

Main_Program [OB1]

Main_Program Properties

General

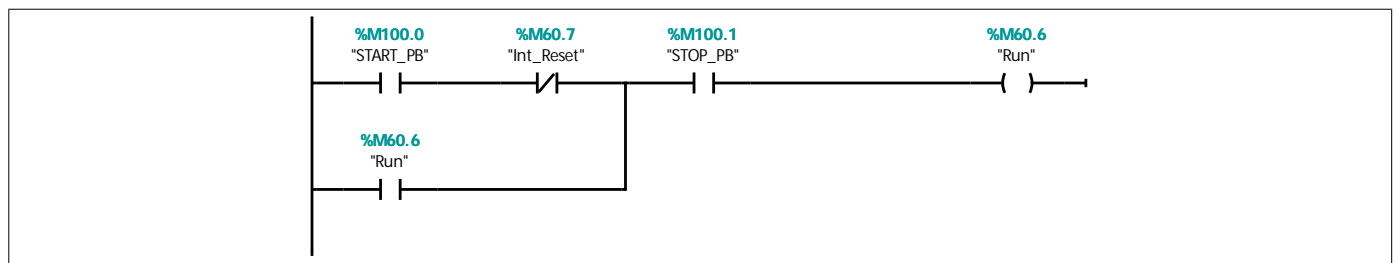
Name	Main_Program	Number	1	Type	OB
Language	LAD	Numbering	Manual		

Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	Example 14.2 Engine Inverter with S7-Graph Copyright (c) 2013, Dogwood Valley Press, LLC
Family		Version	0.1	User-defined ID	

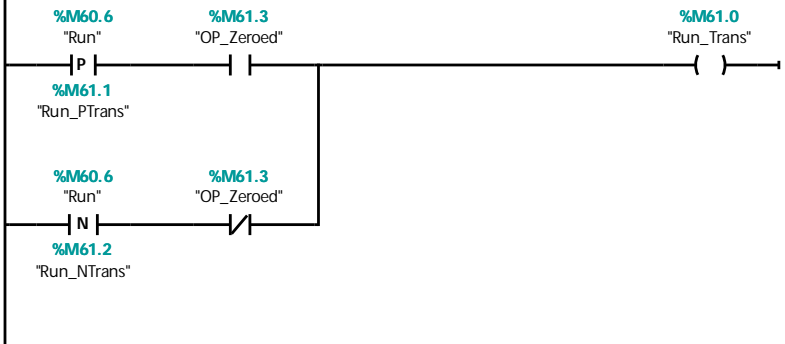
Name	Data type	Default value
▼ Temp		
OB1_EV_CLASS	Byte	
OB1_SCAN_1	Byte	
OB1_PRIORITY	Byte	
OB1_OB_NUMBR	Byte	
OB1_RESERVED_1	Byte	
OB1_RESERVED_2	Byte	
OB1_PREV_CYCLE	Int	
OB1_MIN_CYCLE	Int	
OB1_MAX_CYCLE	Int	
OB1_DATE_TIME	Date_And_Time	
Constant		

Network 1: Start/stop.

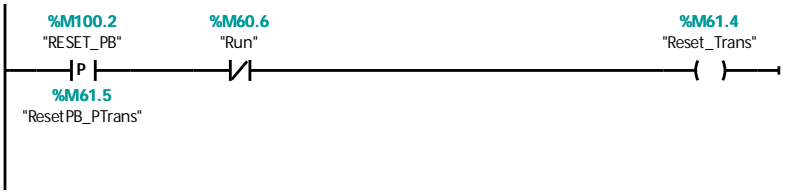


Network 2: Generate pulse to toggle pause for SFC

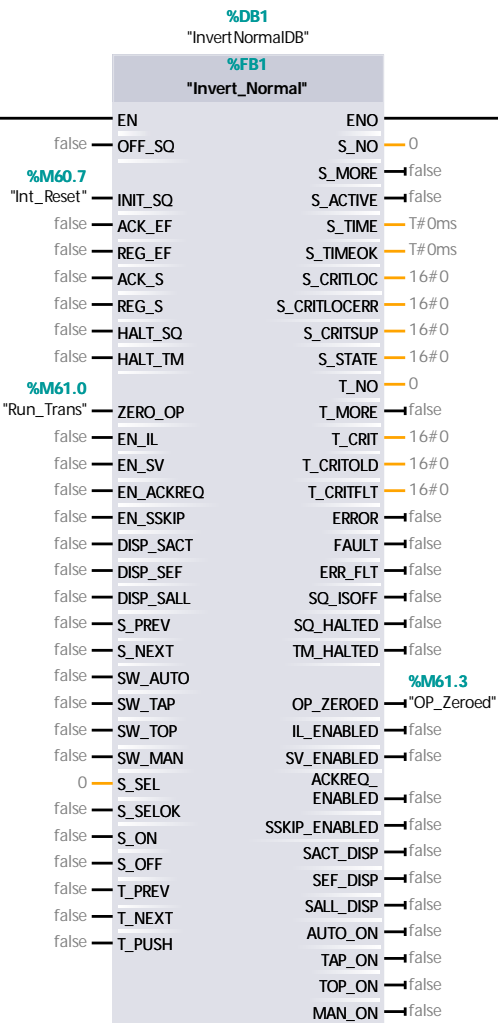
Positive transition on Run used only
when already paused. Negative transition on Run used when not paused.



Network 3: Positive transition for reset PB to start reset operation.



Network 4: Normal Operation SFC



Network 5: Execute reset operation SFC

%DB2
"InvertRstDB"

%FB2
"Invert_Reset"

EN	ENO
false OFF_SQ	S_NO 0
false INIT_SQ	S_MORE false
false ACK_EF	S_ACTIVE false
false REG_EF	S_TIME T#0ms
false ACK_S	S_TIMEOK T#0ms
false REG_S	S_CRITLOC 16#0
false HALT_SQ	S_CRITLOCERR 16#0
false HALT_TM	S_CRITSUP 16#0
false ZERO_OP	S_STATE 16#0
false EN_IL	T_NO 0
false EN_SV	T_MORE false
false EN_ACKREQ	T_CRIT 16#0
false EN_SSKIP	T_CRITOLD 16#0
false DISP_SACT	T_CRITFLT 16#0
false DISP_SEF	ERROR false
false DISP_SALL	FAULT false
false S_PREV	ERR_FLT false
false S_NEXT	SQ_ISOFF false
false SW_AUTO	SQ_HALTED false
false SW_TAP	TM_HALTED false
false SW_TOP	OP_ZEROED false
false SW_MAN	IL_ENABLED false
0 S_SEL	SV_ENABLED false
false S_SELOK	ACKREQ_ENABLED false
false S_ON	SSKIP_ENABLED false
false S_OFF	SACT_DISP false
false T_PREV	SEF_DISP false
false T_NEXT	SALL_DISP false
false T_PUSH	AUTO_ON false
	TAP_ON false
	TOP_ON false
	MAN_ON false

Network 6:

%DB10
"Simulation_DB"

%FB10
"Simulation"

EN ENO

Invert_Normal [FB1]**Invert_Normal Properties****General**

Name	Invert_Normal	Number	1	Type	FB
Language	GRAPH	Numbering	Manual	Network language	LAD

