END_VAR

Global_Variables 0

0001	VAR_GLOBAL
0002	END_VAR

Globale_Variablen

0001	VAR_GLOBAL
0002	END_VAR

Version

0001	VAR_GLOBAL CONSTANT
0002	rVersion:REAL:=1.001;
0003	END_VAR

Globale_Variablen

0001	VAR_GLOBAL CONSTANT		
0002	SOCKET_INVALID:DINT:=-1;		

```

0003
0004 (* AddressFamily *)
0005 SOCKET_AF_UNSPEC:INT:= 0; (* unspecified *)
0006 SOCKET_AF_LOCAL:INT:= 1; (* local to host (pipes, portals) *)
0007 SOCKET_AF_UNIX:INT:=SOCKET_AF_LOCAL; (* backward compatibility *)
0008 SOCKET_AF_INET:INT:=2; (* internetwork: UDP, TCP, etc. *)
0009 SOCKET_AF_IMPLINK:INT:=3; (* arpanet imp addresses *)
0010 SOCKET_AF_PUP:INT:=4; (* pup protocols: e.g. BSP *)
0011 SOCKET_AF_CHAOS:INT:=5; (* mit CHAOS protocols *)
0012 SOCKET_AF_NS:INT:=6; (* XEROX NS protocols *)
0013 SOCKET_AF_ISO:INT:=7; (* ISO protocols *)
0014 SOCKET_AF_OSI:INT:=SOCKET_AF_ISO;
0015 SOCKET_AF_ECMA:INT:=8; (* european computer manufacturers *)
0016 SOCKET_AF_DATAKIT:INT:=9; (* datakit protocols *)
0017 SOCKET_AF_CCITT:INT:=10; (* CCITT protocols, X.25 etc *)
0018 SOCKET_AF_SNA:INT:=11; (* IBM SNA *)
0019 SOCKET_AF_DECnet:INT:=12; (* DECnet *)
0020 SOCKET_AF_DLI:INT:=13; (* DEC Direct data link interface *)
0021 SOCKET_AF_LAT:INT:= 14; (* LAT *)
0022 SOCKET_AF_HYLINK:INT:=15; (* NSC Hyperchannel *)
0023 SOCKET_AF_APPLETALK:INT:=16; (* Apple Talk *)
0024 SOCKET_AF_ROUTE:INT:=17; (* Internal Routing Protocol *)
0025 SOCKET_AF_LINK:INT:=18; (* Link layer interface *)
0026 SOCKET_pseudo_AF_XTP:INT:=19; (* eXpress Transfer Protocol (no AF) *)
0027 SOCKET_AF_COIP:INT:=20; (* connection-oriented IP, aka ST II *)
0028 SOCKET_AF_CNT:INT:=21; (* Computer Network Technology *)
0029 SOCKET_pseudo_AF_RTIP:INT:=22; (* Help Identify RTIP packets *)
0030 SOCKET_AF_IPX:INT:=23; (* Novell Internet Protocol *)
0031 SOCKET_AF_SIP:INT:=24; (* Simple Internet Protocol *)
0032 SOCKET_pseudo_AF_PIP:INT:=25; (* Help Identify PIP packets *)
0033 SOCKET_AF_MAX:INT:=26;
0034 SOCKET_AF_INET_BSD:INT:=100; (* BSD-specific INET af *)
0035 SOCKET_AF_INET_STREAMS:INT:=101; (* STREAMS-specific INET af *)
0036
0037 (* Level number for (get/set)sockopt() to apply to socket itself. *)
0038 SOCKET_SOL:WORD:=16#ffff;
0039
0040 (* Socket options *)
0041 SOCKET_SO_DEBUG:DINT:=16#0001; (* turn on debugging info recording *)
0042 SOCKET_SO_ACCEPTCONN:DINT:=16#0002; (* socket has had listen() *)
0043 SOCKET_SO_REUSEADDR:DINT:=16#0004; (* allow local address reuse *)
0044 SOCKET_SO_KEEPAIVE:DINT:=16#0008; (* keep connections alive *)
0045 SOCKET_SO_DONTROUTE:DINT:=16#0010; (* just use interface addresses *)
0046 SOCKET_SO_BROADCAST:DINT:=16#0020; (* permit sending of broadcast msgs *)
0047 SOCKET_SO_USELOOPBACK:DINT:=16#0040; (* bypass hardware when possible *)
0048 SOCKET_SO_LINGER:DINT:=16#0080; (* linger on close if data present *)
0049 SOCKET_SO_OOBINLINE:DINT:=16#0100; (* leave received OOB data in line *)
0050 SOCKET_SO_REUSEPORT:DINT:=16#0200; (* allow local address & port reuse *)
0051 SOCKET_SO_SNDBUF:DINT:=16#1001; (* send buffer size *)
0052 SOCKET_SO_RCVBUF:DINT:= 16#1002; (* receive buffer size *)
0053 SOCKET_SO_SNDLOWAT:DINT:=16#1003; (* send low-water mark *)
0054 SOCKET_SO_RCVLOWAT:DINT:=16#1004; (* receive low-water mark *)
0055 SOCKET_SO_SNDTIMEO:DINT:=16#1005; (* send timeout *)
0056 SOCKET_SO_RCVTIMEO:DINT:=16#1006; (* receive timeout *)
0057 SOCKET_SO_ERROR:DINT:=16#1007; (* get error status and clear *)
0058 SOCKET_SO_TYPE:DINT:=16#1008; (* get socket type *)
0059 SOCKET_SO_PROTOCOL:DINT:=16#1009; (* get/set protocol type *)
0060 (* TCP/IP socket options *)
0061 SOCKET_TCP_NODELAY:DINT:=16#01; (* don't delay send to coalesce packets *)
0062 SOCKET_TCP_MAXSEG:DINT:=16#02; (* set maximum segment size *)
0063
0064 (* Socket types *)
0065 SOCKET_STREAM:DINT:=1; (* stream socket *)
0066 SOCKET_DGRAM:DINT:=2; (* datagram socket *)
0067 SOCKET_RAW:DINT:=3; (* raw-protocol interface *)
0068 SOCKET_RDM:DINT:=4; (* reliably-delivered message *)
0069 SOCKET_SEQPACKET:DINT:=5; (* sequenced packet stream *)
0070
0071 (* Inet address definitions *)
0072 SOCKET_INADDR_ANY:UDINT:=16#00000000;
0073 SOCKET_INADDR_LOOPBACK:UDINT:=16#7f000001;
0074 SOCKET_INADDR_BROADCAST:UDINT:=16#ffffff;
0075 SOCKET_INADDR_NONE:UDINT:=16#ffffff;

```

0076	
0077	(* Protocols *)
0078	SOCKET_IPPROTO_IP:DINT:=0; (* dummy for IP *)
0079	SOCKET_IPPROTO_ICMP:DINT:=1; (* control message protocol *)
0080	SOCKET_IPPROTO_IGMP:DINT:=2; (* group management protocol *)
0081	SOCKET_IPPROTO_GGP:DINT:=3; (* gateway^2 (deprecated) *)
0082	SOCKET_IPPROTO_TCP:DINT:=6; (* tcp *)
0083	SOCKET_IPPROTO_PUP:DINT:=12; (* pup *)
0084	SOCKET_IPPROTO_UDP:DINT:=17; (* user datagram protocol *)
0085	SOCKET_IPPROTO_IDP:DINT:=22; (* xns idp *)
0086	SOCKET_IPPROTO_ND:DINT:=77; (* UNOFFICIAL net disk proto *)
0087	SOCKET_IPPROTO_RAW:DINT:=255; (* raw IP packet *)
0088	SOCKET_IPPROTO_MAX:DINT:=256;
0089	
0090	(* Flags *)
0091	SOCKET_MSG_OOB:DINT:=16#1; (* process out-of-band data *)
0092	SOCKET_MSG_PEEK:DINT:=16#2; (* peek at incoming message *)
0093	SOCKET_MSG_DONTROUTE:DINT:=16#4; (* send without using routing tables *)
0094	
0095	(* Ioctl commands *)
0096	SOCKET_FIONREAD:DINT:=1; (* get num chars available to read *)
0097	SOCKET_FIONBIO:DINT:=2; (* set to non-blocking *)
0098	
0099	(* For SysSockSelect() descriptors *)
0100	SOCKET_FD_SETSIZE :DINT := 64;
0101	MAX_SOCKET_FD_SETSIZE : DINT := 63;
0102	END_VAR

Globale_Variablen

0001	VAR_GLOBAL
0002	END_VAR

Alarm configuration

<input type="checkbox"/>	Alarm configuration
<input type="checkbox"/>	Alarm classes
<input type="checkbox"/>	System

PLC Configuration

```

*Hardware configuration (Id.: 20100000001)
  Node number:  -1
  Input address: %IB0
  Output address: %QB0
  Diagnostic address: %MB0
  Download:  1
  AutoAdr:  1

*K-Bus (* WAGO 750-881 PFC ETHERNET *) [FIX] (Id.: 11994)
  Node number:  0
  Input address: %IB0
  Output address: %QB0
  Diagnostic address: %MB0
  Download:  1
  AutoAdr:  1

*0750-0459 4 AI 0-10V DC s.e.[VAR] (Id.: 2000008004)
  Node number:  0
  Input address: %IB0
  Output address: %QB0
  Diagnostic address: %MB0
  Download:  1
  AutoAdr:  1
  Parameter:
    PAAssignment: PLC
  Channels:
    AI_PE101_Piy AT %IW0: WORD; (* SINS.1 Branchline UHV pressure *) [CHANNEL (I)]
    AI_PE201_Piy AT %IW1: WORD; (* M201 UHV range pressure *) [CHANNEL (I)]
    AI_PE202_Piy AT %IW2: WORD; (* M202 UHV range pressure *) [CHANNEL (I)]
    AI_SPARE04 AT %IW3: WORD; (* Ch_4 Input word *) [CHANNEL (I)]

*0750-0459 4 AI 0-10V DC s.e.[VAR] (Id.: 2000008004)
  Node number:  1
  Input address: %IB1

```

Output address: %QB1
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
 PAAssignment: PLC
Channels:
 AI_PE203_HI_Piy AT %IW4: WORD; (* FTR201 High range pressure *) [CHANNEL (I)]
 AI_PE203_LO_Piy AT %IW5: WORD; (* FTR201 Low range pressure *) [CHANNEL (I)]
 AI_PE211_HI_Piy AT %IW6: WORD; (* ES211 High range pressure *) [CHANNEL (I)]
 AI_PE211_LO_Piy AT %IW7: WORD; (* ES211 Low range pressure *) [CHANNEL (I)]

*0750-0459 4 AI 0-10V DC s.e.[VAR] (Id.: 2000008004)

Node number: 2
Input address: %IB2
Output address: %QB2
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
 PAAssignment: PLC
Channels:
 AI_PE212_HI_Piy AT %IW8: WORD; (* LL211 High range pressure *) [CHANNEL (I)]
 AI_PE212_LO_Piy AT %IW9: WORD; (* LL211 Low range pressure *) [CHANNEL (I)]
 AI_SPARE11 AT %IW10: WORD; (* Ch_3 Input word *) [CHANNEL (I)]
 AI_SPARE12 AT %IW11: WORD; (* Ch_4 Input word *) [CHANNEL (I)]

*0750-0459 4 AI 0-10V DC s.e.[VAR] (Id.: 2000008004)

Node number: 3
Input address: %IB3
Output address: %QB3
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
 PAAssignment: PLC
Channels:
 AI_SPARE13 AT %IW12: WORD; (* Ch_1 Input word *) [CHANNEL (I)]
 AI_SPARE14 AT %IW13: WORD; (* Ch_2 Input word *) [CHANNEL (I)]
 AI_SPARE15 AT %IW14: WORD; (* Ch_3 Input word *) [CHANNEL (I)]
 AI_SPARE16 AT %IW15: WORD; (* Ch_4 Input word *) [CHANNEL (I)]

*0750-0530 8 DO 24 V DC 0.5A[VAR] (Id.: 2000010008)

Node number: 4
Input address: %IB4
Output address: %QB4
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
 PAAssignment: PLC
Channels:
 DO_RP2110_ON_CMD AT %QX0.0: BOOL; (* Ch_1 Digital output *) [CHANNEL (Q)]
 DO_RP2111_ON_CMD AT %QX0.1: BOOL; (* Ch_2 Digital output *) [CHANNEL (Q)]
 DO_V101_OPEN_CMD AT %QX0.2: BOOL; (* Ch_3 Digital output *) [CHANNEL (Q)]
 DO_V201_OPEN_CMD AT %QX0.3: BOOL; (* Ch_4 Digital output *) [CHANNEL (Q)]
 DO_V203_OPEN_CMD AT %QX0.4: BOOL; (* Ch_5 Digital output *) [CHANNEL (Q)]
 DO_V204_OPEN_CMD AT %QX0.5: BOOL; (* Ch_6 Digital output *) [CHANNEL (Q)]
 DO_TP201_ON_CMD AT %QX0.6: BOOL; (* Ch_7 Digital output *) [CHANNEL (Q)]
 DO_TP201_VENT_ENABLE_CMD AT %QX0.7: BOOL; (* Ch_8 Digital output *) [CHANNEL (Q)]

*0750-0530 8 DO 24 V DC 0.5A[VAR] (Id.: 2000010008)

Node number: 5
Input address: %IB5
Output address: %QB5
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
 PAAssignment: PLC
Channels:
 DO_TP211_ON_CMD AT %QX0.8: BOOL; (* Ch_1 Digital output *) [CHANNEL (Q)]
 DO_TPV211_OPEN_CMD AT %QX0.9: BOOL; (* Ch_2 Digital output *) [CHANNEL (Q)]

```
DO_RPV211_OPEN_CMD AT %QX0.10: BOOL; (* Ch_3 Digital output *) [CHANNEL (Q)]
DO_VENT211_SLOW_CMD AT %QX0.11: BOOL; (* Ch_4 Digital output *) [CHANNEL (Q)]
DO_VENT211_FAST_CMD AT %QX0.12: BOOL; (* Ch_5 Digital output *) [CHANNEL (Q)]
DO_SPARE_14 AT %QX0.13: BOOL; (* Ch_6 Digital output *) [CHANNEL (Q)]
DO_SLOTV211_OPEN_CMD AT %QX0.14: BOOL; (* Ch_7 Digital output *) [CHANNEL (Q)]
DO_SLOTV211_CLOSE_CMD AT %QX0.15: BOOL; (* Ch_8 Digital output *) [CHANNEL (Q)]
```

*0750-0530 8 DO 24 V DC 0.5A[VAR] (Id.: 2000010008)

```
Node number: 6
Input address: %IB6
Output address: %QB6
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
  PAAssignment: PLC
```

Channels:

```
DO_TP212_ON_CMD AT %QX1.0: BOOL; (* Ch_1 Digital output *) [CHANNEL (Q)]
DO_TPV212_OPEN_CMD AT %QX1.1: BOOL; (* Ch_2 Digital output *) [CHANNEL (Q)]
DO_RPV212_OPEN_CMD AT %QX1.2: BOOL; (* Ch_3 Digital output *) [CHANNEL (Q)]
DO_VENT212_SLOW_CMD AT %QX1.3: BOOL; (* Ch_4 Digital output *) [CHANNEL (Q)]
DO_VENT212_FAST_CMD AT %QX1.4: BOOL; (* Ch_5 Digital output *) [CHANNEL (Q)]
DO_SPARE_22 AT %QX1.5: BOOL; (* Ch_6 Digital output *) [CHANNEL (Q)]
DO_SPARE_23 AT %QX1.6: BOOL; (* Ch_7 Digital output *) [CHANNEL (Q)]
DO_SPARE_24 AT %QX1.7: BOOL; (* Ch_8 Digital output *) [CHANNEL (Q)]
```

*0750-0530 8 DO 24 V DC 0.5A[VAR] (Id.: 2000010008)

```
Node number: 7
Input address: %IB7
Output address: %QB7
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
  PAAssignment: PLC
```

Channels:

```
DO_SPARE_25 AT %QX1.8: BOOL; (* Ch_1 Digital output *) [CHANNEL (Q)]
DO_SPARE_26 AT %QX1.9: BOOL; (* Ch_2 Digital output *) [CHANNEL (Q)]
DO_SPARE_27 AT %QX1.10: BOOL; (* Ch_3 Digital output *) [CHANNEL (Q)]
DO_SPARE_28 AT %QX1.11: BOOL; (* Ch_4 Digital output *) [CHANNEL (Q)]
DO_SPARE_29 AT %QX1.12: BOOL; (* Ch_5 Digital output *) [CHANNEL (Q)]
DO_SPARE_30 AT %QX1.13: BOOL; (* Ch_6 Digital output *) [CHANNEL (Q)]
DO_SPARE_31 AT %QX1.14: BOOL; (* Ch_7 Digital output *) [CHANNEL (Q)]
DO_SPARE_32 AT %QX1.15: BOOL; (* Ch_8 Digital output *) [CHANNEL (Q)]
```

*0750-0430 8 DI 24 V DC 3.0ms[VAR] (Id.: 2000001008)

```
Node number: 8
Input address: %IB8
Output address: %QB8
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
  PAAssignment: PLC
```

Channels:

```
DI_PE101_PSL_LO AT %IX16.0: BOOL; (* Ch_1 Digital input *) [CHANNEL (I)]
DI_PE201_PSL_LO AT %IX16.1: BOOL; (* Ch_2 Digital input *) [CHANNEL (I)]
DI_PE202_PSL_LO AT %IX16.2: BOOL; (* Ch_3 Digital input *) [CHANNEL (I)]
DI_SPARE_04 AT %IX16.3: BOOL; (* Ch_4 Digital input *) [CHANNEL (I)]
DI_RP2110_ON AT %IX16.4: BOOL; (* Ch_5 Digital input *) [CHANNEL (I)]
DI_RP2111_ON AT %IX16.5: BOOL; (* Ch_6 Digital input *) [CHANNEL (I)]
DI_PE2110_PSL AT %IX16.6: BOOL; (* Ch_7 Digital input *) [CHANNEL (I)]
DI_PE2111_PSL AT %IX16.7: BOOL; (* Ch_8 Digital input *) [CHANNEL (I)]
```

*0750-0430 8 DI 24 V DC 3.0ms[VAR] (Id.: 2000001008)

```
Node number: 9
Input address: %IB9
Output address: %QB9
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
  PAAssignment: PLC
```


Channels:

```
DI_PE203_PIIY_OK AT %IX16.8: BOOL; (* Ch_1 Digital input *) [CHANNEL (I)]
DI_PE211_PIIY_OK AT %IX16.9: BOOL; (* Ch_2 Digital input *) [CHANNEL (I)]
DI_PE212_PIIY_OK AT %IX16.10: BOOL; (* Ch_3 Digital input *) [CHANNEL (I)]
DI_SPARE_12 AT %IX16.11: BOOL; (* Ch_4 Digital input *) [CHANNEL (I)]
DI_PE203_PSL_HI AT %IX16.12: BOOL; (* Ch_5 Digital input *) [CHANNEL (I)]
DI_PE203_PSL_MIDHI AT %IX16.13: BOOL; (* Ch_6 Digital input *) [CHANNEL (I)]
DI_PE203_PSL_MIDLO AT %IX16.14: BOOL; (* Ch_7 Digital input *) [CHANNEL (I)]
DI_PE203_PSL_LO AT %IX16.15: BOOL; (* Ch_8 Digital input *) [CHANNEL (I)]
```

*0750-0430 8 DI 24 V DC 3.0ms[VAR] (Id.: 2000001008)

Node number: 10
Input address: %IB10
Output address: %QB10
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
PAAssignment: PLC

Channels:

```
DI_PE211_PSL_HI AT %IX17.0: BOOL; (* Ch_1 Digital input *) [CHANNEL (I)]
DI_PE211_PSL_MIDHI AT %IX17.1: BOOL; (* Ch_2 Digital input *) [CHANNEL (I)]
DI_PE211_PSL_MIDLO AT %IX17.2: BOOL; (* Ch_3 Digital input *) [CHANNEL (I)]
DI_PE211_PSL_LO AT %IX17.3: BOOL; (* Ch_4 Digital input *) [CHANNEL (I)]
DI_PE212_PSL_HI AT %IX17.4: BOOL; (* Ch_5 Digital input *) [CHANNEL (I)]
DI_PE212_PSL_MIDHI AT %IX17.5: BOOL; (* Ch_6 Digital input *) [CHANNEL (I)]
DI_PE212_PSL_MIDLO AT %IX17.6: BOOL; (* Ch_7 Digital input *) [CHANNEL (I)]
DI_PE212_PSL_LO AT %IX17.7: BOOL; (* Ch_8 Digital input *) [CHANNEL (I)]
```

*0750-0430 8 DI 24 V DC 3.0ms[VAR] (Id.: 2000001008)

Node number: 11
Input address: %IB11
Output address: %QB11
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
PAAssignment: PLC

Channels:

```
DI_V100_OPEN AT %IX17.8: BOOL; (* Ch_1 Digital input *) [CHANNEL (I)]
DI_V100_CLOSED AT %IX17.9: BOOL; (* Ch_2 Digital input *) [CHANNEL (I)]
DI_V101_OPEN AT %IX17.10: BOOL; (* Ch_3 Digital input *) [CHANNEL (I)]
DI_V101_CLOSED AT %IX17.11: BOOL; (* Ch_4 Digital input *) [CHANNEL (I)]
DI_V201_OPEN AT %IX17.12: BOOL; (* Ch_5 Digital input *) [CHANNEL (I)]
DI_V201_CLOSED AT %IX17.13: BOOL; (* Ch_6 Digital input *) [CHANNEL (I)]
DI_V202_OPEN AT %IX17.14: BOOL; (* Ch_7 Digital input *) [CHANNEL (I)]
DI_V202_CLOSED AT %IX17.15: BOOL; (* Ch_8 Digital input *) [CHANNEL (I)]
```

*0750-0430 8 DI 24 V DC 3.0ms[VAR] (Id.: 2000001008)

Node number: 12
Input address: %IB12
Output address: %QB12
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
PAAssignment: PLC

Channels:

```
DI_V203_OPEN AT %IX18.0: BOOL; (* Ch_1 Digital input *) [CHANNEL (I)]
DI_V203_CLOSED AT %IX18.1: BOOL; (* Ch_2 Digital input *) [CHANNEL (I)]
DI_V204_OPEN AT %IX18.2: BOOL; (* Ch_3 Digital input *) [CHANNEL (I)]
DI_V204_CLOSED AT %IX18.3: BOOL; (* Ch_4 Digital input *) [CHANNEL (I)]
DI_TP201_TURBO_OK AT %IX18.4: BOOL; (* Ch_5 Digital input *) [CHANNEL (I)]
DI_TP201_AT_SPEED AT %IX18.5: BOOL; (* Ch_6 Digital input *) [CHANNEL (I)]
DI_RPV211_OPEN AT %IX18.6: BOOL; (* Ch_7 Digital input *) [CHANNEL (I)]
DI_RPV211_CLOSED AT %IX18.7: BOOL; (* Ch_8 Digital input *) [CHANNEL (I)]
```

*0750-0430 8 DI 24 V DC 3.0ms[VAR] (Id.: 2000001008)

Node number: 13
Input address: %IB13
Output address: %QB13
Diagnostic address: %MB0
Download: 1

AutoAdr: 1
Parameter:
 PAssignment: PLC
Channels:
 DI_TP211_OPEN AT %IX18.8: BOOL; (* Ch_1 Digital input *) [CHANNEL (I)]
 DI_TP211_CLOSED AT %IX18.9: BOOL; (* Ch_2 Digital input *) [CHANNEL (I)]
 DI_RPV212_OPEN AT %IX18.10: BOOL; (* Ch_3 Digital input *) [CHANNEL (I)]
 DI_RPV212_CLOSED AT %IX18.11: BOOL; (* Ch_4 Digital input *) [CHANNEL (I)]
 DI_TP212_OPEN AT %IX18.12: BOOL; (* Ch_5 Digital input *) [CHANNEL (I)]
 DI_TP212_CLOSED AT %IX18.13: BOOL; (* Ch_6 Digital input *) [CHANNEL (I)]
 DI_TP211_AT_SPEED AT %IX18.14: BOOL; (* Ch_7 Digital input *) [CHANNEL (I)]
 DI_TP211_TURBO_OK AT %IX18.15: BOOL; (* Ch_8 Digital input *) [CHANNEL (I)]

*0750-0430 8 DI 24 V DC 3.0ms[VAR] (Id.: 2000001008)
Node number: 14
Input address: %IB14
Output address: %QB14
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
 PAssignment: PLC
Channels:
 DI_TP212_AT_SPEED AT %IX19.0: BOOL; (* Ch_1 Digital input *) [CHANNEL (I)]
 DI_TP212_TURBO_OK AT %IX19.1: BOOL; (* Ch_2 Digital input *) [CHANNEL (I)]
 DI_SLOT211_OPEN AT %IX19.2: BOOL; (* Ch_3 Digital input *) [CHANNEL (I)]
 DI_SLOT211_CLOSED AT %IX19.3: BOOL; (* Ch_4 Digital input *) [CHANNEL (I)]
 DI_LL211_LID_CLOSED AT %IX19.4: BOOL; (* Ch_5 Digital input *) [CHANNEL (I)]
 DI_LL211_ARM_RETRACTED AT %IX19.5: BOOL; (* Ch_6 Digital input *) [CHANNEL (I)]
 DI_SPARE_55 AT %IX19.6: BOOL; (* Ch_7 Digital input *) [CHANNEL (I)]
 DI_SPARE_56 AT %IX19.7: BOOL; (* Ch_8 Digital input *) [CHANNEL (I)]

*0750-0430 8 DI 24 V DC 3.0ms[VAR] (Id.: 2000001008)
Node number: 15
Input address: %IB15
Output address: %QB15
Diagnostic address: %MB0
Download: 1
AutoAdr: 1
Parameter:
 PAssignment: PLC
Channels:
 DI_SPARE_57 AT %IX19.8: BOOL; (* Ch_1 Digital input *) [CHANNEL (I)]
 DI_SPARE_58 AT %IX19.9: BOOL; (* Ch_2 Digital input *) [CHANNEL (I)]
 DI_SPARE_59 AT %IX19.10: BOOL; (* Ch_3 Digital input *) [CHANNEL (I)]
 DI_SPARE_60 AT %IX19.11: BOOL; (* Ch_4 Digital input *) [CHANNEL (I)]
 DI_SPARE_61 AT %IX19.12: BOOL; (* Ch_5 Digital input *) [CHANNEL (I)]
 DI_SPARE_62 AT %IX19.13: BOOL; (* Ch_6 Digital input *) [CHANNEL (I)]
 DI_SPARE_63 AT %IX19.14: BOOL; (* Ch_7 Digital input *) [CHANNEL (I)]
 DI_SPARE_64 AT %IX19.15: BOOL; (* Ch_8 Digital input *) [CHANNEL (I)]

*Fieldbus variables[FIX] (Id.: 2010310001)
Node number: 1
Input address: %IB0
Output address: %QB0
Diagnostic address: %MB0
Download: 1
AutoAdr: 1

*Flag variables[FIX] (Id.: 2010320001)
Node number: 2
Input address: %IB0
Output address: %QB0
Diagnostic address: %MB0
Download: 1
AutoAdr: 1

Sampling Trace

No trace loaded

Task configuration

☐ Task configuration
☐ System events

```

Main (PRIORITY := 1, INTERVAL := T#15ms
  PLC_PRG();
IAI (PRIORITY := 3, INTERVAL := T#100ms
  Actuator_SM();

```

Watch- and Recipe Manager

Workspace

Parameter Manager

0001	Parameter-Manager
0002	=====

Cross Reference List

xDataReady

ACTUATOR_SM (23)	Local Read
ACTUATOR_SM (50)	Local Read
ACTUATOR_SM (59)	Local Read
ACTUATOR_SM (67)	Local Read
ACTUATOR_SM (76)	Local Read
ACTUATOR_SM (85)	Local Read
ACTUATOR_SM (92)	Local Read
ACTUATOR_SM (105)	Local Read
ACTUATOR_SM (122)	Local Read
ACTUATOR_SM (130)	Local Read
ACTUATOR_SM.DRG1_W... (34)	Local Write
ACTUATOR_SM.DRG1_W... (38)	Local Write
ACTUATOR_SM.DRG1_W... (40)	Local Write
ACTUATOR_SM.PCMD_W... (35)	Local Write
ACTUATOR_SM.PCMD_W... (39)	Local Write
ACTUATOR_SM.PCMD_W... (41)	Local Write
ACTUATOR_SM.STATUS... (34)	Local Write
ACTUATOR_SM.STATUS... (41)	Local Write
ACTUATOR_SM.STATUS... (43)	Local Write
ACTUATORinit (11)	Local Write

xSend

ACTUATOR_SM.CONNECT (9)	Local Write
ACTUATOR_SM.CONNECT (25)	Local Read
ACTUATOR_SM.DRG1_W... (7)	Local Write
ACTUATOR_SM.DRG1_W... (26)	Local Read
ACTUATOR_SM.DRG1_W... (36)	Local Read
ACTUATOR_SM.PCMD_W... (8)	Local Write
ACTUATOR_SM.PCMD_W... (27)	Local Read
ACTUATOR_SM.PCMD_W... (37)	Local Read
ACTUATOR_SM.STATUS... (7)	Local Write
ACTUATOR_SM.STATUS... (26)	Local Read
ACTUATOR_SM.STATUS... (36)	Local Read
ACTUATORinit (9)	Local Write

xConnect

ACTUATOR_SM (5)	Local Write
ACTUATOR_SM (10)	Local Write
ACTUATOR_SM (145)	Local Write
ACTUATOR_SM.CONNECT (6)	Local Read
ACTUATOR_SM.CONNECT (31)	Local Write
ACTUATOR_SM.DRG1_W... (32)	Local Write
ACTUATOR_SM.PCMD_W... (33)	Local Write
ACTUATOR_SM.STATUS... (32)	Local Write
ACTUATORinit (8)	Local Write

xActuatorReady

ACTUATOR_SM (4)	Global Write
ACTUATOR_SM (110)	Global Write
ACTUATOR_SM (115)	Global Write
PLC_PRG.ACTUATOR_I... (5)	Global Read
_global_init (1)	Global Write

VPV212_SLOW

PLC_PRG.PROCESS_OU... (24)	Local Read
PLC_PRG.SC_OUTPUTS (99)	Local Read
PLC_PRG.VALVES (86)	Local Write
PLC_PRG.VALVES (87)	Local Write
PLC_PRG.VALVES (88)	Local Write
PLC_PRG.VALVES (89)	Local Write
PLC_PRG.VALVES (90)	Local Write
PLC_PRG.VALVES (91)	Local Read
_global_init (302)	Local Read

xBusy

ACTUATOR_SM (17)	Local Write
ACTUATOR_SM.DRG1_W... (5)	Local Read
ACTUATOR_SM.DRG1_W... (6)	Local Write
ACTUATOR_SM.DRG1_W... (33)	Local Write
ACTUATOR_SM.DRG1_W... (37)	Local Write
ACTUATOR_SM.PCMD_W... (5)	Local Read
ACTUATOR_SM.PCMD_W... (7)	Local Write
ACTUATOR_SM.PCMD_W... (34)	Local Write
ACTUATOR_SM.PCMD_W... (38)	Local Write
ACTUATOR_SM.STATUS... (5)	Local Read
ACTUATOR_SM.STATUS... (6)	Local Write
ACTUATOR_SM.STATUS... (33)	Local Write
ACTUATOR_SM.STATUS... (40)	Local Write
ACTUATORinit (10)	Local Write
wActuatorStatus	
ACTUATOR_SM.STATUS... (39)	Global Write
PLC_PRG.ACTUATOR_I... (3)	Global Read
_global_init (2)	Global Write
VPV212_OPN	
PLC_PRG.PROCESS_IN... (64)	Local Write
PLC_PRG.PROCESS_IN... (65)	Local Read
_global_init (209)	Local Write
wTarget	
ACTUATOR_SM.PCMD_W... (6)	Local Write
ACTUATOR_SM.PCMD_W... (27)	Local Read
ACTUATORinit (5)	Local Write
wActuatorPosition	
ACTUATOR_SM (107)	Global Read
ACTUATOR_SM.STATUS... (37)	Global Write
PLC_PRG.ACTUATOR_I... (7)	Global Read
_global_init (3)	Global Write
VPV211_SLOW_OPN_REQ_ES	
PLC_PRG.ES_SM (14)	Local Write
PLC_PRG.ES_SM (28)	Local Write
PLC_PRG.ES_SM (42)	Local Write
PLC_PRG.ES_SM (60)	Local Write
PLC_PRG.ES_SM (78)	Local Write
PLC_PRG.ES_SM (96)	Local Write
PLC_PRG.ES_SM (114)	Local Write
PLC_PRG.ES_SM (133)	Local Write
PLC_PRG.ES_SM (151)	Local Write
PLC_PRG.ES_SM (172)	Local Write
PLC_PRG.ES_SM (192)	Local Write
PLC_PRG.VALVES (57)	Local Read
PLC_PRG.VALVES (58)	Local Read
_global_init (256)	Local Write
V100_OPN	
PLC_PRG.PROCESS_IN... (30)	Local Write
PLC_PRG.SC_OUTPUTS (37)	Local Read
_global_init (189)	Local Write
wState	
ACTUATOR_SM (3)	Local Read
ACTUATOR_SM (7)	Local Write
ACTUATOR_SM (9)	Local Read
ACTUATOR_SM (12)	Local Write
ACTUATOR_SM (14)	Local Read
ACTUATOR_SM (18)	Local Write
ACTUATOR_SM (21)	Local Read
ACTUATOR_SM (27)	Local Write
ACTUATOR_SM (31)	Local Write
ACTUATOR_SM (35)	Local Write
ACTUATOR_SM (39)	Local Write
ACTUATOR_SM (42)	Local Write
ACTUATOR_SM (46)	Local Read
ACTUATOR_SM (52)	Local Write
ACTUATOR_SM (55)	Local Read
ACTUATOR_SM (61)	Local Write
ACTUATOR_SM (64)	Local Read
ACTUATOR_SM (69)	Local Write
ACTUATOR_SM (72)	Local Read
ACTUATOR_SM (78)	Local Write
ACTUATOR_SM (81)	Local Read
ACTUATOR_SM (87)	Local Write

ACTUATOR_SM (90)	Local Read
ACTUATOR_SM (96)	Local Write
ACTUATOR_SM (99)	Local Write
ACTUATOR_SM (103)	Local Read
ACTUATOR_SM (111)	Local Write
ACTUATOR_SM (116)	Local Write
ACTUATOR_SM (120)	Local Read
ACTUATOR_SM (125)	Local Write
ACTUATOR_SM (128)	Local Read
ACTUATOR_SM (136)	Local Write
ACTUATOR_SM (140)	Local Write
ACTUATOR_SM (146)	Local Write
ACTUATOR_SM.CONNECT (32)	Local Write
ACTUATOR_SM.DRG1_W... (35)	Local Write
ACTUATOR_SM.PCMD_W... (36)	Local Write
ACTUATOR_SM.STATUS... (35)	Local Write
ACTUATORinit (12)	Local Write
wActuatorTarget	
ACTUATOR_SM (107)	Global Read
ACTUATOR_SM.PCMD_W... (6)	Global Read
PLC_PRG.ACTUATOR_O... (4)	Global Write
_global_init (1)	Global Write
wActuatorAlarm	
ACTUATOR_SM.STATUS... (38)	Global Write
_global_init (4)	Global Write
VPV212_SLOW_OPN_REQ_LL	
PLC_PRG.LL_SM (14)	Local Write
PLC_PRG.LL_SM (27)	Local Write
PLC_PRG.LL_SM (40)	Local Write
PLC_PRG.LL_SM (57)	Local Write
PLC_PRG.LL_SM (74)	Local Write
PLC_PRG.LL_SM (91)	Local Write
PLC_PRG.LL_SM (108)	Local Write
PLC_PRG.LL_SM (126)	Local Write
PLC_PRG.LL_SM (143)	Local Write
PLC_PRG.LL_SM (163)	Local Write
PLC_PRG.LL_SM (182)	Local Write
PLC_PRG.VALVES (89)	Local Read
PLC_PRG.VALVES (90)	Local Read
_global_init (268)	Local Write
VPV211_SLOW_CLS_REQ_ES	
_global_init (257)	Local Write
V101_OPN	
PLC_PRG.PROCESS_IN... (33)	Local Write
PLC_PRG.SC_OUTPUTS (41)	Local Read
_global_init (191)	Local Write
V100_CSD	
PLC_PRG.PROCESS_IN... (31)	Local Write
PLC_PRG.SC_OUTPUTS (38)	Local Read
PLC_PRG.SC_OUTPUTS (40)	Local Read
PLC_PRG.SC_OUTPUTS (48)	Local Read
_global_init (190)	Local Write
SC_VENT212_SLOW_CMD%MX8.11	
PLC_PRG.SC_OUTPUTS (99)	Local Write
_global_init (88)	Local Write
uiSuccessful	
ACTUATOR_SM (134)	Local Read
ACTUATOR_SM (134)	Local Write
_global_init (7)	Local Write
SC_VENT211_SLOW_CMD%MX6.11	
PLC_PRG.SC_OUTPUTS (80)	Local Write
_global_init (73)	Local Write
tTCP_Watchdog	
ACTUATOR_SM.CONNECT (25)	Local Read
ACTUATOR_SM.DRG1_W... (26)	Local Read
ACTUATOR_SM.PCMD_W... (27)	Local Read
ACTUATOR_SM.STATUS... (26)	Local Read
_global_init (5)	Local Write
SC_V204_BEAM_PASS%MX5.8	
PLC_PRG.SC_OUTPUTS (68)	Local Write
_global_init (63)	Local Write
wPort	
ACTUATOR_SM.CONNECT (25)	Local Read

ACTUATOR_SM.DRG1_W... (26)	Local Read
ACTUATOR_SM.PCMD_W... (27)	Local Read
ACTUATOR_SM.STATUS... (26)	Local Read
_global_init (2)	Local Write
VPV212_SLOW_CLS_REQ_LL	
_global_init (269)	Local Write
VPV212_FAST_CLS_REQ_LL	
_global_init (271)	Local Write
VPV212_FAST	
PLC_PRG.PROCESS_OU... (25)	Local Read
PLC_PRG.SC_OUTPUTS (100)	Local Read
PLC_PRG.VALVES (94)	Local Write
PLC_PRG.VALVES (95)	Local Write
PLC_PRG.VALVES (96)	Local Write
PLC_PRG.VALVES (97)	Local Write
PLC_PRG.VALVES (98)	Local Write
PLC_PRG.VALVES (99)	Local Read
_global_init (303)	Local Read
VPV212_FAST_OPN_REQ_LL	
PLC_PRG.LL_SM (15)	Local Write
PLC_PRG.LL_SM (28)	Local Write
PLC_PRG.LL_SM (41)	Local Write
PLC_PRG.LL_SM (58)	Local Write
PLC_PRG.LL_SM (75)	Local Write
PLC_PRG.LL_SM (92)	Local Write
PLC_PRG.LL_SM (109)	Local Write
PLC_PRG.LL_SM (127)	Local Write
PLC_PRG.LL_SM (144)	Local Write
PLC_PRG.LL_SM (164)	Local Write
PLC_PRG.LL_SM (183)	Local Write
PLC_PRG.VALVES (97)	Local Read
PLC_PRG.VALVES (98)	Local Read
_global_init (270)	Local Write
VPV212_CSD	
PLC_PRG.PROCESS_IN... (65)	Local Write
PLC_PRG.VALVES (102)	Local Read
_global_init (210)	Local Write
VPV211_SLOW	
PLC_PRG.PROCESS_OU... (15)	Local Read
PLC_PRG.SC_OUTPUTS (80)	Local Read
PLC_PRG.VALVES (54)	Local Write
PLC_PRG.VALVES (55)	Local Write
PLC_PRG.VALVES (56)	Local Write
PLC_PRG.VALVES (57)	Local Write
PLC_PRG.VALVES (58)	Local Write
PLC_PRG.VALVES (59)	Local Read
_global_init (297)	Local Read
VPV211_FAST	
PLC_PRG.PROCESS_OU... (16)	Local Read
PLC_PRG.SC_OUTPUTS (81)	Local Read
PLC_PRG.VALVES (62)	Local Write
PLC_PRG.VALVES (63)	Local Write
PLC_PRG.VALVES (64)	Local Write
PLC_PRG.VALVES (65)	Local Write
PLC_PRG.VALVES (66)	Local Write
PLC_PRG.VALVES (67)	Local Read
_global_init (298)	Local Read
VPV211_FAST_OPN_REQ_ES	
PLC_PRG.ES_SM (15)	Local Write
PLC_PRG.ES_SM (29)	Local Write
PLC_PRG.ES_SM (43)	Local Write
PLC_PRG.ES_SM (61)	Local Write
PLC_PRG.ES_SM (79)	Local Write
PLC_PRG.ES_SM (97)	Local Write
PLC_PRG.ES_SM (115)	Local Write
PLC_PRG.ES_SM (134)	Local Write
PLC_PRG.ES_SM (152)	Local Write
PLC_PRG.ES_SM (173)	Local Write
PLC_PRG.ES_SM (193)	Local Write
PLC_PRG.VALVES (65)	Local Read
PLC_PRG.VALVES (66)	Local Read
_global_init (258)	Local Write
VPV201	

PLC_PRG.PROCESS_OU...	(10)	Local Read
PLC_PRG.SC_OUTPUTS	(112)	Local Read
PLC_PRG.SC_OUTPUTS	(113)	Local Read
PLC_PRG.VALVES	(28)	Local Write
PLC_PRG.VALVES	(29)	Local Write
PLC_PRG.VALVES	(30)	Local Write
PLC_PRG.VALVES	(31)	Local Write
PLC_PRG.VALVES	(32)	Local Write
PLC_PRG.VALVES	(33)	Local Read
_global_init	(296)	Local Read
VPV211_CSD		
PLC_PRG.PROCESS_IN...	(53)	Local Write
PLC_PRG.VALVES	(70)	Local Read
_global_init	(202)	Local Write
V204_OPN_REQ_SC		
PLC_PRG.SC_INPUTS	(13)	Local Write
PLC_PRG.VALVES	(39)	Local Read
_global_init	(253)	Local Write
VPV211_OPN		
PLC_PRG.PROCESS_IN...	(52)	Local Write
PLC_PRG.PROCESS_IN...	(53)	Local Read
_global_init	(201)	Local Write
VPV211_FAST_CLS_REQ_ES		
_global_init	(259)	Local Write
V204_CSD		
PLC_PRG.ES_SM	(33)	Local Read
PLC_PRG.PROCESS_IN...	(46)	Local Write
PLC_PRG.PUMPS	(16)	Local Read
PLC_PRG.SC_OUTPUTS	(68)	Local Read
PLC_PRG.SC_OUTPUTS	(70)	Local Read
PLC_PRG.VALVES	(28)	Local Read
PLC_PRG.VALVES	(46)	Local Read
PLC_PRG.VALVES	(54)	Local Read
PLC_PRG.VALVES	(62)	Local Read
PLC_PRG.VALVES	(70)	Local Read
PLC_PRG.VALVES	(80)	Local Read
_global_init	(200)	Local Write
V203_OPN_REQ_SC		
PLC_PRG.SC_INPUTS	(11)	Local Write
PLC_PRG.VALVES	(23)	Local Read
_global_init	(251)	Local Write
V204_OPN		
PLC_PRG.PROCESS_IN...	(45)	Local Write
PLC_PRG.SC_OUTPUTS	(69)	Local Read
_global_init	(199)	Local Write
V204_CLS_REQ_ES		
PLC_PRG.ES_SM	(10)	Local Write
PLC_PRG.ES_SM	(24)	Local Write
PLC_PRG.ES_SM	(38)	Local Write
PLC_PRG.ES_SM	(56)	Local Write
PLC_PRG.ES_SM	(74)	Local Write
PLC_PRG.ES_SM	(92)	Local Write
PLC_PRG.ES_SM	(110)	Local Write
PLC_PRG.ES_SM	(129)	Local Write
PLC_PRG.ES_SM	(147)	Local Write
PLC_PRG.ES_SM	(168)	Local Write
PLC_PRG.ES_SM	(188)	Local Write
PLC_PRG.VALVES	(40)	Local Read
_global_init	(255)	Local Write
V204		
PLC_PRG.PROCESS_OU...	(8)	Local Read
PLC_PRG.SC_OUTPUTS	(71)	Local Read
PLC_PRG.SC_OUTPUTS	(72)	Local Read
PLC_PRG.SC_OUTPUTS	(73)	Local Read
PLC_PRG.SC_OUTPUTS	(74)	Local Read
PLC_PRG.VALVES	(36)	Local Write
PLC_PRG.VALVES	(37)	Local Write
PLC_PRG.VALVES	(38)	Local Write
PLC_PRG.VALVES	(39)	Local Write
PLC_PRG.VALVES	(40)	Local Write
PLC_PRG.VALVES	(41)	Local Read
_global_init	(295)	Local Read
V204_CLS_REQ_SC		

	PLC_PRG.SC_INPUTS (14)	Local Write
	PLC_PRG.VALVES (40)	Local Read
	_global_init (254)	Local Write
V203_CSD		
	PLC_PRG.PROCESS_IN... (43)	Local Write
	PLC_PRG.PUMPS (16)	Local Read
	PLC_PRG.SC_OUTPUTS (60)	Local Read
	PLC_PRG.SC_OUTPUTS (62)	Local Read
	PLC_PRG.VALVES (28)	Local Read
	_global_init (198)	Local Write
V203_OPN		
	PLC_PRG.PROCESS_IN... (42)	Local Write
	PLC_PRG.SC_OUTPUTS (61)	Local Read
	_global_init (197)	Local Write
V203		
	PLC_PRG.PROCESS_OU... (7)	Local Read
	PLC_PRG.SC_OUTPUTS (63)	Local Read
	PLC_PRG.SC_OUTPUTS (64)	Local Read
	PLC_PRG.SC_OUTPUTS (65)	Local Read
	PLC_PRG.SC_OUTPUTS (66)	Local Read
	PLC_PRG.VALVES (20)	Local Write
	PLC_PRG.VALVES (21)	Local Write
	PLC_PRG.VALVES (22)	Local Write
	PLC_PRG.VALVES (23)	Local Write
	PLC_PRG.VALVES (24)	Local Write
	PLC_PRG.VALVES (25)	Local Read
	_global_init (294)	Local Read
V203_CLS_REQ_SC		
	PLC_PRG.SC_INPUTS (12)	Local Write
	PLC_PRG.VALVES (24)	Local Read
	_global_init (252)	Local Write
V202_OPN		
	PLC_PRG.FAULT_LOGIC (6)	Local Read
	PLC_PRG.FAULT_LOGIC (37)	Local Read
	PLC_PRG.PROCESS_IN... (39)	Local Write
	PLC_PRG.SC_OUTPUTS (56)	Local Read
	_global_init (195)	Local Write
V202_CSD		
	PLC_PRG.PROCESS_IN... (40)	Local Write
	PLC_PRG.SC_OUTPUTS (57)	Local Read
	PLC_PRG.SC_OUTPUTS (58)	Local Read
	_global_init (196)	Local Write
V201_CLS_REQ_SC		
	PLC_PRG.SC_INPUTS (10)	Local Write
	PLC_PRG.VALVES (16)	Local Read
	_global_init (250)	Local Write
V201_OPN_REQ_SC		
	PLC_PRG.SC_INPUTS (9)	Local Write
	PLC_PRG.VALVES (15)	Local Read
	_global_init (249)	Local Write
V101_OPN_REQ_SC		
	PLC_PRG.SC_INPUTS (7)	Local Write
	PLC_PRG.VALVES (7)	Local Read
	_global_init (247)	Local Write
V201_OPN		
	PLC_PRG.PROCESS_IN... (36)	Local Write
	PLC_PRG.SC_OUTPUTS (49)	Local Read
	_global_init (193)	Local Write
TPV212_OPN		
	PLC_PRG.PROCESS_IN... (70)	Local Write
	PLC_PRG.SC_OUTPUTS (102)	Local Read
	_global_init (213)	Local Write
V201_CSD		
	PLC_PRG.PROCESS_IN... (37)	Local Write
	PLC_PRG.SC_OUTPUTS (48)	Local Read
	PLC_PRG.SC_OUTPUTS (50)	Local Read
	_global_init (194)	Local Write
V201		
	PLC_PRG.PROCESS_OU... (6)	Local Read
	PLC_PRG.SC_OUTPUTS (51)	Local Read
	PLC_PRG.SC_OUTPUTS (52)	Local Read
	PLC_PRG.SC_OUTPUTS (53)	Local Read
	PLC_PRG.SC_OUTPUTS (54)	Local Read

	PLC_PRG.VALVES (12)	Local Write
	PLC_PRG.VALVES (13)	Local Write
	PLC_PRG.VALVES (14)	Local Write
	PLC_PRG.VALVES (15)	Local Write
	PLC_PRG.VALVES (16)	Local Write
	PLC_PRG.VALVES (17)	Local Read
	_global_init (293)	Local Read
V101_CLS_REQ_SC		
	PLC_PRG.SC_INPUTS (8)	Local Write
	PLC_PRG.VALVES (8)	Local Read
	_global_init (248)	Local Write
TPV212		
	PLC_PRG.PROCESS_OU... (22)	Local Read
	PLC_PRG.SC_OUTPUTS (104)	Local Read
	PLC_PRG.VALVES (110)	Local Write
	PLC_PRG.VALVES (111)	Local Write
	PLC_PRG.VALVES (112)	Local Write
	PLC_PRG.VALVES (113)	Local Write
	PLC_PRG.VALVES (114)	Local Write
	PLC_PRG.VALVES (115)	Local Read
	_global_init (305)	Local Read
V101		
	PLC_PRG.PROCESS_OU... (5)	Local Read
	PLC_PRG.SC_OUTPUTS (43)	Local Read
	PLC_PRG.SC_OUTPUTS (44)	Local Read
	PLC_PRG.SC_OUTPUTS (45)	Local Read
	PLC_PRG.SC_OUTPUTS (46)	Local Read
	PLC_PRG.VALVES (4)	Local Write
	PLC_PRG.VALVES (5)	Local Write
	PLC_PRG.VALVES (6)	Local Write
	PLC_PRG.VALVES (7)	Local Write
	PLC_PRG.VALVES (8)	Local Write
	PLC_PRG.VALVES (9)	Local Read
	_global_init (292)	Local Read
TPV211_OPN_REQ_ES		
	PLC_PRG.ES_SM (16)	Local Write
	PLC_PRG.ES_SM (30)	Local Write
	PLC_PRG.ES_SM (44)	Local Write
	PLC_PRG.ES_SM (62)	Local Write
	PLC_PRG.ES_SM (80)	Local Write
	PLC_PRG.ES_SM (98)	Local Write
	PLC_PRG.ES_SM (116)	Local Write
	PLC_PRG.ES_SM (135)	Local Write
	PLC_PRG.ES_SM (153)	Local Write
	PLC_PRG.ES_SM (174)	Local Write
	PLC_PRG.ES_SM (194)	Local Write
	PLC_PRG.VALVES (81)	Local Read
	PLC_PRG.VALVES (82)	Local Read
	_global_init (262)	Local Write
TPV212_CSD		
	PLC_PRG.PROCESS_IN... (71)	Local Write
	PLC_PRG.PUMPS (31)	Local Read
	PLC_PRG.PUMPS (32)	Local Read
	PLC_PRG.SC_OUTPUTS (103)	Local Read
	PLC_PRG.VALVES (86)	Local Read
	PLC_PRG.VALVES (94)	Local Read
	_global_init (214)	Local Write
TPV211_OPN		
	PLC_PRG.PROCESS_IN... (58)	Local Write
	PLC_PRG.SC_OUTPUTS (83)	Local Read
	_global_init (205)	Local Write
TPV211_CSD		
	PLC_PRG.PROCESS_IN... (59)	Local Write
	PLC_PRG.PUMPS (23)	Local Read
	PLC_PRG.PUMPS (24)	Local Read
	PLC_PRG.SC_OUTPUTS (84)	Local Read
	PLC_PRG.VALVES (54)	Local Read
	PLC_PRG.VALVES (62)	Local Read
	_global_init (206)	Local Write
TPV211		
	PLC_PRG.PROCESS_OU... (13)	Local Read
	PLC_PRG.SC_OUTPUTS (85)	Local Read
	PLC_PRG.VALVES (78)	Local Write

	PLC_PRG.VALVES (79)	Local Write
	PLC_PRG.VALVES (80)	Local Write
	PLC_PRG.VALVES (81)	Local Write
	PLC_PRG.VALVES (82)	Local Write
	PLC_PRG.VALVES (83)	Local Read
	_global_init (300)	Local Read
TP212_ON_REQ_LL		
	PLC_PRG.LL_SM (17)	Local Write
	PLC_PRG.LL_SM (30)	Local Write
	PLC_PRG.LL_SM (43)	Local Write
	PLC_PRG.LL_SM (60)	Local Write
	PLC_PRG.LL_SM (77)	Local Write
	PLC_PRG.LL_SM (94)	Local Write
	PLC_PRG.LL_SM (111)	Local Write
	PLC_PRG.LL_SM (129)	Local Write
	PLC_PRG.LL_SM (146)	Local Write
	PLC_PRG.LL_SM (166)	Local Write
	PLC_PRG.LL_SM (185)	Local Write
	PLC_PRG.PUMPS (33)	Local Read
	_global_init (284)	Local Write
TP212		
	PLC_PRG.PROCESS_OU... (21)	Local Read
	PLC_PRG.PUMPS (30)	Local Write
	PLC_PRG.PUMPS (31)	Local Write
	PLC_PRG.PUMPS (32)	Local Write
	PLC_PRG.PUMPS (33)	Local Write
	PLC_PRG.PUMPS (34)	Local Read
	PLC_PRG.PUMPS (34)	Local Write
	PLC_PRG.PUMPS (35)	Local Read
	PLC_PRG.SC_OUTPUTS (129)	Local Read
	PLC_PRG.VALVES (110)	Local Read
	_global_init (310)	Local Read
TP211		
	PLC_PRG.PROCESS_OU... (12)	Local Read
	PLC_PRG.PUMPS (22)	Local Write
	PLC_PRG.PUMPS (23)	Local Write
	PLC_PRG.PUMPS (24)	Local Write
	PLC_PRG.PUMPS (25)	Local Write
	PLC_PRG.PUMPS (26)	Local Read
	PLC_PRG.PUMPS (26)	Local Write
	PLC_PRG.PUMPS (27)	Local Read
	PLC_PRG.SC_OUTPUTS (125)	Local Read
	PLC_PRG.VALVES (78)	Local Read
	_global_init (309)	Local Read
TPV211_CLS_REQ_ES		
	_global_init (263)	Local Write
TP201_OK		
	PLC_PRG.FAULT_LOGIC (19)	Local Read
	PLC_PRG.FAULT_LOGIC (37)	Local Read
	PLC_PRG.PROCESS_IN... (48)	Local Write
	PLC_PRG.PROCESS_IN... (49)	Local Read
	PLC_PRG.SC_OUTPUTS (115)	Local Read
	_global_init (215)	Local Write
V101_CSD		
	PLC_PRG.PROCESS_IN... (34)	Local Write
	PLC_PRG.SC_OUTPUTS (40)	Local Read
	PLC_PRG.SC_OUTPUTS (42)	Local Read
	_global_init (192)	Local Write
TP201_READY		
	PLC_PRG.PROCESS_IN... (50)	Local Write
	PLC_PRG.VALVES (21)	Local Read
	PLC_PRG.VALVES (37)	Local Read
	_global_init (217)	Local Write
TP201_ON		
	PLC_PRG.PROCESS_IN... (49)	Local Write
	PLC_PRG.PROCESS_IN... (50)	Local Read
	PLC_PRG.SC_OUTPUTS (116)	Local Read
	PLC_PRG.VALVES (28)	Local Read
	_global_init (216)	Local Write
SOCKET_SO_USELOOPBACK		
	_global_init (123)	Global Write
SOCKET_SO_SNDTIMEO		
	_global_init (131)	Global Write

SOCKET_SO_DEBUG		
_global_init (117)		Global Write
SOCKET_SOL		
_global_init (116)		Global Write
SOCKET_SO_SNDBUF		
_global_init (127)		Global Write
SOCKET_SO_PROTOTYPE		
_global_init (135)		Global Write
SOCKET_SO_REUSEADDR		
_global_init (119)		Global Write
SOCKET_MSG_PEEK		
_global_init (159)		Global Write
SOCKET_SO_ACCEPTCONN		
_global_init (118)		Global Write
SOCKET_IPPROTO_TCP		
CLIENT_OPENCLOSE (11)		Global Read
_global_init (151)		Global Write
SOCKET_IPPROTO_ND		
_global_init (155)		Global Write
SC_VERSION_MINOR%MW1281		
PLC_PRG.SC_OUTPUTS (157)		Local Write
_global_init (146)		Local Write
SC_VERSION_MAJOR%MW1280		
PLC_PRG.SC_OUTPUTS (156)		Local Write
_global_init (145)		Local Write
SC_VENT212_FAST_CMD%MX8.12		
PLC_PRG.SC_OUTPUTS (100)		Local Write
_global_init (89)		Local Write
SC_V202_CLOSED%MX4.9		
PLC_PRG.SC_OUTPUTS (57)		Local Write
_global_init (54)		Local Write
SC_V201_BEAM_PASS%MX4.0		
PLC_PRG.SC_OUTPUTS (48)		Local Write
PLC_PRG.SC_OUTPUTS (58)		Local Read
_global_init (46)		Local Write
SC_V100_CLOSED%MX3.1		
PLC_PRG.SC_OUTPUTS (38)		Local Write
_global_init (38)		Local Write
uiFailing		
ACTUATOR_SM.CONNECT (30)		Local Read
ACTUATOR_SM.CONNECT (30)		Local Write
ACTUATOR_SM.DRG1_W... (31)		Local Read
ACTUATOR_SM.DRG1_W... (31)		Local Write
ACTUATOR_SM.PCMD_W... (32)		Local Read
ACTUATOR_SM.PCMD_W... (32)		Local Write
ACTUATOR_SM.STATUS... (31)		Local Read
ACTUATOR_SM.STATUS... (31)		Local Write
_global_init (8)		Local Write
TPV212_OPN_REQ_LL		
PLC_PRG.LL_SM (16)		Local Write
PLC_PRG.LL_SM (29)		Local Write
PLC_PRG.LL_SM (42)		Local Write
PLC_PRG.LL_SM (59)		Local Write
PLC_PRG.LL_SM (76)		Local Write
PLC_PRG.LL_SM (93)		Local Write
PLC_PRG.LL_SM (110)		Local Write
PLC_PRG.LL_SM (128)		Local Write
PLC_PRG.LL_SM (145)		Local Write
PLC_PRG.LL_SM (165)		Local Write
PLC_PRG.LL_SM (184)		Local Write
PLC_PRG.VALVES (113)		Local Read
PLC_PRG.VALVES (114)		Local Read
_global_init (274)		Local Write
TP212_OK		
PLC_PRG.FAULT_LOGIC (21)		Local Read
PLC_PRG.FAULT_LOGIC (37)		Local Read
PLC_PRG.LL_SM (47)		Local Read
PLC_PRG.LL_SM (154)		Local Read
PLC_PRG.PROCESS_IN... (73)		Local Write
PLC_PRG.SC_OUTPUTS (127)		Local Read
_global_init (220)		Local Write
TP211_ON_REQ_ES		
PLC_PRG.ES_SM (17)		Local Write

PLC_PRG.ES_SM (31)	Local Write
PLC_PRG.ES_SM (45)	Local Write
PLC_PRG.ES_SM (63)	Local Write
PLC_PRG.ES_SM (81)	Local Write
PLC_PRG.ES_SM (99)	Local Write
PLC_PRG.ES_SM (117)	Local Write
PLC_PRG.ES_SM (136)	Local Write
PLC_PRG.ES_SM (154)	Local Write
PLC_PRG.ES_SM (175)	Local Write
PLC_PRG.ES_SM (195)	Local Write
PLC_PRG.PUMPS (25)	Local Read
_global_init (282)	Local Write
TP211_READY	
PLC_PRG.PROCESS_IN... (62)	Local Write
PLC_PRG.SC_OUTPUTS (124)	Local Read
_global_init (219)	Local Write
TP211_OK	
PLC_PRG.ES_SM (49)	Local Read
PLC_PRG.ES_SM (162)	Local Read
PLC_PRG.FAULT_LOGIC (20)	Local Read
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.PROCESS_IN... (61)	Local Write
PLC_PRG.SC_OUTPUTS (123)	Local Read
_global_init (218)	Local Write
SC_VENT211_FAST_CMD%MX6.12	
PLC_PRG.SC_OUTPUTS (81)	Local Write
_global_init (74)	Local Write
SC_V203_OPN_REQ%MX641.6	
PLC_PRG.CLEAR_REQS (11)	Local Write
PLC_PRG.SC_INPUTS (11)	Local Read
_global_init (135)	Local Write
SC_V201_CLS_REQ%MX641.3	
PLC_PRG.CLEAR_REQS (9)	Local Write
PLC_PRG.SC_INPUTS (10)	Local Read
_global_init (134)	Local Write
SC_V101_OPEN_PERMIT%MX3.11	
PLC_PRG.SC_OUTPUTS (43)	Local Write
_global_init (42)	Local Write
SC_PE212_OK%MX2.0	
PLC_PRG.SC_OUTPUTS (28)	Local Write
_global_init (30)	Local Write
tTCP_Timeout	
ACTUATOR_SM.CONNECT (25)	Local Read
ACTUATOR_SM.DRG1_W... (26)	Local Read
ACTUATOR_SM.PCMD_W... (27)	Local Read
ACTUATOR_SM.STATUS... (26)	Local Read
_global_init (4)	Local Write
TP212_OFF_REQ_LL	
_global_init (285)	Local Write
TPV212_CLS_REQ_LL	
_global_init (275)	Local Write
TP201_VENT_ENABLE_REQ_SC	
PLC_PRG.SC_INPUTS (17)	Local Write
PLC_PRG.VALVES (31)	Local Read
_global_init (278)	Local Write
TP212_READY	
PLC_PRG.PROCESS_IN... (74)	Local Write
PLC_PRG.SC_OUTPUTS (128)	Local Read
_global_init (221)	Local Write
TP211_OFF_REQ_ES	
_global_init (283)	Local Write
TP201_VENT_DISABLE_REQ_SC	
PLC_PRG.SC_INPUTS (18)	Local Write
PLC_PRG.VALVES (32)	Local Read
_global_init (279)	Local Write
TP201_ON_REQ_SC	
PLC_PRG.PUMPS (17)	Local Read
PLC_PRG.SC_INPUTS (15)	Local Write
_global_init (276)	Local Write
TP201_OFF_REQ_SC	
PLC_PRG.PUMPS (18)	Local Read
PLC_PRG.SC_INPUTS (16)	Local Write
_global_init (277)	Local Write

SOCKET_INVALID		
_global_init (84)		Global Write
TP201		
PLC_PRG.PROCESS_OU... (9)		Local Read
PLC_PRG.PUMPS (14)		Local Write
PLC_PRG.PUMPS (15)		Local Write
PLC_PRG.PUMPS (16)		Local Write
PLC_PRG.PUMPS (17)		Local Write
PLC_PRG.PUMPS (18)		Local Write
PLC_PRG.PUMPS (19)		Local Read
PLC_PRG.SC_OUTPUTS (117)		Local Read
PLC_PRG.SC_OUTPUTS (118)		Local Read
PLC_PRG.SC_OUTPUTS (119)		Local Read
PLC_PRG.SC_OUTPUTS (120)		Local Read
PLC_PRG.SC_OUTPUTS (121)		Local Read
PLC_PRG.VALVES (29)		Local Read
_global_init (306)		Local Read
SOCKET_pseudo_AF_XTP		
_global_init (106)		Global Write
SOCKET_pseudo_AF_RTIP		
_global_init (109)		Global Write
SOCKET_pseudo_AF_PIP		
_global_init (112)		Global Write
SOCKET_AF_SIP		
_global_init (111)		Global Write
SOCKET_AF_ROUTE		
_global_init (104)		Global Write
SOCKET_AF_SNA		
_global_init (98)		Global Write
SC_VERSION_MINOR%MW1281		
PLC_PRG.SC_OUTPUTS (157)		Local Write
_global_init (146)		Local Write
SC_V204_OPN_REQ%MX641.8		
PLC_PRG.CLEAR_REQS (14)		Local Write
PLC_PRG.SC_INPUTS (13)		Local Read
_global_init (137)		Local Write
SC_V203_CLOSED%MX5.2		
PLC_PRG.SC_OUTPUTS (62)		Local Write
_global_init (58)		Local Write
SC_PE211_PSL_HI%MX1.9		
PLC_PRG.SC_OUTPUTS (23)		Local Write
_global_init (26)		Local Write
SC_PE203_PSL_MIDHI%MX1.2		
PLC_PRG.SC_OUTPUTS (18)		Local Write
_global_init (22)		Local Write
tonConnect		
ACTUATOR_SM.CONNECT (6)		Local Write
ACTUATOR_SM.CONNECT (25)		Local Read
ACTUATOR_SM.DRG1_W... (26)		Local Read
ACTUATOR_SM.PCMD_W... (27)		Local Read
ACTUATOR_SM.STATUS... (26)		Local Read
ACTUATORinit (7)		Local Read
SOCKET_SO_OOBLINE		
_global_init (125)		Global Write
SOCKET_SO_LINGER		
_global_init (124)		Global Write
SOCKET_SO_KEEPAIVE		
_global_init (120)		Global Write
SOCKET_SO_BROADCAST		
_global_init (122)		Global Write
SOCKET_SO_DONTROUTE		
_global_init (121)		Global Write
SOCKET_AF_UNSPEC		
_global_init (85)		Global Write
SOCKET_AF_UNIX		
_global_init (87)		Global Write
SOCKET_AF_PUP		
_global_init (90)		Global Write
SOCKET_AF_NS		
_global_init (92)		Global Write
SC_V204_OPEN_PERMIT%MX5.11		
PLC_PRG.SC_OUTPUTS (71)		Local Write
_global_init (66)		Local Write

SC_V100_OPEN%MX3.0		
PLC_PRG.SC_OUTPUTS (37)		Local Write
_global_init (37)		Local Write
SC_PE201_PSL%MX0.9		
PLC_PRG.SC_OUTPUTS (8)		Local Write
_global_init (14)		Local Write
strAddress		
ACTUATOR_SM.CONNECT (25)		Local Read
ACTUATOR_SM.DRG1_W... (26)		Local Read
ACTUATOR_SM.PCMD_W... (27)		Local Read
ACTUATOR_SM.STATUS... (26)		Local Read
_global_init (1)		Local Write
SOCKET_SO_TYPE		
_global_init (134)		Global Write
SOCKET_SO_SNDLOWAT		
_global_init (129)		Global Write
SOCKET_SO_RCVLOWAT		
_global_init (130)		Global Write
SOCKET_SO_REUSEPORT		
_global_init (126)		Global Write
SOCKET_SO_RCVTIMEO		
_global_init (132)		Global Write
SOCKET_SO_ERROR		
_global_init (133)		Global Write
SOCKET_IPPROTO_UDP		
CLIENT_OPENCLOSE (43)		Global Read
ETHERNET_MODBUSMAS... (9)		Global Read
_global_init (153)		Global Write
SOCKET_SO_RCVBUF		
_global_init (128)		Global Write
SOCKET_IPPROTO_MAX		
_global_init (157)		Global Write
SOCKET_IPPROTO_IP		
_global_init (147)		Global Write
SOCKET_IPPROTO_IGMP		
_global_init (149)		Global Write
SOCKET_AF_OSI		
_global_init (94)		Global Write
SOCKET_AF_MAX		
_global_init (113)		Global Write
SOCKET_AF_LOCAL		
_global_init (86)		Global Write
SOCKET_AF_LINK		
_global_init (105)		Global Write
SOCKET_AF_LAT		
_global_init (101)		Global Write
SOCKET_AF_ISO		
_global_init (93)		Global Write
SOCKET_AF_IPX		
_global_init (110)		Global Write
SOCKET_AF_INET_STREAMS		
_global_init (115)		Global Write
SOCKET_AF_INET_BSD		
_global_init (114)		Global Write
SOCKET_AF_INET		
CLIENT_OPENCLOSE (11)		Global Read
CLIENT_OPENCLOSE (27)		Global Read
CLIENT_OPENCLOSE (43)		Global Read
ETHERNET_MODBUSMAS... (9)		Global Read
ETHERNET_MODBUSMAS... (12)		Global Read
_global_init (88)		Global Write
SOCKET_AF_HYLINK		
_global_init (102)		Global Write
SOCKET_AF_ECMA		
_global_init (95)		Global Write
SOCKET_AF_CHAOS		
_global_init (91)		Global Write
SOCKET_AF_IMPLINK		
_global_init (89)		Global Write
SOCKET_AF_DLI		
_global_init (100)		Global Write
SOCKET_AF_DECnet		
_global_init (99)		Global Write

SOCKET_AF_COIP		
_global_init (107)		Global Write
SOCKET_AF_DATAKIT		
_global_init (96)		Global Write
SOCKET_AF_CNT		
_global_init (108)		Global Write
SOCKET_AF_APPLETALK		
_global_init (103)		Global Write
SC_VENT212_FAST_CMD%MX8.12		
PLC_PRG.SC_OUTPUTS (100)		Local Write
_global_init (89)		Local Write
SC_VENT212_SLOW_CMD%MX8.11		
PLC_PRG.SC_OUTPUTS (99)		Local Write
_global_init (88)		Local Write
SC_VENT211_SLOW_CMD%MX6.11		
PLC_PRG.SC_OUTPUTS (80)		Local Write
_global_init (73)		Local Write
SC_VENT211_FAST_CMD%MX6.12		
PLC_PRG.SC_OUTPUTS (81)		Local Write
_global_init (74)		Local Write
SC_V204_OPN_REQ%MX641.8		
PLC_PRG.CLEAR_REQS (14)		Local Write
PLC_PRG.SC_INPUTS (13)		Local Read
_global_init (137)		Local Write
SOCKET_AF_CCITT		
_global_init (97)		Global Write
SC_VERSION_MAJOR%MW1280		
PLC_PRG.SC_OUTPUTS (156)		Local Write
_global_init (145)		Local Write
SC_V204_OPEN_PERMIT%MX5.11		
PLC_PRG.SC_OUTPUTS (71)		Local Write
_global_init (66)		Local Write
SC_V204_OPEN_CMD%MX5.13		
PLC_PRG.SC_OUTPUTS (73)		Local Write
_global_init (68)		Local Write
SC_V204_OPEN_CMD%MX5.13		
PLC_PRG.SC_OUTPUTS (73)		Local Write
_global_init (68)		Local Write
SC_V204_NOT_SYMBOL%MX5.14		
PLC_PRG.SC_OUTPUTS (74)		Local Write
_global_init (69)		Local Write
SC_V204_CLS_REQ%MX641.9		
PLC_PRG.CLEAR_REQS (15)		Local Write
PLC_PRG.SC_INPUTS (14)		Local Read
_global_init (138)		Local Write
SC_V204_BEAM_PASS%MX5.8		
PLC_PRG.SC_OUTPUTS (68)		Local Write
_global_init (63)		Local Write
SC_V204_OPEN%MX5.9		
PLC_PRG.SC_OUTPUTS (69)		Local Write
_global_init (64)		Local Write
SC_V204_CLOSED%MX5.10		
PLC_PRG.SC_OUTPUTS (70)		Local Write
_global_init (65)		Local Write
SC_V204_OPEN%MX5.9		
PLC_PRG.SC_OUTPUTS (69)		Local Write
_global_init (64)		Local Write
SC_V204_CLS_REQ%MX641.9		
PLC_PRG.CLEAR_REQS (15)		Local Write
PLC_PRG.SC_INPUTS (14)		Local Read
_global_init (138)		Local Write
SC_V203_OPN_REQ%MX641.6		
PLC_PRG.CLEAR_REQS (11)		Local Write
PLC_PRG.SC_INPUTS (11)		Local Read
_global_init (135)		Local Write
SC_V204_CLOSE_PERMIT%MX5.12		
PLC_PRG.SC_OUTPUTS (72)		Local Write
_global_init (67)		Local Write
SC_V203_OPEN_PERMIT%MX5.3		
PLC_PRG.SC_OUTPUTS (63)		Local Write
_global_init (59)		Local Write
SC_V203_OPEN_PERMIT%MX5.3		
PLC_PRG.SC_OUTPUTS (63)		Local Write

_global_init (59)	Local Write
SC_V203_OPEN_CMD%MX5.5	
PLC_PRG.SC_OUTPUTS (65)	Local Write
_global_init (61)	Local Write
SC_V203_NOT_SYMBOL%MX5.6	
PLC_PRG.SC_OUTPUTS (66)	Local Write
_global_init (62)	Local Write
SC_V203_CLS_REQ%MX641.7	
PLC_PRG.CLEAR_REQS (12)	Local Write
PLC_PRG.SC_INPUTS (12)	Local Read
_global_init (136)	Local Write
SC_V203_OPEN%MX5.1	
PLC_PRG.SC_OUTPUTS (61)	Local Write
_global_init (57)	Local Write
SC_V203_CLOSED%MX5.2	
PLC_PRG.SC_OUTPUTS (62)	Local Write
_global_init (58)	Local Write
SC_V203_OPEN%MX5.1	
PLC_PRG.SC_OUTPUTS (61)	Local Write
_global_init (57)	Local Write
SC_V203_CLOSE_PERMIT%MX5.4	
PLC_PRG.SC_OUTPUTS (64)	Local Write
_global_init (60)	Local Write
SC_V203_CLOSE_PERMIT%MX5.4	
PLC_PRG.SC_OUTPUTS (64)	Local Write
_global_init (60)	Local Write
SC_V203_BEAM_PASS%MX5.0	
PLC_PRG.SC_OUTPUTS (60)	Local Write
PLC_PRG.SC_OUTPUTS (68)	Local Read
_global_init (56)	Local Write
SC_V203_BEAM_PASS%MX5.0	
PLC_PRG.SC_OUTPUTS (60)	Local Write
PLC_PRG.SC_OUTPUTS (68)	Local Read
_global_init (56)	Local Write
SC_V202_BEAM_PASS%MX4.10	
PLC_PRG.SC_OUTPUTS (58)	Local Write
PLC_PRG.SC_OUTPUTS (60)	Local Read
_global_init (55)	Local Write
SC_V202_OPEN%MX4.8	
PLC_PRG.SC_OUTPUTS (56)	Local Write
_global_init (53)	Local Write
SC_V202_OPEN%MX4.8	
PLC_PRG.SC_OUTPUTS (56)	Local Write
_global_init (53)	Local Write
SC_V202_BEAM_PASS%MX4.10	
PLC_PRG.SC_OUTPUTS (58)	Local Write
PLC_PRG.SC_OUTPUTS (60)	Local Read
_global_init (55)	Local Write
SC_V202_CLOSED%MX4.9	
PLC_PRG.SC_OUTPUTS (57)	Local Write
_global_init (54)	Local Write
SC_V201_OPN_REQ%MX641.2	
PLC_PRG.CLEAR_REQS (8)	Local Write
PLC_PRG.SC_INPUTS (9)	Local Read
_global_init (133)	Local Write
SC_V201_OPN_REQ%MX641.2	
PLC_PRG.CLEAR_REQS (8)	Local Write
PLC_PRG.SC_INPUTS (9)	Local Read
_global_init (133)	Local Write
SC_V201_OPEN_CMD%MX4.5	
PLC_PRG.SC_OUTPUTS (53)	Local Write
_global_init (51)	Local Write
SC_V201_OPEN%MX4.1	
PLC_PRG.SC_OUTPUTS (49)	Local Write
_global_init (47)	Local Write
SC_V201_OPEN_PERMIT%MX4.3	
PLC_PRG.SC_OUTPUTS (51)	Local Write
_global_init (49)	Local Write
SC_V201_OPEN_PERMIT%MX4.3	
PLC_PRG.SC_OUTPUTS (51)	Local Write
_global_init (49)	Local Write
SC_V201_OPEN_CMD%MX4.5	
PLC_PRG.SC_OUTPUTS (53)	Local Write

_global_init (51)	Local Write
SC_V201_NOT_SYMBOL%MX4.6	
PLC_PRG.SC_OUTPUTS (54)	Local Write
_global_init (52)	Local Write
SC_V201_NOT_SYMBOL%MX4.6	
PLC_PRG.SC_OUTPUTS (54)	Local Write
_global_init (52)	Local Write
SC_V201_OPEN%MX4.1	
PLC_PRG.SC_OUTPUTS (49)	Local Write
_global_init (47)	Local Write
SC_V201_CLS_REQ%MX641.3	
PLC_PRG.CLEAR_REQS (9)	Local Write
PLC_PRG.SC_INPUTS (10)	Local Read
_global_init (134)	Local Write
SC_V201_CLOSED%MX4.2	
PLC_PRG.SC_OUTPUTS (50)	Local Write
_global_init (48)	Local Write
SC_V201_CLOSE_PERMIT%MX4.4	
PLC_PRG.SC_OUTPUTS (52)	Local Write
_global_init (50)	Local Write
SC_V201_CLOSE_PERMIT%MX4.4	
PLC_PRG.SC_OUTPUTS (52)	Local Write
_global_init (50)	Local Write
SC_V101_OPN_REQ%MX641.0	
PLC_PRG.CLEAR_REQS (5)	Local Write
PLC_PRG.SC_INPUTS (7)	Local Read
_global_init (131)	Local Write
SC_V201_BEAM_PASS%MX4.0	
PLC_PRG.SC_OUTPUTS (48)	Local Write
PLC_PRG.SC_OUTPUTS (58)	Local Read
_global_init (46)	Local Write
SC_V101_OPEN_PERMIT%MX3.11	
PLC_PRG.SC_OUTPUTS (43)	Local Write
_global_init (42)	Local Write
SC_V201_CLOSED%MX4.2	
PLC_PRG.SC_OUTPUTS (50)	Local Write
_global_init (48)	Local Write
SC_V101_OPEN%MX3.9	
PLC_PRG.SC_OUTPUTS (41)	Local Write
_global_init (40)	Local Write
SC_V101_OPEN_CMD%MX3.13	
PLC_PRG.SC_OUTPUTS (45)	Local Write
_global_init (44)	Local Write
SC_V101_OPEN_CMD%MX3.13	
PLC_PRG.SC_OUTPUTS (45)	Local Write
_global_init (44)	Local Write
SC_V101_NOT_SYMBOL%MX3.14	
PLC_PRG.SC_OUTPUTS (46)	Local Write
_global_init (45)	Local Write
SC_V101_NOT_SYMBOL%MX3.14	
PLC_PRG.SC_OUTPUTS (46)	Local Write
_global_init (45)	Local Write
SC_V101_OPEN%MX3.9	
PLC_PRG.SC_OUTPUTS (41)	Local Write
_global_init (40)	Local Write
SC_V101_CLS_REQ%MX641.1	
PLC_PRG.CLEAR_REQS (6)	Local Write
PLC_PRG.SC_INPUTS (8)	Local Read
_global_init (132)	Local Write
SC_V101_CLOSE_PERMIT%MX3.12	
PLC_PRG.SC_OUTPUTS (44)	Local Write
_global_init (43)	Local Write
SC_V101_CLOSED%MX3.10	
PLC_PRG.SC_OUTPUTS (42)	Local Write
_global_init (41)	Local Write
SC_V101_CLOSED%MX3.10	
PLC_PRG.SC_OUTPUTS (42)	Local Write
_global_init (41)	Local Write
SC_V101_CLOSE_PERMIT%MX3.12	
PLC_PRG.SC_OUTPUTS (44)	Local Write
_global_init (43)	Local Write
SC_V101_BEAM_PASS%MX3.8	
PLC_PRG.SC_OUTPUTS (40)	Local Write

_global_init (39)	Local Write
SC_TPV212_OPEN_CMD%MX9.5	
PLC_PRG.SC_OUTPUTS (104)	Local Write
_global_init (92)	Local Write
SC_TPV212_OPEN_CMD%MX9.5	
PLC_PRG.SC_OUTPUTS (104)	Local Write
_global_init (92)	Local Write
SC_V101_BEAM_PASS%MX3.8	
PLC_PRG.SC_OUTPUTS (40)	Local Write
_global_init (39)	Local Write
SC_V100_OPEN%MX3.0	
PLC_PRG.SC_OUTPUTS (37)	Local Write
_global_init (37)	Local Write
SC_V100_CLOSED%MX3.1	
PLC_PRG.SC_OUTPUTS (38)	Local Write
_global_init (38)	Local Write
SC_TPV212_CLOSED%MX9.2	
PLC_PRG.SC_OUTPUTS (103)	Local Write
_global_init (91)	Local Write
SC_TPV212_OPEN%MX9.1	
PLC_PRG.SC_OUTPUTS (102)	Local Write
_global_init (90)	Local Write
SC_TPV211_OPEN%MX7.1	
PLC_PRG.SC_OUTPUTS (83)	Local Write
_global_init (75)	Local Write
SC_TP212_ON%MX11.9	
PLC_PRG.SC_OUTPUTS (128)	Local Write
_global_init (110)	Local Write
SC_TP212_ON%MX11.9	
PLC_PRG.SC_OUTPUTS (128)	Local Write
_global_init (110)	Local Write
SC_TP211_ON%MX11.1	
PLC_PRG.SC_OUTPUTS (124)	Local Write
_global_init (107)	Local Write
SC_TPV212_OPEN%MX9.1	
PLC_PRG.SC_OUTPUTS (102)	Local Write
_global_init (90)	Local Write
SC_TP211_OK%MX11.0	
PLC_PRG.SC_OUTPUTS (123)	Local Write
_global_init (106)	Local Write
SC_TP211_OK%MX11.0	
PLC_PRG.SC_OUTPUTS (123)	Local Write
_global_init (106)	Local Write
SC_TPV212_CLOSED%MX9.2	
PLC_PRG.SC_OUTPUTS (103)	Local Write
_global_init (91)	Local Write
SC_TPV211_OPEN_CMD%MX7.5	
PLC_PRG.SC_OUTPUTS (85)	Local Write
_global_init (77)	Local Write
SC_TPV211_CLOSED%MX7.2	
PLC_PRG.SC_OUTPUTS (84)	Local Write
_global_init (76)	Local Write
SC_TP212_OK%MX11.8	
PLC_PRG.SC_OUTPUTS (127)	Local Write
_global_init (109)	Local Write
SC_TP212_OFF%MX11.10	
PLC_PRG.SC_OUTPUTS (129)	Local Write
_global_init (111)	Local Write
SC_TP211_OFF%MX11.2	
PLC_PRG.SC_OUTPUTS (125)	Local Write
_global_init (108)	Local Write
SC_TP201_VENT_NOT_SYMBOL%MX10.6	
PLC_PRG.SC_OUTPUTS (113)	Local Write
_global_init (98)	Local Write
SC_TP211_ON%MX11.1	
PLC_PRG.SC_OUTPUTS (124)	Local Write
_global_init (107)	Local Write
SC_TP201_VENT_ENABLE_REQ%MX641.12	
PLC_PRG.CLEAR_REQS (19)	Local Write
PLC_PRG.SC_INPUTS (17)	Local Read
_global_init (141)	Local Write
SC_TP201_VENT_ENABLE_REQ%MX641.12	
PLC_PRG.CLEAR_REQS (19)	Local Write

PLC_PRG.SC_INPUTS (17)	Local Read
_global_init (141)	Local Write
SC_TP201_VENT_DISABLE_REQ%MX641.13	
PLC_PRG.CLEAR_REQS (20)	Local Write
PLC_PRG.SC_INPUTS (18)	Local Read
_global_init (142)	Local Write
SC_TP201_VENT_DISABLE_REQ%MX641.13	
PLC_PRG.CLEAR_REQS (20)	Local Write
PLC_PRG.SC_INPUTS (18)	Local Read
_global_init (142)	Local Write
SC_TP211_OFF%MX11.2	
PLC_PRG.SC_OUTPUTS (125)	Local Write
_global_init (108)	Local Write
SC_TP201_ON_REQ%MX641.10	
PLC_PRG.CLEAR_REQS (17)	Local Write
PLC_PRG.SC_INPUTS (15)	Local Read
_global_init (139)	Local Write
SC_TP201_ON_REQ%MX641.10	
PLC_PRG.CLEAR_REQS (17)	Local Write
PLC_PRG.SC_INPUTS (15)	Local Read
_global_init (139)	Local Write
SC_TP201_ON_PERMIT%MX10.11	
PLC_PRG.SC_OUTPUTS (118)	Local Write
_global_init (102)	Local Write
SC_TP201_VENT_NOT_SYMBOL%MX10.6	
PLC_PRG.SC_OUTPUTS (113)	Local Write
_global_init (98)	Local Write
SC_TP201_ON_CMD%MX10.13	
PLC_PRG.SC_OUTPUTS (120)	Local Write
_global_init (104)	Local Write
SC_TP201_OFF_REQ%MX641.11	
PLC_PRG.CLEAR_REQS (18)	Local Write
PLC_PRG.SC_INPUTS (16)	Local Read
_global_init (140)	Local Write
SC_RP2111_AT_SPEED%MX0.13	
PLC_PRG.SC_OUTPUTS (12)	Local Write
_global_init (17)	Local Write
SC_RP2111_AT_SPEED%MX0.13	
PLC_PRG.SC_OUTPUTS (12)	Local Write
_global_init (17)	Local Write
SC_PE212_OK%MX2.0	
PLC_PRG.SC_OUTPUTS (28)	Local Write
_global_init (30)	Local Write
SC_RP2110_AT_SPEED%MX0.12	
PLC_PRG.SC_OUTPUTS (11)	Local Write
_global_init (16)	Local Write
SC_PE212_PSL_MIDHI%MX2.2	
PLC_PRG.SC_OUTPUTS (30)	Local Write
_global_init (32)	Local Write
SC_PE211_PSL_HI%MX1.9	
PLC_PRG.SC_OUTPUTS (23)	Local Write
_global_init (26)	Local Write
SC_PE212_PSL_LO%MX2.4	
PLC_PRG.SC_OUTPUTS (32)	Local Write
_global_init (34)	Local Write
SC_PE212_PSL_LO%MX2.4	
PLC_PRG.SC_OUTPUTS (32)	Local Write
_global_init (34)	Local Write
SC_PE2110_PSL%MX0.14	
PLC_PRG.SC_OUTPUTS (13)	Local Write
_global_init (18)	Local Write
SC_RP2110_AT_SPEED%MX0.12	
PLC_PRG.SC_OUTPUTS (11)	Local Write
_global_init (16)	Local Write
SC_ATB%MX0.2	
PLC_PRG.SC_OUTPUTS (3)	Local Write
_global_init (11)	Local Write
SC_RESET_REQUIRED%MX0.0	
PLC_PRG.SC_OUTPUTS (2)	Local Write
_global_init (10)	Local Write
SC_RESET_REQUIRED%MX0.0	
PLC_PRG.SC_OUTPUTS (2)	Local Write
_global_init (10)	Local Write

SC_PE212_PSL_MIDLO%MX2.3		
PLC_PRG.SC_OUTPUTS (31)		Local Write
_global_init (33)		Local Write
SC_PE212_PSL_HI%MX2.1		
PLC_PRG.SC_OUTPUTS (29)		Local Write
_global_init (31)		Local Write
SC_PE211_OK%MX1.8		
PLC_PRG.SC_OUTPUTS (22)		Local Write
_global_init (25)		Local Write
SC_PE211_PSL_MIDLO%MX1.11		
PLC_PRG.SC_OUTPUTS (25)		Local Write
_global_init (28)		Local Write
SC_PE211_PSL_MIDLO%MX1.11		
PLC_PRG.SC_OUTPUTS (25)		Local Write
_global_init (28)		Local Write
SC_PE203_OK%MX1.0		
PLC_PRG.SC_OUTPUTS (16)		Local Write
_global_init (20)		Local Write
SC_PE2111_PSL%MX0.15		
PLC_PRG.SC_OUTPUTS (14)		Local Write
_global_init (19)		Local Write
SC_PE203_PSL_HI%MX1.1		
PLC_PRG.SC_OUTPUTS (17)		Local Write
_global_init (21)		Local Write
open_req		
PLC_PRG.VALVES (7)		Local Write
PLC_PRG.VALVES (15)		Local Write
PLC_PRG.VALVES (23)		Local Write
PLC_PRG.VALVES (31)		Local Write
PLC_PRG.VALVES (39)		Local Write
PLC_PRG.VALVES (57)		Local Write
PLC_PRG.VALVES (65)		Local Write
PLC_PRG.VALVES (73)		Local Write
PLC_PRG.VALVES (81)		Local Write
PLC_PRG.VALVES (89)		Local Write
PLC_PRG.VALVES (97)		Local Write
PLC_PRG.VALVES (105)		Local Write
PLC_PRG.VALVES (113)		Local Write
VALVE_FB (3)		Local Read
VALVE_FBinit (4)		Local Write
open_intlk		
PLC_PRG.VALVES (4)		Local Write
PLC_PRG.VALVES (12)		Local Write
PLC_PRG.VALVES (20)		Local Write
PLC_PRG.VALVES (28)		Local Write
PLC_PRG.VALVES (36)		Local Write
PLC_PRG.VALVES (54)		Local Write
PLC_PRG.VALVES (62)		Local Write
PLC_PRG.VALVES (70)		Local Write
PLC_PRG.VALVES (78)		Local Write
PLC_PRG.VALVES (86)		Local Write
PLC_PRG.VALVES (94)		Local Write
PLC_PRG.VALVES (102)		Local Write
PLC_PRG.VALVES (110)		Local Write
VALVE_FB (3)		Local Read
VALVE_FB (6)		Local Read
VALVE_FBinit (1)		Local Write
open_intlk		
PLC_PRG.VALVES (45)		Local Write
VALVE_BI_FB (4)		Local Read
VALVE_BI_FB (11)		Local Read
VALVE_BI_FBinit (1)		Local Write
wCommand		
ACTUATOR_SM (48)		Local Write
ACTUATOR_SM (57)		Local Write
ACTUATOR_SM (65)		Local Write
ACTUATOR_SM (74)		Local Write
ACTUATOR_SM (83)		Local Write
ACTUATOR_SM.DRG1_W... (26)		Local Read
ACTUATORinit (4)		Local Write
SOCKET_TCP_NODELAY		
CLIENT_OPENCLOSE (20)		Global Read
CLIENT_OPENCLOSE (71)		Global Read

_global_init (136)	Global Write
SOCKET_TCP_MAXSEG	
_global_init (137)	Global Write
SOCKET_STREAM	
CLIENT_OPENCLOSE (11)	Global Read
_global_init (138)	Global Write
SOCKET_SEQPACKET	
_global_init (142)	Global Write
SOCKET_RDM	
_global_init (141)	Global Write
SOCKET_INADDR_NONE	
_global_init (146)	Global Write
SOCKET_INADDR_ANY	
_global_init (143)	Global Write
SOCKET_RAW	
_global_init (140)	Global Write
SOCKET_MSG_OOB	
_global_init (158)	Global Write
SOCKET_MSG_DONTROUTE	
_global_init (160)	Global Write
SOCKET_IPPROTO_RAW	
_global_init (156)	Global Write
SOCKET_IPPROTO_PUP	
_global_init (152)	Global Write
SOCKET_IPPROTO_IDP	
_global_init (154)	Global Write
SOCKET_IPPROTO_ICMP	
_global_init (148)	Global Write
SOCKET_IPPROTO_GGP	
_global_init (150)	Global Write
SOCKET_INADDR_LOOPBACK	
_global_init (144)	Global Write
SOCKET_INADDR_BROADCAST	
_global_init (145)	Global Write
SOCKET_FIONBIO	
CLIENT_OPENCLOSE (25)	Global Read
CLIENT_OPENCLOSE (46)	Global Read
ETHERNET_MODBUSMAS... (11)	Global Read
_global_init (162)	Global Write
SOCKET_FD_SETSIZE	
_global_init (163)	Global Write
SOCKET_FIONREAD	
_global_init (161)	Global Write
SOCKET_DGRAM	
CLIENT_OPENCLOSE (43)	Global Read
ETHERNET_MODBUSMAS... (9)	Global Read
_global_init (139)	Global Write
SC_V204_NOT_SYMBOL%MX5.14	
PLC_PRG.SC_OUTPUTS (74)	Local Write
_global_init (69)	Local Write
SC_V204_CLOSED%MX5.10	
PLC_PRG.SC_OUTPUTS (70)	Local Write
_global_init (65)	Local Write
SC_TPV211_OPEN_CMD%MX7.5	
PLC_PRG.SC_OUTPUTS (85)	Local Write
_global_init (77)	Local Write
SC_TPV211_OPEN%MX7.1	
PLC_PRG.SC_OUTPUTS (83)	Local Write
_global_init (75)	Local Write
SC_TP201_ON_PERMIT%MX10.11	
PLC_PRG.SC_OUTPUTS (118)	Local Write
_global_init (102)	Local Write
SC_TP201_ON_CMD%MX10.13	
PLC_PRG.SC_OUTPUTS (120)	Local Write
_global_init (104)	Local Write
SC_TP201_OFF_REQ%MX641.11	
PLC_PRG.CLEAR_REQS (18)	Local Write
PLC_PRG.SC_INPUTS (16)	Local Read
_global_init (140)	Local Write
SC_TP201_VENT_ENABLE_CMD%MX10.5	
PLC_PRG.SC_OUTPUTS (112)	Local Write
_global_init (97)	Local Write
SC_SLOTV211_OPEN_PERMIT%MX7.11	

PLC_PRG.SC_OUTPUTS (89)	Local Write
_global_init (80)	Local Write
SC_SLOTV211_OPEN_CMD%MX7.13	
PLC_PRG.SC_OUTPUTS (91)	Local Write
_global_init (82)	Local Write
SC_TPV211_CLOSED%MX7.2	
PLC_PRG.SC_OUTPUTS (84)	Local Write
_global_init (76)	Local Write
SC_TP201_VENT_ENABLE_CMD%MX10.5	
PLC_PRG.SC_OUTPUTS (112)	Local Write
_global_init (97)	Local Write
SC_TP201_ON%MX10.9	
PLC_PRG.SC_OUTPUTS (116)	Local Write
_global_init (100)	Local Write
SC_TP201_ON%MX10.9	
PLC_PRG.SC_OUTPUTS (116)	Local Write
_global_init (100)	Local Write
SC_SLOTV211_OPEN_PERMIT%MX7.11	
PLC_PRG.SC_OUTPUTS (89)	Local Write
_global_init (80)	Local Write
SC_SLOTV211_OPEN_CMD%MX7.13	
PLC_PRG.SC_OUTPUTS (91)	Local Write
_global_init (82)	Local Write
SC_SLOTV211_OPEN%MX7.9	
PLC_PRG.SC_OUTPUTS (87)	Local Write
_global_init (78)	Local Write
SC_SLOTV211_OPEN%MX7.9	
PLC_PRG.SC_OUTPUTS (87)	Local Write
_global_init (78)	Local Write
SC_SLOTV211_NOT_SYMBOL%MX7.15	
PLC_PRG.SC_OUTPUTS (93)	Local Write
_global_init (84)	Local Write
SC_SLOTV211_NOT_SYMBOL%MX7.15	
PLC_PRG.SC_OUTPUTS (93)	Local Write
_global_init (84)	Local Write
SC_V204_CLOSE_PERMIT%MX5.12	
PLC_PRG.SC_OUTPUTS (72)	Local Write
_global_init (67)	Local Write
SC_RPV211_OPEN_CMD%MX6.5	
PLC_PRG.SC_OUTPUTS (78)	Local Write
_global_init (72)	Local Write
SC_V203_OPEN_CMD%MX5.5	
PLC_PRG.SC_OUTPUTS (65)	Local Write
_global_init (61)	Local Write
SC_TP201_OK%MX10.8	
PLC_PRG.SC_OUTPUTS (115)	Local Write
_global_init (99)	Local Write
SC_RPV211_OPEN%MX6.1	
PLC_PRG.SC_OUTPUTS (76)	Local Write
_global_init (70)	Local Write
SC_V203_NOT_SYMBOL%MX5.6	
PLC_PRG.SC_OUTPUTS (66)	Local Write
_global_init (62)	Local Write
SC_V203_CLS_REQ%MX641.7	
PLC_PRG.CLEAR_REQS (12)	Local Write
PLC_PRG.SC_INPUTS (12)	Local Read
_global_init (136)	Local Write
SC_V101_OPN_REQ%MX641.0	
PLC_PRG.CLEAR_REQS (5)	Local Write
PLC_PRG.SC_INPUTS (7)	Local Read
_global_init (131)	Local Write
SC_V101_CLS_REQ%MX641.1	
PLC_PRG.CLEAR_REQS (6)	Local Write
PLC_PRG.SC_INPUTS (8)	Local Read
_global_init (132)	Local Write
SC_TP212_OFF%MX11.10	
PLC_PRG.SC_OUTPUTS (129)	Local Write
_global_init (111)	Local Write
SC_TP212_OK%MX11.8	
PLC_PRG.SC_OUTPUTS (127)	Local Write
_global_init (109)	Local Write
SC_TP201_OK%MX10.8	
PLC_PRG.SC_OUTPUTS (115)	Local Write

_global_init (99)	Local Write
SC_TP201_OFF_PERMIT%MX10.12	
PLC_PRG.SC_OUTPUTS (119)	Local Write
_global_init (103)	Local Write
SC_TP201_OFF_PERMIT%MX10.12	
PLC_PRG.SC_OUTPUTS (119)	Local Write
_global_init (103)	Local Write
SC_TP201_OFF%MX10.10	
PLC_PRG.SC_OUTPUTS (117)	Local Write
_global_init (101)	Local Write
SC_TP201_OFF%MX10.10	
PLC_PRG.SC_OUTPUTS (117)	Local Write
_global_init (101)	Local Write
SC_SLOTV211_OPN_REQ%MX642.0	
PLC_PRG.CLEAR_REQS (22)	Local Write
PLC_PRG.SC_INPUTS (19)	Local Read
_global_init (143)	Local Write
SC_SLOTV211_CLS_REQ%MX642.1	
PLC_PRG.CLEAR_REQS (23)	Local Write
PLC_PRG.SC_INPUTS (20)	Local Read
_global_init (144)	Local Write
SC_TP201_NOT_SYMBOL%MX10.14	
PLC_PRG.SC_OUTPUTS (121)	Local Write
_global_init (105)	Local Write
SC_TP201_NOT_SYMBOL%MX10.14	
PLC_PRG.SC_OUTPUTS (121)	Local Write
_global_init (105)	Local Write
SC_SLOTV211_OPN_REQ%MX642.0	
PLC_PRG.CLEAR_REQS (22)	Local Write
PLC_PRG.SC_INPUTS (19)	Local Read
_global_init (143)	Local Write
SC_SLOTV211_CLS_REQ%MX642.1	
PLC_PRG.CLEAR_REQS (23)	Local Write
PLC_PRG.SC_INPUTS (20)	Local Read
_global_init (144)	Local Write
SC_SLOTV211_CLOSE_PERMIT%MX7.12	
PLC_PRG.SC_OUTPUTS (90)	Local Write
_global_init (81)	Local Write
SC_SLOTV211_CLOSED%MX7.10	
PLC_PRG.SC_OUTPUTS (88)	Local Write
_global_init (79)	Local Write
SC_SLOTV211_CLOSE_PERMIT%MX7.12	
PLC_PRG.SC_OUTPUTS (90)	Local Write
_global_init (81)	Local Write
SC_RPV212_OPEN_CMD%MX8.5	
PLC_PRG.SC_OUTPUTS (97)	Local Write
_global_init (87)	Local Write
SC_SLOTV211_CLOSED%MX7.10	
PLC_PRG.SC_OUTPUTS (88)	Local Write
_global_init (79)	Local Write
SC_RPV212_OPEN%MX8.1	
PLC_PRG.SC_OUTPUTS (95)	Local Write
_global_init (85)	Local Write
SC_RPV212_CLOSED%MX8.2	
PLC_PRG.SC_OUTPUTS (96)	Local Write
_global_init (86)	Local Write
SC_SLOTV211_CLOSE_CMD%MX7.14	
PLC_PRG.SC_OUTPUTS (92)	Local Write
_global_init (83)	Local Write
SC_RPV212_OPEN%MX8.1	
PLC_PRG.SC_OUTPUTS (95)	Local Write
_global_init (85)	Local Write
SC_RPV212_CLOSED%MX8.2	
PLC_PRG.SC_OUTPUTS (96)	Local Write
_global_init (86)	Local Write
SC_SLOTV211_CLOSE_CMD%MX7.14	
PLC_PRG.SC_OUTPUTS (92)	Local Write
_global_init (83)	Local Write
SC_RPV211_OPEN_CMD%MX6.5	
PLC_PRG.SC_OUTPUTS (78)	Local Write
_global_init (72)	Local Write
SC_RPV212_OPEN_CMD%MX8.5	
PLC_PRG.SC_OUTPUTS (97)	Local Write

_global_init (87)	Local Write
SC_RPV211_OPEN%MX6.1	
PLC_PRG.SC_OUTPUTS (76)	Local Write
_global_init (70)	Local Write
SC_RP2111_ON_CMD%MX10.1	
PLC_PRG.SC_OUTPUTS (110)	Local Write
_global_init (96)	Local Write
SC_RPV211_CLOSED%MX6.2	
PLC_PRG.SC_OUTPUTS (77)	Local Write
_global_init (71)	Local Write
SC_RPV211_CLOSED%MX6.2	
PLC_PRG.SC_OUTPUTS (77)	Local Write
_global_init (71)	Local Write
SC_RP2111_ON_CMD%MX10.1	
PLC_PRG.SC_OUTPUTS (110)	Local Write
_global_init (96)	Local Write
SC_RP2111_ON%MX10.0	
PLC_PRG.SC_OUTPUTS (109)	Local Write
_global_init (95)	Local Write
SC_RP2111_ON%MX10.0	
PLC_PRG.SC_OUTPUTS (109)	Local Write
_global_init (95)	Local Write
SC_RP2110_ON_CMD%MX9.9	
PLC_PRG.SC_OUTPUTS (107)	Local Write
_global_init (94)	Local Write
SC_RP2110_ON_CMD%MX9.9	
PLC_PRG.SC_OUTPUTS (107)	Local Write
_global_init (94)	Local Write
SC_RP2110_ON%MX9.8	
PLC_PRG.SC_OUTPUTS (106)	Local Write
_global_init (93)	Local Write
SC_RP2110_ON%MX9.8	
PLC_PRG.SC_OUTPUTS (106)	Local Write
_global_init (93)	Local Write
SC_RESET_REQ%MX640.0	
PLC_PRG.CLEAR_REQS (3)	Local Write
PLC_PRG.SC_INPUTS (2)	Local Read
_global_init (130)	Local Write
SC_RESET_REQ%MX640.0	
PLC_PRG.CLEAR_REQS (3)	Local Write
PLC_PRG.SC_INPUTS (2)	Local Read
_global_init (130)	Local Write
SC_PE212_PSL_MIDLO%MX2.3	
PLC_PRG.SC_OUTPUTS (31)	Local Write
_global_init (33)	Local Write
SC_PE212_PSL_MIDHI%MX2.2	
PLC_PRG.SC_OUTPUTS (30)	Local Write
_global_init (32)	Local Write
SC_PE212_HI_PIIY%MW1291	
PLC_PRG.SC_OUTPUTS (167)	Local Write
_global_init (154)	Local Write
SC_PE212_PSL_HI%MX2.1	
PLC_PRG.SC_OUTPUTS (29)	Local Write
_global_init (31)	Local Write
SC_PE212_HI_PIIY%MW1291	
PLC_PRG.SC_OUTPUTS (167)	Local Write
_global_init (154)	Local Write
SC_PE212_LO_PIIY%MW1292	
PLC_PRG.SC_OUTPUTS (168)	Local Write
_global_init (155)	Local Write
SC_PE212_LO_PIIY%MW1292	
PLC_PRG.SC_OUTPUTS (168)	Local Write
_global_init (155)	Local Write
SC_PE211_PSL_MIDHI%MX1.10	
PLC_PRG.SC_OUTPUTS (24)	Local Write
_global_init (27)	Local Write
SC_PE211_LO_PIIY%MW1290	
PLC_PRG.SC_OUTPUTS (166)	Local Write
_global_init (153)	Local Write
SC_PE211_HI_PIIY%MW1289	
PLC_PRG.SC_OUTPUTS (165)	Local Write
_global_init (152)	Local Write
SC_PE211_HI_PIIY%MW1289	

PLC_PRG.SC_OUTPUTS (165)	Local Write
_global_init (152)	Local Write
SC_PE203_HI_Piy%MW1287	
PLC_PRG.SC_OUTPUTS (163)	Local Write
_global_init (150)	Local Write
SC_PE203_HI_Piy%MW1287	
PLC_PRG.SC_OUTPUTS (163)	Local Write
_global_init (150)	Local Write
SC_PE201_PSL%MX0.9	
PLC_PRG.SC_OUTPUTS (8)	Local Write
_global_init (14)	Local Write
SC_PE201_Piy%MW1285	
PLC_PRG.SC_OUTPUTS (161)	Local Write
_global_init (148)	Local Write
SC_PE211_PSL_LO%MX1.12	
PLC_PRG.SC_OUTPUTS (26)	Local Write
_global_init (29)	Local Write
SC_PE101_PSL%MX0.8	
PLC_PRG.SC_OUTPUTS (7)	Local Write
_global_init (13)	Local Write
SC_PE202_Piy%MW1286	
PLC_PRG.SC_OUTPUTS (162)	Local Write
_global_init (149)	Local Write
SC_LL_TP211_TURBO_OK%MX13.6	
PLC_PRG.SC_OUTPUTS (148)	Local Write
_global_init (126)	Local Write
SC_PE211_PSL_MIDHI%MX1.10	
PLC_PRG.SC_OUTPUTS (24)	Local Write
_global_init (27)	Local Write
SC_PE211_PSL_LO%MX1.12	
PLC_PRG.SC_OUTPUTS (26)	Local Write
_global_init (29)	Local Write
SC_PE203_PSL_MIDHI%MX1.2	
PLC_PRG.SC_OUTPUTS (18)	Local Write
_global_init (22)	Local Write
SC_PE203_PSL_LO%MX1.4	
PLC_PRG.SC_OUTPUTS (20)	Local Write
_global_init (24)	Local Write
SC_PE211_LO_Piy%MW1290	
PLC_PRG.SC_OUTPUTS (166)	Local Write
_global_init (153)	Local Write
SC_PE203_LO_Piy%MW1288	
PLC_PRG.SC_OUTPUTS (164)	Local Write
_global_init (151)	Local Write
SC_PE203_LO_Piy%MW1288	
PLC_PRG.SC_OUTPUTS (164)	Local Write
_global_init (151)	Local Write
SC_PE202_Piy%MW1286	
PLC_PRG.SC_OUTPUTS (162)	Local Write
_global_init (149)	Local Write
SC_PE101_Piy%MW1284	
PLC_PRG.SC_OUTPUTS (160)	Local Write
_global_init (147)	Local Write
SC_PE201_Piy%MW1285	
PLC_PRG.SC_OUTPUTS (161)	Local Write
_global_init (148)	Local Write
SC_LL_RP2111_ON%MX13.4	
PLC_PRG.SC_OUTPUTS (146)	Local Write
_global_init (124)	Local Write
SC_LL_PE2111_PSL_LL%MX13.9	
_global_init (129)	Local Write
SC_LL_PE2111_PSL%MX13.5	
PLC_PRG.SC_OUTPUTS (147)	Local Write
_global_init (125)	Local Write
SC_PE211_OK%MX1.8	
PLC_PRG.SC_OUTPUTS (22)	Local Write
_global_init (25)	Local Write
SC_PE2111_PSL%MX0.15	
PLC_PRG.SC_OUTPUTS (14)	Local Write
_global_init (19)	Local Write
SC_PE203_OK%MX1.0	
PLC_PRG.SC_OUTPUTS (16)	Local Write
_global_init (20)	Local Write

SC_PE2110_PSL%MX0.14		
PLC_PRG.SC_OUTPUTS (13)		Local Write
_global_init (18)		Local Write
SC_PE202_PSL%MX0.10		
PLC_PRG.SC_OUTPUTS (9)		Local Write
_global_init (15)		Local Write
SC_LL_TP211_TURBO_OK%MX13.6		
PLC_PRG.SC_OUTPUTS (148)		Local Write
_global_init (126)		Local Write
SC_LL_RP2111_ON%MX13.4		
PLC_PRG.SC_OUTPUTS (146)		Local Write
_global_init (124)		Local Write
SC_LL_V202_OPN%MX12.3		
PLC_PRG.SC_OUTPUTS (136)		Local Write
_global_init (115)		Local Write
SC_LL_STATE%MW1306		
PLC_PRG.SC_OUTPUTS (269)		Local Write
PLC_PRG.SC_OUTPUTS (271)		Local Write
PLC_PRG.SC_OUTPUTS (273)		Local Write
PLC_PRG.SC_OUTPUTS (275)		Local Write
PLC_PRG.SC_OUTPUTS (277)		Local Write
PLC_PRG.SC_OUTPUTS (279)		Local Write
PLC_PRG.SC_OUTPUTS (281)		Local Write
PLC_PRG.SC_OUTPUTS (283)		Local Write
PLC_PRG.SC_OUTPUTS (285)		Local Write
PLC_PRG.SC_OUTPUTS (287)		Local Write
PLC_PRG.SC_OUTPUTS (289)		Local Write
PLC_PRG.SC_OUTPUTS (292)		Local Write
_global_init (161)		Local Write
SC_LL_PE203_PSL_LO%MX12.6		
PLC_PRG.SC_OUTPUTS (139)		Local Write
_global_init (118)		Local Write
SC_LL_PE203_OK%MX12.5		
PLC_PRG.SC_OUTPUTS (138)		Local Write
_global_init (117)		Local Write
SC_PE203_PSL_LO%MX1.4		
PLC_PRG.SC_OUTPUTS (20)		Local Write
_global_init (24)		Local Write
SC_LL_TP212_TURBO_OK%MX13.7		
PLC_PRG.SC_OUTPUTS (149)		Local Write
_global_init (127)		Local Write
SC_LL_PE211_OK%MX13.2		
PLC_PRG.SC_OUTPUTS (144)		Local Write
_global_init (122)		Local Write
SC_LL_PE203_PSL_LO%MX12.6		
PLC_PRG.SC_OUTPUTS (139)		Local Write
_global_init (118)		Local Write
SC_LL_PE211_OK%MX13.2		
PLC_PRG.SC_OUTPUTS (144)		Local Write
_global_init (122)		Local Write
SC_LL_PE202_PSL%MX12.4		
PLC_PRG.SC_OUTPUTS (137)		Local Write
_global_init (116)		Local Write
SC_PE203_PSL_MIDLO%MX1.3		
PLC_PRG.SC_OUTPUTS (19)		Local Write
_global_init (23)		Local Write
SC_PE203_PSL_MIDLO%MX1.3		
PLC_PRG.SC_OUTPUTS (19)		Local Write
_global_init (23)		Local Write
SC_LL_PE201_PSL%MX12.2		
PLC_PRG.SC_OUTPUTS (135)		Local Write
_global_init (114)		Local Write
SC_PE203_PSL_HI%MX1.1		
PLC_PRG.SC_OUTPUTS (17)		Local Write
_global_init (21)		Local Write
SC_LL_TP201_OK%MX12.7		
PLC_PRG.SC_OUTPUTS (140)		Local Write
_global_init (119)		Local Write
SC_LL_PE2111_PSL_LL%MX13.9		
_global_init (129)		Local Write
SC_LL_PE101_PSL%MX12.1		
PLC_PRG.SC_OUTPUTS (134)		Local Write
_global_init (113)		Local Write

SC_LL_LL_CONFIG_OK%MX13.1		
PLC_PRG.SC_OUTPUTS (143)		Local Write
_global_init (121)		Local Write
SC_LL_LL_CONFIG_OK%MX13.1		
PLC_PRG.SC_OUTPUTS (143)		Local Write
_global_init (121)		Local Write
SC_LL_PE201_PSL%MX12.2		
PLC_PRG.SC_OUTPUTS (135)		Local Write
_global_init (114)		Local Write
SC_LL_ES_CONFIG_OK%MX13.0		
PLC_PRG.SC_OUTPUTS (142)		Local Write
_global_init (120)		Local Write
SC_LL_ACTUATOR_OK%MX12.0		
PLC_PRG.SC_OUTPUTS (133)		Local Write
_global_init (112)		Local Write
SC_PE202_PSL%MX0.10		
PLC_PRG.SC_OUTPUTS (9)		Local Write
_global_init (15)		Local Write
SC_LL211_LID_CLOSED%MX2.8		
PLC_PRG.SC_OUTPUTS (34)		Local Write
_global_init (35)		Local Write
SC_LL211_ARM_RETRACTED%MX2.9		
PLC_PRG.SC_OUTPUTS (35)		Local Write
_global_init (36)		Local Write
SC_PE101_PSL%MX0.8		
PLC_PRG.SC_OUTPUTS (7)		Local Write
_global_init (13)		Local Write
SC_PE101_PIY%MW1284		
PLC_PRG.SC_OUTPUTS (160)		Local Write
_global_init (147)		Local Write
SC_LL_V202_OPN%MX12.3		
PLC_PRG.SC_OUTPUTS (136)		Local Write
_global_init (115)		Local Write
SC_LL_TP212_TURBO_OK%MX13.7		
PLC_PRG.SC_OUTPUTS (149)		Local Write
_global_init (127)		Local Write
SC_LL_STATE%MW1306		
PLC_PRG.SC_OUTPUTS (269)		Local Write
PLC_PRG.SC_OUTPUTS (271)		Local Write
PLC_PRG.SC_OUTPUTS (273)		Local Write
PLC_PRG.SC_OUTPUTS (275)		Local Write
PLC_PRG.SC_OUTPUTS (277)		Local Write
PLC_PRG.SC_OUTPUTS (279)		Local Write
PLC_PRG.SC_OUTPUTS (281)		Local Write
PLC_PRG.SC_OUTPUTS (283)		Local Write
PLC_PRG.SC_OUTPUTS (285)		Local Write
PLC_PRG.SC_OUTPUTS (287)		Local Write
PLC_PRG.SC_OUTPUTS (289)		Local Write
PLC_PRG.SC_OUTPUTS (292)		Local Write
_global_init (161)		Local Write
SC_LL_PE212_OK%MX13.3		
PLC_PRG.SC_OUTPUTS (145)		Local Write
_global_init (123)		Local Write
SC_LL_PE2111_PSL%MX13.5		
PLC_PRG.SC_OUTPUTS (147)		Local Write
_global_init (125)		Local Write
SC_LL_CMD_VAL%MW1298		
PLC_PRG.SC_OUTPUTS (203)		Local Write
PLC_PRG.SC_OUTPUTS (205)		Local Write
PLC_PRG.SC_OUTPUTS (207)		Local Write
PLC_PRG.SC_OUTPUTS (209)		Local Write
PLC_PRG.SC_OUTPUTS (212)		Local Write
_global_init (158)		Local Write
SC_LL_PE212_OK%MX13.3		
PLC_PRG.SC_OUTPUTS (145)		Local Write
_global_init (123)		Local Write
SC_LL_ACTUATOR_OK%MX12.0		
PLC_PRG.SC_OUTPUTS (133)		Local Write
_global_init (112)		Local Write
SC_LL_TP201_OK%MX12.7		
PLC_PRG.SC_OUTPUTS (140)		Local Write
_global_init (119)		Local Write
SC_LL_PE203_OK%MX12.5		

PLC_PRG.SC_OUTPUTS (138)	Local Write
_global_init (117)	Local Write
SC_LL_ES_CONFIG_OK%MX13.0	
PLC_PRG.SC_OUTPUTS (142)	Local Write
_global_init (120)	Local Write
SC_LL_PE202_PSL%MX12.4	
PLC_PRG.SC_OUTPUTS (137)	Local Write
_global_init (116)	Local Write
SC_LL_CMD_REQ%MW3714	
PLC_PRG.SC_INPUTS (53)	Local Read
PLC_PRG.SC_INPUTS (55)	Local Read
PLC_PRG.SC_INPUTS (57)	Local Read
PLC_PRG.SC_INPUTS (59)	Local Read
_global_init (164)	Local Write
SC_LL211_LID_CLOSED%MX2.8	
PLC_PRG.SC_OUTPUTS (34)	Local Write
_global_init (35)	Local Write
SC_LL211_ARM_RETRACTED%MX2.9	
PLC_PRG.SC_OUTPUTS (35)	Local Write
_global_init (36)	Local Write
SC_ES_STATE%MW1305	
PLC_PRG.SC_OUTPUTS (240)	Local Write
PLC_PRG.SC_OUTPUTS (242)	Local Write
PLC_PRG.SC_OUTPUTS (244)	Local Write
PLC_PRG.SC_OUTPUTS (246)	Local Write
PLC_PRG.SC_OUTPUTS (248)	Local Write
PLC_PRG.SC_OUTPUTS (250)	Local Write
PLC_PRG.SC_OUTPUTS (252)	Local Write
PLC_PRG.SC_OUTPUTS (254)	Local Write
PLC_PRG.SC_OUTPUTS (256)	Local Write
PLC_PRG.SC_OUTPUTS (258)	Local Write
PLC_PRG.SC_OUTPUTS (260)	Local Write
PLC_PRG.SC_OUTPUTS (263)	Local Write
_global_init (160)	Local Write
SC_LL_CMD_REQ%MW3714	
PLC_PRG.SC_INPUTS (53)	Local Read
PLC_PRG.SC_INPUTS (55)	Local Read
PLC_PRG.SC_INPUTS (57)	Local Read
PLC_PRG.SC_INPUTS (59)	Local Read
_global_init (164)	Local Write
SC_ES_CMD_VAL%MW1297	
PLC_PRG.SC_OUTPUTS (188)	Local Write
PLC_PRG.SC_OUTPUTS (190)	Local Write
PLC_PRG.SC_OUTPUTS (192)	Local Write
PLC_PRG.SC_OUTPUTS (194)	Local Write
PLC_PRG.SC_OUTPUTS (197)	Local Write
_global_init (157)	Local Write
SC_AFB%MX0.3	
PLC_PRG.SC_OUTPUTS (4)	Local Write
_global_init (12)	Local Write
SC_LL_CMD_VAL%MW1298	
PLC_PRG.SC_OUTPUTS (203)	Local Write
PLC_PRG.SC_OUTPUTS (205)	Local Write
PLC_PRG.SC_OUTPUTS (207)	Local Write
PLC_PRG.SC_OUTPUTS (209)	Local Write
PLC_PRG.SC_OUTPUTS (212)	Local Write
_global_init (158)	Local Write
SC_BR_STATE%MW1304	
PLC_PRG.SC_OUTPUTS (219)	Local Write
PLC_PRG.SC_OUTPUTS (222)	Local Write
PLC_PRG.SC_OUTPUTS (225)	Local Write
PLC_PRG.SC_OUTPUTS (228)	Local Write
PLC_PRG.SC_OUTPUTS (231)	Local Write
PLC_PRG.SC_OUTPUTS (234)	Local Write
_global_init (159)	Local Write
SC_BR_CMD_REQ%MW3712	
PLC_PRG.SC_INPUTS (24)	Local Read
PLC_PRG.SC_INPUTS (26)	Local Read
PLC_PRG.SC_INPUTS (28)	Local Read
PLC_PRG.SC_INPUTS (30)	Local Read
_global_init (162)	Local Write
rVersion	
_global_init (165)	Global Write

RPV212_CSD		
PLC_PRG.LL_SM (32)		Local Read
PLC_PRG.PROCESS_IN... (68)		Local Write
PLC_PRG.PUMPS (8)		Local Read
PLC_PRG.SC_OUTPUTS (96)		Local Read
PLC_PRG.VALVES (71)		Local Read
PLC_PRG.VALVES (86)		Local Read
PLC_PRG.VALVES (94)		Local Read
_global_init (212)		Local Write
RPV212		
PLC_PRG.PROCESS_OU... (23)		Local Read
PLC_PRG.SC_OUTPUTS (97)		Local Read
PLC_PRG.VALVES (102)		Local Write
PLC_PRG.VALVES (103)		Local Write
PLC_PRG.VALVES (104)		Local Write
PLC_PRG.VALVES (105)		Local Write
PLC_PRG.VALVES (106)		Local Write
PLC_PRG.VALVES (107)		Local Read
_global_init (304)		Local Read
SC_ES_STATE%MW1305		
PLC_PRG.SC_OUTPUTS (240)		Local Write
PLC_PRG.SC_OUTPUTS (242)		Local Write
PLC_PRG.SC_OUTPUTS (244)		Local Write
PLC_PRG.SC_OUTPUTS (246)		Local Write
PLC_PRG.SC_OUTPUTS (248)		Local Write
PLC_PRG.SC_OUTPUTS (250)		Local Write
PLC_PRG.SC_OUTPUTS (252)		Local Write
PLC_PRG.SC_OUTPUTS (254)		Local Write
PLC_PRG.SC_OUTPUTS (256)		Local Write
PLC_PRG.SC_OUTPUTS (258)		Local Write
PLC_PRG.SC_OUTPUTS (260)		Local Write
PLC_PRG.SC_OUTPUTS (263)		Local Write
_global_init (160)		Local Write
RPV211_CSD		
PLC_PRG.ES_SM (33)		Local Read
PLC_PRG.PROCESS_IN... (56)		Local Write
PLC_PRG.PUMPS (8)		Local Read
PLC_PRG.SC_OUTPUTS (77)		Local Read
PLC_PRG.VALVES (54)		Local Read
PLC_PRG.VALVES (62)		Local Read
PLC_PRG.VALVES (103)		Local Read
_global_init (204)		Local Write
RP211_ON		
PLC_PRG.ES_SM (123)		Local Read
PLC_PRG.LL_SM (117)		Local Read
PLC_PRG.PROCESS_IN... (7)		Local Write
PLC_PRG.SC_OUTPUTS (106)		Local Read
PLC_PRG.VALVES (70)		Local Read
PLC_PRG.VALVES (102)		Local Read
_global_init (222)		Local Write
PE212_PSL_MIDLO		
PLC_PRG.LL_SM (47)		Local Read
PLC_PRG.LL_SM (135)		Local Read
PLC_PRG.LL_SM (152)		Local Read
PLC_PRG.LL_SM (172)		Local Read
PLC_PRG.LL_SM (191)		Local Read
PLC_PRG.PROCESS_IN... (27)		Local Write
PLC_PRG.VALVES (103)		Local Read
PLC_PRG.VALVES (110)		Local Read
_global_init (185)		Local Write
PE212_PSL_LO		
PLC_PRG.LL_SM (174)		Local Read
PLC_PRG.LL_SM (194)		Local Read
PLC_PRG.PROCESS_IN... (28)		Local Write
_global_init (186)		Local Write
SC_LL_PE2111_PSL_ES%MX13.8		
_global_init (128)		Local Write
SC_LL_PE2111_PSL_ES%MX13.8		
_global_init (128)		Local Write
PE212_PSH_MIDHI		
PLC_PRG.LL_SM (66)		Local Read
PLC_PRG.PROCESS_IN... (26)		Local Write
_global_init (184)		Local Write

SC_ES_CMD_VAL%MW1297		
PLC_PRG.SC_OUTPUTS (188)		Local Write
PLC_PRG.SC_OUTPUTS (190)		Local Write
PLC_PRG.SC_OUTPUTS (192)		Local Write
PLC_PRG.SC_OUTPUTS (194)		Local Write
PLC_PRG.SC_OUTPUTS (197)		Local Write
_global_init (157)		Local Write
RPV212_OPN_REQ_LL		
PLC_PRG.LL_SM (12)		Local Write
PLC_PRG.LL_SM (25)		Local Write
PLC_PRG.LL_SM (38)		Local Write
PLC_PRG.LL_SM (55)		Local Write
PLC_PRG.LL_SM (72)		Local Write
PLC_PRG.LL_SM (89)		Local Write
PLC_PRG.LL_SM (106)		Local Write
PLC_PRG.LL_SM (124)		Local Write
PLC_PRG.LL_SM (141)		Local Write
PLC_PRG.LL_SM (161)		Local Write
PLC_PRG.LL_SM (180)		Local Write
PLC_PRG.VALVES (105)		Local Read
PLC_PRG.VALVES (106)		Local Read
_global_init (272)		Local Write
RPV212_CLS_REQ_LL		
_global_init (273)		Local Write
RPV211		
PLC_PRG.PROCESS_OU... (14)		Local Read
PLC_PRG.SC_OUTPUTS (78)		Local Read
PLC_PRG.VALVES (70)		Local Write
PLC_PRG.VALVES (71)		Local Write
PLC_PRG.VALVES (72)		Local Write
PLC_PRG.VALVES (73)		Local Write
PLC_PRG.VALVES (74)		Local Write
PLC_PRG.VALVES (75)		Local Read
_global_init (299)		Local Read
RPV212_OPN		
PLC_PRG.PROCESS_IN... (67)		Local Write
PLC_PRG.SC_OUTPUTS (95)		Local Read
_global_init (211)		Local Write
RP211_ON_REQ_LL		
PLC_PRG.LL_SM (13)		Local Write
PLC_PRG.LL_SM (26)		Local Write
PLC_PRG.LL_SM (39)		Local Write
PLC_PRG.LL_SM (56)		Local Write
PLC_PRG.LL_SM (73)		Local Write
PLC_PRG.LL_SM (90)		Local Write
PLC_PRG.LL_SM (107)		Local Write
PLC_PRG.LL_SM (125)		Local Write
PLC_PRG.LL_SM (142)		Local Write
PLC_PRG.LL_SM (162)		Local Write
PLC_PRG.LL_SM (181)		Local Write
PLC_PRG.PUMPS (9)		Local Read
_global_init (281)		Local Write
PE212_PIIY_OK		
PLC_PRG.FAULT_LOGIC (15)		Local Read
PLC_PRG.FAULT_LOGIC (37)		Local Read
PLC_PRG.PROCESS_IN... (24)		Local Write
_global_init (182)		Local Write
PE211_PSL_MIDLO		
PLC_PRG.ES_SM (49)		Local Read
PLC_PRG.ES_SM (142)		Local Read
PLC_PRG.ES_SM (160)		Local Read
PLC_PRG.ES_SM (181)		Local Read
PLC_PRG.ES_SM (201)		Local Read
PLC_PRG.PROCESS_IN... (21)		Local Write
PLC_PRG.VALVES (71)		Local Read
PLC_PRG.VALVES (78)		Local Read
_global_init (180)		Local Write
PE211_PSL_LO		
PLC_PRG.ES_SM (183)		Local Read
PLC_PRG.ES_SM (204)		Local Read
PLC_PRG.PROCESS_IN... (22)		Local Write
PLC_PRG.VALVES (36)		Local Read
_global_init (181)		Local Write

SC_ES_CMD_REQ%MW3713		
PLC_PRG.SC_INPUTS (38)		Local Read
PLC_PRG.SC_INPUTS (40)		Local Read
PLC_PRG.SC_INPUTS (42)		Local Read
PLC_PRG.SC_INPUTS (44)		Local Read
_global_init (163)		Local Write
SC_ES_CMD_REQ%MW3713		
PLC_PRG.SC_INPUTS (38)		Local Read
PLC_PRG.SC_INPUTS (40)		Local Read
PLC_PRG.SC_INPUTS (42)		Local Read
PLC_PRG.SC_INPUTS (44)		Local Read
_global_init (163)		Local Write
PE211_PSH_HI		
PLC_PRG.ES_SM (87)		Local Read
PLC_PRG.ES_SM (105)		Local Read
PLC_PRG.PROCESS_IN... (19)		Local Write
_global_init (178)		Local Write
SC_BR_CMD_VAL%MW1296		
PLC_PRG.SC_OUTPUTS (173)		Local Write
PLC_PRG.SC_OUTPUTS (175)		Local Write
PLC_PRG.SC_OUTPUTS (177)		Local Write
PLC_PRG.SC_OUTPUTS (179)		Local Write
PLC_PRG.SC_OUTPUTS (182)		Local Write
_global_init (156)		Local Write
SC_BR_CMD_VAL%MW1296		
PLC_PRG.SC_OUTPUTS (173)		Local Write
PLC_PRG.SC_OUTPUTS (175)		Local Write
PLC_PRG.SC_OUTPUTS (177)		Local Write
PLC_PRG.SC_OUTPUTS (179)		Local Write
PLC_PRG.SC_OUTPUTS (182)		Local Write
_global_init (156)		Local Write
RPV211_OPN_REQ_ES		
PLC_PRG.ES_SM (12)		Local Write
PLC_PRG.ES_SM (26)		Local Write
PLC_PRG.ES_SM (40)		Local Write
PLC_PRG.ES_SM (58)		Local Write
PLC_PRG.ES_SM (76)		Local Write
PLC_PRG.ES_SM (94)		Local Write
PLC_PRG.ES_SM (112)		Local Write
PLC_PRG.ES_SM (131)		Local Write
PLC_PRG.ES_SM (149)		Local Write
PLC_PRG.ES_SM (170)		Local Write
PLC_PRG.ES_SM (190)		Local Write
PLC_PRG.VALVES (73)		Local Read
PLC_PRG.VALVES (74)		Local Read
_global_init (260)		Local Write
PE211_PIIY_OK		
PLC_PRG.FAULT_LOGIC (14)		Local Read
PLC_PRG.FAULT_LOGIC (37)		Local Read
PLC_PRG.PROCESS_IN... (18)		Local Write
_global_init (177)		Local Write
SC_LL_PE101_PSL%MX12.1		
PLC_PRG.SC_OUTPUTS (134)		Local Write
_global_init (113)		Local Write
RP211_ON_REQ_ES		
PLC_PRG.ES_SM (13)		Local Write
PLC_PRG.ES_SM (27)		Local Write
PLC_PRG.ES_SM (41)		Local Write
PLC_PRG.ES_SM (59)		Local Write
PLC_PRG.ES_SM (77)		Local Write
PLC_PRG.ES_SM (95)		Local Write
PLC_PRG.ES_SM (113)		Local Write
PLC_PRG.ES_SM (132)		Local Write
PLC_PRG.ES_SM (150)		Local Write
PLC_PRG.ES_SM (171)		Local Write
PLC_PRG.ES_SM (191)		Local Write
PLC_PRG.PUMPS (9)		Local Read
_global_init (280)		Local Write
RP211		
PLC_PRG.PROCESS_OU... (3)		Local Read
PLC_PRG.PUMPS (7)		Local Write
PLC_PRG.PUMPS (8)		Local Write
PLC_PRG.PUMPS (9)		Local Write

PLC_PRG.PUMPS (10)	Local Read
PLC_PRG.PUMPS (10)	Local Write
PLC_PRG.PUMPS (11)	Local Read
PLC_PRG.SC_OUTPUTS (107)	Local Read
_global_init (307)	Local Read
RPV211_OPN	
PLC_PRG.PROCESS_IN... (55)	Local Write
PLC_PRG.SC_OUTPUTS (76)	Local Read
_global_init (203)	Local Write
PE203_PSL_LO	
PLC_PRG.FAULT_LOGIC (8)	Local Read
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.PROCESS_IN... (16)	Local Write
_global_init (176)	Local Write
PE203_PSH_MIDHI	
PLC_PRG.PROCESS_IN... (14)	Local Write
_global_init (174)	Local Write
SC_BR_STATE%MW1304	
PLC_PRG.SC_OUTPUTS (219)	Local Write
PLC_PRG.SC_OUTPUTS (222)	Local Write
PLC_PRG.SC_OUTPUTS (225)	Local Write
PLC_PRG.SC_OUTPUTS (228)	Local Write
PLC_PRG.SC_OUTPUTS (231)	Local Write
PLC_PRG.SC_OUTPUTS (234)	Local Write
_global_init (159)	Local Write
PE203_PSH_HI	
PLC_PRG.PROCESS_IN... (13)	Local Write
_global_init (173)	Local Write
SC_BR_CMD_REQ%MW3712	
PLC_PRG.SC_INPUTS (24)	Local Read
PLC_PRG.SC_INPUTS (26)	Local Read
PLC_PRG.SC_INPUTS (28)	Local Read
PLC_PRG.SC_INPUTS (30)	Local Read
_global_init (162)	Local Write
SC_ATB%MX0.2	
PLC_PRG.SC_OUTPUTS (3)	Local Write
_global_init (11)	Local Write
PE203_PIIY_OK	
PLC_PRG.FAULT_LOGIC (13)	Local Read
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.PROCESS_IN... (12)	Local Write
_global_init (172)	Local Write
SC_AFB%MX0.3	
PLC_PRG.SC_OUTPUTS (4)	Local Write
_global_init (12)	Local Write
RPV211_CLS_REQ_ES	
_global_init (261)	Local Write
RP211_PSL	
PLC_PRG.PROCESS_IN... (9)	Local Write
_global_init (187)	Local Write
Reset_Required	
PLC_PRG.FAULT_LOGIC (37)	Local Write
PLC_PRG.SC_OUTPUTS (2)	Local Read
_global_init (243)	Local Write
PE202_PSL_LO	
PLC_PRG.FAULT_LOGIC (7)	Local Read
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.PROCESS_IN... (5)	Local Write
PLC_PRG.SC_OUTPUTS (9)	Local Read
_global_init (171)	Local Write
PE201_PSL_LO	
PLC_PRG.FAULT_LOGIC (5)	Local Read
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.PROCESS_IN... (4)	Local Write
PLC_PRG.SC_OUTPUTS (8)	Local Read
_global_init (170)	Local Write
RESET_REQ	
PLC_PRG.FAULT_LOGIC (3)	Local Read
PLC_PRG.FAULT_LOGIC (4)	Local Read
PLC_PRG.FAULT_LOGIC (5)	Local Read
PLC_PRG.FAULT_LOGIC (6)	Local Read
PLC_PRG.FAULT_LOGIC (7)	Local Read
PLC_PRG.FAULT_LOGIC (8)	Local Read

PLC_PRG.FAULT_LOGIC (10)	Local Read
PLC_PRG.FAULT_LOGIC (11)	Local Read
PLC_PRG.FAULT_LOGIC (13)	Local Read
PLC_PRG.FAULT_LOGIC (14)	Local Read
PLC_PRG.FAULT_LOGIC (15)	Local Read
PLC_PRG.FAULT_LOGIC (17)	Local Read
PLC_PRG.FAULT_LOGIC (19)	Local Read
PLC_PRG.FAULT_LOGIC (20)	Local Read
PLC_PRG.FAULT_LOGIC (21)	Local Read
PLC_PRG.SC_INPUTS (2)	Local Write
_global_init (168)	Local Write
PE212_PSH_HI	
PLC_PRG.LL_SM (83)	Local Read
PLC_PRG.LL_SM (100)	Local Read
PLC_PRG.PROCESS_IN... (25)	Local Write
_global_init (183)	Local Write
PE211_PSH_MIDHI	
PLC_PRG.ES_SM (69)	Local Read
PLC_PRG.PROCESS_IN... (20)	Local Write
_global_init (179)	Local Write
PE203_PSL_MIDLO	
PLC_PRG.PROCESS_IN... (15)	Local Write
_global_init (175)	Local Write
PE101_PSL_LO	
PLC_PRG.FAULT_LOGIC (4)	Local Read
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.PROCESS_IN... (3)	Local Write
PLC_PRG.SC_OUTPUTS (7)	Local Read
_global_init (169)	Local Write
open_req	
PLC_PRG.VALVES (49)	Local Write
VALVE_BI_FB (4)	Local Read
VALVE_BI_FB (8)	Local Read
VALVE_BI_FBinit (5)	Local Write
open_ena	
PLC_PRG.SC_OUTPUTS (43)	Local Read
PLC_PRG.SC_OUTPUTS (51)	Local Read
PLC_PRG.SC_OUTPUTS (63)	Local Read
PLC_PRG.SC_OUTPUTS (71)	Local Read
PLC_PRG.VALVES (5)	Local Write
PLC_PRG.VALVES (13)	Local Write
PLC_PRG.VALVES (21)	Local Write
PLC_PRG.VALVES (29)	Local Write
PLC_PRG.VALVES (37)	Local Write
PLC_PRG.VALVES (55)	Local Write
PLC_PRG.VALVES (63)	Local Write
PLC_PRG.VALVES (71)	Local Write
PLC_PRG.VALVES (79)	Local Write
PLC_PRG.VALVES (87)	Local Write
PLC_PRG.VALVES (95)	Local Write
PLC_PRG.VALVES (103)	Local Write
PLC_PRG.VALVES (111)	Local Write
VALVE_FB (3)	Local Read
VALVE_FB (6)	Local Read
VALVE_FBinit (2)	Local Write
open_ena	
PLC_PRG.SC_OUTPUTS (89)	Local Read
PLC_PRG.VALVES (46)	Local Write
VALVE_BI_FB (4)	Local Read
VALVE_BI_FB (8)	Local Read
VALVE_BI_FB (11)	Local Read
VALVE_BI_FBinit (2)	Local Write
open_cmd	
PLC_PRG.PROCESS_OU... (5)	Local Read
PLC_PRG.PROCESS_OU... (6)	Local Read
PLC_PRG.PROCESS_OU... (7)	Local Read
PLC_PRG.PROCESS_OU... (8)	Local Read
PLC_PRG.PROCESS_OU... (10)	Local Read
PLC_PRG.PROCESS_OU... (13)	Local Read
PLC_PRG.PROCESS_OU... (14)	Local Read
PLC_PRG.PROCESS_OU... (15)	Local Read
PLC_PRG.PROCESS_OU... (16)	Local Read
PLC_PRG.PROCESS_OU... (22)	Local Read

PLC_PRG.PROCESS_OU...	(23)	Local	Read
PLC_PRG.PROCESS_OU...	(24)	Local	Read
PLC_PRG.PROCESS_OU...	(25)	Local	Read
PLC_PRG.SC_OUTPUTS	(45)	Local	Read
PLC_PRG.SC_OUTPUTS	(53)	Local	Read
PLC_PRG.SC_OUTPUTS	(65)	Local	Read
PLC_PRG.SC_OUTPUTS	(73)	Local	Read
PLC_PRG.SC_OUTPUTS	(78)	Local	Read
PLC_PRG.SC_OUTPUTS	(80)	Local	Read
PLC_PRG.SC_OUTPUTS	(81)	Local	Read
PLC_PRG.SC_OUTPUTS	(85)	Local	Read
PLC_PRG.SC_OUTPUTS	(97)	Local	Read
PLC_PRG.SC_OUTPUTS	(99)	Local	Read
PLC_PRG.SC_OUTPUTS	(100)	Local	Read
PLC_PRG.SC_OUTPUTS	(104)	Local	Read
PLC_PRG.SC_OUTPUTS	(112)	Local	Read
VALVE_FB	(3)	Local	Read
VALVE_FB	(3)	Local	Write
VALVE_FB	(6)	Local	Read
VALVE_FBinit	(6)	Local	Write
on_req			
PLC_PRG.PUMPS	(17)	Local	Write
PLC_PRG.PUMPS	(25)	Local	Write
PLC_PRG.PUMPS	(26)	Local	Read
PLC_PRG.PUMPS	(33)	Local	Write
PLC_PRG.PUMPS	(34)	Local	Read
TP_FB	(3)	Local	Read
TP_FBinit	(4)	Local	Write
on_req			
PLC_PRG.PUMPS	(9)	Local	Write
PLC_PRG.PUMPS	(10)	Local	Read
RP_FB	(2)	Local	Read
RP_FBinit	(3)	Local	Write
open_cmd			
PLC_PRG.PROCESS_OU...	(18)	Local	Read
PLC_PRG.SC_OUTPUTS	(91)	Local	Read
VALVE_BI_FB	(4)	Local	Read
VALVE_BI_FB	(4)	Local	Write
VALVE_BI_FB	(11)	Local	Read
VALVE_BI_FBinit	(7)	Local	Write
LLV211_OPN_REQ_SC			
PLC_PRG.SC_INPUTS	(19)	Local	Write
PLC_PRG.VALVES	(49)	Local	Read
_global_init	(264)	Local	Write
LLV211_CLS_REQ_LL			
PLC_PRG.LL_SM	(11)	Local	Write
PLC_PRG.LL_SM	(24)	Local	Write
PLC_PRG.LL_SM	(37)	Local	Write
PLC_PRG.LL_SM	(54)	Local	Write
PLC_PRG.LL_SM	(71)	Local	Write
PLC_PRG.LL_SM	(88)	Local	Write
PLC_PRG.LL_SM	(123)	Local	Write
PLC_PRG.LL_SM	(140)	Local	Write
PLC_PRG.LL_SM	(160)	Local	Write
PLC_PRG.LL_SM	(179)	Local	Write
PLC_PRG.VALVES	(50)	Local	Read
_global_init	(267)	Local	Write
LLV211_CLS_REQ_SC			
PLC_PRG.SC_INPUTS	(20)	Local	Write
PLC_PRG.VALVES	(50)	Local	Read
_global_init	(265)	Local	Write
LLV211_CLS_REQ_ES			
PLC_PRG.ES_SM	(11)	Local	Write
PLC_PRG.ES_SM	(25)	Local	Write
PLC_PRG.ES_SM	(39)	Local	Write
PLC_PRG.ES_SM	(57)	Local	Write
PLC_PRG.ES_SM	(75)	Local	Write
PLC_PRG.ES_SM	(93)	Local	Write
PLC_PRG.ES_SM	(111)	Local	Write
PLC_PRG.ES_SM	(130)	Local	Write
PLC_PRG.ES_SM	(148)	Local	Write
PLC_PRG.ES_SM	(169)	Local	Write
PLC_PRG.ES_SM	(189)	Local	Write

PLC_PRG.LL_SM (105)	Local Write
PLC_PRG.VALVES (50)	Local Read
_global_init (266)	Local Write
on_intlk	
PLC_PRG.PUMPS (14)	Local Write
PLC_PRG.PUMPS (22)	Local Write
PLC_PRG.PUMPS (30)	Local Write
TP_FB (3)	Local Read
TP_FB (6)	Local Read
TP_FBinit (1)	Local Write
LL_TP212_OK	
PLC_PRG.FAULT_LOGIC (21)	Local Read
PLC_PRG.FAULT_LOGIC (21)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.SC_OUTPUTS (149)	Local Read
_global_init (242)	Local Write
on_ena	
PLC_PRG.PUMPS (15)	Local Write
PLC_PRG.PUMPS (23)	Local Write
PLC_PRG.PUMPS (31)	Local Write
PLC_PRG.SC_OUTPUTS (118)	Local Read
TP_FB (3)	Local Read
TP_FB (6)	Local Read
TP_FBinit (2)	Local Write
MAX_SOCKET_FD_SETSIZE	
_global_init (164)	Global Write
LL_STATE	
PLC_PRG.LL_SM (5)	Local Write
PLC_PRG.LL_SM (10)	Local Read
PLC_PRG.LL_SM (20)	Local Write
PLC_PRG.LL_SM (23)	Local Read
PLC_PRG.LL_SM (33)	Local Write
PLC_PRG.LL_SM (36)	Local Read
PLC_PRG.LL_SM (46)	Local Write
PLC_PRG.LL_SM (48)	Local Write
PLC_PRG.LL_SM (50)	Local Write
PLC_PRG.LL_SM (53)	Local Read
PLC_PRG.LL_SM (63)	Local Write
PLC_PRG.LL_SM (65)	Local Write
PLC_PRG.LL_SM (67)	Local Write
PLC_PRG.LL_SM (70)	Local Read
PLC_PRG.LL_SM (80)	Local Write
PLC_PRG.LL_SM (82)	Local Write
PLC_PRG.LL_SM (84)	Local Write
PLC_PRG.LL_SM (87)	Local Read
PLC_PRG.LL_SM (97)	Local Write
PLC_PRG.LL_SM (99)	Local Write
PLC_PRG.LL_SM (101)	Local Write
PLC_PRG.LL_SM (104)	Local Read
PLC_PRG.LL_SM (114)	Local Write
PLC_PRG.LL_SM (116)	Local Write
PLC_PRG.LL_SM (119)	Local Write
PLC_PRG.LL_SM (122)	Local Read
PLC_PRG.LL_SM (132)	Local Write
PLC_PRG.LL_SM (134)	Local Write
PLC_PRG.LL_SM (136)	Local Write
PLC_PRG.LL_SM (139)	Local Read
PLC_PRG.LL_SM (149)	Local Write
PLC_PRG.LL_SM (151)	Local Write
PLC_PRG.LL_SM (153)	Local Write
PLC_PRG.LL_SM (156)	Local Write
PLC_PRG.LL_SM (159)	Local Read
PLC_PRG.LL_SM (169)	Local Write
PLC_PRG.LL_SM (171)	Local Write
PLC_PRG.LL_SM (173)	Local Write
PLC_PRG.LL_SM (175)	Local Write
PLC_PRG.LL_SM (178)	Local Read
PLC_PRG.LL_SM (188)	Local Write
PLC_PRG.LL_SM (190)	Local Write
PLC_PRG.LL_SM (193)	Local Write
PLC_PRG.LL_SM (195)	Local Write
PLC_PRG.LL_SM (200)	Local Write
PLC_PRG.SC_OUTPUTS (268)	Local Read

PLC_PRG.SC_OUTPUTS (270)	Local Read
PLC_PRG.SC_OUTPUTS (272)	Local Read
PLC_PRG.SC_OUTPUTS (274)	Local Read
PLC_PRG.SC_OUTPUTS (276)	Local Read
PLC_PRG.SC_OUTPUTS (278)	Local Read
PLC_PRG.SC_OUTPUTS (280)	Local Read
PLC_PRG.SC_OUTPUTS (282)	Local Read
PLC_PRG.SC_OUTPUTS (284)	Local Read
PLC_PRG.SC_OUTPUTS (286)	Local Read
PLC_PRG.SC_OUTPUTS (288)	Local Read
PLC_PRG.VALVES (45)	Local Read
_global_init (290)	Local Write
LL_TP201_OK	
PLC_PRG.FAULT_LOGIC (19)	Local Read
PLC_PRG.FAULT_LOGIC (19)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.SC_OUTPUTS (140)	Local Read
PLC_PRG.VALVES (20)	Local Read
PLC_PRG.VALVES (36)	Local Read
_global_init (235)	Local Write
LL_PE211_PIY_OK	
PLC_PRG.ES_SM (4)	Local Read
PLC_PRG.ES_SM (19)	Local Read
PLC_PRG.FAULT_LOGIC (14)	Local Read
PLC_PRG.FAULT_LOGIC (14)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.SC_OUTPUTS (144)	Local Read
PLC_PRG.VALVES (78)	Local Read
_global_init (238)	Local Write
on_ena	
PLC_PRG.PUMPS (7)	Local Write
RP_FB (2)	Local Read
RP_FB (4)	Local Read
RP_FBinit (1)	Local Write
LL_PE203_PSL_LO	
PLC_PRG.FAULT_LOGIC (8)	Local Read
PLC_PRG.FAULT_LOGIC (8)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.SC_OUTPUTS (139)	Local Read
PLC_PRG.VALVES (20)	Local Read
PLC_PRG.VALVES (36)	Local Read
_global_init (234)	Local Write
on_cmd	
PLC_PRG.PROCESS_OU... (9)	Local Read
PLC_PRG.PROCESS_OU... (12)	Local Read
PLC_PRG.PROCESS_OU... (21)	Local Read
PLC_PRG.SC_OUTPUTS (117)	Local Read
PLC_PRG.SC_OUTPUTS (120)	Local Read
PLC_PRG.SC_OUTPUTS (125)	Local Read
PLC_PRG.SC_OUTPUTS (129)	Local Read
PLC_PRG.VALVES (29)	Local Read
PLC_PRG.VALVES (78)	Local Read
PLC_PRG.VALVES (110)	Local Read
TP_FB (3)	Local Read
TP_FB (3)	Local Write
TP_FB (6)	Local Read
TP_FBinit (6)	Local Write
LL_TP211_OK	
PLC_PRG.FAULT_LOGIC (20)	Local Read
PLC_PRG.FAULT_LOGIC (20)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.SC_OUTPUTS (148)	Local Read
_global_init (241)	Local Write
LL_PE203_PIY_OK	
PLC_PRG.FAULT_LOGIC (13)	Local Read
PLC_PRG.FAULT_LOGIC (13)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.PUMPS (14)	Local Read
PLC_PRG.SC_OUTPUTS (138)	Local Read
_global_init (233)	Local Write
LL_PE202_PSL_LO	
PLC_PRG.FAULT_LOGIC (7)	Local Read
PLC_PRG.FAULT_LOGIC (7)	Local Write

PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.SC_OUTPUTS (137)	Local Read
PLC_PRG.VALVES (12)	Local Read
PLC_PRG.VALVES (20)	Local Read
_global_init (232)	Local Write
DO_VENT212_SLOW_CMD%QX1.3	
PLC_PRG.PROCESS_IN... (64)	Global Read
PLC_PRG.PROCESS_OU... (24)	Global Write
_global_init (24)	Global Write
DO_VENT212_FAST_CMD%QX1.4	
PLC_PRG.PROCESS_IN... (64)	Global Read
PLC_PRG.PROCESS_OU... (25)	Global Write
_global_init (25)	Global Write
DO_VENT211_SLOW_CMD%QX0.11	
PLC_PRG.PROCESS_IN... (52)	Global Read
PLC_PRG.PROCESS_OU... (15)	Global Write
_global_init (16)	Global Write
DO_VENT211_FAST_CMD%QX0.12	
PLC_PRG.PROCESS_IN... (52)	Global Read
PLC_PRG.PROCESS_OU... (16)	Global Write
_global_init (17)	Global Write
LL_LL_CONFIG_OK	
PLC_PRG.FAULT_LOGIC (11)	Local Read
PLC_PRG.FAULT_LOGIC (11)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.LL_SM (4)	Local Read
PLC_PRG.SC_OUTPUTS (143)	Local Read
_global_init (237)	Local Write
DO_V204_OPEN_CMD%QX0.5	
PLC_PRG.PROCESS_IN... (45)	Global Read
PLC_PRG.PROCESS_IN... (46)	Global Read
PLC_PRG.PROCESS_OU... (8)	Global Write
_global_init (10)	Global Write
DO_V203_OPEN_CMD%QX0.4	
PLC_PRG.PROCESS_IN... (42)	Global Read
PLC_PRG.PROCESS_IN... (43)	Global Read
PLC_PRG.PROCESS_OU... (7)	Global Write
_global_init (9)	Global Write
DO_TPV212_OPEN_CMD%QX1.1	
PLC_PRG.PROCESS_IN... (70)	Global Read
PLC_PRG.PROCESS_IN... (71)	Global Read
PLC_PRG.PROCESS_OU... (22)	Global Write
_global_init (22)	Global Write
LL_ES_CONFIG_OK	
PLC_PRG.ES_SM (4)	Local Read
PLC_PRG.FAULT_LOGIC (10)	Local Read
PLC_PRG.FAULT_LOGIC (10)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.SC_OUTPUTS (142)	Local Read
_global_init (236)	Local Write
DO_TPV211_OPEN_CMD%QX0.9	
PLC_PRG.PROCESS_IN... (58)	Global Read
PLC_PRG.PROCESS_IN... (59)	Global Read
PLC_PRG.PROCESS_OU... (13)	Global Write
_global_init (14)	Global Write
DO_TP211_ON_CMD%QX0.8	
PLC_PRG.PROCESS_IN... (62)	Global Read
PLC_PRG.PROCESS_OU... (12)	Global Write
_global_init (13)	Global Write
DO_SPARE_32%QX1.15	
_global_init (36)	Global Write
DO_SPARE_30%QX1.13	
_global_init (34)	Global Write
DO_V201_OPEN_CMD%QX0.3	
PLC_PRG.PROCESS_IN... (36)	Global Read
PLC_PRG.PROCESS_IN... (37)	Global Read
PLC_PRG.PROCESS_OU... (6)	Global Write
_global_init (8)	Global Write
DO_SPARE_29%QX1.12	
_global_init (33)	Global Write
DO_SPARE_28%QX1.11	
_global_init (32)	Global Write
DO_TP212_ON_CMD%QX1.0	

PLC_PRG.PROCESS_IN... (74)	Global Read
PLC_PRG.PROCESS_OU... (21)	Global Write
_global_init (21)	Global Write
DO_SPARE_26%QX1.9	
_global_init (30)	Global Write
DO_SPARE_25%QX1.8	
_global_init (29)	Global Write
DO_TP201_VENT_ENABLE_CMD%QX0.7	
PLC_PRG.PROCESS_OU... (10)	Global Write
_global_init (12)	Global Write
DO_SPARE_24%QX1.7	
_global_init (28)	Global Write
DO_SPARE_22%QX1.5	
_global_init (26)	Global Write
DO_SPARE_14%QX0.13	
_global_init (18)	Global Write
DO_SLOTV211_CLOSE_CMD%QX0.15	
PLC_PRG.PROCESS_OU... (19)	Global Write
_global_init (20)	Global Write
DO_RP2111_ON_CMD%QX0.1	
PLC_PRG.PROCESS_OU... (4)	Global Write
_global_init (6)	Global Write
LL_BP211_ON	
PLC_PRG.FAULT_LOGIC (17)	Local Read
PLC_PRG.FAULT_LOGIC (17)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.PUMPS (22)	Local Read
PLC_PRG.PUMPS (30)	Local Read
PLC_PRG.SC_OUTPUTS (146)	Local Read
PLC_PRG.VALVES (78)	Local Read
PLC_PRG.VALVES (110)	Local Read
_global_init (240)	Local Write
DI_V204_OPEN%IX18.2	
PLC_PRG.PROCESS_IN... (45)	Global Read
DI_V204_OPEN%IX18.2	
PLC_PRG.PROCESS_IN... (45)	Global Read
DI_V204_CLOSED%IX18.3	
PLC_PRG.PROCESS_IN... (46)	Global Read
DI_V204_CLOSED%IX18.3	
PLC_PRG.PROCESS_IN... (46)	Global Read
DO_VENT212_SLOW_CMD%QX1.3	
PLC_PRG.PROCESS_IN... (64)	Global Read
PLC_PRG.PROCESS_OU... (24)	Global Write
_global_init (24)	Global Write
DI_V203_OPEN%IX18.0	
PLC_PRG.PROCESS_IN... (42)	Global Read
DI_V203_CLOSED%IX18.1	
PLC_PRG.PROCESS_IN... (43)	Global Read
DI_V202_CLOSED%IX17.15	
PLC_PRG.PROCESS_IN... (40)	Global Read
DI_V203_OPEN%IX18.0	
PLC_PRG.PROCESS_IN... (42)	Global Read
DI_V201_OPEN%IX17.12	
PLC_PRG.PROCESS_IN... (36)	Global Read
DI_V201_CLOSED%IX17.13	
PLC_PRG.PROCESS_IN... (37)	Global Read
DO_VENT212_FAST_CMD%QX1.4	
PLC_PRG.PROCESS_IN... (64)	Global Read
PLC_PRG.PROCESS_OU... (25)	Global Write
_global_init (25)	Global Write
DI_V101_OPEN%IX17.10	
PLC_PRG.PROCESS_IN... (33)	Global Read
DI_V101_CLOSED%IX17.11	
PLC_PRG.PROCESS_IN... (34)	Global Read
DI_V202_OPEN%IX17.14	
PLC_PRG.PROCESS_IN... (39)	Global Read
DI_V202_OPEN%IX17.14	
PLC_PRG.PROCESS_IN... (39)	Global Read
DI_V100_OPEN%IX17.8	
PLC_PRG.PROCESS_IN... (30)	Global Read
DI_TPV211_OPEN%IX18.8	
PLC_PRG.PROCESS_IN... (58)	Global Read
DI_TPV211_CLOSED%IX18.9	

PLC_PRG.PROCESS_IN...	(59)	Global	Read
DI_TP212_TURBO_OK%IX19.1			
PLC_PRG.PROCESS_IN...	(73)	Global	Read
DI_V100_CLOSED%IX17.9			
PLC_PRG.PROCESS_IN...	(31)	Global	Read
DI_TP212_AT_SPEED%IX19.0			
PLC_PRG.PROCESS_IN...	(74)	Global	Read
DI_TP201_TURBO_OK%IX18.4			
PLC_PRG.PROCESS_IN...	(48)	Global	Read
DI_TP201_AT_SPEED%IX18.5			
PLC_PRG.PROCESS_IN...	(50)	Global	Read
DI_TPV212_OPEN%IX18.12			
PLC_PRG.PROCESS_IN...	(70)	Global	Read
DI_TPV212_OPEN%IX18.12			
PLC_PRG.PROCESS_IN...	(70)	Global	Read
DI_TPV212_CLOSED%IX18.13			
PLC_PRG.PROCESS_IN...	(71)	Global	Read
DI_TP212_AT_SPEED%IX19.0			
PLC_PRG.PROCESS_IN...	(74)	Global	Read
DI_TP211_TURBO_OK%IX18.15			
PLC_PRG.PROCESS_IN...	(61)	Global	Read
DI_V202_CLOSED%IX17.15			
PLC_PRG.PROCESS_IN...	(40)	Global	Read
DI_TP211_TURBO_OK%IX18.15			
PLC_PRG.PROCESS_IN...	(61)	Global	Read
DI_TPV211_OPEN%IX18.8			
PLC_PRG.PROCESS_IN...	(58)	Global	Read
DI_TP211_AT_SPEED%IX18.14			
PLC_PRG.PROCESS_IN...	(62)	Global	Read
DI_TP211_AT_SPEED%IX18.14			
PLC_PRG.PROCESS_IN...	(62)	Global	Read
DI_SLOTV211_OPEN%IX19.2			
PLC_PRG.PROCESS_IN...	(76)	Global	Read
DI_SLOTV211_CLOSED%IX19.3			
PLC_PRG.PROCESS_IN...	(77)	Global	Read
DI_RPV212_OPEN%IX18.10			
PLC_PRG.PROCESS_IN...	(67)	Global	Read
DI_RPV212_CLOSED%IX18.11			
PLC_PRG.PROCESS_IN...	(68)	Global	Read
DI_TP201_TURBO_OK%IX18.4			
PLC_PRG.PROCESS_IN...	(48)	Global	Read
DI_RPV211_OPEN%IX18.6			
PLC_PRG.PROCESS_IN...	(55)	Global	Read
DI_RPV211_CLOSED%IX18.7			
PLC_PRG.PROCESS_IN...	(56)	Global	Read
DI_LL211_LID_CLOSED%IX19.4			
PLC_PRG.PROCESS_IN...	(79)	Global	Read
PLC_PRG.SC_OUTPUTS	(34)	Global	Read
on_cmd			
PLC_PRG.PROCESS_OU...	(3)	Local	Read
PLC_PRG.SC_OUTPUTS	(107)	Local	Read
RP_FB	(2)	Local	Read
RP_FB	(2)	Local	Write
RP_FB	(4)	Local	Read
RP_FBinit	(5)	Local	Write
bID			
ACTUATOR_SM.CONNECT	(25)	Local	Read
ACTUATOR_SM.DRG1_W...	(26)	Local	Read
ACTUATOR_SM.PCMD_W...	(27)	Local	Read
ACTUATOR_SM.STATUS...	(26)	Local	Read
_global_init	(3)	Local	Write
oMBMaster			
ACTUATOR_SM	(16)	Local	Read
ACTUATOR_SM.CONNECT	(25)	Local	Write
ACTUATOR_SM.CONNECT	(28)	Local	Read
ACTUATOR_SM.DRG1_W...	(26)	Local	Write
ACTUATOR_SM.DRG1_W...	(29)	Local	Read
ACTUATOR_SM.PCMD_W...	(27)	Local	Write
ACTUATOR_SM.PCMD_W...	(30)	Local	Read
ACTUATOR_SM.STATUS...	(26)	Local	Write
ACTUATOR_SM.STATUS...	(29)	Local	Read
ACTUATORinit	(6)	Local	Read
off_req			

PLC_PRG.PUMPS (18)	Local Write
PLC_PRG.PUMPS (26)	Local Write
PLC_PRG.PUMPS (34)	Local Write
TP_FB (3)	Local Read
TP_FBinit (5)	Local Write
off_req	
PLC_PRG.PUMPS (10)	Local Write
RP_FB (2)	Local Read
RP_FBinit (4)	Local Write
off_ena	
PLC_PRG.PUMPS (16)	Local Write
PLC_PRG.PUMPS (24)	Local Write
PLC_PRG.PUMPS (32)	Local Write
PLC_PRG.SC_OUTPUTS (119)	Local Read
TP_FB (3)	Local Read
TP_FB (6)	Local Read
TP_FBinit (3)	Local Write
not_symbol	
PLC_PRG.SC_OUTPUTS (46)	Local Read
PLC_PRG.SC_OUTPUTS (54)	Local Read
PLC_PRG.SC_OUTPUTS (66)	Local Read
PLC_PRG.SC_OUTPUTS (74)	Local Read
PLC_PRG.SC_OUTPUTS (113)	Local Read
VALVE_FB (6)	Local Write
VALVE_FBinit (7)	Local Write
LL_REQUEST	
PLC_PRG.LL_SM (45)	Local Read
PLC_PRG.LL_SM (47)	Local Read
PLC_PRG.LL_SM (49)	Local Read
PLC_PRG.LL_SM (62)	Local Read
PLC_PRG.LL_SM (64)	Local Read
PLC_PRG.LL_SM (79)	Local Read
PLC_PRG.LL_SM (81)	Local Read
PLC_PRG.LL_SM (96)	Local Read
PLC_PRG.LL_SM (98)	Local Read
PLC_PRG.LL_SM (113)	Local Read
PLC_PRG.LL_SM (115)	Local Read
PLC_PRG.LL_SM (131)	Local Read
PLC_PRG.LL_SM (133)	Local Read
PLC_PRG.LL_SM (148)	Local Read
PLC_PRG.LL_SM (150)	Local Read
PLC_PRG.LL_SM (168)	Local Read
PLC_PRG.LL_SM (170)	Local Read
PLC_PRG.LL_SM (187)	Local Read
PLC_PRG.LL_SM (189)	Local Read
PLC_PRG.SC_INPUTS (54)	Local Write
PLC_PRG.SC_INPUTS (56)	Local Write
PLC_PRG.SC_INPUTS (58)	Local Write
PLC_PRG.SC_INPUTS (60)	Local Write
PLC_PRG.SC_INPUTS (62)	Local Write
PLC_PRG.SC_OUTPUTS (202)	Local Read
PLC_PRG.SC_OUTPUTS (204)	Local Read
PLC_PRG.SC_OUTPUTS (206)	Local Read
PLC_PRG.SC_OUTPUTS (208)	Local Read
_global_init (291)	Local Write
LL_PE201_PSL_LO	
PLC_PRG.FAULT_LOGIC (5)	Local Read
PLC_PRG.FAULT_LOGIC (5)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.SC_OUTPUTS (135)	Local Read
PLC_PRG.VALVES (4)	Local Read
PLC_PRG.VALVES (12)	Local Read
_global_init (230)	Local Write
LL_PE101_PSL_LO	
PLC_PRG.FAULT_LOGIC (4)	Local Read
PLC_PRG.FAULT_LOGIC (4)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.SC_OUTPUTS (134)	Local Read
PLC_PRG.VALVES (4)	Local Read
_global_init (229)	Local Write
ES_REQUEST	
PLC_PRG.ES_SM (47)	Local Read
PLC_PRG.ES_SM (49)	Local Read

PLC_PRG.ES_SM (51)	Local Read
PLC_PRG.ES_SM (65)	Local Read
PLC_PRG.ES_SM (67)	Local Read
PLC_PRG.ES_SM (83)	Local Read
PLC_PRG.ES_SM (85)	Local Read
PLC_PRG.ES_SM (101)	Local Read
PLC_PRG.ES_SM (103)	Local Read
PLC_PRG.ES_SM (119)	Local Read
PLC_PRG.ES_SM (121)	Local Read
PLC_PRG.ES_SM (138)	Local Read
PLC_PRG.ES_SM (140)	Local Read
PLC_PRG.ES_SM (156)	Local Read
PLC_PRG.ES_SM (158)	Local Read
PLC_PRG.ES_SM (177)	Local Read
PLC_PRG.ES_SM (179)	Local Read
PLC_PRG.ES_SM (197)	Local Read
PLC_PRG.ES_SM (199)	Local Read
PLC_PRG.SC_INPUTS (39)	Local Write
PLC_PRG.SC_INPUTS (41)	Local Write
PLC_PRG.SC_INPUTS (43)	Local Write
PLC_PRG.SC_INPUTS (45)	Local Write
PLC_PRG.SC_INPUTS (47)	Local Write
PLC_PRG.SC_OUTPUTS (187)	Local Read
PLC_PRG.SC_OUTPUTS (189)	Local Read
PLC_PRG.SC_OUTPUTS (191)	Local Read
PLC_PRG.SC_OUTPUTS (193)	Local Read
_global_init (289)	Local Write
off_ena	
PLC_PRG.PUMPS (8)	Local Write
RP_FB (2)	Local Read
RP_FB (4)	Local Read
RP_FBinit (2)	Local Write
close_req	
PLC_PRG.VALVES (8)	Local Write
PLC_PRG.VALVES (16)	Local Write
PLC_PRG.VALVES (24)	Local Write
PLC_PRG.VALVES (32)	Local Write
PLC_PRG.VALVES (40)	Local Write
PLC_PRG.VALVES (58)	Local Write
PLC_PRG.VALVES (66)	Local Write
PLC_PRG.VALVES (74)	Local Write
PLC_PRG.VALVES (82)	Local Write
PLC_PRG.VALVES (90)	Local Write
PLC_PRG.VALVES (98)	Local Write
PLC_PRG.VALVES (106)	Local Write
PLC_PRG.VALVES (114)	Local Write
VALVE_FB (3)	Local Read
VALVE_FBinit (5)	Local Write
oActuator	
ACTUATOR_SM (3)	Local Read
ACTUATOR_SM (5)	Local Write
ACTUATOR_SM (7)	Local Write
ACTUATOR_SM (9)	Local Read
ACTUATOR_SM (10)	Local Write
ACTUATOR_SM (12)	Local Write
ACTUATOR_SM (14)	Local Read
ACTUATOR_SM (16)	Local Read
ACTUATOR_SM (17)	Local Write
ACTUATOR_SM (18)	Local Write
ACTUATOR_SM (21)	Local Read
ACTUATOR_SM (23)	Local Read
ACTUATOR_SM (25)	Local Read
ACTUATOR_SM (27)	Local Write
ACTUATOR_SM (29)	Local Read
ACTUATOR_SM (31)	Local Write
ACTUATOR_SM (33)	Local Read
ACTUATOR_SM (35)	Local Write
ACTUATOR_SM (37)	Local Read
ACTUATOR_SM (39)	Local Write
ACTUATOR_SM (42)	Local Write
ACTUATOR_SM (46)	Local Read
ACTUATOR_SM (48)	Local Write
ACTUATOR_SM (50)	Local Read

ACTUATOR_SM (52)	Local Write
ACTUATOR_SM (55)	Local Read
ACTUATOR_SM (57)	Local Write
ACTUATOR_SM (59)	Local Read
ACTUATOR_SM (61)	Local Write
ACTUATOR_SM (64)	Local Read
ACTUATOR_SM (65)	Local Write
ACTUATOR_SM (67)	Local Read
ACTUATOR_SM (69)	Local Write
ACTUATOR_SM (72)	Local Read
ACTUATOR_SM (74)	Local Write
ACTUATOR_SM (76)	Local Read
ACTUATOR_SM (78)	Local Write
ACTUATOR_SM (81)	Local Read
ACTUATOR_SM (83)	Local Write
ACTUATOR_SM (85)	Local Read
ACTUATOR_SM (87)	Local Write
ACTUATOR_SM (90)	Local Read
ACTUATOR_SM (92)	Local Read
ACTUATOR_SM (94)	Local Read
ACTUATOR_SM (96)	Local Write
ACTUATOR_SM (99)	Local Write
ACTUATOR_SM (103)	Local Read
ACTUATOR_SM (105)	Local Read
ACTUATOR_SM (111)	Local Write
ACTUATOR_SM (116)	Local Write
ACTUATOR_SM (120)	Local Read
ACTUATOR_SM (122)	Local Read
ACTUATOR_SM (125)	Local Write
ACTUATOR_SM (128)	Local Read
ACTUATOR_SM (130)	Local Read
ACTUATOR_SM (132)	Local Read
ACTUATOR_SM (136)	Local Write
ACTUATOR_SM (140)	Local Write
ACTUATOR_SM (145)	Local Write
ACTUATOR_SM (146)	Local Write
ACTUATOR_SM.CONNECT (6)	Local Read
ACTUATOR_SM.CONNECT (6)	Local Write
ACTUATOR_SM.CONNECT (9)	Local Write
ACTUATOR_SM.CONNECT (25)	Local Write
ACTUATOR_SM.CONNECT (25)	Local Read
ACTUATOR_SM.CONNECT (25)	Local Write
ACTUATOR_SM.CONNECT (25)	Local Read
ACTUATOR_SM.CONNECT (25)	Local Write
ACTUATOR_SM.CONNECT (25)	Local Read
ACTUATOR_SM.CONNECT (25)	Local Write
ACTUATOR_SM.CONNECT (28)	Local Read
ACTUATOR_SM.CONNECT (31)	Local Write
ACTUATOR_SM.CONNECT (32)	Local Write
ACTUATOR_SM.DRG1_W... (5)	Local Read
ACTUATOR_SM.DRG1_W... (6)	Local Write
ACTUATOR_SM.DRG1_W... (7)	Local Write
ACTUATOR_SM.DRG1_W... (26)	Local Write
ACTUATOR_SM.DRG1_W... (26)	Local Read
ACTUATOR_SM.DRG1_W... (26)	Local Write
ACTUATOR_SM.DRG1_W... (26)	Local Read
ACTUATOR_SM.DRG1_W... (26)	Local Write
ACTUATOR_SM.DRG1_W... (26)	Local Read
ACTUATOR_SM.DRG1_W... (26)	Local Write
ACTUATOR_SM.DRG1_W... (29)	Local Read
ACTUATOR_SM.DRG1_W... (32)	Local Write
ACTUATOR_SM.DRG1_W... (33)	Local Write
ACTUATOR_SM.DRG1_W... (34)	Local Write
ACTUATOR_SM.DRG1_W... (35)	Local Write
ACTUATOR_SM.DRG1_W... (36)	Local Read
ACTUATOR_SM.DRG1_W... (37)	Local Write
ACTUATOR_SM.DRG1_W... (38)	Local Write
ACTUATOR_SM.DRG1_W... (40)	Local Write
ACTUATOR_SM.PCMD_W... (5)	Local Read
ACTUATOR_SM.PCMD_W... (6)	Local Write
ACTUATOR_SM.PCMD_W... (7)	Local Write
ACTUATOR_SM.PCMD_W... (8)	Local Write
ACTUATOR_SM.PCMD_W... (27)	Local Write

ACTUATOR_SM.PCMD_W... (27)	Local Read
ACTUATOR_SM.PCMD_W... (27)	Local Write
ACTUATOR_SM.PCMD_W... (27)	Local Read
ACTUATOR_SM.PCMD_W... (27)	Local Write
ACTUATOR_SM.PCMD_W... (27)	Local Read
ACTUATOR_SM.PCMD_W... (27)	Local Write
ACTUATOR_SM.PCMD_W... (30)	Local Read
ACTUATOR_SM.PCMD_W... (33)	Local Write
ACTUATOR_SM.PCMD_W... (34)	Local Write
ACTUATOR_SM.PCMD_W... (35)	Local Write
ACTUATOR_SM.PCMD_W... (36)	Local Write
ACTUATOR_SM.PCMD_W... (37)	Local Read
ACTUATOR_SM.PCMD_W... (38)	Local Write
ACTUATOR_SM.PCMD_W... (39)	Local Write
ACTUATOR_SM.PCMD_W... (41)	Local Write
ACTUATOR_SM.STATUS... (5)	Local Read
ACTUATOR_SM.STATUS... (6)	Local Write
ACTUATOR_SM.STATUS... (7)	Local Write
ACTUATOR_SM.STATUS... (26)	Local Write
ACTUATOR_SM.STATUS... (26)	Local Read
ACTUATOR_SM.STATUS... (26)	Local Write
ACTUATOR_SM.STATUS... (26)	Local Read
ACTUATOR_SM.STATUS... (26)	Local Write
ACTUATOR_SM.STATUS... (26)	Local Read
ACTUATOR_SM.STATUS... (26)	Local Write
ACTUATOR_SM.STATUS... (29)	Local Read
ACTUATOR_SM.STATUS... (32)	Local Write
ACTUATOR_SM.STATUS... (33)	Local Write
ACTUATOR_SM.STATUS... (34)	Local Write
ACTUATOR_SM.STATUS... (35)	Local Write
ACTUATOR_SM.STATUS... (36)	Local Read
ACTUATOR_SM.STATUS... (37)	Local Read
ACTUATOR_SM.STATUS... (38)	Local Read
ACTUATOR_SM.STATUS... (39)	Local Read
ACTUATOR_SM.STATUS... (40)	Local Write
ACTUATOR_SM.STATUS... (41)	Local Write
ACTUATOR_SM.STATUS... (43)	Local Write
_global_init (6)	Local Read
not_symbol	
PLC_PRG.SC_OUTPUTS (93)	Local Read
VALVE_BI_FB (11)	Local Write
VALVE_BI_FBinit (9)	Local Write
LLV211	
PLC_PRG.PROCESS_OU... (18)	Local Read
PLC_PRG.PROCESS_OU... (19)	Local Read
PLC_PRG.SC_OUTPUTS (89)	Local Read
PLC_PRG.SC_OUTPUTS (90)	Local Read
PLC_PRG.SC_OUTPUTS (91)	Local Read
PLC_PRG.SC_OUTPUTS (92)	Local Read
PLC_PRG.SC_OUTPUTS (93)	Local Read
PLC_PRG.VALVES (45)	Local Write
PLC_PRG.VALVES (46)	Local Write
PLC_PRG.VALVES (47)	Local Write
PLC_PRG.VALVES (48)	Local Write
PLC_PRG.VALVES (49)	Local Write
PLC_PRG.VALVES (50)	Local Write
PLC_PRG.VALVES (51)	Local Read
_global_init (301)	Local Read
LLV211_OPN	
PLC_PRG.PROCESS_IN... (76)	Local Write
PLC_PRG.SC_OUTPUTS (87)	Local Read
_global_init (207)	Local Write
LL_V202_OPN	
PLC_PRG.FAULT_LOGIC (6)	Local Read
PLC_PRG.FAULT_LOGIC (6)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.SC_OUTPUTS (136)	Local Read
PLC_PRG.VALVES (12)	Local Read
_global_init (231)	Local Write
LLV211_CSD	
PLC_PRG.ES_SM (33)	Local Read
PLC_PRG.LL_SM (32)	Local Read
PLC_PRG.PROCESS_IN... (77)	Local Write

PLC_PRG.SC_OUTPUTS (88)	Local Read
PLC_PRG.VALVES (37)	Local Read
PLC_PRG.VALVES (47)	Local Read
PLC_PRG.VALVES (54)	Local Read
PLC_PRG.VALVES (62)	Local Read
PLC_PRG.VALVES (70)	Local Read
PLC_PRG.VALVES (80)	Local Read
PLC_PRG.VALVES (86)	Local Read
PLC_PRG.VALVES (94)	Local Read
PLC_PRG.VALVES (102)	Local Read
PLC_PRG.VALVES (112)	Local Read
_global_init (208)	Local Write
LL_CONFIG_OK	
PLC_PRG.BYPASSES (5)	Local Write
PLC_PRG.FAULT_LOGIC (11)	Local Read
PLC_PRG.FAULT_LOGIC (37)	Local Read
_global_init (227)	Local Write
LL_ACTUATOR_OK	
PLC_PRG.BR_SM (4)	Local Read
PLC_PRG.BR_SM (13)	Local Read
PLC_PRG.FAULT_LOGIC (3)	Local Read
PLC_PRG.FAULT_LOGIC (3)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.SC_OUTPUTS (133)	Local Read
_global_init (228)	Local Write
not_symbol	
PLC_PRG.SC_OUTPUTS (121)	Local Read
TP_FB (6)	Local Write
TP_FBinit (7)	Local Write
LL_PE212_PIIY_OK	
PLC_PRG.FAULT_LOGIC (15)	Local Read
PLC_PRG.FAULT_LOGIC (15)	Local Write
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.LL_SM (4)	Local Read
PLC_PRG.LL_SM (19)	Local Read
PLC_PRG.SC_OUTPUTS (145)	Local Read
PLC_PRG.VALVES (110)	Local Read
_global_init (239)	Local Write
DO_V204_OPEN_CMD%QX0.5	
PLC_PRG.PROCESS_IN... (45)	Global Read
PLC_PRG.PROCESS_IN... (46)	Global Read
PLC_PRG.PROCESS_OU... (8)	Global Write
_global_init (10)	Global Write
LL211_LID_CLOSED	
PLC_PRG.PROCESS_IN... (79)	Local Write
_global_init (224)	Local Write
DO_VENT211_SLOW_CMD%QX0.11	
PLC_PRG.PROCESS_IN... (52)	Global Read
PLC_PRG.PROCESS_OU... (15)	Global Write
_global_init (16)	Global Write
DO_VENT211_FAST_CMD%QX0.12	
PLC_PRG.PROCESS_IN... (52)	Global Read
PLC_PRG.PROCESS_OU... (16)	Global Write
_global_init (17)	Global Write
DO_SPARE_32%QX1.15	
_global_init (36)	Global Write
DO_V203_OPEN_CMD%QX0.4	
PLC_PRG.PROCESS_IN... (42)	Global Read
PLC_PRG.PROCESS_IN... (43)	Global Read
PLC_PRG.PROCESS_OU... (7)	Global Write
_global_init (9)	Global Write
DO_V101_OPEN_CMD%QX0.2	
PLC_PRG.PROCESS_IN... (33)	Global Read
PLC_PRG.PROCESS_IN... (34)	Global Read
PLC_PRG.PROCESS_OU... (5)	Global Write
_global_init (7)	Global Write
DO_SPARE_31%QX1.14	
_global_init (35)	Global Write
LL211_ARM_RETRACTED	
PLC_PRG.PROCESS_IN... (80)	Local Write
PLC_PRG.VALVES (47)	Local Read
PLC_PRG.VALVES (48)	Local Read
_global_init (225)	Local Write

DO_SPARE_30%QX1.13		
_global_init (34)	Global Write	
DO_V201_OPEN_CMD%QX0.3		
PLC_PRG.PROCESS_IN... (36)	Global Read	
PLC_PRG.PROCESS_IN... (37)	Global Read	
PLC_PRG.PROCESS_OU... (6)	Global Write	
_global_init (8)	Global Write	
DO_SPARE_31%QX1.14		
_global_init (35)	Global Write	
DO_SPARE_29%QX1.12		
_global_init (33)	Global Write	
DO_TPV212_OPEN_CMD%QX1.1		
PLC_PRG.PROCESS_IN... (70)	Global Read	
PLC_PRG.PROCESS_IN... (71)	Global Read	
PLC_PRG.PROCESS_OU... (22)	Global Write	
_global_init (22)	Global Write	
DO_SPARE_28%QX1.11		
_global_init (32)	Global Write	
DO_TP211_ON_CMD%QX0.8		
PLC_PRG.PROCESS_IN... (62)	Global Read	
PLC_PRG.PROCESS_OU... (12)	Global Write	
_global_init (13)	Global Write	
DO_TP201_ON_CMD%QX0.6		
PLC_PRG.PROCESS_IN... (49)	Global Read	
PLC_PRG.PROCESS_OU... (9)	Global Write	
_global_init (11)	Global Write	
DO_SPARE_27%QX1.10		
_global_init (31)	Global Write	
DO_SPARE_27%QX1.10		
_global_init (31)	Global Write	
DO_V101_OPEN_CMD%QX0.2		
PLC_PRG.PROCESS_IN... (33)	Global Read	
PLC_PRG.PROCESS_IN... (34)	Global Read	
PLC_PRG.PROCESS_OU... (5)	Global Write	
_global_init (7)	Global Write	
DO_SPARE_25%QX1.8		
_global_init (29)	Global Write	
DO_TPV211_OPEN_CMD%QX0.9		
PLC_PRG.PROCESS_IN... (58)	Global Read	
PLC_PRG.PROCESS_IN... (59)	Global Read	
PLC_PRG.PROCESS_OU... (13)	Global Write	
_global_init (14)	Global Write	
DO_SPARE_24%QX1.7		
_global_init (28)	Global Write	
DO_SPARE_23%QX1.6		
_global_init (27)	Global Write	
DO_SPARE_23%QX1.6		
_global_init (27)	Global Write	
DO_TP212_ON_CMD%QX1.0		
PLC_PRG.PROCESS_IN... (74)	Global Read	
PLC_PRG.PROCESS_OU... (21)	Global Write	
_global_init (21)	Global Write	
DO_SPARE_22%QX1.5		
_global_init (26)	Global Write	
DO_TP201_VENT_ENABLE_CMD%QX0.7		
PLC_PRG.PROCESS_OU... (10)	Global Write	
_global_init (12)	Global Write	
DO_SPARE_26%QX1.9		
_global_init (30)	Global Write	
DO_SPARE_14%QX0.13		
_global_init (18)	Global Write	
DO_SLOTV211_OPEN_CMD%QX0.14		
PLC_PRG.PROCESS_OU... (18)	Global Write	
_global_init (19)	Global Write	
DO_SLOTV211_CLOSE_CMD%QX0.15		
PLC_PRG.PROCESS_OU... (19)	Global Write	
_global_init (20)	Global Write	
DO_TP201_ON_CMD%QX0.6		
PLC_PRG.PROCESS_IN... (49)	Global Read	
PLC_PRG.PROCESS_OU... (9)	Global Write	
_global_init (11)	Global Write	
DO_RPV211_OPEN_CMD%QX0.10		
PLC_PRG.PROCESS_IN... (55)	Global Read	

PLC_PRG.PROCESS_IN... (56)	Global Read
PLC_PRG.PROCESS_OU... (14)	Global Write
_global_init (15)	Global Write
DO_RP2110_ON_CMD%QX0.0	
PLC_PRG.PROCESS_OU... (3)	Global Write
_global_init (5)	Global Write
ES_STATE	
PLC_PRG.ES_SM (5)	Local Write
PLC_PRG.ES_SM (9)	Local Read
PLC_PRG.ES_SM (20)	Local Write
PLC_PRG.ES_SM (23)	Local Read
PLC_PRG.ES_SM (34)	Local Write
PLC_PRG.ES_SM (37)	Local Read
PLC_PRG.ES_SM (48)	Local Write
PLC_PRG.ES_SM (50)	Local Write
PLC_PRG.ES_SM (52)	Local Write
PLC_PRG.ES_SM (55)	Local Read
PLC_PRG.ES_SM (66)	Local Write
PLC_PRG.ES_SM (68)	Local Write
PLC_PRG.ES_SM (70)	Local Write
PLC_PRG.ES_SM (73)	Local Read
PLC_PRG.ES_SM (84)	Local Write
PLC_PRG.ES_SM (86)	Local Write
PLC_PRG.ES_SM (88)	Local Write
PLC_PRG.ES_SM (91)	Local Read
PLC_PRG.ES_SM (102)	Local Write
PLC_PRG.ES_SM (104)	Local Write
PLC_PRG.ES_SM (106)	Local Write
PLC_PRG.ES_SM (109)	Local Read
PLC_PRG.ES_SM (120)	Local Write
PLC_PRG.ES_SM (122)	Local Write
PLC_PRG.ES_SM (125)	Local Write
PLC_PRG.ES_SM (128)	Local Read
PLC_PRG.ES_SM (139)	Local Write
PLC_PRG.ES_SM (141)	Local Write
PLC_PRG.ES_SM (143)	Local Write
PLC_PRG.ES_SM (146)	Local Read
PLC_PRG.ES_SM (157)	Local Write
PLC_PRG.ES_SM (159)	Local Write
PLC_PRG.ES_SM (161)	Local Write
PLC_PRG.ES_SM (164)	Local Write
PLC_PRG.ES_SM (167)	Local Read
PLC_PRG.ES_SM (178)	Local Write
PLC_PRG.ES_SM (180)	Local Write
PLC_PRG.ES_SM (182)	Local Write
PLC_PRG.ES_SM (184)	Local Write
PLC_PRG.ES_SM (187)	Local Read
PLC_PRG.ES_SM (198)	Local Write
PLC_PRG.ES_SM (200)	Local Write
PLC_PRG.ES_SM (203)	Local Write
PLC_PRG.ES_SM (205)	Local Write
PLC_PRG.ES_SM (210)	Local Write
PLC_PRG.SC_OUTPUTS (239)	Local Read
PLC_PRG.SC_OUTPUTS (241)	Local Read
PLC_PRG.SC_OUTPUTS (243)	Local Read
PLC_PRG.SC_OUTPUTS (245)	Local Read
PLC_PRG.SC_OUTPUTS (247)	Local Read
PLC_PRG.SC_OUTPUTS (249)	Local Read
PLC_PRG.SC_OUTPUTS (251)	Local Read
PLC_PRG.SC_OUTPUTS (253)	Local Read
PLC_PRG.SC_OUTPUTS (255)	Local Read
PLC_PRG.SC_OUTPUTS (257)	Local Read
PLC_PRG.SC_OUTPUTS (259)	Local Read
PLC_PRG.VALVES (37)	Local Read
PLC_PRG.VALVES (45)	Local Read
_global_init (288)	Local Write
DO_SLOTV211_OPEN_CMD%QX0.14	
PLC_PRG.PROCESS_OU... (18)	Global Write
_global_init (19)	Global Write
DO_RPV212_OPEN_CMD%QX1.2	
PLC_PRG.PROCESS_IN... (67)	Global Read
PLC_PRG.PROCESS_IN... (68)	Global Read
PLC_PRG.PROCESS_OU... (23)	Global Write

_global_init (23)	Global Write
DO_RPV211_OPEN_CMD%QX0.10	
PLC_PRG.PROCESS_IN... (55)	Global Read
PLC_PRG.PROCESS_IN... (56)	Global Read
PLC_PRG.PROCESS_OU... (14)	Global Write
_global_init (15)	Global Write
DI_V201_OPEN%IX17.12	
PLC_PRG.PROCESS_IN... (36)	Global Read
DI_V201_CLOSED%IX17.13	
PLC_PRG.PROCESS_IN... (37)	Global Read
DI_V101_OPEN%IX17.10	
PLC_PRG.PROCESS_IN... (33)	Global Read
DI_V101_CLOSED%IX17.11	
PLC_PRG.PROCESS_IN... (34)	Global Read
DO_RP2110_ON_CMD%QX0.0	
PLC_PRG.PROCESS_OU... (3)	Global Write
_global_init (5)	Global Write
DI_V100_OPEN%IX17.8	
PLC_PRG.PROCESS_IN... (30)	Global Read
ES_CONFIG_OK	
PLC_PRG.BYPASSES (4)	Local Write
PLC_PRG.FAULT_LOGIC (10)	Local Read
PLC_PRG.FAULT_LOGIC (37)	Local Read
_global_init (226)	Local Write
DI_TPV212_CLOSED%IX18.13	
PLC_PRG.PROCESS_IN... (71)	Global Read
DI_V203_CLOSED%IX18.1	
PLC_PRG.PROCESS_IN... (43)	Global Read
DI_TP201_AT_SPEED%IX18.5	
PLC_PRG.PROCESS_IN... (50)	Global Read
DI_V100_CLOSED%IX17.9	
PLC_PRG.PROCESS_IN... (31)	Global Read
DI_TP212_TURBO_OK%IX19.1	
PLC_PRG.PROCESS_IN... (73)	Global Read
DI_TPV211_CLOSED%IX18.9	
PLC_PRG.PROCESS_IN... (59)	Global Read
DI_SLOTV211_OPEN%IX19.2	
PLC_PRG.PROCESS_IN... (76)	Global Read
DI_SLOTV211_CLOSED%IX19.3	
PLC_PRG.PROCESS_IN... (77)	Global Read
DI_RPV212_OPEN%IX18.10	
PLC_PRG.PROCESS_IN... (67)	Global Read
DI_RPV212_CLOSED%IX18.11	
PLC_PRG.PROCESS_IN... (68)	Global Read
DI_RPV211_OPEN%IX18.6	
PLC_PRG.PROCESS_IN... (55)	Global Read
DI_RPV211_CLOSED%IX18.7	
PLC_PRG.PROCESS_IN... (56)	Global Read
DI_RP2111_ON%IX16.5	
PLC_PRG.PROCESS_IN... (8)	Global Read
PLC_PRG.SC_OUTPUTS (12)	Global Read
DI_PE212_PSL_MIDLO%IX17.6	
PLC_PRG.PROCESS_IN... (27)	Global Read
PLC_PRG.SC_OUTPUTS (31)	Global Read
DI_RP2111_ON%IX16.5	
PLC_PRG.PROCESS_IN... (8)	Global Read
PLC_PRG.SC_OUTPUTS (12)	Global Read
DI_RP2110_ON%IX16.4	
PLC_PRG.PROCESS_IN... (7)	Global Read
PLC_PRG.SC_OUTPUTS (11)	Global Read
DI_PE212_PSL_MIDLO%IX17.6	
PLC_PRG.PROCESS_IN... (27)	Global Read
PLC_PRG.SC_OUTPUTS (31)	Global Read
DI_PE212_PSL_MIDHI%IX17.5	
PLC_PRG.PROCESS_IN... (26)	Global Read
PLC_PRG.SC_OUTPUTS (30)	Global Read
DI_PE212_PSL_MIDHI%IX17.5	
PLC_PRG.PROCESS_IN... (26)	Global Read
PLC_PRG.SC_OUTPUTS (30)	Global Read
DI_PE212_PSL_LO%IX17.7	
PLC_PRG.PROCESS_IN... (28)	Global Read
PLC_PRG.SC_OUTPUTS (32)	Global Read
DI_PE212_PSL_LO%IX17.7	

PLC_PRG.PROCESS_IN... (28)	Global Read
PLC_PRG.SC_OUTPUTS (32)	Global Read
DI_PE212_PSL_HI%IX17.4	
PLC_PRG.PROCESS_IN... (25)	Global Read
PLC_PRG.SC_OUTPUTS (29)	Global Read
DI_PE212_PSL_HI%IX17.4	
PLC_PRG.PROCESS_IN... (25)	Global Read
PLC_PRG.SC_OUTPUTS (29)	Global Read
DI_PE212_PIIY_OK%IX16.10	
PLC_PRG.PROCESS_IN... (24)	Global Read
PLC_PRG.PROCESS_IN... (25)	Global Read
PLC_PRG.PROCESS_IN... (26)	Global Read
PLC_PRG.SC_OUTPUTS (28)	Global Read
DI_PE211_PSL_MIDLO%IX17.2	
PLC_PRG.PROCESS_IN... (21)	Global Read
PLC_PRG.SC_OUTPUTS (25)	Global Read
DI_PE212_PIIY_OK%IX16.10	
PLC_PRG.PROCESS_IN... (24)	Global Read
PLC_PRG.PROCESS_IN... (25)	Global Read
PLC_PRG.PROCESS_IN... (26)	Global Read
PLC_PRG.SC_OUTPUTS (28)	Global Read
DI_PE211_PSL_MIDLO%IX17.2	
PLC_PRG.PROCESS_IN... (21)	Global Read
PLC_PRG.SC_OUTPUTS (25)	Global Read
DI_PE211_PSL_MIDHI%IX17.1	
PLC_PRG.PROCESS_IN... (20)	Global Read
PLC_PRG.SC_OUTPUTS (24)	Global Read
DI_PE211_PSL_LO%IX17.3	
PLC_PRG.PROCESS_IN... (22)	Global Read
PLC_PRG.SC_OUTPUTS (26)	Global Read
DI_PE211_PSL_HI%IX17.0	
PLC_PRG.PROCESS_IN... (19)	Global Read
PLC_PRG.SC_OUTPUTS (23)	Global Read
DI_PE211_PIIY_OK%IX16.9	
PLC_PRG.PROCESS_IN... (18)	Global Read
PLC_PRG.PROCESS_IN... (19)	Global Read
PLC_PRG.PROCESS_IN... (20)	Global Read
PLC_PRG.SC_OUTPUTS (22)	Global Read
DI_PE211_PSL%IX16.7	
PLC_PRG.PROCESS_IN... (10)	Global Read
PLC_PRG.SC_OUTPUTS (14)	Global Read
DI_PE211_PSL%IX16.7	
PLC_PRG.PROCESS_IN... (10)	Global Read
PLC_PRG.SC_OUTPUTS (14)	Global Read
DI_PE203_PSL_MIDLO%IX16.14	
PLC_PRG.PROCESS_IN... (15)	Global Read
PLC_PRG.SC_OUTPUTS (19)	Global Read
DI_RP2110_ON%IX16.4	
PLC_PRG.PROCESS_IN... (7)	Global Read
PLC_PRG.SC_OUTPUTS (11)	Global Read
DI_PE211_PSL_HI%IX17.0	
PLC_PRG.PROCESS_IN... (19)	Global Read
PLC_PRG.SC_OUTPUTS (23)	Global Read
DI_PE203_PSL_MIDHI%IX16.13	
PLC_PRG.PROCESS_IN... (14)	Global Read
PLC_PRG.SC_OUTPUTS (18)	Global Read
DI_PE203_PSL_MIDHI%IX16.13	
PLC_PRG.PROCESS_IN... (14)	Global Read
PLC_PRG.SC_OUTPUTS (18)	Global Read
DI_PE203_PSL_LO%IX16.15	
PLC_PRG.PROCESS_IN... (16)	Global Read
PLC_PRG.SC_OUTPUTS (20)	Global Read
DI_PE203_PSL_LO%IX16.15	
PLC_PRG.PROCESS_IN... (16)	Global Read
PLC_PRG.SC_OUTPUTS (20)	Global Read
DI_PE211_PIIY_OK%IX16.9	
PLC_PRG.PROCESS_IN... (18)	Global Read
PLC_PRG.PROCESS_IN... (19)	Global Read
PLC_PRG.PROCESS_IN... (20)	Global Read
PLC_PRG.SC_OUTPUTS (22)	Global Read
DI_PE203_PSL_HI%IX16.12	
PLC_PRG.PROCESS_IN... (13)	Global Read
PLC_PRG.SC_OUTPUTS (17)	Global Read

DI_PE203_PSL_HI%IX16.12		
PLC_PRG.PROCESS_IN... (13)	Global	Read
PLC_PRG.SC_OUTPUTS (17)	Global	Read
DI_PE2110_PSL%IX16.6		
PLC_PRG.PROCESS_IN... (9)	Global	Read
PLC_PRG.SC_OUTPUTS (13)	Global	Read
DI_PE203_PIIY_OK%IX16.8		
PLC_PRG.PROCESS_IN... (12)	Global	Read
PLC_PRG.PROCESS_IN... (13)	Global	Read
PLC_PRG.PROCESS_IN... (14)	Global	Read
PLC_PRG.SC_OUTPUTS (16)	Global	Read
DI_PE203_PIIY_OK%IX16.8		
PLC_PRG.PROCESS_IN... (12)	Global	Read
PLC_PRG.PROCESS_IN... (13)	Global	Read
PLC_PRG.PROCESS_IN... (14)	Global	Read
PLC_PRG.SC_OUTPUTS (16)	Global	Read
DO_RPV212_OPEN_CMD%QX1.2		
PLC_PRG.PROCESS_IN... (67)	Global	Read
PLC_PRG.PROCESS_IN... (68)	Global	Read
PLC_PRG.PROCESS_OU... (23)	Global	Write
_global_init (23)	Global	Write
DI_PE202_PSL_LO%IX16.2		
PLC_PRG.PROCESS_IN... (5)	Global	Read
DO_RP2111_ON_CMD%QX0.1		
PLC_PRG.PROCESS_OU... (4)	Global	Write
_global_init (6)	Global	Write
DI_PE211_PSL_MIDHI%IX17.1		
PLC_PRG.PROCESS_IN... (20)	Global	Read
PLC_PRG.SC_OUTPUTS (24)	Global	Read
DI_PE211_PSL_LO%IX17.3		
PLC_PRG.PROCESS_IN... (22)	Global	Read
PLC_PRG.SC_OUTPUTS (26)	Global	Read
DI_PE203_PSL_MIDLO%IX16.14		
PLC_PRG.PROCESS_IN... (15)	Global	Read
PLC_PRG.SC_OUTPUTS (19)	Global	Read
DI_PE2110_PSL%IX16.6		
PLC_PRG.PROCESS_IN... (9)	Global	Read
PLC_PRG.SC_OUTPUTS (13)	Global	Read
DI_PE202_PSL_LO%IX16.2		
PLC_PRG.PROCESS_IN... (5)	Global	Read
DI_PE201_PSL_LO%IX16.1		
PLC_PRG.PROCESS_IN... (4)	Global	Read
DI_PE201_PSL_LO%IX16.1		
PLC_PRG.PROCESS_IN... (4)	Global	Read
DI_LL211_ARM_RETRACTED%IX19.5		
PLC_PRG.PROCESS_IN... (80)	Global	Read
PLC_PRG.SC_OUTPUTS (35)	Global	Read
DI_PE101_PSL_LO%IX16.0		
PLC_PRG.PROCESS_IN... (3)	Global	Read
DI_PE101_PSL_LO%IX16.0		
PLC_PRG.PROCESS_IN... (3)	Global	Read
cYAG		
PLC_PRG.BR_SM (80)	Local	Read
PLC_PRG.BR_SM (96)	Local	Read
_global_init (5)	Local	Write
cSINS02		
PLC_PRG.BR_SM (49)	Local	Read
PLC_PRG.BR_SM (65)	Local	Read
_global_init (4)	Local	Write
cVERSION_MINOR		
PLC_PRG.SC_OUTPUTS (157)	Local	Read
_global_init (2)	Local	Write
close_intlk		
PLC_PRG.VALVES (47)	Local	Write
VALVE_BI_FB (8)	Local	Read
VALVE_BI_FB (11)	Local	Read
VALVE_BI_FBinit (3)	Local	Write
not_symbol		
RP_FB (4)	Local	Write
RP_FBinit (6)	Local	Write
DI_LL211_LID_CLOSED%IX19.4		
PLC_PRG.PROCESS_IN... (79)	Global	Read
PLC_PRG.SC_OUTPUTS (34)	Global	Read

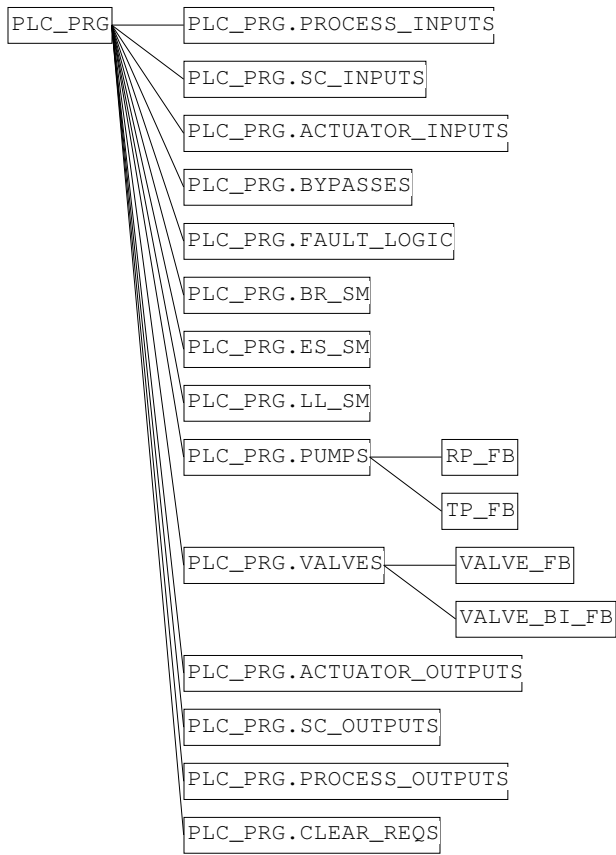
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PLC_PRG.PROCESS_IN... (80)	Global	Read
PLC_PRG.SC_OUTPUTS (35)	Global	Read
cVERSION_MAJOR		
PLC_PRG.SC_OUTPUTS (156)	Local	Read
_global_init (1)	Local	Write
cSINS01		
PLC_PRG.BR_SM (19)	Local	Read
PLC_PRG.BR_SM (34)	Local	Read
_global_init (3)	Local	Write
count2		
PLC_PRG.ACTUATOR_I... (6)	Local	Write
PLC_PRG.ACTUATOR_I... (6)	Local	Read
PLC_PRG.ACTUATOR_I... (7)	Local	Read
PLC_PRG.ACTUATOR_I... (8)	Local	Read
PLC_PRG.ACTUATOR_I... (11)	Local	Read
PLC_PRG.ACTUATOR_I... (11)	Local	Write
_global_init (166)	Local	Write
count		
_global_init (165)	Local	Write
close_req		
PLC_PRG.VALVES (50)	Local	Write
VALVE_BI_FB (4)	Local	Read
VALVE_BI_FB (8)	Local	Read
VALVE_BI_FBinit (6)	Local	Write
close_ena		
PLC_PRG.SC_OUTPUTS (44)	Local	Read
PLC_PRG.SC_OUTPUTS (52)	Local	Read
PLC_PRG.SC_OUTPUTS (64)	Local	Read
PLC_PRG.SC_OUTPUTS (72)	Local	Read
PLC_PRG.VALVES (6)	Local	Write
PLC_PRG.VALVES (14)	Local	Write
PLC_PRG.VALVES (22)	Local	Write
PLC_PRG.VALVES (30)	Local	Write
PLC_PRG.VALVES (38)	Local	Write
PLC_PRG.VALVES (56)	Local	Write
PLC_PRG.VALVES (64)	Local	Write
PLC_PRG.VALVES (72)	Local	Write
PLC_PRG.VALVES (80)	Local	Write
PLC_PRG.VALVES (88)	Local	Write
PLC_PRG.VALVES (96)	Local	Write
PLC_PRG.VALVES (104)	Local	Write
PLC_PRG.VALVES (112)	Local	Write
VALVE_FB (3)	Local	Read
VALVE_FB (6)	Local	Read
VALVE_FBinit (3)	Local	Write
close_ena		
PLC_PRG.SC_OUTPUTS (90)	Local	Read
PLC_PRG.VALVES (48)	Local	Write
VALVE_BI_FB (4)	Local	Read
VALVE_BI_FB (8)	Local	Read
VALVE_BI_FB (11)	Local	Read
VALVE_BI_FBinit (4)	Local	Write
cBR_SELECTOR_UL		
_global_init (6)	Local	Write
cACTUATOR_TARGET		
PLC_PRG.ACTUATOR_I... (7)	Local	Read
PLC_PRG.ACTUATOR_O... (4)	Local	Read
_global_init (7)	Local	Write
_global_init (8)	Local	Write
_global_init (9)	Local	Write
close_cmd		
PLC_PRG.PROCESS_OU... (19)	Local	Read
PLC_PRG.SC_OUTPUTS (92)	Local	Read
VALVE_BI_FB (8)	Local	Read
VALVE_BI_FB (8)	Local	Write
VALVE_BI_FB (11)	Local	Read
VALVE_BI_FBinit (8)	Local	Write
BR_STATE		
PLC_PRG.BR_SM (5)	Local	Write
PLC_PRG.BR_SM (9)	Local	Read
PLC_PRG.BR_SM (14)	Local	Write
PLC_PRG.BR_SM (17)	Local	Read

PLC_PRG.BR_SM (23)	Local Write
PLC_PRG.BR_SM (25)	Local Write
PLC_PRG.BR_SM (27)	Local Write
PLC_PRG.BR_SM (29)	Local Write
PLC_PRG.BR_SM (32)	Local Read
PLC_PRG.BR_SM (38)	Local Write
PLC_PRG.BR_SM (40)	Local Write
PLC_PRG.BR_SM (42)	Local Write
PLC_PRG.BR_SM (44)	Local Write
PLC_PRG.BR_SM (47)	Local Read
PLC_PRG.BR_SM (53)	Local Write
PLC_PRG.BR_SM (56)	Local Write
PLC_PRG.BR_SM (58)	Local Write
PLC_PRG.BR_SM (60)	Local Write
PLC_PRG.BR_SM (63)	Local Read
PLC_PRG.BR_SM (69)	Local Write
PLC_PRG.BR_SM (71)	Local Write
PLC_PRG.BR_SM (73)	Local Write
PLC_PRG.BR_SM (75)	Local Write
PLC_PRG.BR_SM (78)	Local Read
PLC_PRG.BR_SM (84)	Local Write
PLC_PRG.BR_SM (87)	Local Write
PLC_PRG.BR_SM (89)	Local Write
PLC_PRG.BR_SM (91)	Local Write
PLC_PRG.BR_SM (94)	Local Read
PLC_PRG.BR_SM (100)	Local Write
PLC_PRG.BR_SM (102)	Local Write
PLC_PRG.BR_SM (104)	Local Write
PLC_PRG.BR_SM (106)	Local Write
PLC_PRG.BR_SM (110)	Local Write
PLC_PRG.SC_OUTPUTS (40)	Local Read
PLC_PRG.SC_OUTPUTS (48)	Local Read
PLC_PRG.SC_OUTPUTS (218)	Local Read
PLC_PRG.SC_OUTPUTS (220)	Local Read
PLC_PRG.SC_OUTPUTS (223)	Local Read
PLC_PRG.SC_OUTPUTS (226)	Local Read
PLC_PRG.SC_OUTPUTS (229)	Local Read
_global_init (286)	Local Write
AI_PE212_LO_PII%IW9	
PLC_PRG.SC_OUTPUTS (168)	Global Read
BP211_ON_CMD	
PLC_PRG.PROCESS_OU... (4)	Local Read
PLC_PRG.PUMPS (4)	Local Write
PLC_PRG.SC_OUTPUTS (110)	Local Read
_global_init (308)	Local Write
AI_PE212_LO_PII%IW9	
PLC_PRG.SC_OUTPUTS (168)	Global Read
AI_PE212_HI_PII%IW8	
PLC_PRG.SC_OUTPUTS (167)	Global Read
AI_PE212_HI_PII%IW8	
PLC_PRG.SC_OUTPUTS (167)	Global Read
AI_PE211_LO_PII%IW7	
PLC_PRG.SC_OUTPUTS (166)	Global Read
AI_PE211_LO_PII%IW7	
PLC_PRG.SC_OUTPUTS (166)	Global Read
BR_REQUEST	
PLC_PRG.BR_SM (24)	Local Read
PLC_PRG.BR_SM (26)	Local Read
PLC_PRG.BR_SM (28)	Local Read
PLC_PRG.BR_SM (37)	Local Read
PLC_PRG.BR_SM (39)	Local Read
PLC_PRG.BR_SM (41)	Local Read
PLC_PRG.BR_SM (43)	Local Read
PLC_PRG.BR_SM (55)	Local Read
PLC_PRG.BR_SM (57)	Local Read
PLC_PRG.BR_SM (59)	Local Read
PLC_PRG.BR_SM (68)	Local Read
PLC_PRG.BR_SM (70)	Local Read
PLC_PRG.BR_SM (72)	Local Read
PLC_PRG.BR_SM (74)	Local Read
PLC_PRG.BR_SM (86)	Local Read
PLC_PRG.BR_SM (88)	Local Read
PLC_PRG.BR_SM (90)	Local Read

PLC_PRG.BR_SM (99)	Local Read
PLC_PRG.BR_SM (101)	Local Read
PLC_PRG.BR_SM (103)	Local Read
PLC_PRG.BR_SM (105)	Local Read
PLC_PRG.SC_INPUTS (25)	Local Write
PLC_PRG.SC_INPUTS (27)	Local Write
PLC_PRG.SC_INPUTS (29)	Local Write
PLC_PRG.SC_INPUTS (31)	Local Write
PLC_PRG.SC_INPUTS (33)	Local Write
PLC_PRG.SC_OUTPUTS (172)	Local Read
PLC_PRG.SC_OUTPUTS (174)	Local Read
PLC_PRG.SC_OUTPUTS (176)	Local Read
PLC_PRG.SC_OUTPUTS (178)	Local Read
_global_init (287)	Local Write
AI_PE211_HI_PIIY%IW6	
PLC_PRG.SC_OUTPUTS (165)	Global Read
BP211_ON	
PLC_PRG.FAULT_LOGIC (17)	Local Read
PLC_PRG.FAULT_LOGIC (37)	Local Read
PLC_PRG.PROCESS_IN... (8)	Local Write
PLC_PRG.SC_OUTPUTS (109)	Local Read
_global_init (223)	Local Write
AI_PE211_HI_PIIY%IW6	
PLC_PRG.SC_OUTPUTS (165)	Global Read
AI_PE203_LO_PIIY%IW5	
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PLC_PRG.BR_SM (49)	Local Write
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