

Main [OB1]

Main Properties

General

Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Manual		

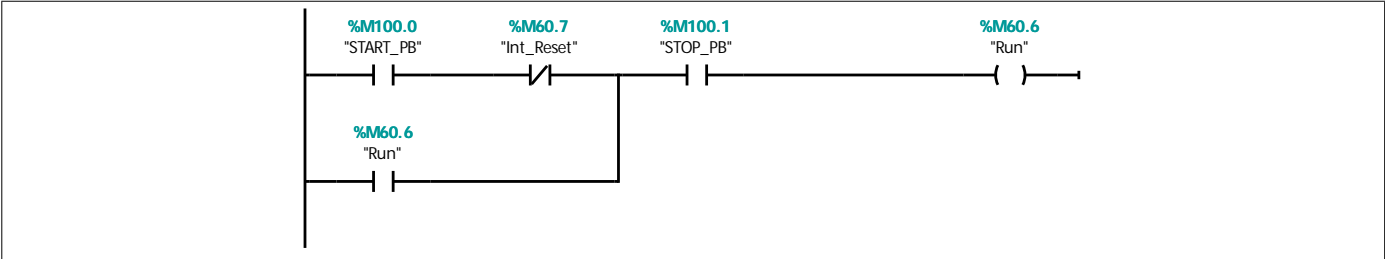
Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	Example 9.1 Engine Inverter with move-based sequencer Copyright (c) 2022 Dogwood Valley Press, LLC
Family		Version	0.1	User-defined ID	

Name	Data type	Default value
▼ Temp		
OB1_EV_CLASS	Byte	
OB1_SCAN_1	Byte	
OB1_PRIORITY	Byte	
OB1_OB_NUMBR	Byte	
OB1_RESERVED_1	Byte	
OB1_RESERVED_2	Byte	
OB1_PREV_CYCLE	Int	
OB1_MIN_CYCLE	Int	
OB1_MAX_CYCLE	Int	
OB1_DATE_TIME	Date_And_Time	
Constant		

Network 1: Start/stop/pause.

Start prevented if reset in progress.

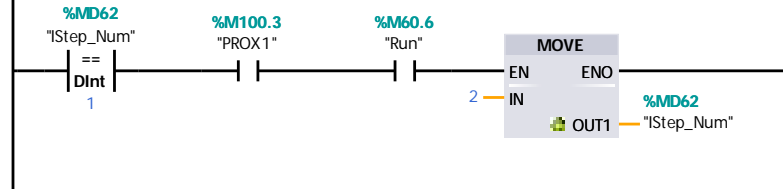


Network 2: First Start

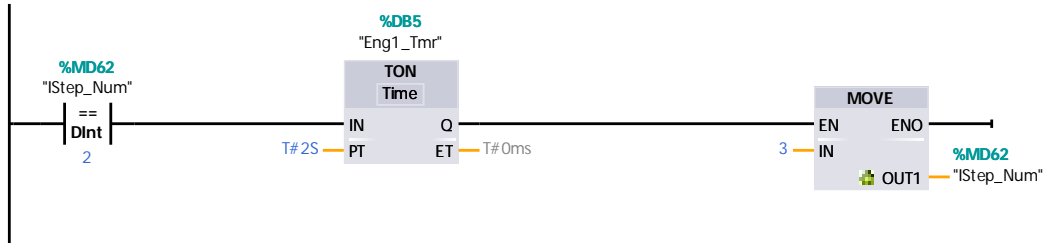
Transition out of initial step to step 1.



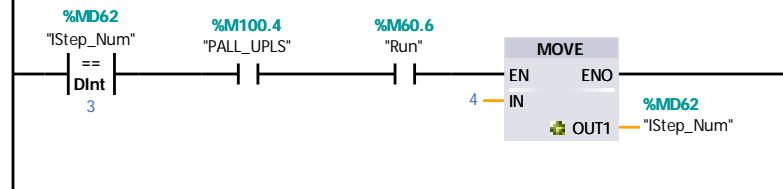
Network 3: Step 1 - Wait for pallet.