Information

Title	S7GRAPH V5.0 FB -- Ex14_2\SIMATIC 400 Station\CPU 417-4\S7 Program(2)\Sources\In- vert_Main	Author		Comment	Example 14.2 Engine In- verter Normal Operation with S7 Graph Copyright (c) 2011 Dog- wood Valley Press, LLC
Family		Version	0.1	User-defined ID	

Name	Data type	Default value
▼ Input		
OFF_SQ	Bool	false
INIT_SQ	Bool	false
ACK_EF	Bool	false
REG_EF	Bool	false
ACK_S	Bool	false
REG_S	Bool	false
HALT_SQ	Bool	false
HALT_TM	Bool	false
ZERO_OP	Bool	false
EN_IL	Bool	false
EN_SV	Bool	false
EN_ACKREQ	Bool	false
EN_SSKIP	Bool	false
DISP_SACT	Bool	false
DISP_SEF	Bool	false
DISP_SALL	Bool	false
S_PREV	Bool	false
S_NEXT	Bool	false
SW_AUTO	Bool	false
SW_TAP	Bool	false
SW_TOP	Bool	false
SW_MAN	Bool	false
S_SEL	Int	0
S_SELOK	Bool	false
S_ON	Bool	false
S_OFF	Bool	false
T_PREV	Bool	false
T_NEXT	Bool	false
T_PUSH	Bool	false
▼ Output		
S_NO	Int	0

Totally Integrated Automation Portal		
Name	Data type	Default value
S_MORE	Bool	false
S_ACTIVE	Bool	false
S_TIME	Time	T#0ms
S_TIMEOK	Time	T#0ms
S_CRITLOC	DWord	16#0
S_CRITLOCERR	DWord	16#0
S_CRITSUP	DWord	16#0
S_STATE	Word	16#0
T_NO	Int	0
T_MORE	Bool	false
T_CRIT	DWord	16#0
T_CRITOLD	DWord	16#0
T_CRITFLT	DWord	16#0
ERROR	Bool	false
FAULT	Bool	false
ERR_FLT	Bool	false
SQ_ISOFF	Bool	false
SQ_HALTED	Bool	false
TM_HALTED	Bool	false
OP_ZEROED	Bool	false
IL_ENABLED	Bool	false
SV_ENABLED	Bool	false
ACKREQ_ENABLED	Bool	false
SSKIP_ENABLED	Bool	false
SACT_DISP	Bool	false
SEF_DISP	Bool	false
SALL_DISP	Bool	false
AUTO_ON	Bool	false
TAP_ON	Bool	false
TOP_ON	Bool	false
MAN_ON	Bool	false
InOut		
▼ Static		
Start_Trans	GraphTransition	
PWait_Trans	GraphTransition	
Allow1_Trans	GraphTransition	
PaIl_Up_Trans	GraphTransition	
Clos_Trans	GraphTransition	
RotrUp1_Trans	GraphTransition	
ROTCW_Trans	GraphTransition	
RotDn2_Trans	GraphTransition	
Unclmp_Trans	GraphTransition	
RotUp2_Trans	GraphTransition	
RotCCW_Trans	GraphTransition	
Run_Trans	GraphTransition	
PDrop_Trans	GraphTransition	
MvOut_Trans	GraphTransition	
Initial	GraphStep	

Totally Integrated Automation Portal		
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Name	Data type	Default value
Wait_For_Pallet	GraphStep	
Allow_Next_One_In	GraphStep	
Raise_Pallet	GraphStep	
Clamp_Engine	GraphStep	
Raise_Rotator_1	GraphStep	
Rotate_CW	GraphStep	
Lower_Rotator2	GraphStep	
Unclamp	GraphStep	
Raise_Rotator_2	GraphStep	
Rotate_CCW	GraphStep	
Wait_1	GraphStep	
Drop_Engine	GraphStep	
Move_Out	GraphStep	
Wait_2	GraphStep	
S_DISPLAY	Int	0
S_SEL_OLD	Int	0
S_DISPIDX	Byte	16#0
T_DISPIDX	Byte	16#0
MOP	Struct	
TICKS	Struct	
SQ_FLAGS	Struct	
Temp		
Constant		

Alarms

Enable alarms	False
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Category	Category enabler	Display class
Error		0
Warning		0
Info		0
Category 4		0
Category 5		0
Category 6		0
Category 7		0
Category 8		0

Category for interlocks	Error	Subcategory 1 for interlocks	Subcategory 2 for interlocks
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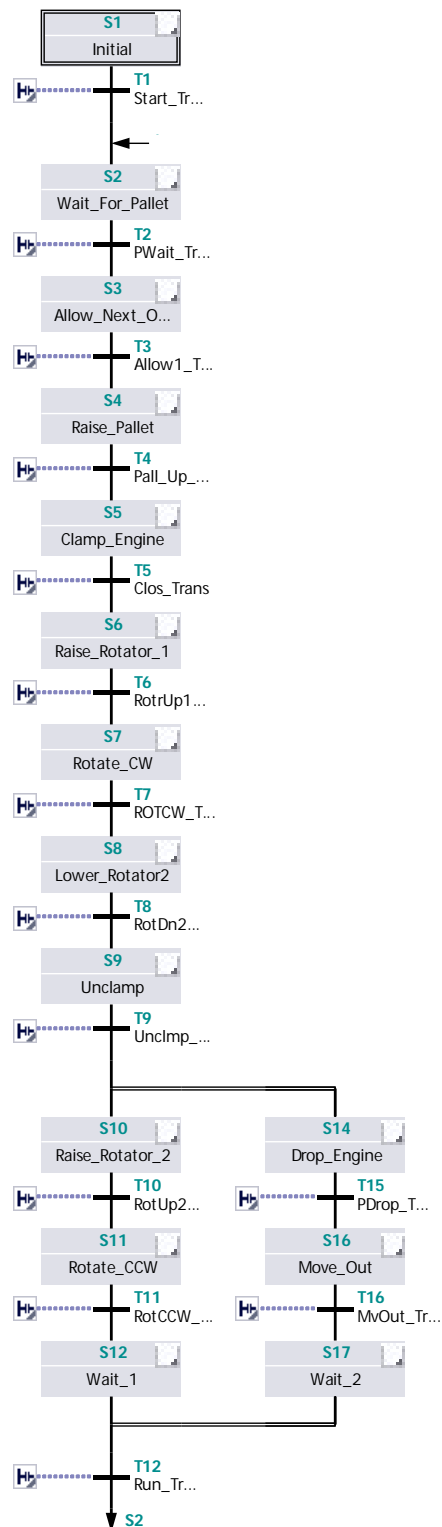
Category for supervisions	Error	Subcategory 1 for supervisions	Subcategory 2 for supervisions
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Permanent pre-instructions

Sequences (1)

1:Sequencer 1

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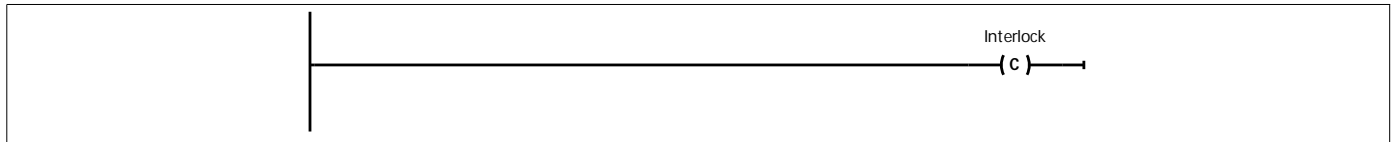
S1 - [Initial step]:Initial

Step comment

Interlock -(c)-:

Interlock alarm

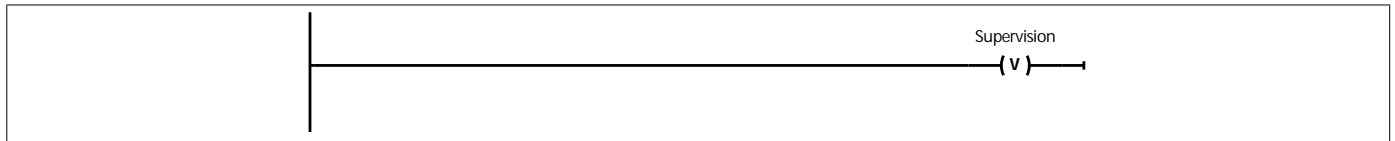
Alarm text Initial



Supervision -(v)-:

Supervision alarm

Alarm text Initial

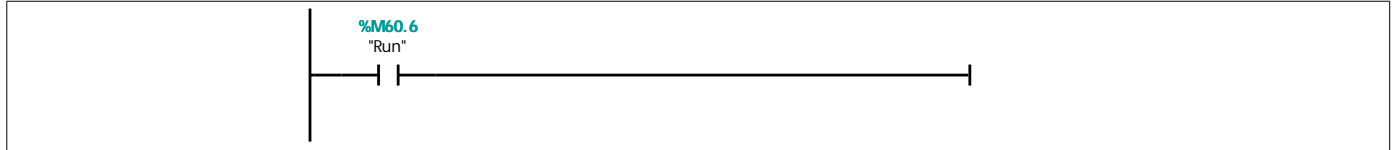


Actions:

Actions:

Interlock	Event	Qualifier	Action

T1:Start_Trans



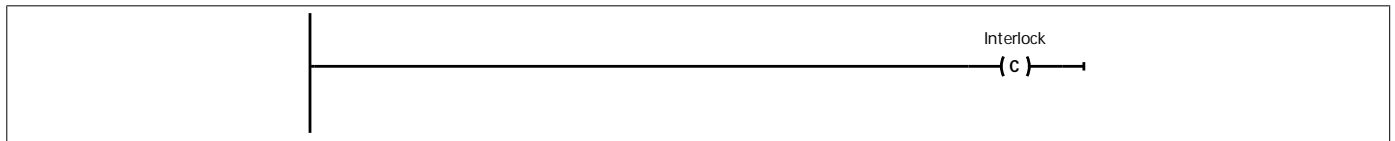
S2:Wait_For_Pallet

Step comment

Interlock -(c)-:

Interlock alarm

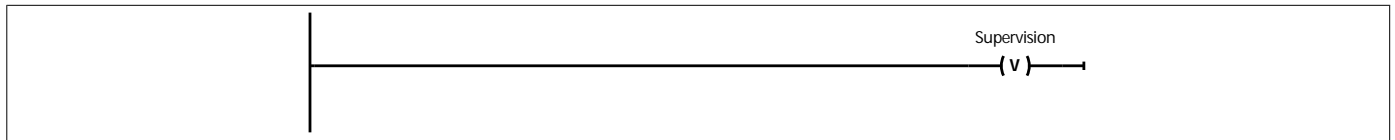
Alarm text Wait_For_Pallet



Supervision -(v)-:

Supervision alarm

Alarm text Wait_For_Pallet



Actions:

Actions:

Interlock	Event	Qualifier	Action

T2:PWait_Trans



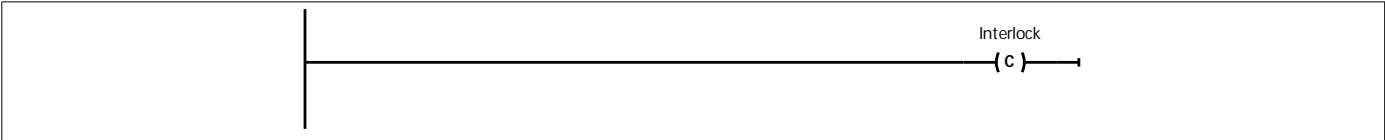
S3:Allow_Next_One_In

Step comment

Interlock -(c)-:

Interlock alarm

Alarm text	Allow_Next_One_In
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Supervision -(v)-:

Supervision alarm

Alarm text	Allow_Next_One_In
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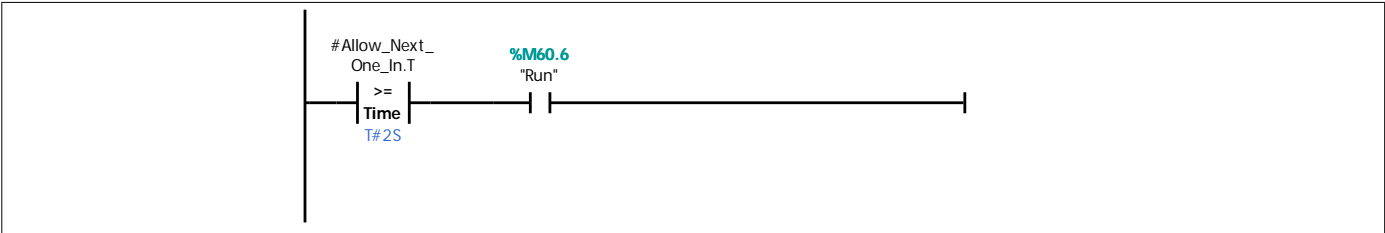


Actions:

Actions:

Interlock	Event	Qualifier	Action
		S	"ENG1_RET"

T3:Allow1_Trans



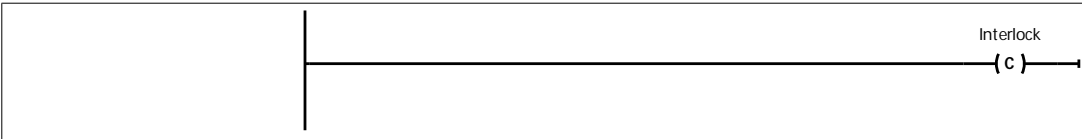
S4:Raise_Pallet

Step comment

Interlock -(c)-:

Interlock alarm

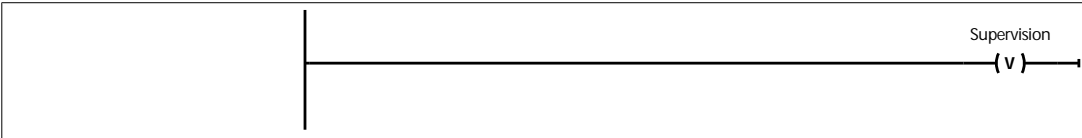
Alarm text Raise_Pallet



Supervision -(v)-:

Supervision alarm

Alarm text Raise_Pallet

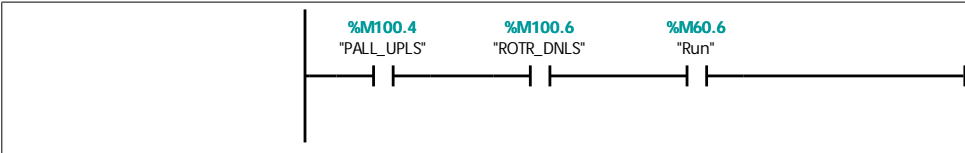


Actions:

Actions:

Interlock	Event	Qualifier	Action
		R	"ENG1_RET"
		S	"PALL_UPCTL"
		N	"ROTR_DOWN"

T4:Pall_Up_Trans



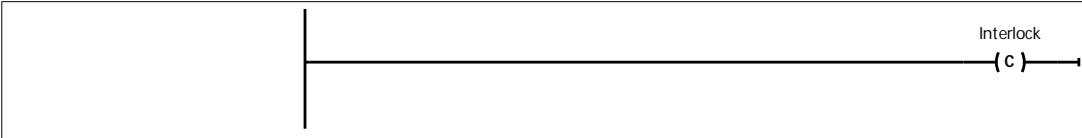
S5:Clamp_Engine

Step comment

Interlock -(c)-:

Interlock alarm

Alarm text Clamp_Engine



Supervision -(v)-:

Supervision alarm

Alarm textClamp_Engine

Supervision
(v)

Actions:

Actions:

Interlock	Event	Qualifier	Action
		S	"GRIP_CLOS"

T5:Clos_Trans

#Clamp_Engine.T
Time
T#1S_500MS

>=

%M60.6
"Run"

S6:Raise_Rotator_1

Step comment

Interlock -(c)-:

Interlock alarm

Alarm textRaise_Rotator_1

Interlock
(c)

Supervision -(v)-:

Supervision alarm

Alarm textRaise_Rotator_1

Supervision
(v)

Actions:

Actions:

Interlock	Event	Qualifier	Action
		N	"ROTR_UP"

Totally Integrated Automation Portal			
Interlock	Event	Qualifier	Action
T6:RotrUp1_Trans			
	<div><div>%M100.5 "ROTR_UPLS"</div><div>%M60.6 "Run"</div></div>		
S7:Rotate_CW			
Step comment			
Interlock -(c)-:			
Interlock alarm			
Alarm text		Rotate_CW	
	<div>Interlock (c)</div>		
Supervision -(v)-:			
Supervision alarm			
Alarm text		Rotate_CW	
	<div>Supervision (v)</div>		
Actions:			
Actions:			
Interlock	Event	Qualifier	Action
		N	"ROTAT_CW"
T7:ROTCW_Trans			
	<div><div>%M100.7 "ROTR_CWLS"</div><div>%M60.6 "Run"</div></div>		
S8:Lower_Rotator2			
Step comment			
Interlock -(c)-:			
Interlock alarm			
Alarm text		Lower_Rotator2	

Totally Integrated Automation Portal		
	<div>Interlock</div> <div>(c)</div>	
Supervision -(v)-:		
Supervision alarm		
Alarm text	Lower_Rotator2	
	<div>Supervision</div> <div>(v)</div>	
Actions:		
Actions:		
Interlock	Event	Qualifier
		N
		"ROTR_DOWN"
T8:RotDn2_Trans		
	<div>%M100.6</div> <div>"ROTR_DNLS"</div> <div>%M60.6</div> <div>"Run"</div>	
S9:Unclamp		
Step comment		
Interlock -(c)-:		
Interlock alarm		
Alarm text	Unclamp	
	<div>Interlock</div> <div>(c)</div>	
Supervision -(v)-:		
Supervision alarm		
Alarm text	Unclamp	
	<div>Supervision</div> <div>(v)</div>	

Actions:

Actions:

Interlock	Event	Qualifier	Action
		R	"GRIP_CLOS"

T9:Unclmp_Trans



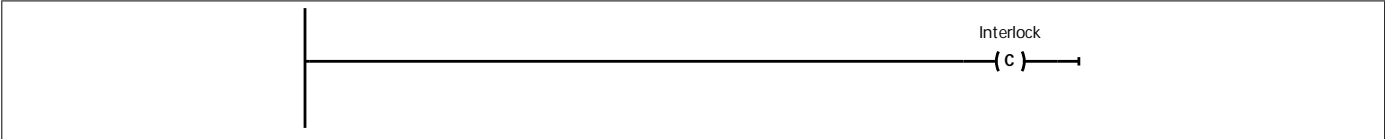
S10:Raise_Rotator_2

Step comment

Interlock -(c)-:

Interlock alarm

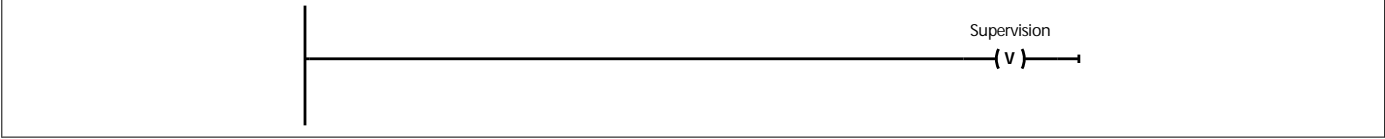
Alarm text	Raise_Rotator_2
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Supervision -(v)-:

Supervision alarm

Alarm text	Raise_Rotator_2
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Actions:

Actions:

Interlock	Event	Qualifier	Action
		N	"ROTR_UP"

T10:RotUp2_Trans



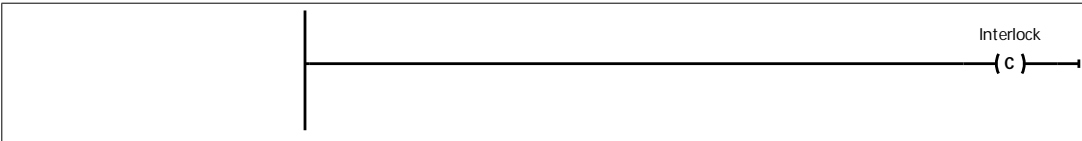
S11:Rotate_CCW

Step comment

Interlock -(c)-:

Interlock alarm

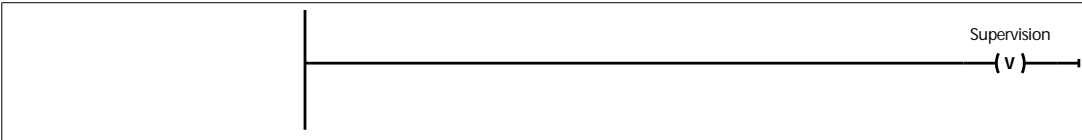
Alarm text Rotate_CCW



Supervision -(v)-:

Supervision alarm

Alarm text Rotate_CCW

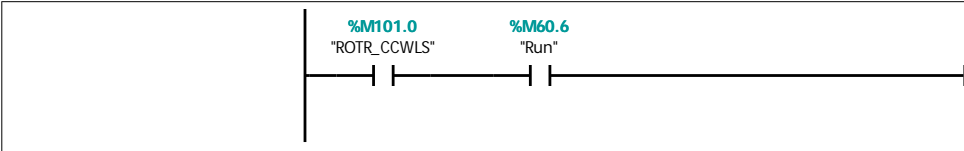


Actions:

Actions:

Interlock	Event	Qualifier	Action
		N	"ROTAT_CCW"

T11:RotCCW_Trans



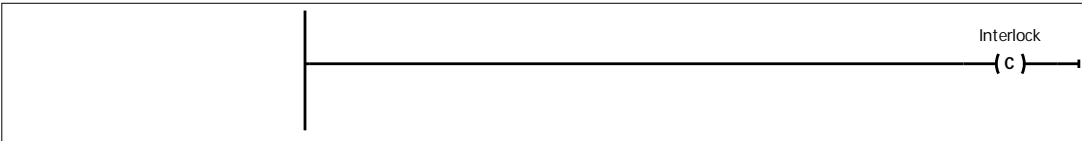
S12:Wait_1

Step comment

Interlock -(c)-:

Interlock alarm

Alarm text Wait_1



Supervision -(v)-:

Supervision alarm

Alarm text Wait_1

Supervision

(v)

Actions:

Actions:

Interlock	Event	Qualifier	Action

T12:Run_Trans

%M60.6

"Run"

S14:Drop_Engine

Step comment

Interlock -(c)-:

Interlock alarm

Alarm text Drop_Engine

Interlock

(c)

Supervision -(v)-:

Supervision alarm

Alarm text Drop_Engine

Supervision

(v)

Actions:

Actions:

Interlock	Event	Qualifier	Action
		R	"PALL_UPCTL"

T15:PDrop_Trans

%M100.4

"PALL_UPLS"

%M60.6

"Run"

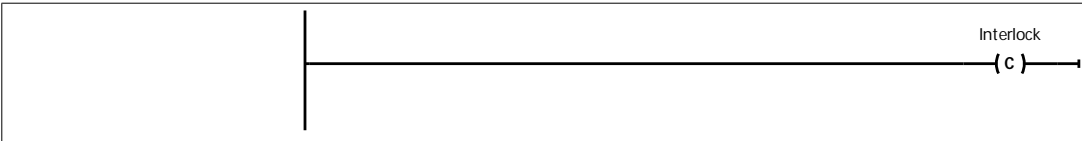
S16:Move_Out

Step comment

Interlock -(c)-:

Interlock alarm

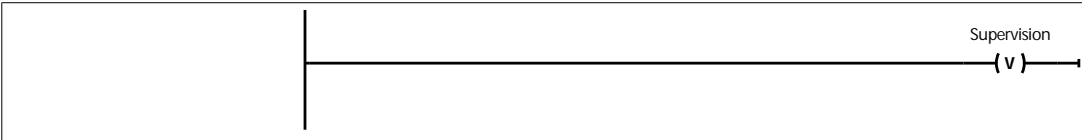
Alarm text Move_Out



Supervision -(v)-:

Supervision alarm

Alarm text Move_Out

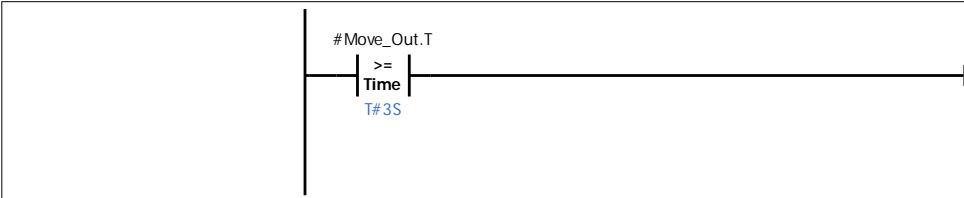


Actions:

Actions:

Interlock	Event	Qualifier	Action
		S	"ENG2_RET"

T16:MvOut_Trans



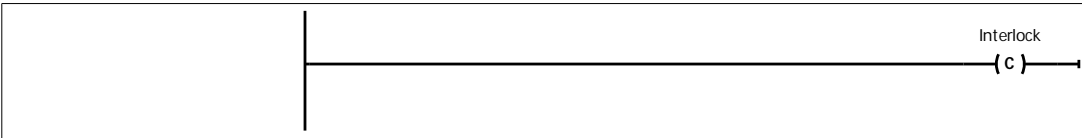
S17:Wait_2

Step comment

Interlock -(c)-:

Interlock alarm

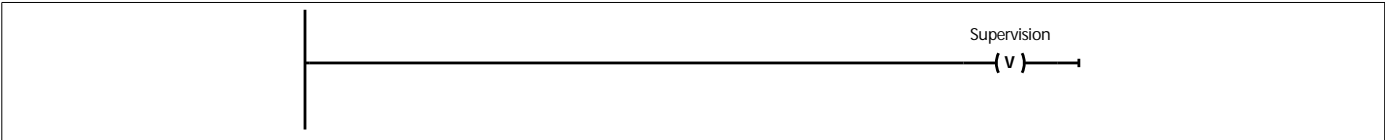
Alarm text Wait_2



Supervision -(v)-:

Supervision alarm

Alarm text Wait_2

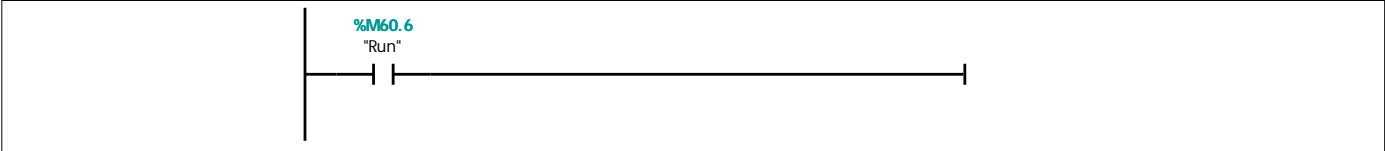


Actions:

Actions:

Interlock	Event	Qualifier	Action
		R	"ENG2_RET"

T12:Run_Trans



Permanent post-instructions

Invert_Reset [FB2]

Invert_Reset Properties

General

Name	Invert_Reset	Number	2	Type	FB
Language	GRAPH	Numbering	Manual	Network language	LAD

Information

Title	S7GRAPH V5.0 FB -- Ex14_2\SIMATIC 400 Station\CPU 417-4\S7 Program(2)\Sources\In- vert_Reset	Author		Comment	Example 14.2 Engine In- verter Reset Operation with S7 Graph Copyright (c) 2011 Dog- wood Valley Press, LLC
Family		Version	0.1	User-defined ID	

Name	Data type	Default value
▼ Input		
OFF_SQ	Bool	false
INIT_SQ	Bool	false
ACK_EF	Bool	false
REG_EF	Bool	false
ACK_S	Bool	false
REG_S	Bool	false
HALT_SQ	Bool	false
HALT_TM	Bool	false
ZERO_OP	Bool	false
EN_IL	Bool	false
EN_SV	Bool	false
EN_ACKREQ	Bool	false
EN_SSKIP	Bool	false
DISP_SACT	Bool	false
DISP_SEF	Bool	false
DISP_SALL	Bool	false
S_PREV	Bool	false
S_NEXT	Bool	false
SW_AUTO	Bool	false
SW_TAP	Bool	false
SW_TOP	Bool	false
SW_MAN	Bool	false
S_SEL	Int	0
S_SELOK	Bool	false
S_ON	Bool	false
S_OFF	Bool	false
T_PREV	Bool	false
T_NEXT	Bool	false
T_PUSH	Bool	false
▼ Output		
S_NO	Int	0

Totally Integrated Automation Portal		
Name	Data type	Default value
S_MORE	Bool	false
S_ACTIVE	Bool	false
S_TIME	Time	T#0ms
S_TIMEOK	Time	T#0ms
S_CRITLOC	DWord	16#0
S_CRITLOCERR	DWord	16#0
S_CRITSUP	DWord	16#0
S_STATE	Word	16#0
T_NO	Int	0
T_MORE	Bool	false
T_CRIT	DWord	16#0
T_CRITOLD	DWord	16#0
T_CRITFLT	DWord	16#0
ERROR	Bool	false
FAULT	Bool	false
ERR_FLT	Bool	false
SQ_ISOFF	Bool	false
SQ_HALTED	Bool	false
TM_HALTED	Bool	false
OP_ZEROED	Bool	false
IL_ENABLED	Bool	false
SV_ENABLED	Bool	false
ACKREQ_ENABLED	Bool	false
SSKIP_ENABLED	Bool	false
SACT_DISP	Bool	false
SEF_DISP	Bool	false
SALL_DISP	Bool	false
AUTO_ON	Bool	false
TAP_ON	Bool	false
TOP_ON	Bool	false
MAN_ON	Bool	false
InOut		
▼ Static		
RstPb_Trans	GraphTransition	
ROpen_Trans	GraphTransition	
RRotUp_Trans	GraphTransition	
RRotCCW_Trans	GraphTransition	
REnd_Trans	GraphTransition	
Reset_Initial	GraphStep	
Open_Gripper	GraphStep	
Raise_Rotator3	GraphStep	
Rotate_CCW2	GraphStep	
Unlatch_Reset	GraphStep	
S_DISPLAY	Int	0
S_SEL_OLD	Int	0
S_DISPIDX	Byte	16#0
T_DISPIDX	Byte	16#0
MOP	Struct	

Totally Integrated Automation Portal																													
<table><thead><tr><th>Name</th><th>Data type</th><th>Default value</th></tr></thead><tbody><tr><td>TICKS</td><td>Struct</td><td></td></tr><tr><td>SQ_FLAGS</td><td>Struct</td><td></td></tr><tr><td>Temp</td><td></td><td></td></tr><tr><td>Constant</td><td></td><td></td></tr></tbody></table>			Name	Data type	Default value	TICKS	Struct		SQ_FLAGS	Struct		Temp			Constant														
Name	Data type	Default value																											
TICKS	Struct																												
SQ_FLAGS	Struct																												
Temp																													
Constant																													
Alarms																													
Enable alarms		False																											
<table><thead><tr><th>Category</th><th>Category enabler</th><th>Display class</th></tr></thead><tbody><tr><td>Error</td><td></td><td>0</td></tr><tr><td>Warning</td><td></td><td>0</td></tr><tr><td>Info</td><td></td><td>0</td></tr><tr><td>Category 4</td><td></td><td>0</td></tr><tr><td>Category 5</td><td></td><td>0</td></tr><tr><td>Category 6</td><td></td><td>0</td></tr><tr><td>Category 7</td><td></td><td>0</td></tr><tr><td>Category 8</td><td></td><td>0</td></tr></tbody></table>			Category	Category enabler	Display class	Error		0	Warning		0	Info		0	Category 4		0	Category 5		0	Category 6		0	Category 7		0	Category 8		0
Category	Category enabler	Display class																											
Error		0																											
Warning		0																											
Info		0																											
Category 4		0																											
Category 5		0																											
Category 6		0																											
Category 7		0																											
Category 8		0																											
Category for interlocks	Error	Subcategory 1 for interlocks	Subcategory 2 for interlocks																										
Category for supervisions	Error	Subcategory 1 for supervisions	Subcategory 2 for supervisions																										
Permanent pre-instructions																													
Sequences (1)																													
1:Sequencer 1																													
<div><pre>graph TD; S1[Reset_Initial] -- T1 RstPb_Tr... --> S2[Open_Gripper]; S2 -- T2 ROpen_T... --> S3[Raise_Rotator3]; S3 -- T3 RRot Up... --> S4[Rotate_CCW2]; S4 -- T4 RRotCCW... --> S5[Unlatch_Reset]; S5 -- T5 REnd_T... --> S1;</pre></div>																													

S1 - [Initial step]:Reset_Initial

Step comment

Interlock -(c)-:

Interlock alarm	
Alarm text	Reset_Initial

Interlock
(c)

Supervision -(v)-:

Supervision alarm	
Alarm text	Reset_Initial

Supervision
(v)

Actions:

Actions:			
Interlock	Event	Qualifier	Action

T1:RstPb_Trans



S2:Open_Gripper

Step comment

Interlock -(c)-:

Interlock alarm	
Alarm text	Open_Gripper

Interlock
(c)

Supervision -(v)-:

Supervision alarm	
Alarm text	Open_Gripper

--	--	--

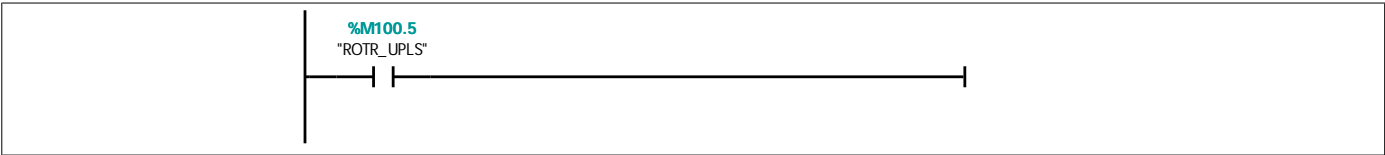
Totally Integrated Automation Portal		
<div><div></div><div>Supervision (v)</div></div>		
Actions:		
Actions:		
Interlock	Event	Qualifier Action
		R "GRIP_CLOS"
		R "ENG1_RET"
		R "ENG2_RET"
		R "PALL_UPCTL"
		S "Int_Reset"
T2:ROpen_Trans		
<div><div></div><div># Open_Gripper.T Time T#1S >=</div></div>		
S3:Raise_Rotator3		
Step comment		
Interlock -(c)-:		
Interlock alarm		
Alarm text	Raise_Rotator3	
<div><div></div><div>Interlock (c)</div></div>		
Supervision -(v)-:		
Supervision alarm		
Alarm text	Raise_Rotator3	
<div><div></div><div>Supervision (v)</div></div>		

Actions:

Actions:

Interlock	Event	Qualifier	Action
		N	"ROTR_UP"

T3:RRotUp_Trans



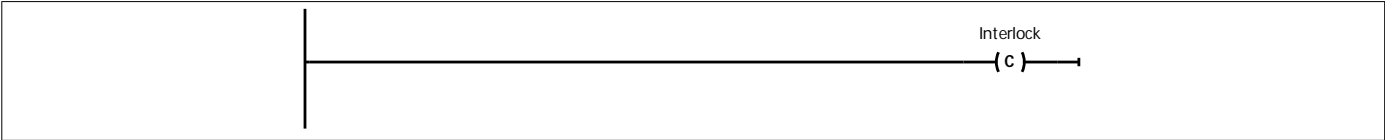
S4:Rotate_CCW2

Step comment

Interlock -(c)-:

Interlock alarm

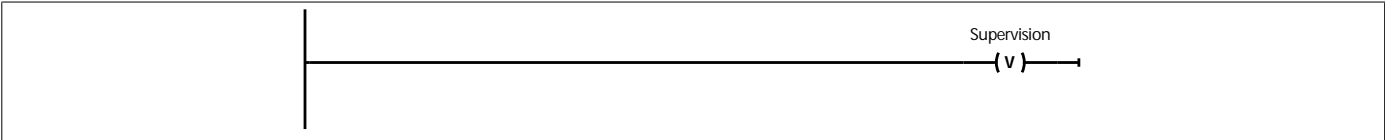
Alarm text	Rotate_CCW2
------------	-------------



Supervision -(v)-:

Supervision alarm

Alarm text	Rotate_CCW2
------------	-------------

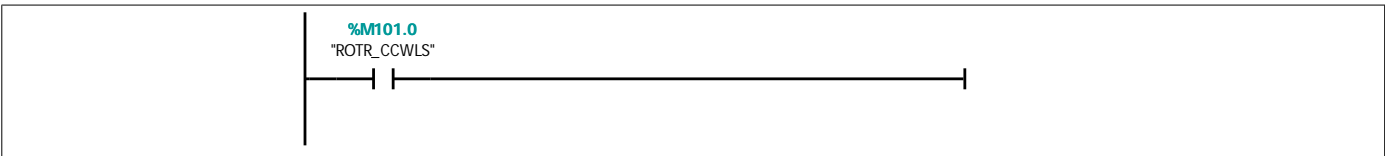


Actions:

Actions:

Interlock	Event	Qualifier	Action
		N	"ROTAT_CCW"

T4:RRotCCW_Trans



S5:Unlatch_Reset

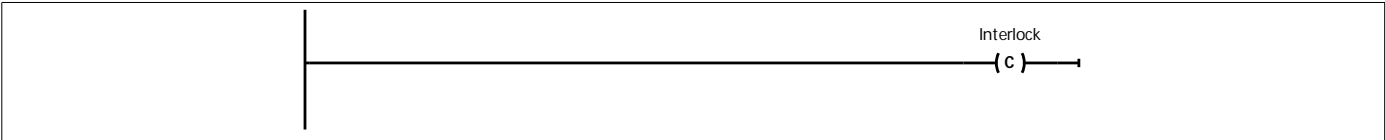
Step comment

--	--	--

Interlock -(c)-:

Interlock alarm

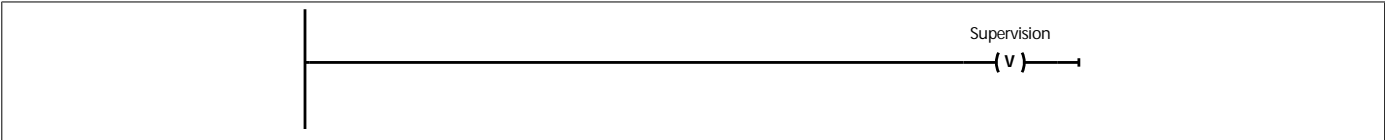
Alarm text Unlatch_Reset



Supervision -(v)-:

Supervision alarm

Alarm text Unlatch_Reset

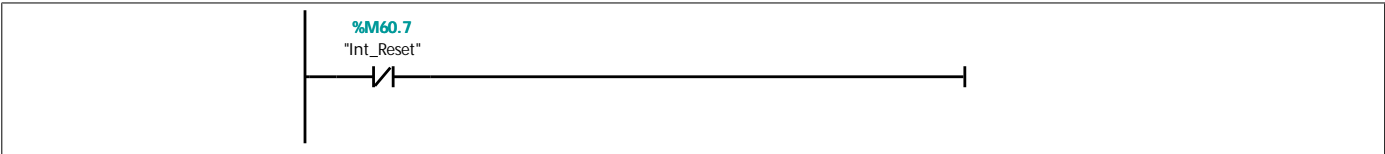


Actions:

Actions:

Interlock	Event	Qualifier	Action
		R	"Int_Reset"

T5:REnd_Trans



Permanent post-instructions

Simulation [FB10]

Simulation Properties

General

Name	Simulation	Number	10	Type	FB
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Language	LAD	Numbering	Manual
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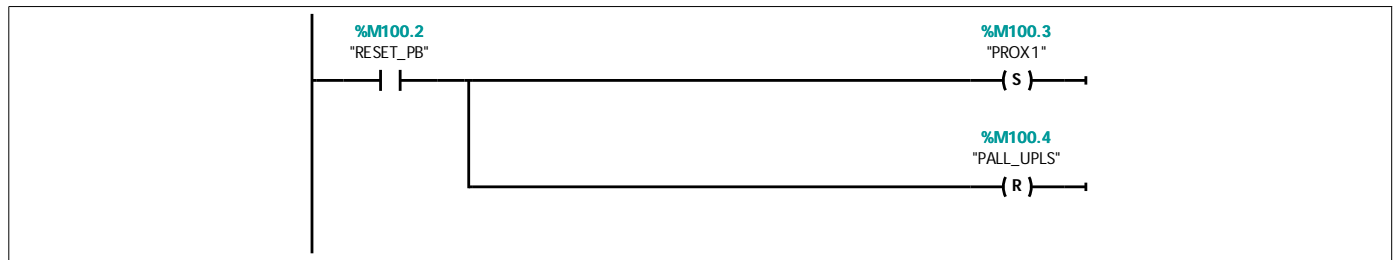
Information

Title	SIMULATION LOGIC	Author		Comment	Copyright (c) 2011, Dogwood Valley Press, LLC
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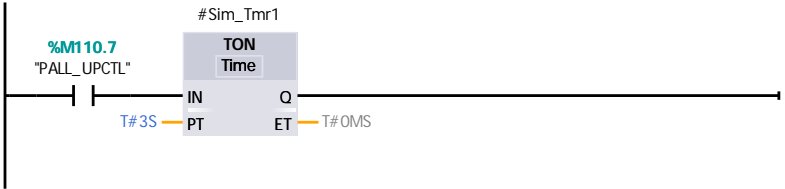
Family		Version	0.1	User-defined ID	
---------------	--	----------------	-----	------------------------	--

Name	Data type	Default value
Input		
Output		
InOut		
▼ Static		
Sim_Tmr1	TON	
Sim_Tmr2	TON	
Sim_Tmr3	TON	
Sim_Tmr4	TON	
Sim_Tmr5	TON	
Sim_Tmr6	TON	
Sim_Tmr7	TON	
Sim_Tmr8	TON	
Sim_Tmr7_Q	Bool	false
Sim_Ons1	Bool	false
Temp		
Constant		

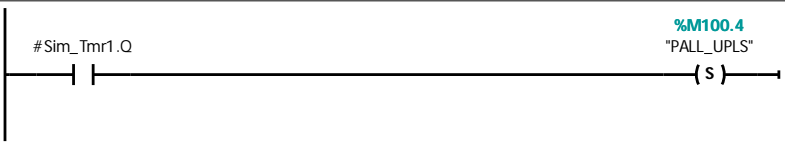
Network 1: When reset, forget there is anything at hook 1.



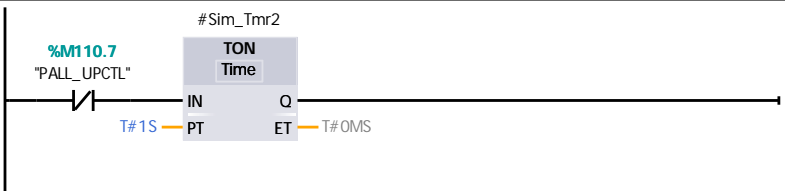
Network 2: Simulate pallet up indication



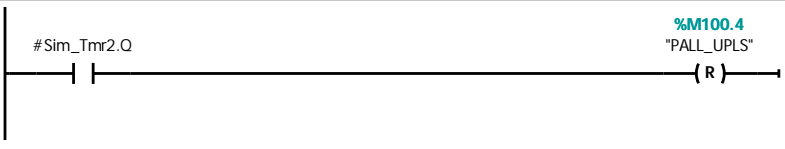
Network 3:



Network 4:

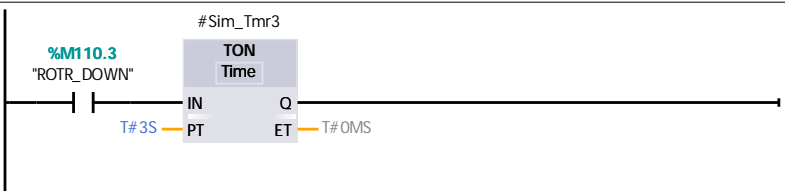


Network 5:

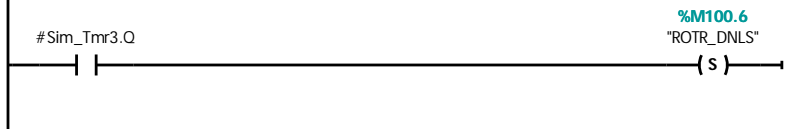


Network 6: Simulate rotator up/down control.

