

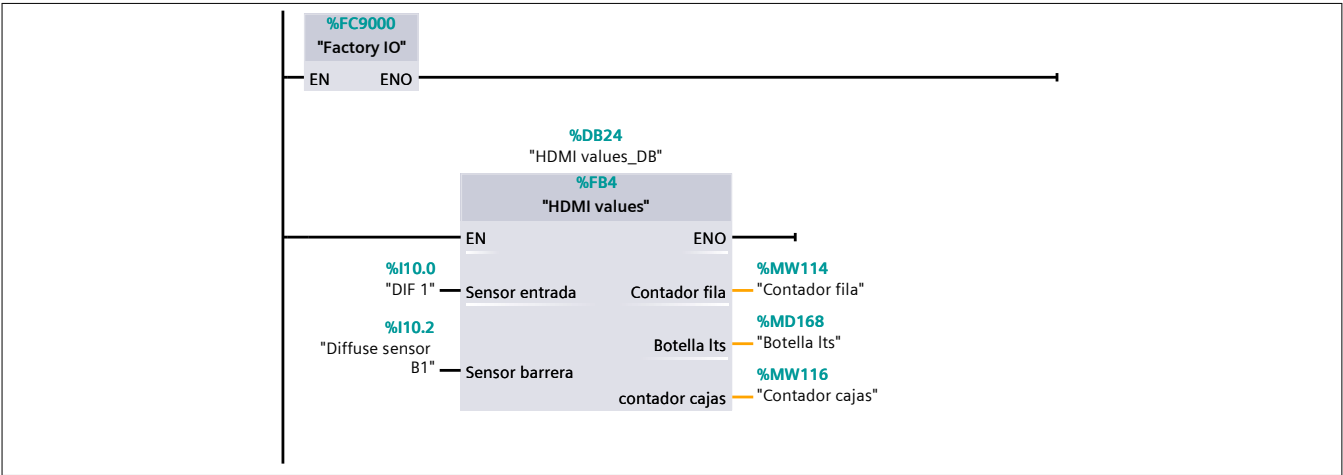
PLC_1 [CPU 1211C DC/DC/DC] / Program blocks

Main [OB1]

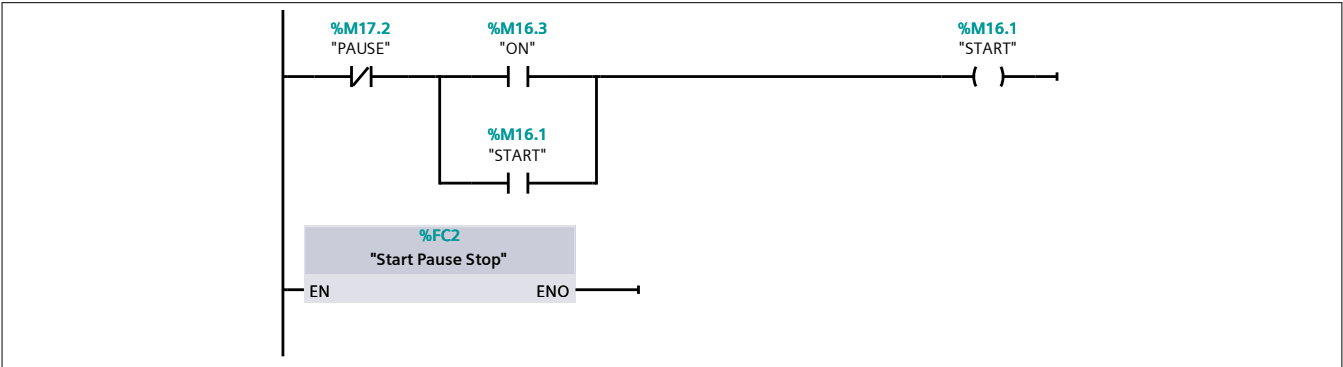
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
▼ Constant			
cantidad de entradas	Int	1	
Tiempo de espera entradas	Time	T#10s	

Network 1: Conexión Factory IO



Network 2: START



Totally Integrated Automation Portal		
Network 3: Embotelladora 1		
<div><div></div><div><div><div>%FC6</div><div>"PID control"</div></div><div>EN</div><div>ENO</div></div><div></div></div>		
Network 4: Embotelladora 2 (Tapa)		
<div><div></div><div><div><div>%M16.1</div><div>"START"</div></div><div><div>%FC5</div><div>"Tapado"</div></div><div>EN</div><div>ENO</div></div><div><div><div>%I10.3</div><div>"Diffuse sensor B2"</div><div>Sensor de Posicion</div></div><div><div>T#500ms</div><div>Time operation</div></div><div><div>%Q11.1</div><div>"Bottle down 2"</div><div>Arm Down</div></div><div><div>%Q12.1</div><div>"CT Bottle 2"</div><div>CT Bottle</div></div></div></div>		
Network 5: Etiquetado		
<div><div></div><div><div><div>%M16.1</div><div>"START"</div></div><div><div>%FC4</div><div>"Etiquetado"</div></div><div>EN</div><div>ENO</div></div><div><div><div>T#200ms</div><div>Tiempo por etiqueta</div></div><div><div>300</div><div>Etiquetas por rollo</div></div><div><div>%MW108</div><div>"Contador etiquetas"</div></div><div><div>Etiquetas restantes</div></div></div></div>		
Network 6: Control de calidad		
<div><div></div><div><div><div>%M16.1</div><div>"START"</div></div><div><div>%FC3</div><div>"Control de calidad"</div></div><div>EN</div><div>ENO</div></div><div><div><div>%I10.5</div><div>"Diff control de calidad"</div><div>Sensor</div></div><div><div>%MW106</div><div>"Contador botellas dañadas"</div></div><div><div>Contador</div></div></div></div>		
Network 7: Empaquetado		

PLC_1 [CPU 1211C DC/DC/DC] / Program blocks

Factory IO [FC9000]

Factory IO Properties

General

Name	Factory IO	Number	9000	Type	FC
Language	SCL	Numbering	Manual		

Information

Title		Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value	Comment
Input			
Output			
InOut			
▼ Temp			
rdTimeReturn	Int		
▼ outputTime	DTL		
YEAR	UInt		
MONTH	USInt		
DAY	USInt		
WEEKDAY	USInt		
HOUR	USInt		
MINUTE	USInt		
SECOND	USInt		
NANOSECOND	UDInt		
SyncVal	Byte		
forVal	Int		
forVal_2	Int		
Value	Byte		
▼ Constant			
CompVal	Byte	16#34	
Value_01	Byte	16#11	
Value_01_DW	DWord	16#A165_D992	
Value_02_DW	DWord	16#58BE_4401	
▼ Return			
Factory IO	Void		

```
0001
0002 #Value:=PEEK(area := 16#82,
0003     dbNumber := 0,
0004     byteOffset := 511);
0005 #Value := #Value + 1;
0006
0007 POKE(area := 16#82,
0008     dbNumber := 0,
0009     byteOffset := 511,
0010     value := #Value);
0011
0012 POKE(area:=16#81,
0013     dbNumber:=0,
0014     byteOffset:=1016,
```


PLC_1 [CPU 1211C DC/DC/DC] / Program blocks

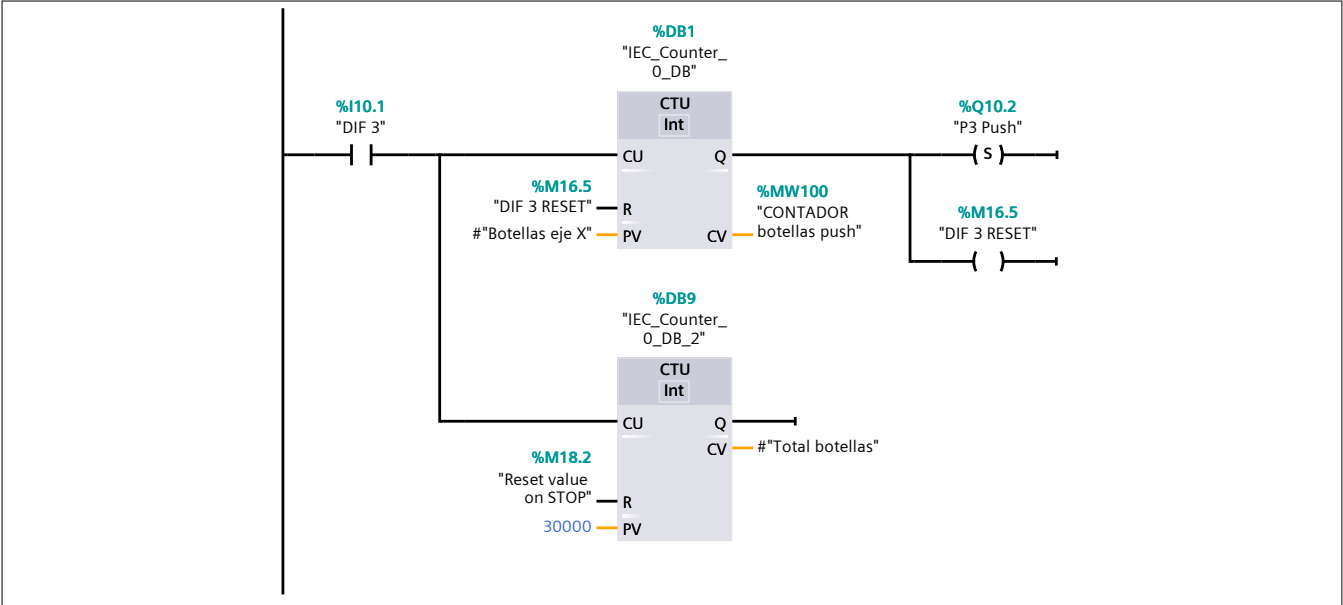
Empaquetado [FC1]

Empaquetado Properties					
General					
Name	Empaquetado	Number	1	Type	FC
Language	LAD	Numbering	Automatic		
Information					
Title		Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value	Comment
▼ Input			
Time up down	Time		
Botellas eje X	Int		
Botellas eje Y	Int		
▼ Output			
Total botellas	Int		
InOut			
Temp			
▼ Constant			
T push extended	Time	T#1300ms	
T clamp	Time	T#1000ms	
▼ Return			
Empaquetado	Void		