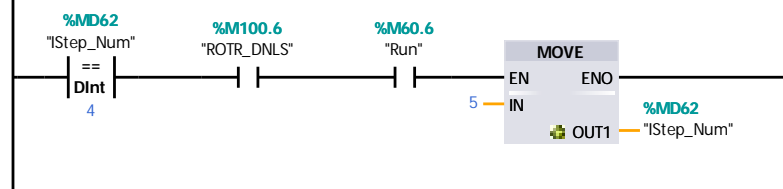
Network 4: Step 2 - Move to hook 2



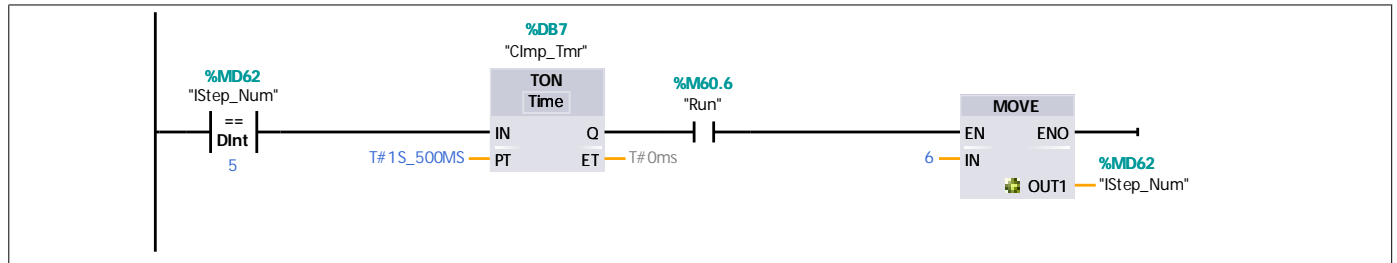
Network 5: Step 3 - Raise pallet



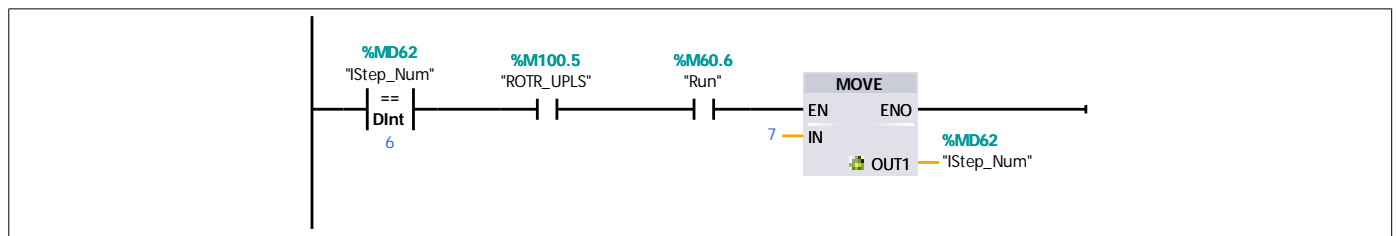
Network 6: Step 4 - Lower rotator



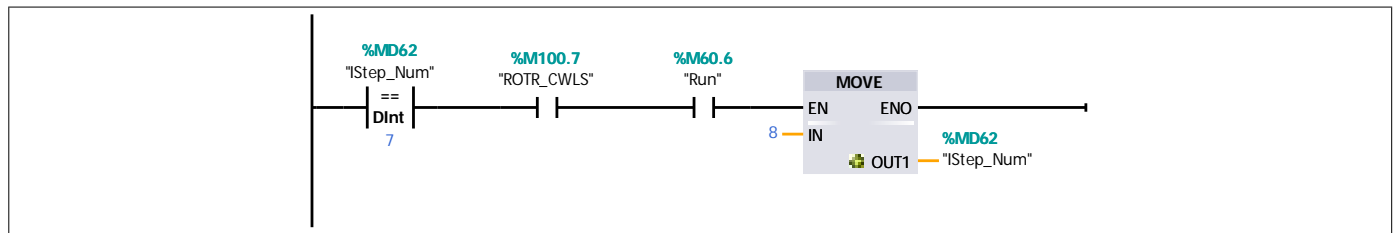
Network 7: Step 5 - Clamp



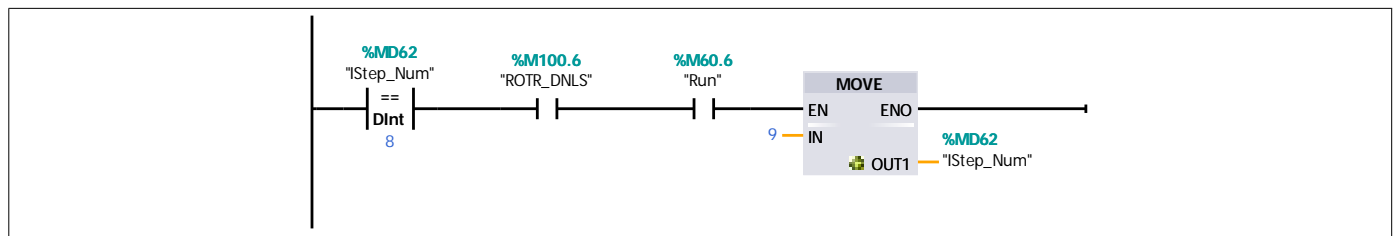
Network 8: Step 6 - Raise rotator



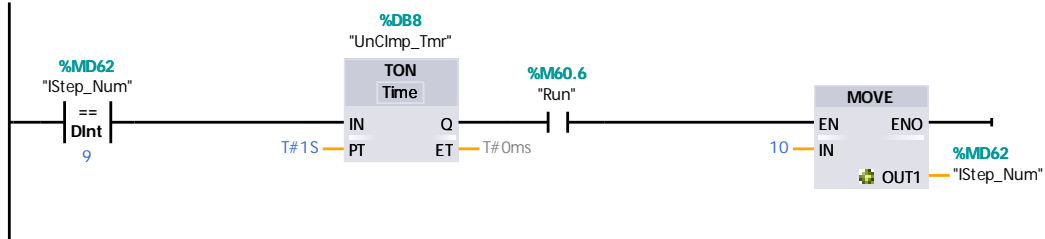
Network 9: Step 7 - Rotate CW



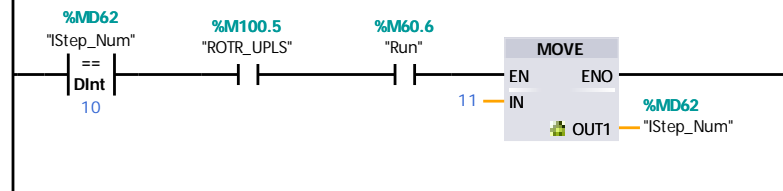
Network 10: Step 8 - Lower rotator



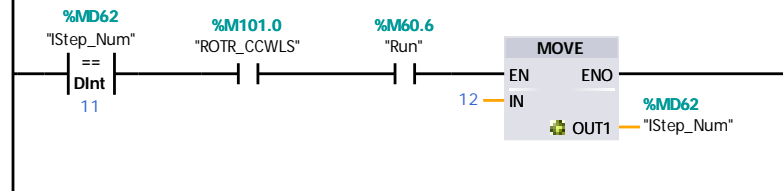
Network 11: Step 9 - Unclamp engine.



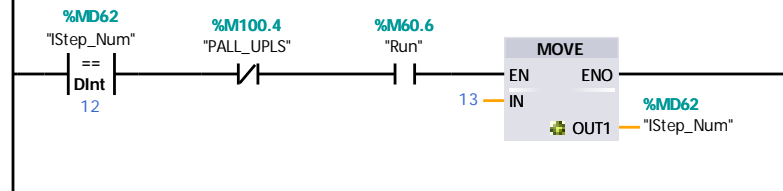
Network 12: Step 10 - Raise rotator.



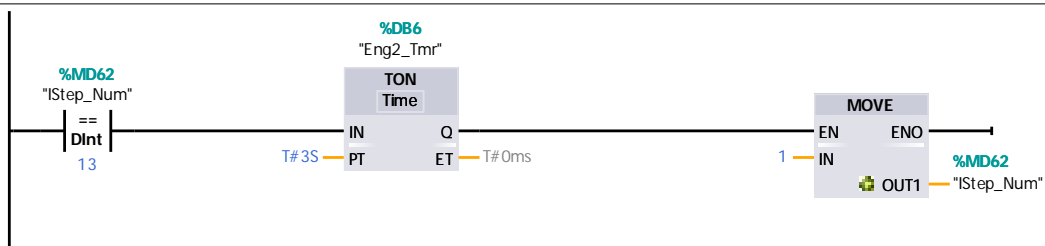
Network 13: Step 11 - Rotate CW



Network 14: Step 12 - Drop engine.