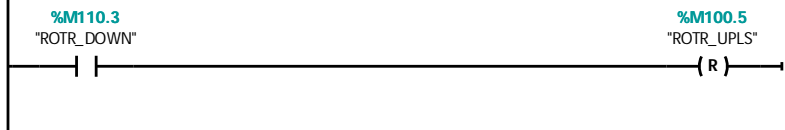
When moved up, the down Is is immediately unlatched off. After 3 secs, the up Is is latched on.
When moved down, the up Is is immediately unlatched off. After 3 secs, the down Is is latched on.



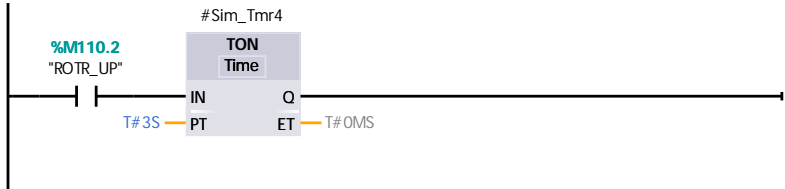
Network 7:



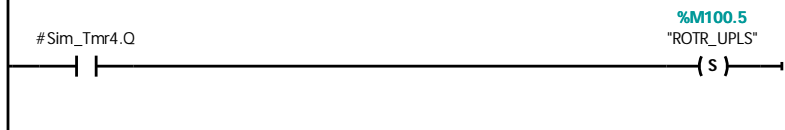
Network 8:



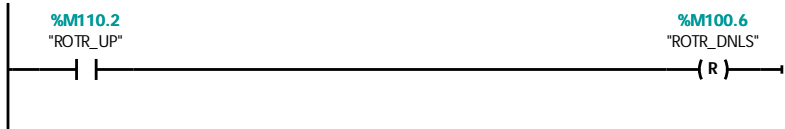
Network 9:



Network 10:

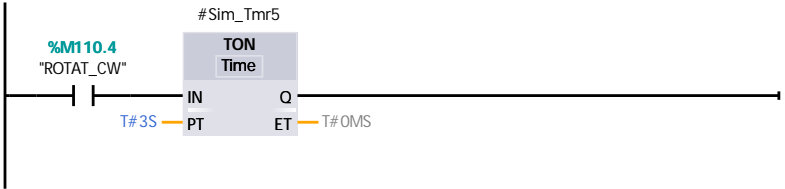


Network 11:

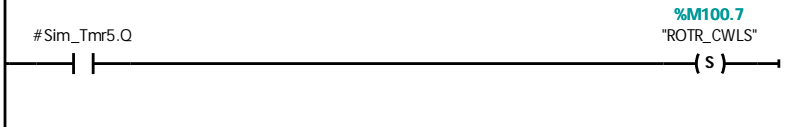


Network 12: Simulate rotator rotating control.

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 13:



Network 14:

%M110.4
"ROTAT_CW"

%M101.0
"ROTR_CCWLS"

(R)

Network 15:

#Sim_Tmr6

TON
Time

%M110.5
"ROTAT_CCW"

IN

Q

PT T#3S

ET T#0MS

Network 16:

#Sim_Tmr6.Q

%M101.0
"ROTR_CCWLS"

(S)

Network 17:

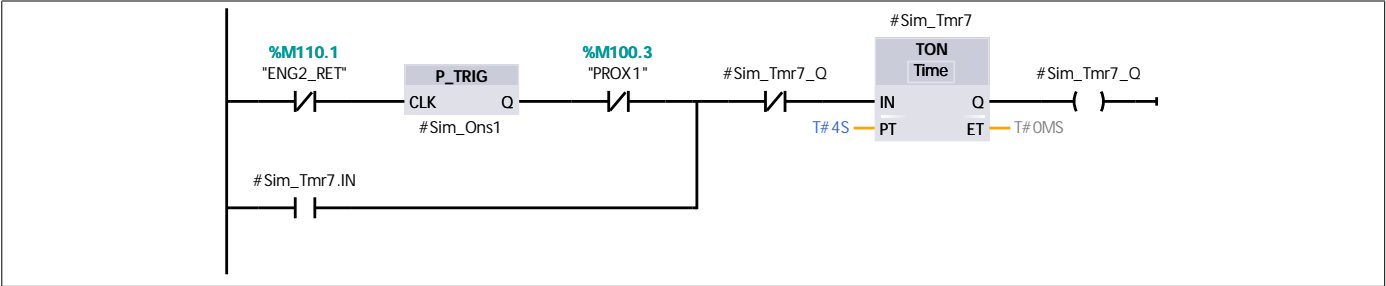
%M110.5
"ROTAT_CCW"

%M100.7
"ROTR_CWLS"

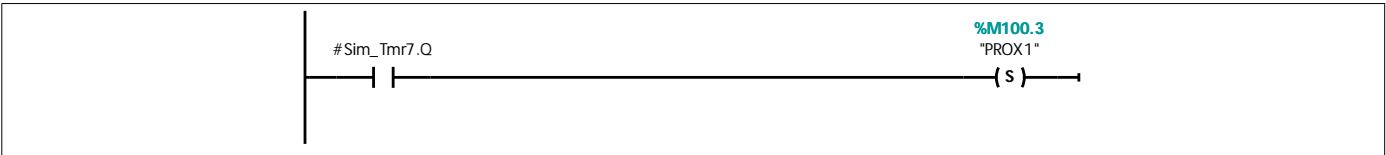
(R)

Network 18: Simulate Pallet Prox

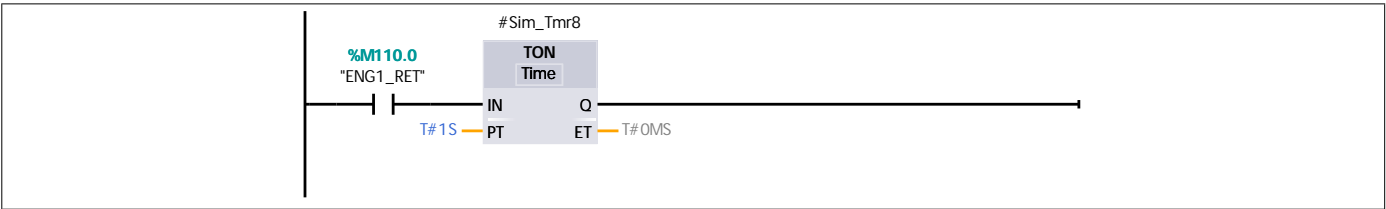
Latch it on 4 seconds after one has left the station.
Latch it off 1 second after new one retained.



Network 19:



Network 20:



Network 21:

