

OB1 - <offline>

"Main_Program"

Name:

Author:

Time stamp Code:

Lengths (block/logic/data):

Family:

Version: 0.1

Block version: 2

12/31/2015 10:39:24 AM

02/15/1996 04:51:12 PM

00624 00458 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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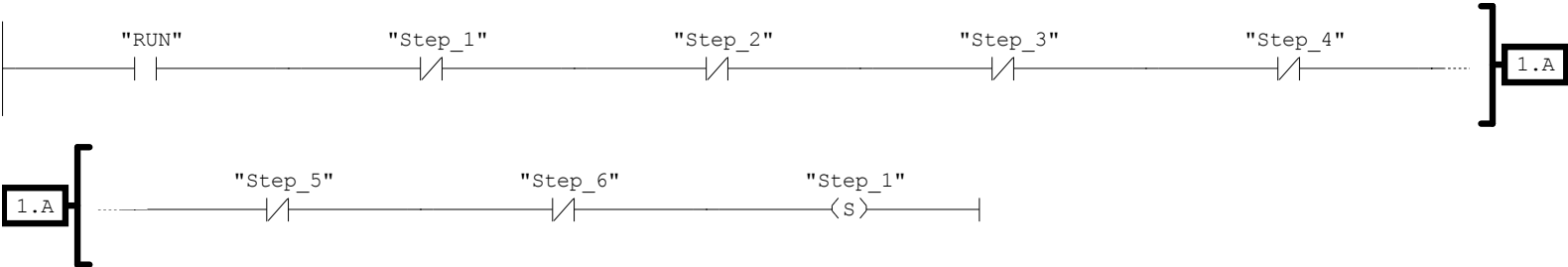
SP21-4 Valve Leak Check Station Control with Simulation

Additional internal memory:
Symbol Address
Int_Reset M5.1 BOOL Internal reset
Step_1 to Step_6 M20.1 to M20.6 BOOL Step-in-progress bits
Wait_Tmr DB1 SFB4 Times leak test
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

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 Initial Start



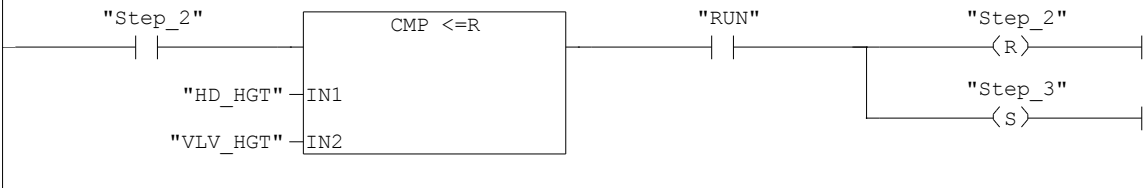
Network: 2

Step 1 Wait for valve



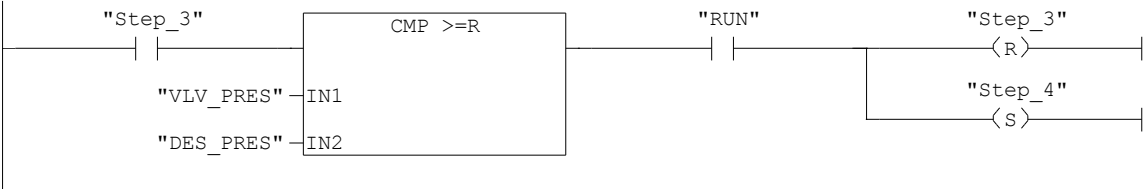
Network: 3

Step 2 Head down



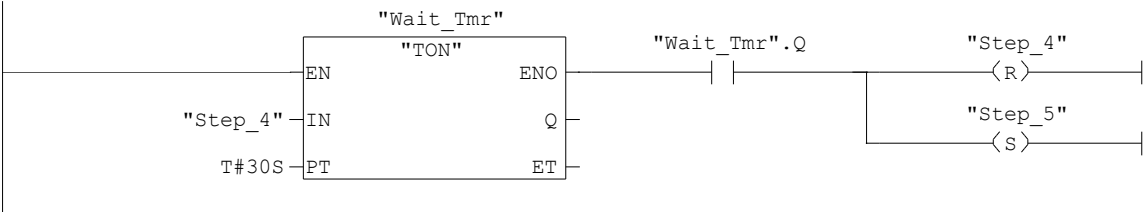
Network: 4

Step 3 Pressurize



Network: 5

Step 4 - Wait for pressure check



Network: 6

Step 5 Head up



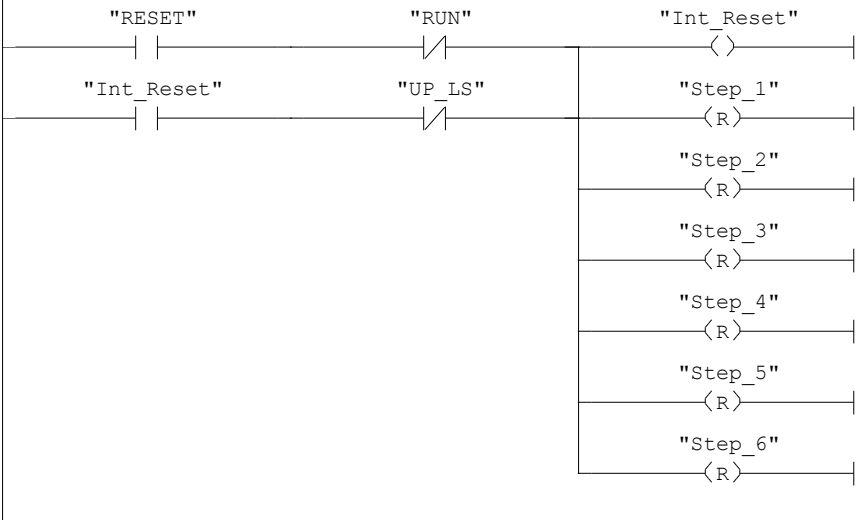
Network: 7

Step 6 - Push to conveyor



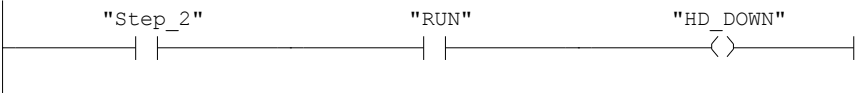
Network: 8

Reset



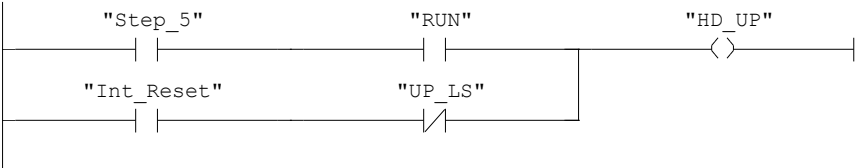
Network: 9

Head Raise/Lower



Network: 10

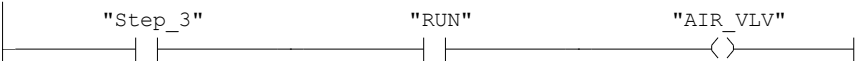
PCYL controls



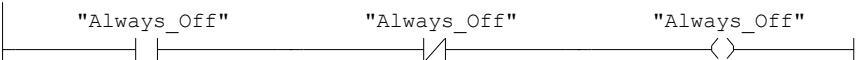
Network: 11 Lift Solenoid. Must remain on when paused



Network: 12 Air Valve

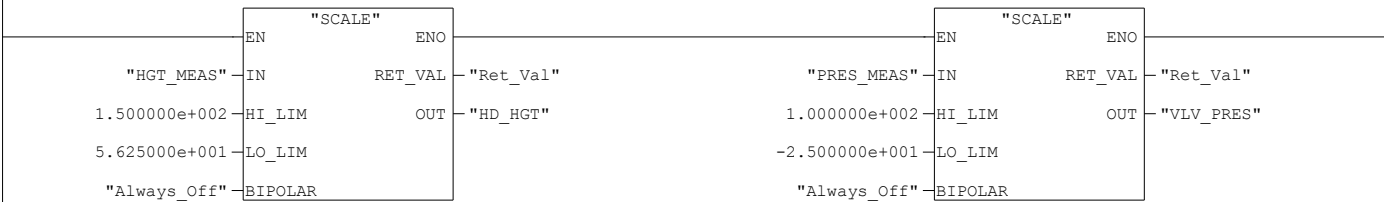


Network: 13 Always Off



Network: 14

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).

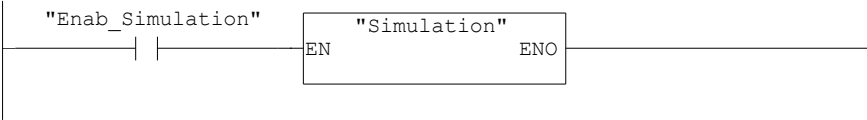


Network: 15 Set if valve is to be rejected because it will not hold pressure

Check valve pressure during step 4. If falling, set reject bit.



| |
|-------------|
| Network: 16 |
| Simulation |



| |
|---|
| Network: 17 |
| Copy real inputs to input image if not simulating |