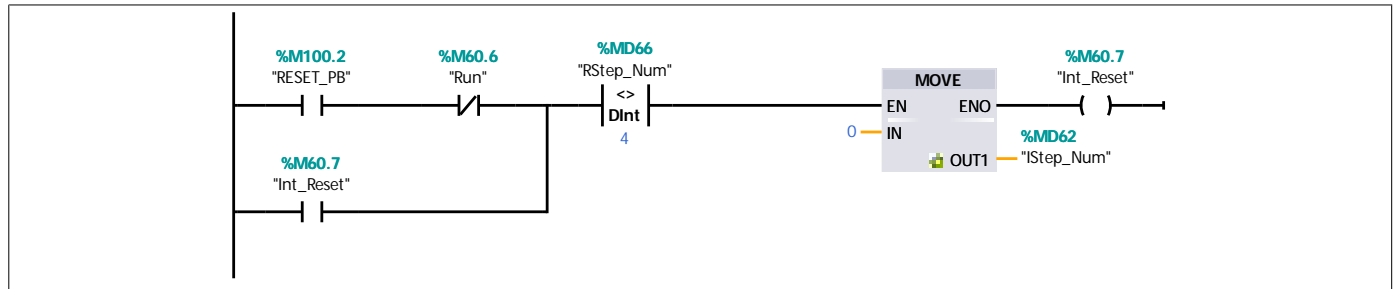


Network 15: Step 13 - Move out pallet, then jump to step 1

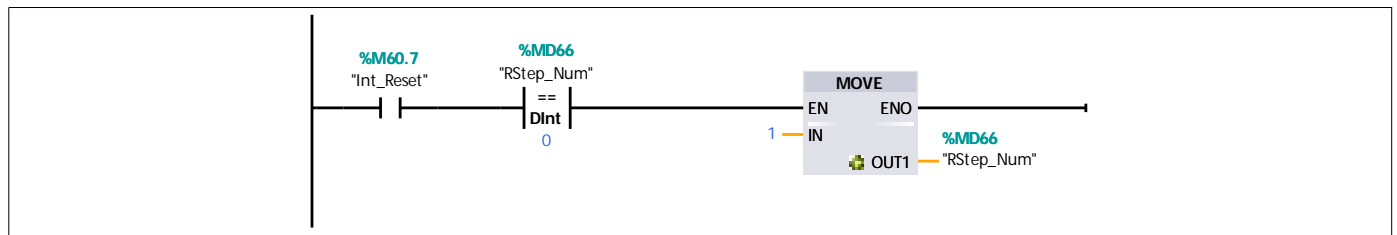


Network 16: Start/stop for reset operation.

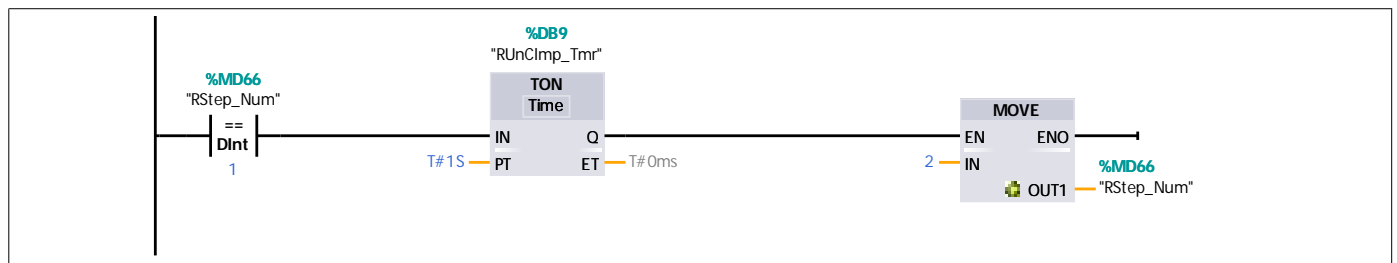
Reset pb starts, reset step 4 stops it.



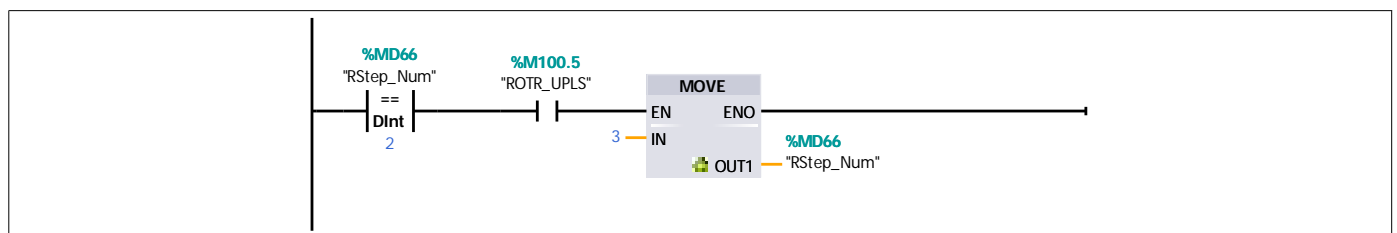
Network 17: First press of reset pb starts reset



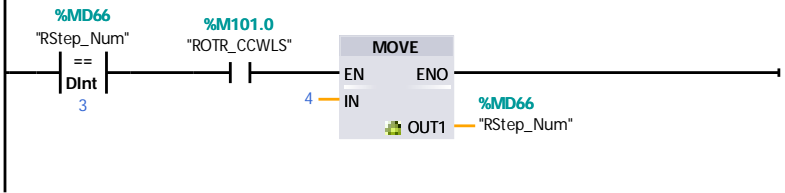
Network 18: Reset step 1 - Unclamp



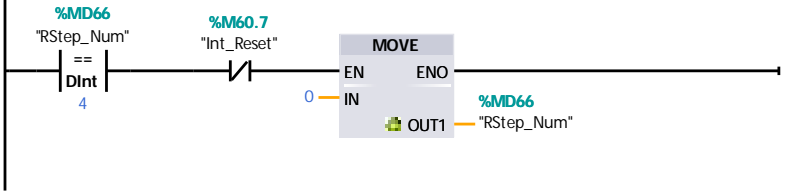
Network 19: Reset step 2 - Raise mechanism.



Network 20: Reset step 3 - Rotate CCW.



Network 21:



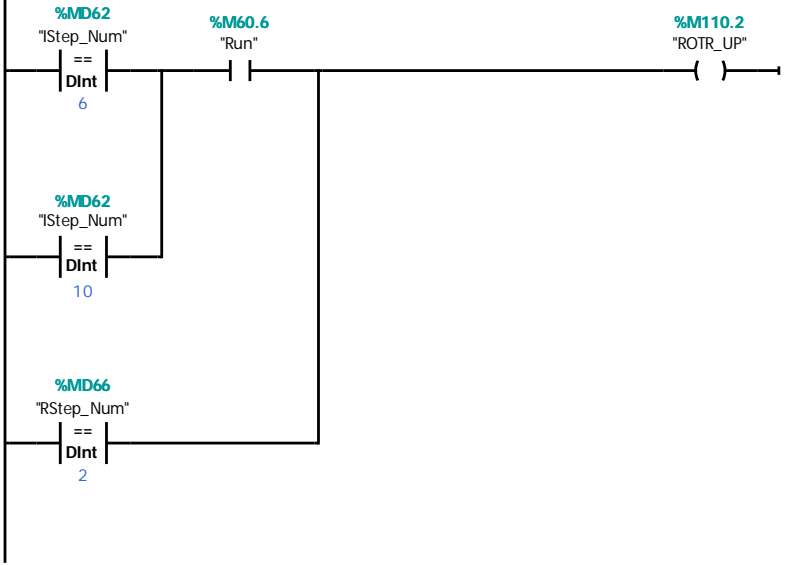
Network 22: Engaging hooks control



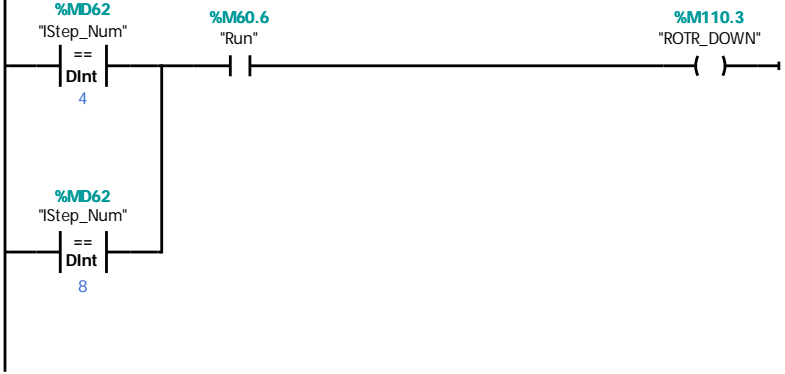
Network 23:



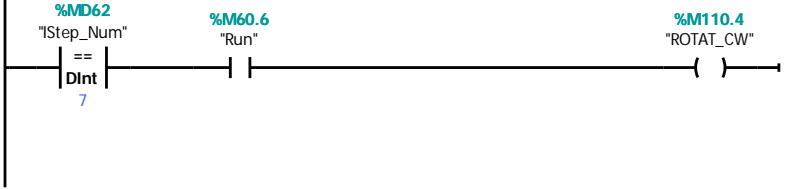
Network 24: Rotating mechanism up/down control.



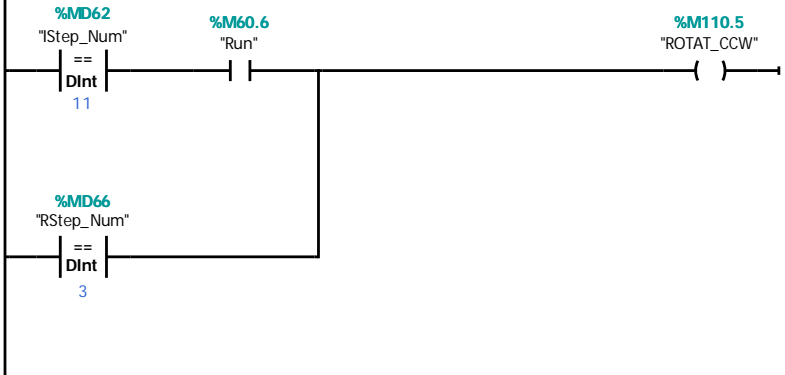
Network 25:



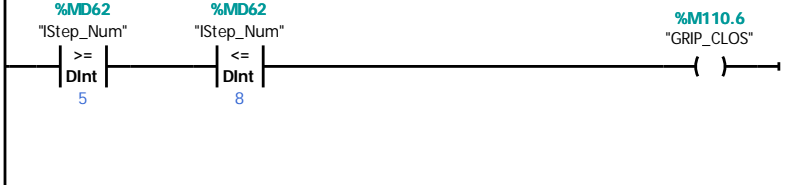
Network 26: Rotation Control



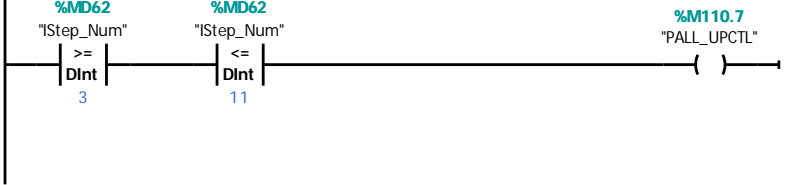
Network 27:



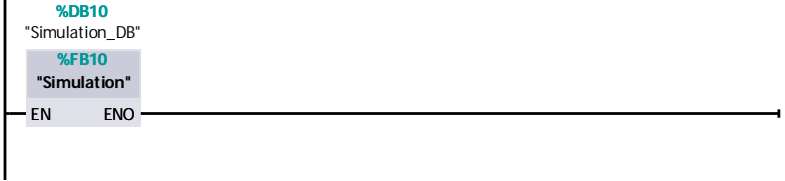
Network 28: Gripper Control



Network 29: Pallet Up Control



Network 30: Call simulation



Simulation [FB10]

Simulation Properties

General

Name	Simulation	Number	10	Type	FB
Language	LAD	Numbering	Manual		

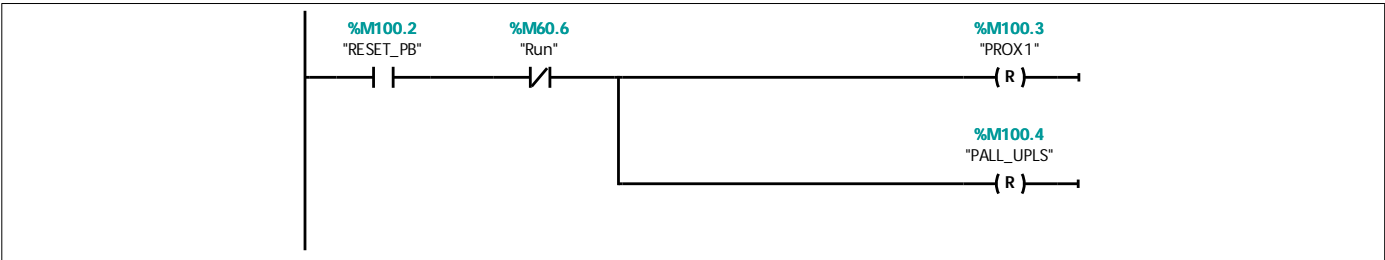
Information

Title	SIMULATION	Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value
Input		
Output		
InOut		
▼ Static		
Sim_Tmr1	TON_TIME	
Sim_Tmr2	TON_TIME	
Sim_Tmr3	TON_TIME	
Sim_Tmr4	TON_TIME	
Sim_Tmr5	TON_TIME	
Sim_Tmr6	TON_TIME	
Sim_Tmr7	TON_TIME	
Sim_Tmr8	TON_TIME	
Sim_Tmr7_Q	Bool	false
Temp		
Constant		

Network 1: Reset

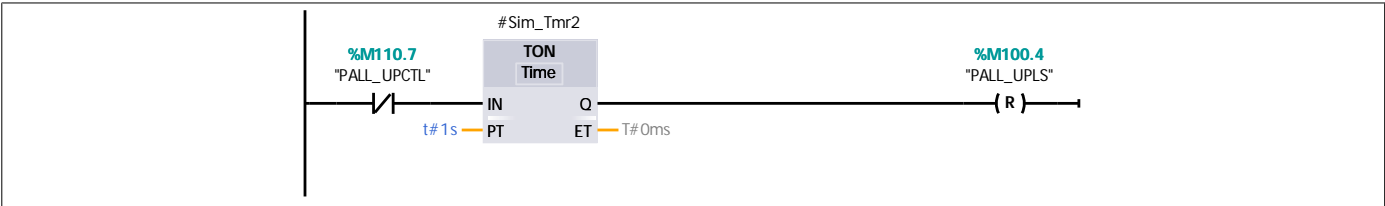
When reset, forget there is anything at hook 1.



Network 2: Simulate pallet up indication



Network 3:

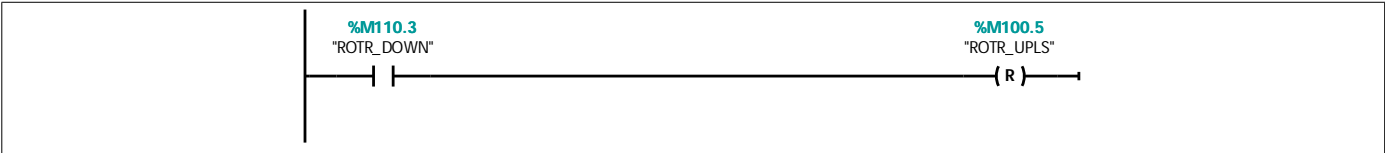


Network 4: Simulate rotator up/down control.

When moved up, the down Is is immediately unlatched off. After 3 secs, the up Is is latched on.
When moved down, the up Is is immediately unlatched off. After 3 secs, the down Is is latched on.



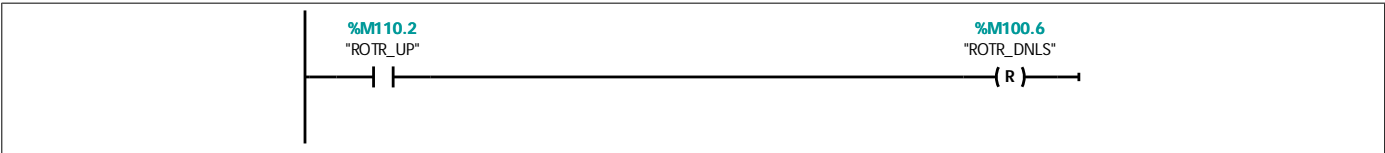
Network 5:



Network 6:



Network 7:

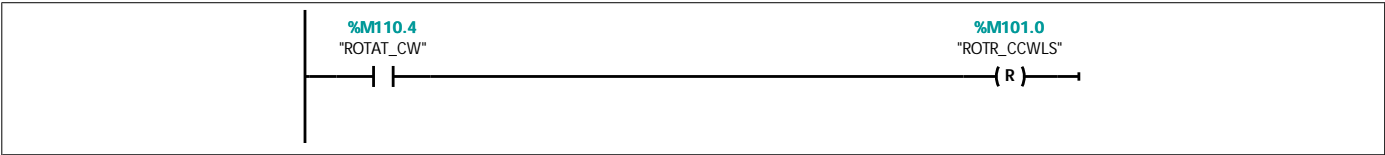


Network 8: Simulate rotator rotating control.

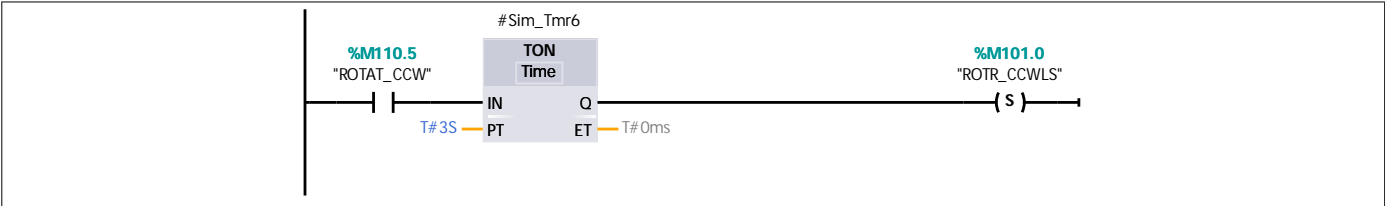
When rotated CW, the CCW Is is immediately unlatched off. After 3 secs, the CW Is is latched on.
When rotated CCW, the CW Is is immediately unlatched off. After 3 secs, the CCW Is is latched on.



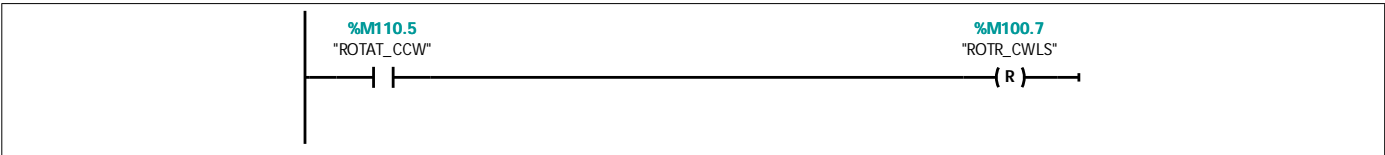
Network 9:



Network 10:

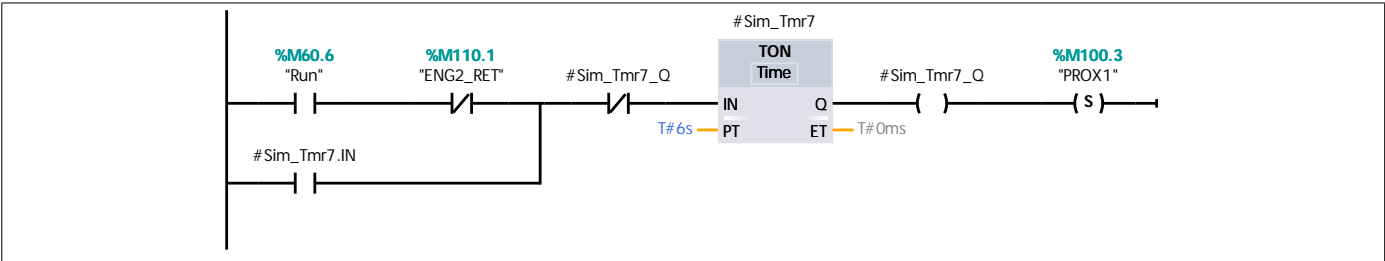


Network 11:



Network 12: Simulate Pallet Prox

Latch it on 6 seconds after one has left the station.
Latch it off 3 second after new one retained.



Network 13:

