

OB1 - <offline>

"Main_Program"

Name:	Family:
Author:	Version: 0.1
	Block version: 2
Time stamp Code:	12/31/2015 10:34:43 AM
Interface:	02/15/1996 04:51:12 PM
Lengths (block/logic/data):	00548 00382 00030

Name	Data Type	Address	Comment
TEMP		0.0	
OB1_EV_CLASS	Byte	0.0	Bits 0-3 = 1 (Coming event), Bits 4-7 = 1 (Event class 1)
OB1_SCAN_1	Byte	1.0	1 (Cold restart scan 1 of OB 1), 3 (Scan 2-n of OB 1)
OB1_PRIORITY	Byte	2.0	Priority of OB Execution
OB1_OB_NUMBR	Byte	3.0	1 (Organization block 1, OB1)
OB1_RESERVED_1	Byte	4.0	Reserved for system
OB1_RESERVED_2	Byte	5.0	Reserved for system
OB1_PREV_CYCLE	Int	6.0	Cycle time of previous OB1 scan (milliseconds)
OB1_MIN_CYCLE	Int	8.0	Minimum cycle time of OB1 (milliseconds)
OB1_MAX_CYCLE	Int	10.0	Maximum cycle time of OB1 (milliseconds)
OB1_DATE_TIME	Date_And_Time	12.0	Date and time OB1 started

Block: OB1 "Main Program Sweep (Cycle) "

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SP14-4 Valve Leak Check Station Control Using S7-GRAPH with Simulation

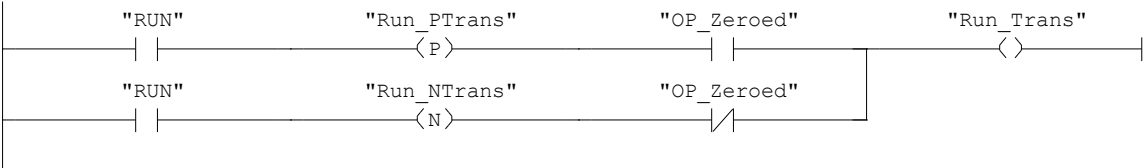
Additional internal memory:
Symbol Address
Int_Reset M5.1 BOOL Internal reset
TmpDI MD120 DINT Temporary double integer
TmpR MD124 REAL Temporary real
Ret_Val MW12 WORD Return value from SCALE block
Always_Off M10.0 BOOL Always off bit for SCALE block
Run_Trans M61.0 BOOL Run has changed
Run_PTrans M61.1 BOOL Bit for Run neg transition
Run_NTrans M61.2 BOOL Bit for Run pos transition
OP_Zeroed M61.3 BOOL Operation paused
Reset_Trans M61.4 BOOL Reset_PB transition to start-kick
SFC
ResetPB_PTrans M61.5 BOOL Bit for Reset_PB pos trans

Conversion formulas:
 HD_HGT = (HGT_MEAS-5530)/22118.0) * (150.0-75.0) + 75.0

 VLV_PRES = (PRES-5530)/22118.0) * (100.0)

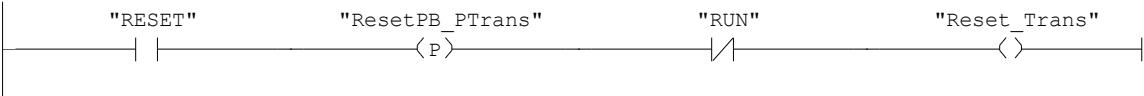
Network: 1

Generate pulse to toggle pause for SFC. Positive transition on Run used only when already paused. Negative transition on Run used when not paused.



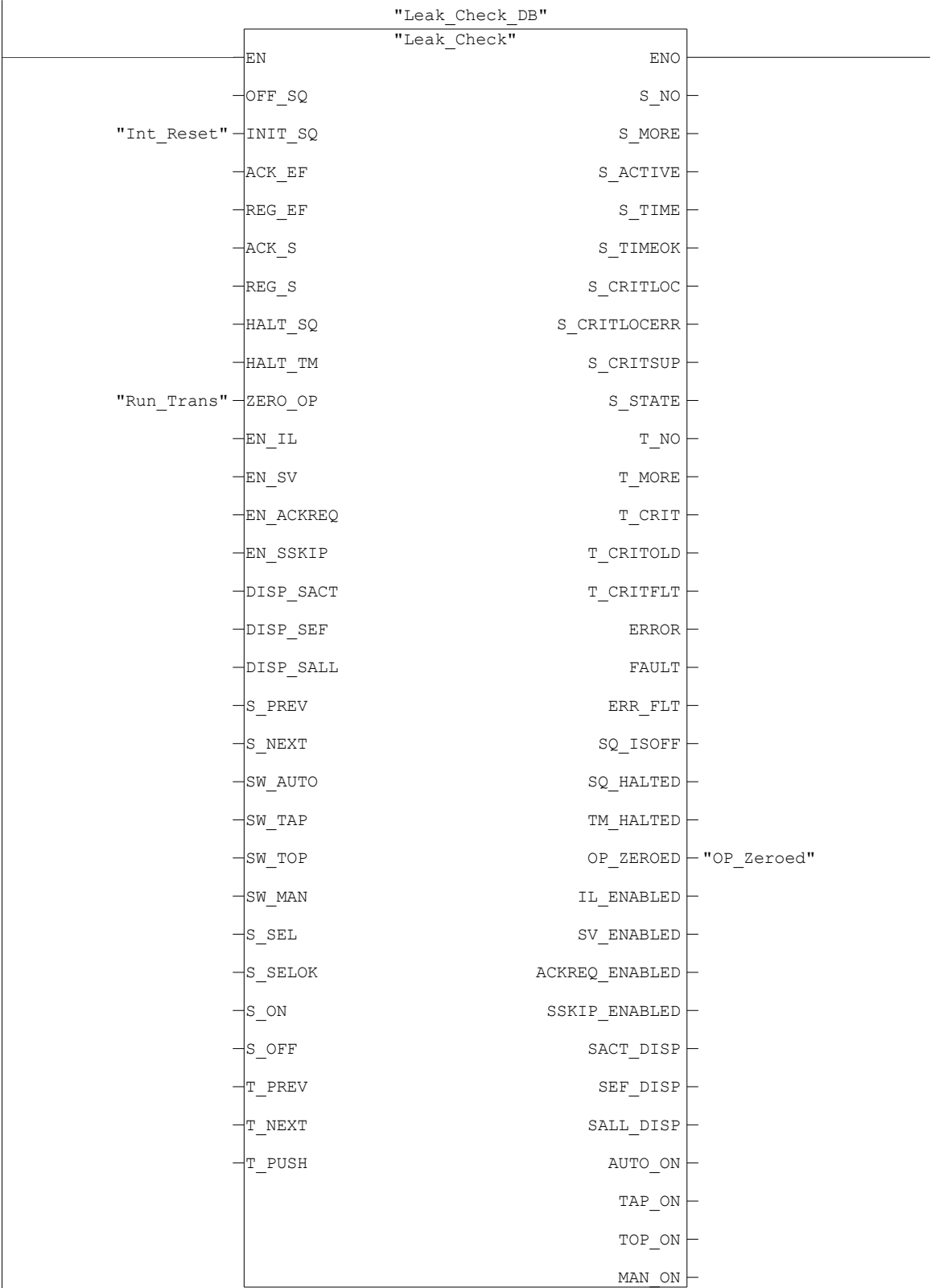
Network: 2

Positive transition for reset to start reset operation.



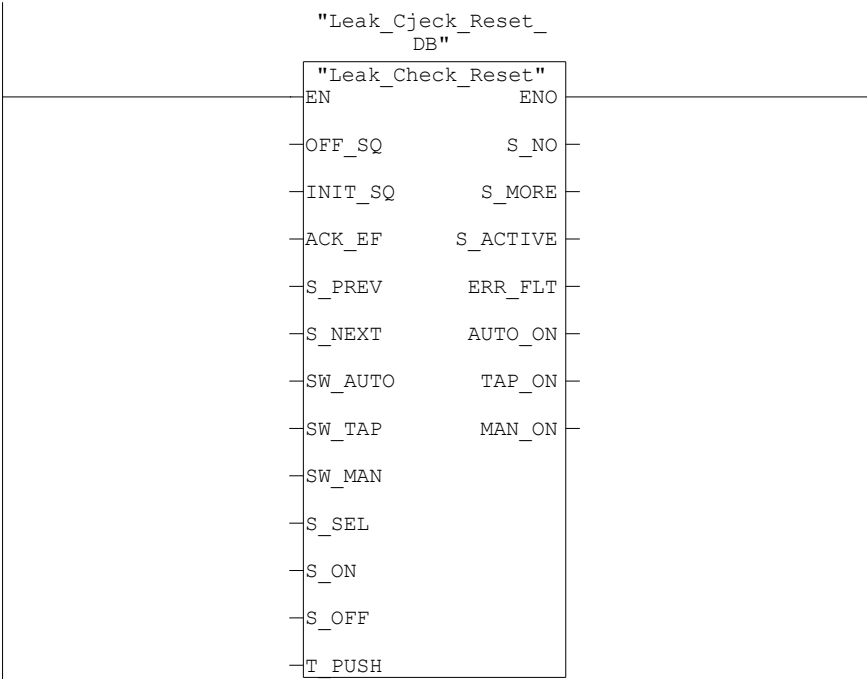
Network: 3

Leak Check S7-GRAPH



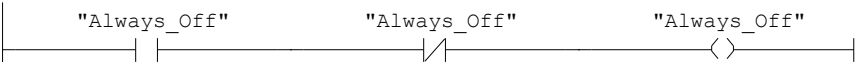
Network: 4

Leak Check Reset S7-GRAPH



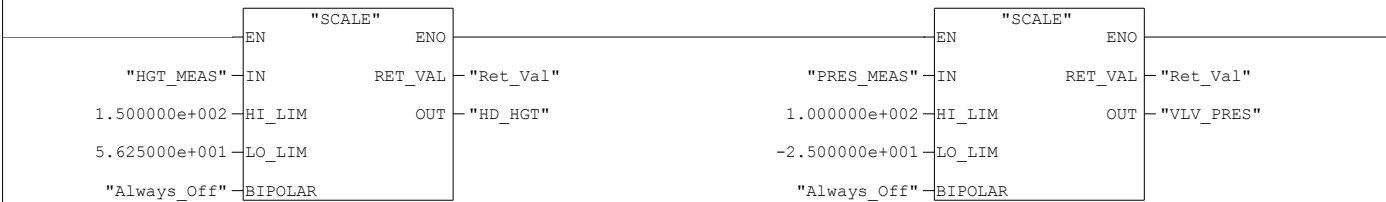
Network: 5

Always Off



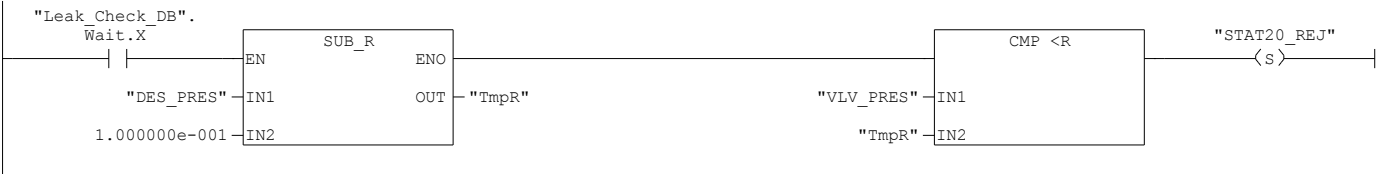
Network: 6

Convert height measurement to mm and pressure measurement to psi.
Uses SCALE block. Note that the lo_lim input is 25% lower than zero weight to account for this block assuming the minimum value of the analog in is zero rather than the 5530 (which corresponds to 4 mA).



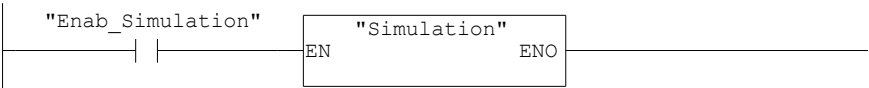
Network: 7Set if valve is to be rejected because it will not hold pressure

Check valve pressure during 30 sec wait. If failing, set reject bit.



Network: 8

Simulation



Network: 9

Copy real inputs to input image if not simulating