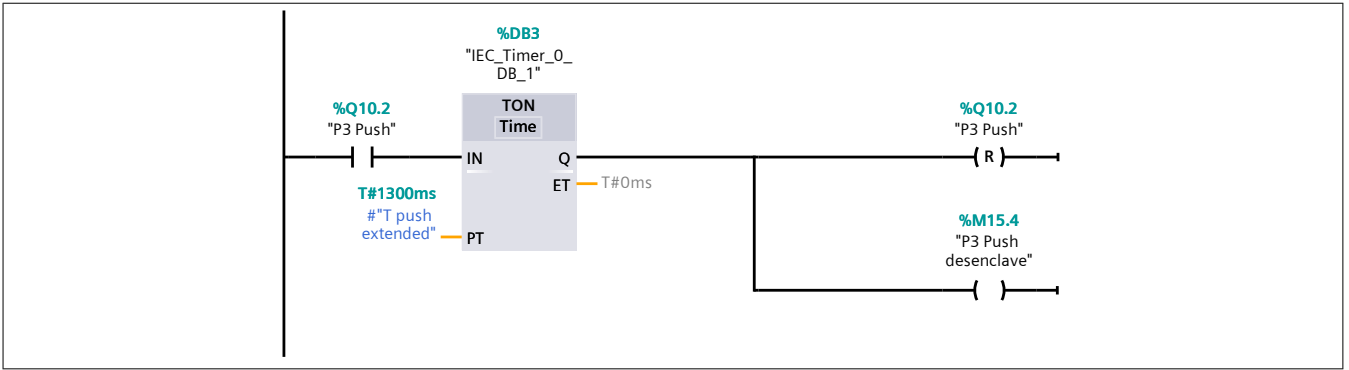
Network 1: Contador de cajas

Cuenta hasta 3 y empuja ja caja



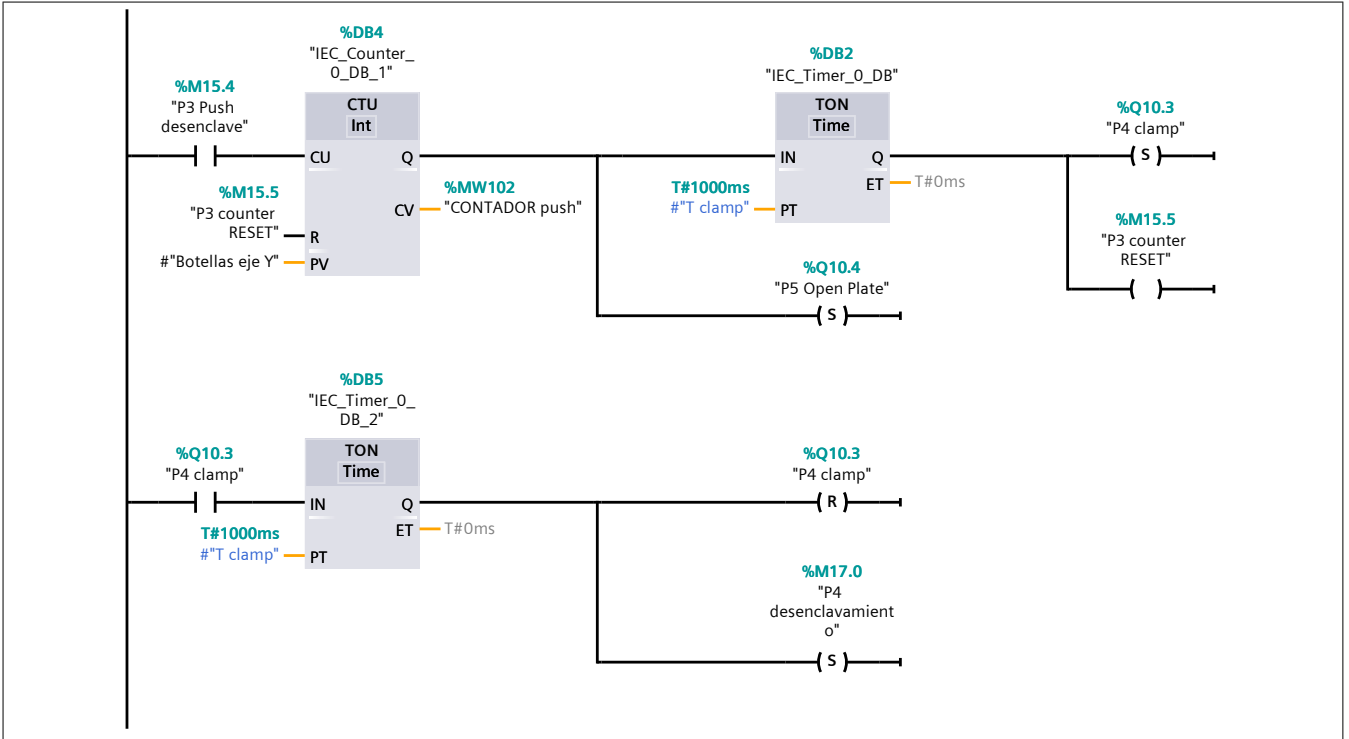
Network 2: Push paletiladora

Enclava el empuje durante 1 segundo

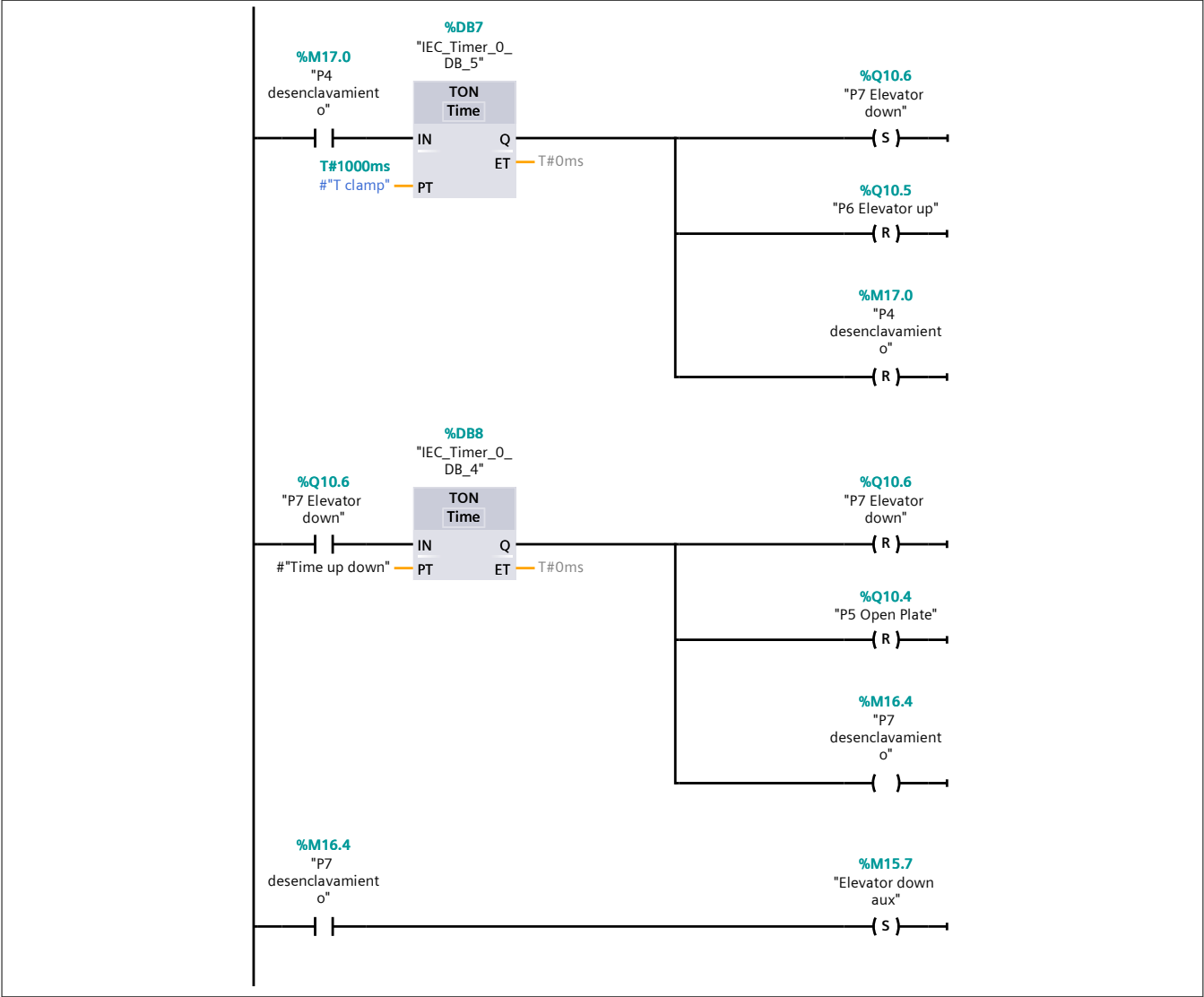


Network 3: Paletizadora

Abre la el piso y cierra las pinzas para acomodar las cajas
despues de 1s abre las pinzas

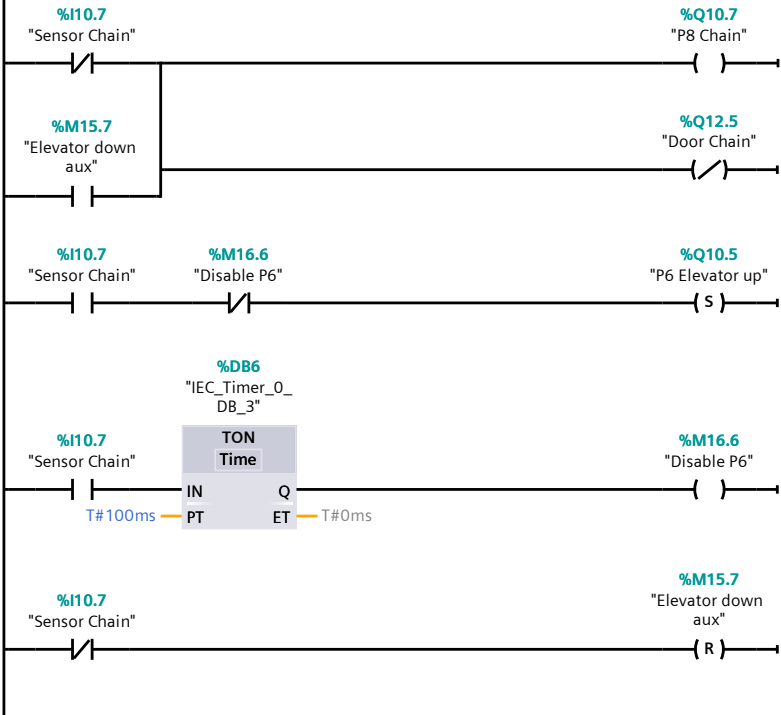


Network 4: Bajar paletizadora



Network 5: Nueva caja paletizadora

Si el sensor detecta una caja
- detiene el transportador y cierra la puerta



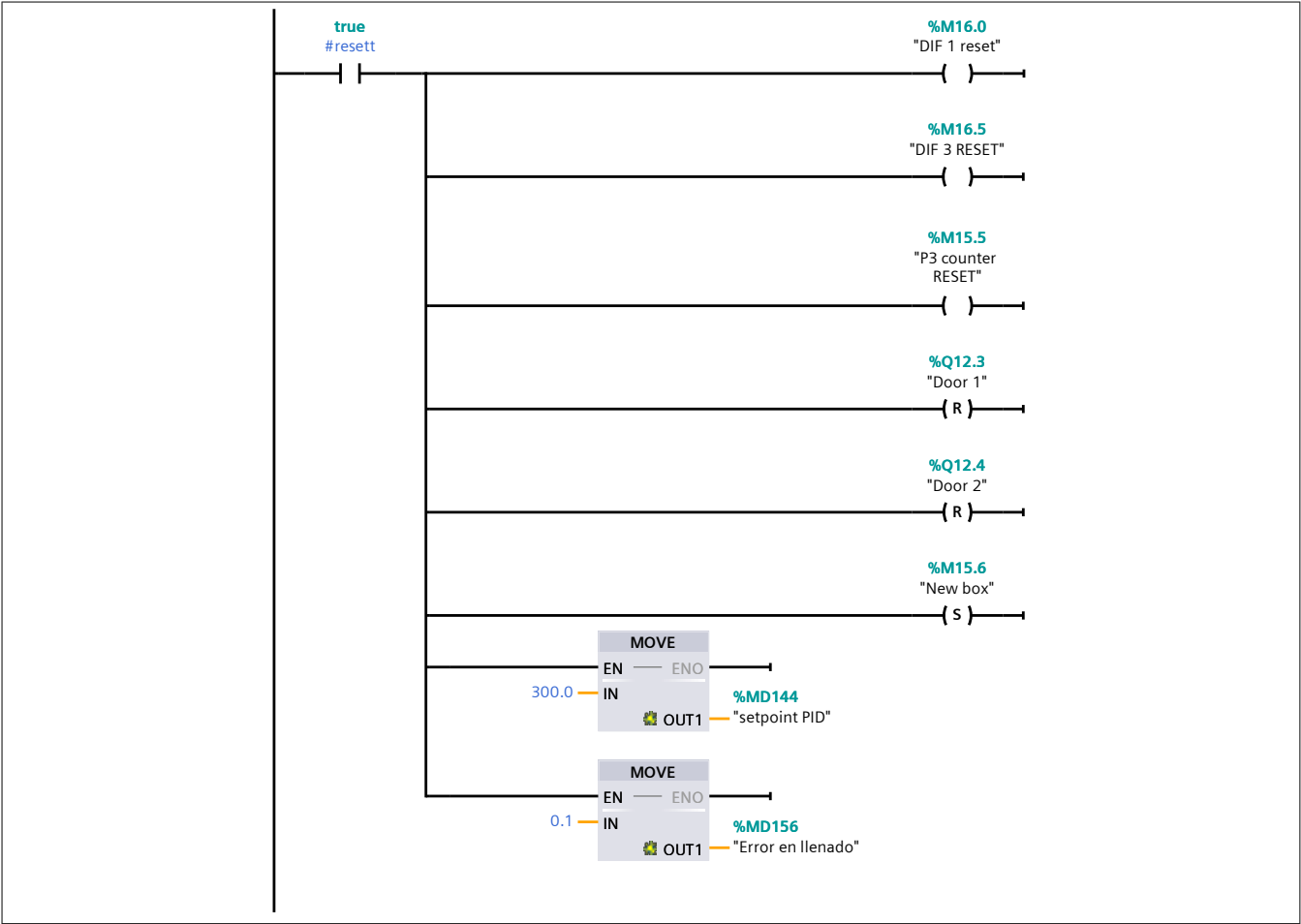
PLC_1 [CPU 1211C DC/DC/DC] / Program blocks

Startup [OB100]

Startup Properties					
General					
Name	Startup	Number	100	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Complete Restart"	Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value	Comment
▼ Input			
LostRetentive	Bool		True if retentive data are lost
LostRTC	Bool		True if date and time are lost
Temp			
▼ Constant			
resett	Bool	true	

Network 1:



Etiquetado [FC4]

Etiquetado Properties

General	
1	General
2	General
3	General
4	General
5	General
6	General
7	General
8	General
9	General
10	General
11	General
12	General
13	General
14	General
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91	General
92	General
93	General
94	General
95	General
96	General
97	General
98	General
99	General
100	General

Name	Etiquetado	Number	4	Type	FC
Language	LAD	Numbering	Automatic		

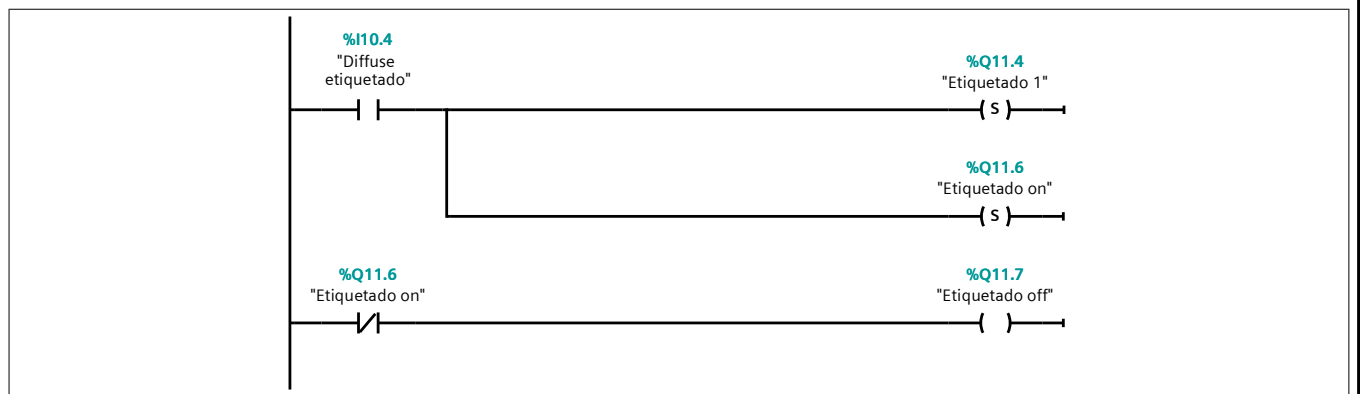
Information

Title		Author		Comment	
Family		Version	0.1	User-defined ID	

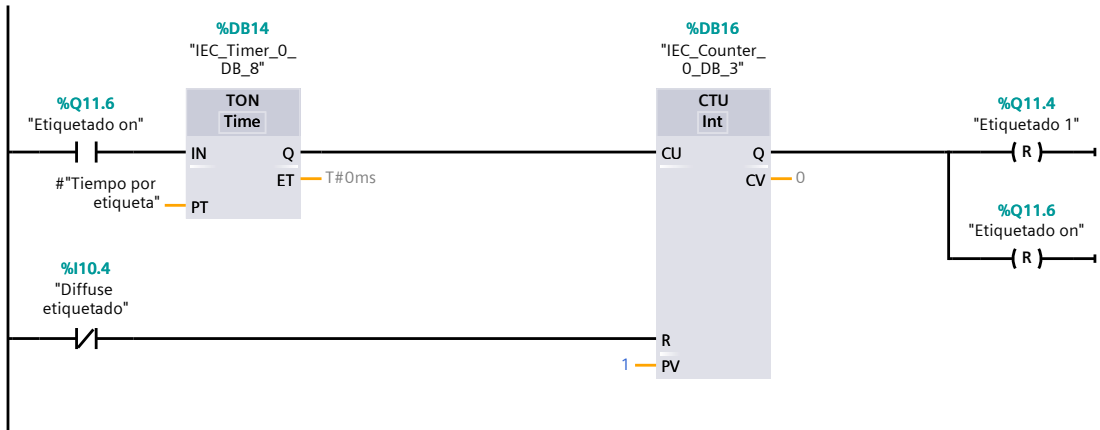
Name	Data type	Default value	Comment
▼ Input			
Tiempo por etiqueta	DInt		
Etiquetas por rollo	Int		
▼ Output			
Etiquetas restantes	Int		
InOut			
Temp			
Constant			
▼ Return			
Etiquetado	Void		

Network 1:

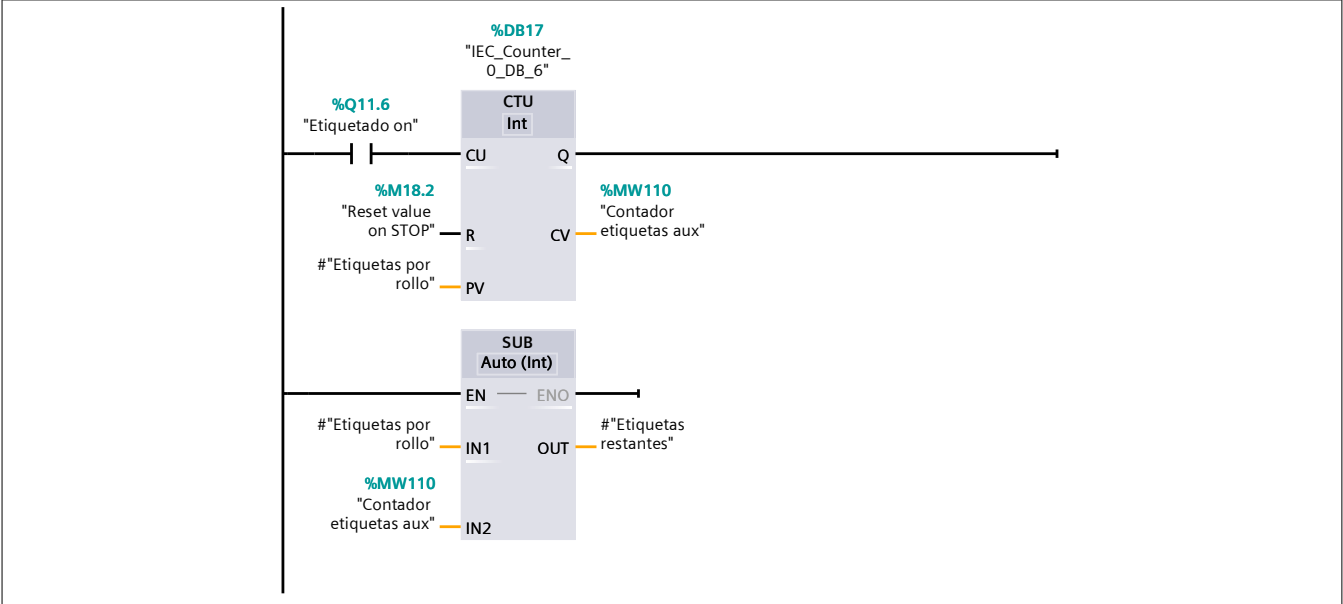
El sensor difuso activa la maquina de etiquetado y el led indicador de funcionamiento



Network 2:

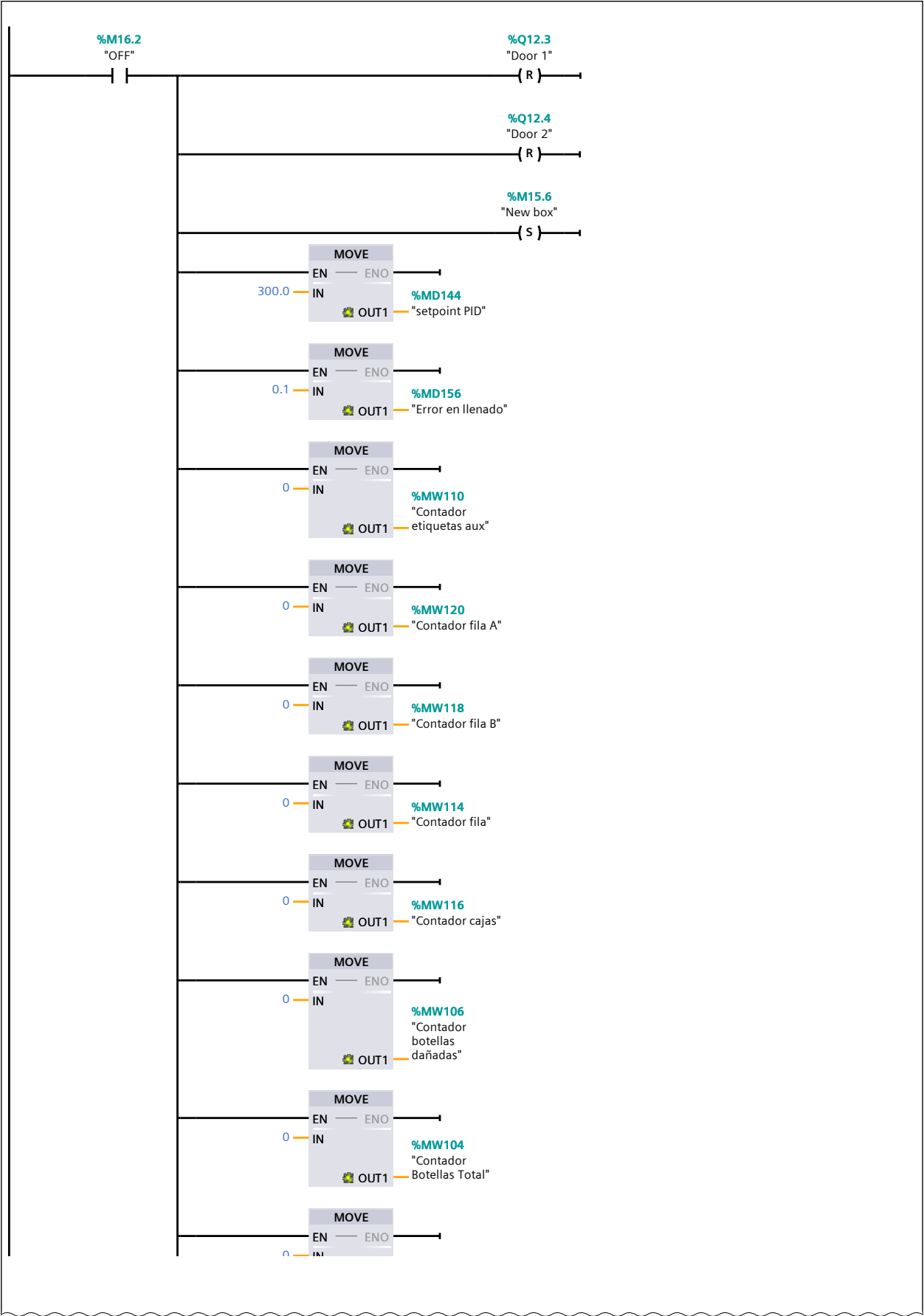


Network 3:



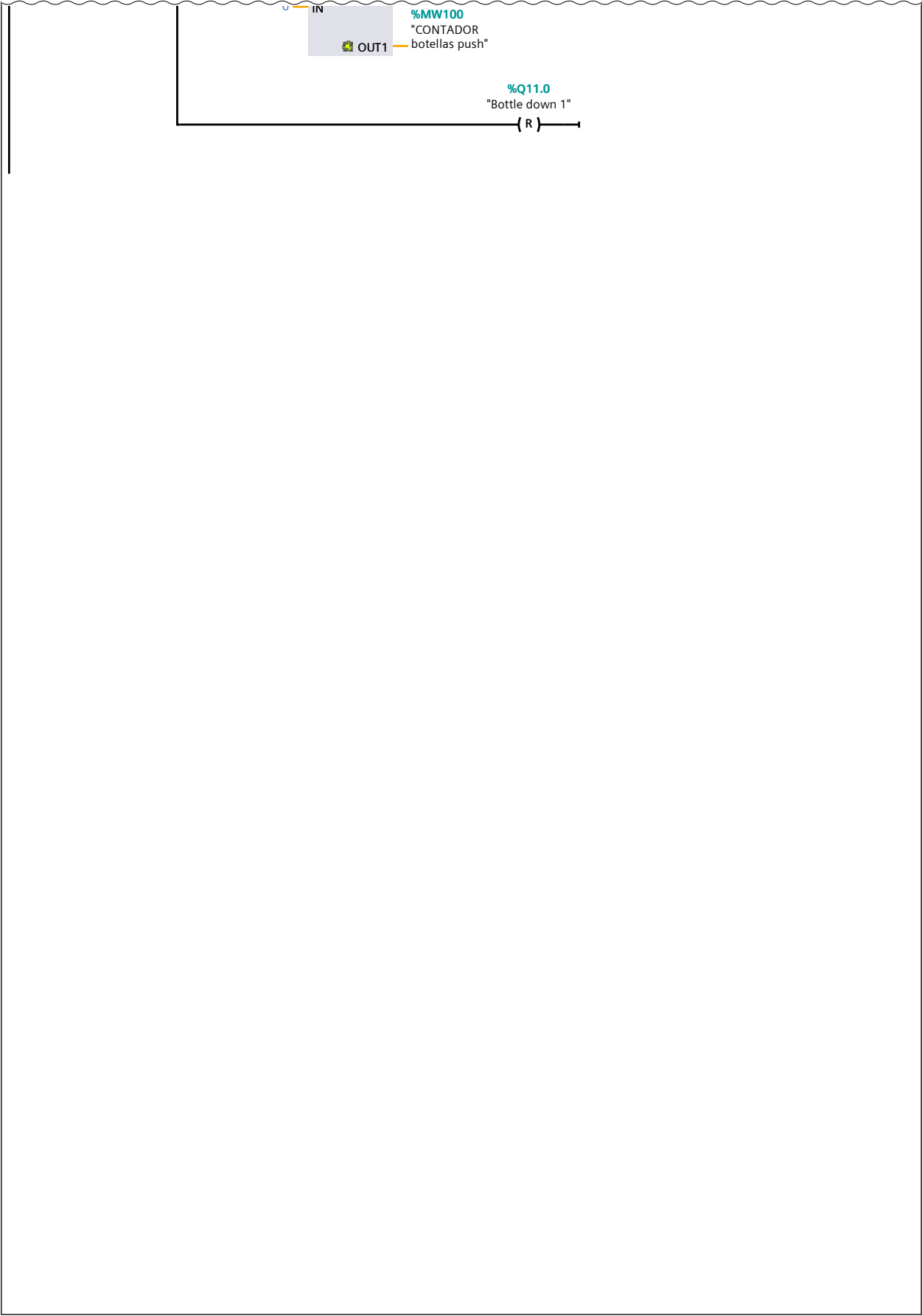
Totally Integrated Automation Portal																																																										
<div>PLC_1 [CPU 1211C DC/DC/DC] / Program blocks</div> <div>Start Pause Stop [FC2]</div> <div><div>Start Pause Stop Properties</div><div><div>General</div><table><tr><td>Name</td><td>Start Pause Stop</td><td>Number</td><td>2</td><td>Type</td><td>FC</td></tr><tr><td>Language</td><td>LAD</td><td>Numbering</td><td>Automatic</td><td></td><td></td></tr></table><div>Information</div><table><tr><td>Title</td><td></td><td>Author</td><td></td><td>Comment</td><td></td></tr><tr><td>Family</td><td></td><td>Version</td><td>0.1</td><td>User-defined ID</td><td></td></tr></table></div><table><tr><th>Name</th><th>Data type</th><th>Default value</th><th>Comment</th></tr><tr><td>Input</td><td></td><td></td><td></td></tr><tr><td>Output</td><td></td><td></td><td></td></tr><tr><td>InOut</td><td></td><td></td><td></td></tr><tr><td>Temp</td><td></td><td></td><td></td></tr><tr><td>Constant</td><td></td><td></td><td></td></tr><tr><td>▼ Return</td><td></td><td></td><td></td></tr><tr><td>Start Pause Stop</td><td>Void</td><td></td><td></td></tr></table></div> <div>Network 1:</div>			Name	Start Pause Stop	Number	2	Type	FC	Language	LAD	Numbering	Automatic			Title		Author		Comment		Family		Version	0.1	User-defined ID		Name	Data type	Default value	Comment	Input				Output				InOut				Temp				Constant				▼ Return				Start Pause Stop	Void		
Name	Start Pause Stop	Number	2	Type	FC																																																					
Language	LAD	Numbering	Automatic																																																							
Title		Author		Comment																																																						
Family		Version	0.1	User-defined ID																																																						
Name	Data type	Default value	Comment																																																							
Input																																																										
Output																																																										
InOut																																																										
Temp																																																										
Constant																																																										
▼ Return																																																										
Start Pause Stop	Void																																																									

Network 1: (1.1 / 2.1)

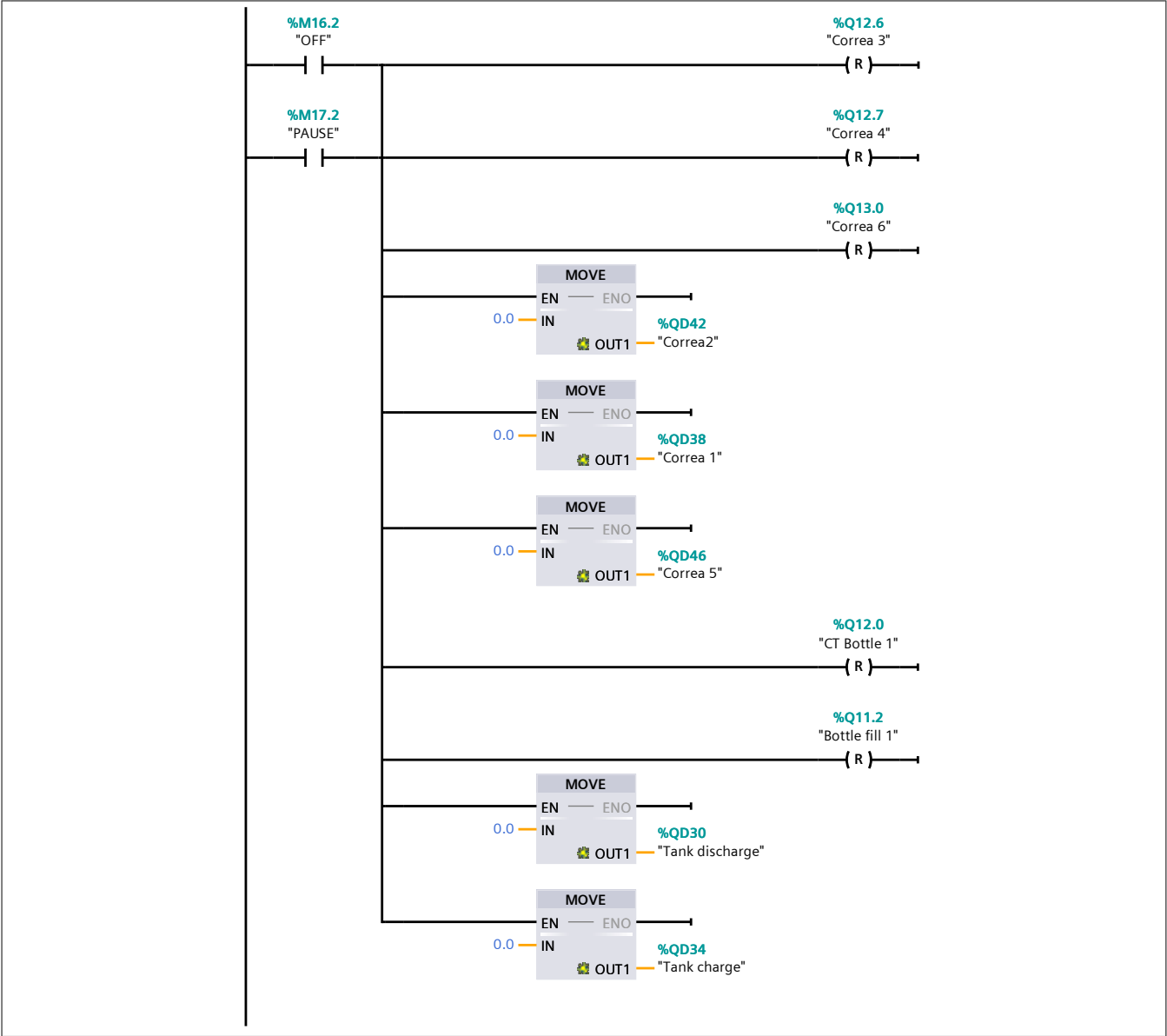


Network 1: (2.1 / 2.1)

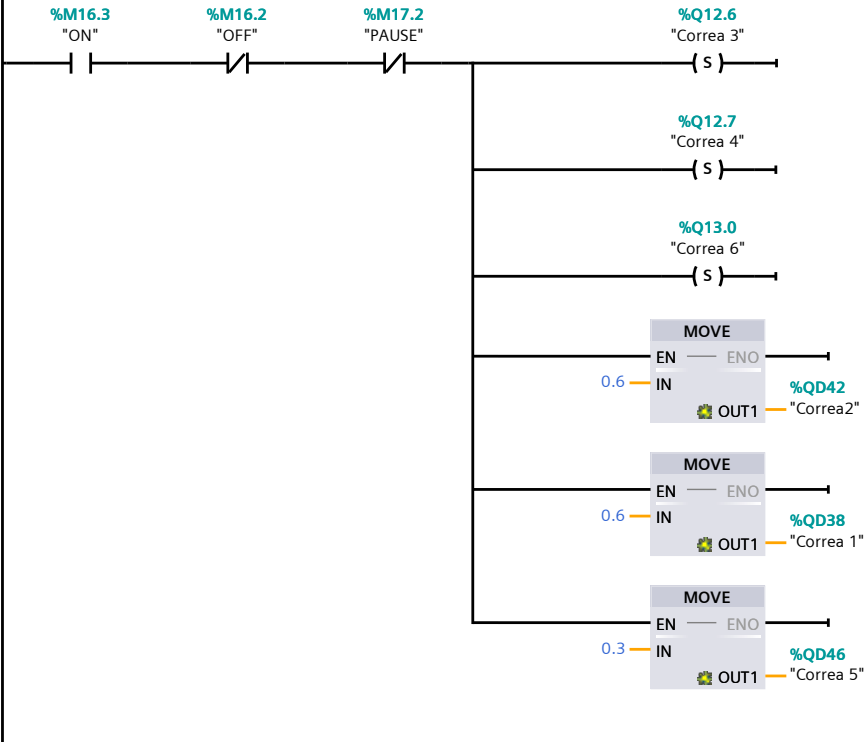
1.1 (Page7 - 2)



Network 2:



Network 3:



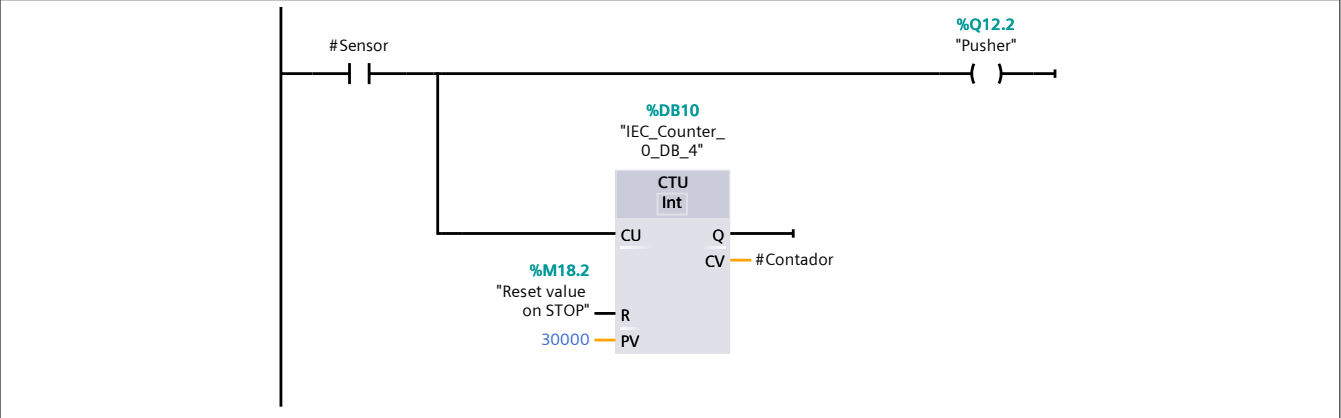
PLC_1 [CPU 1211C DC/DC/DC] / Program blocks

Control de calidad [FC3]

Control de calidad Properties					
General					
Name	Control de calidad	Number	3	Type	FC
Language	LAD	Numbering	Automatic		
Information					
Title		Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value	Comment
▼ Input			
Sensor	Bool		
▼ Output			
Contador	Int		
InOut			
Temp			
Constant			
▼ Return			
Control de calidad	Void		

Network 1:



Totally Integrated Automation Portal

PLC_1 [CPU 1211C DC/DC/DC] / Program blocks

Tapado [FC5]

Tapado Properties

General

Name	Tapado	Number	5	Type	FC
Language	LAD	Numbering	Automatic		

Information

Title		Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value	Comment
▼ Input			
Sensor de Posicion	Bool		
Time operation	DInt		
Output			
▼ InOut			
Arm Down	Bool		
CT Bottle	Bool		
Temp			
Constant			
▼ Return			
Tapado	Void		

Network 1:

Network 2:

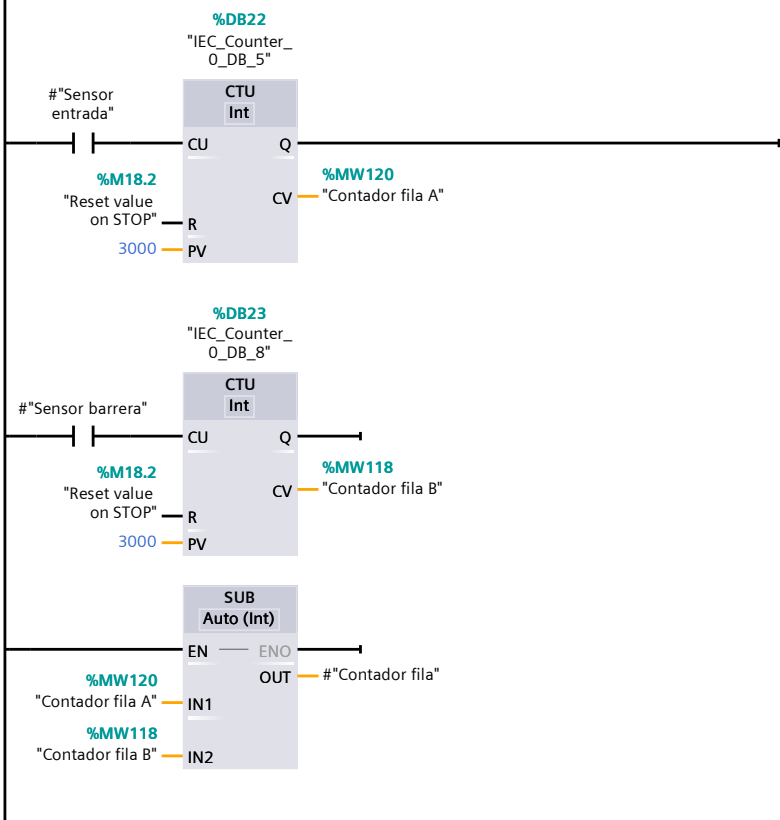
PLC_1 [CPU 1211C DC/DC/DC] / Program blocks

HDMI values [FB4]

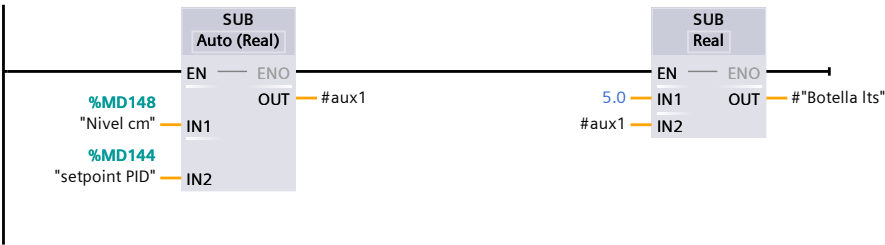
HDMI values Properties					
General					
Name	HDMI values	Number	4	Type	FB
Language	LAD	Numbering	Automatic		
Information					
Title		Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value	Retain	Access- ible from HMI/OP C UA/We b API	Wri- ta- ble from HM I/O PC UA/ We b API	Visible in HMI engi- neer- ing	Set- point	Super- vision	Comment
▼ Input									
Sensor entrada	Bool	false	Non-retain	True	True	True	False		
Sensor barrera	Bool	false	Non-retain	True	True	True	False		
▼ Output									
Contador fila	Int	0	Non-retain	True	True	True	False		
Botella lts	Real	0.0	Non-retain	True	True	True	False		
contador cajas	Int	0	Non-retain	True	True	True	False		
InOut									
▼ Static									
aux1	Real	0.0	Non-retain	True	True	True	False		
Temp									
Constant									

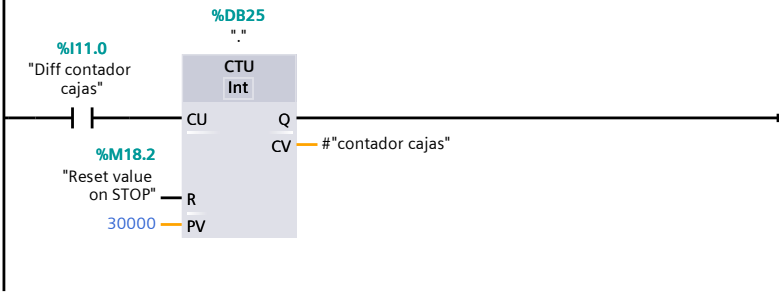
Network 1: contador fila



Network 2: llenado lts botella



Network 3: contador cajas



PID control [FC6]

PID control Properties

General	
1	General
2	General
3	General
4	General
5	General
6	General
7	General
8	General
9	General
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100	General

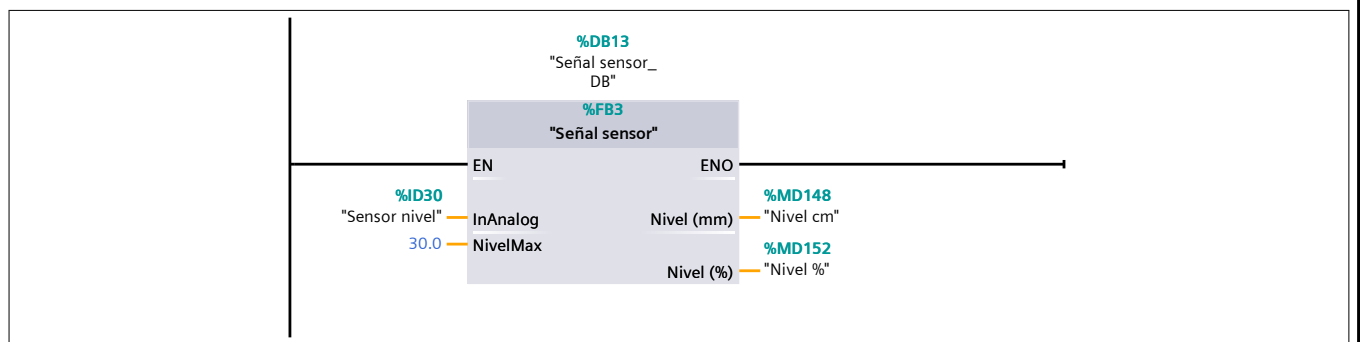
Name	PID control	Number	6	Type	FC
Language	LAD	Numbering	Automatic		

Information

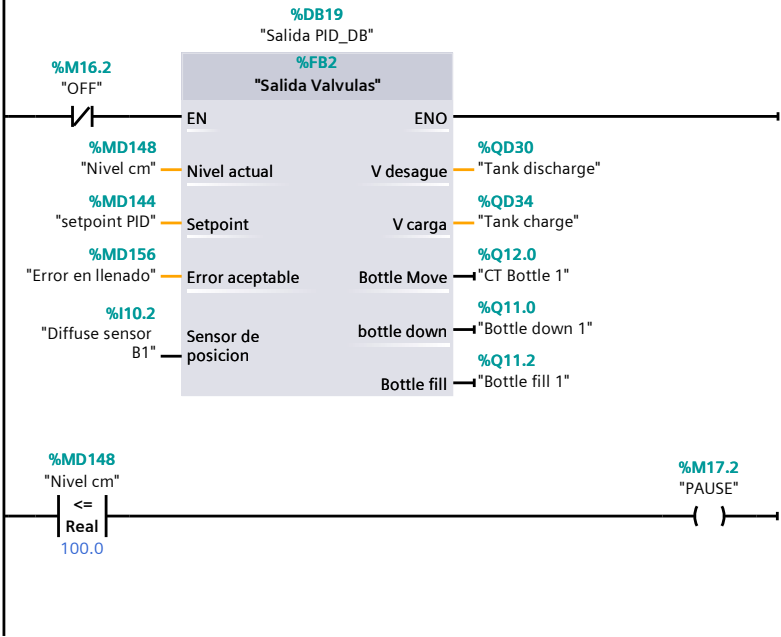
Title		Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value	Comment
Input			
Output			
InOut			
Temp			
Constant			
▼ Return			
PID control	Void		

Network 1:



Network 2:



PLC_1 [CPU 1211C DC/DC/DC] / Program blocks / PID intento 1

Salida Valvulas [FB2]

Salida Valvulas Properties

General

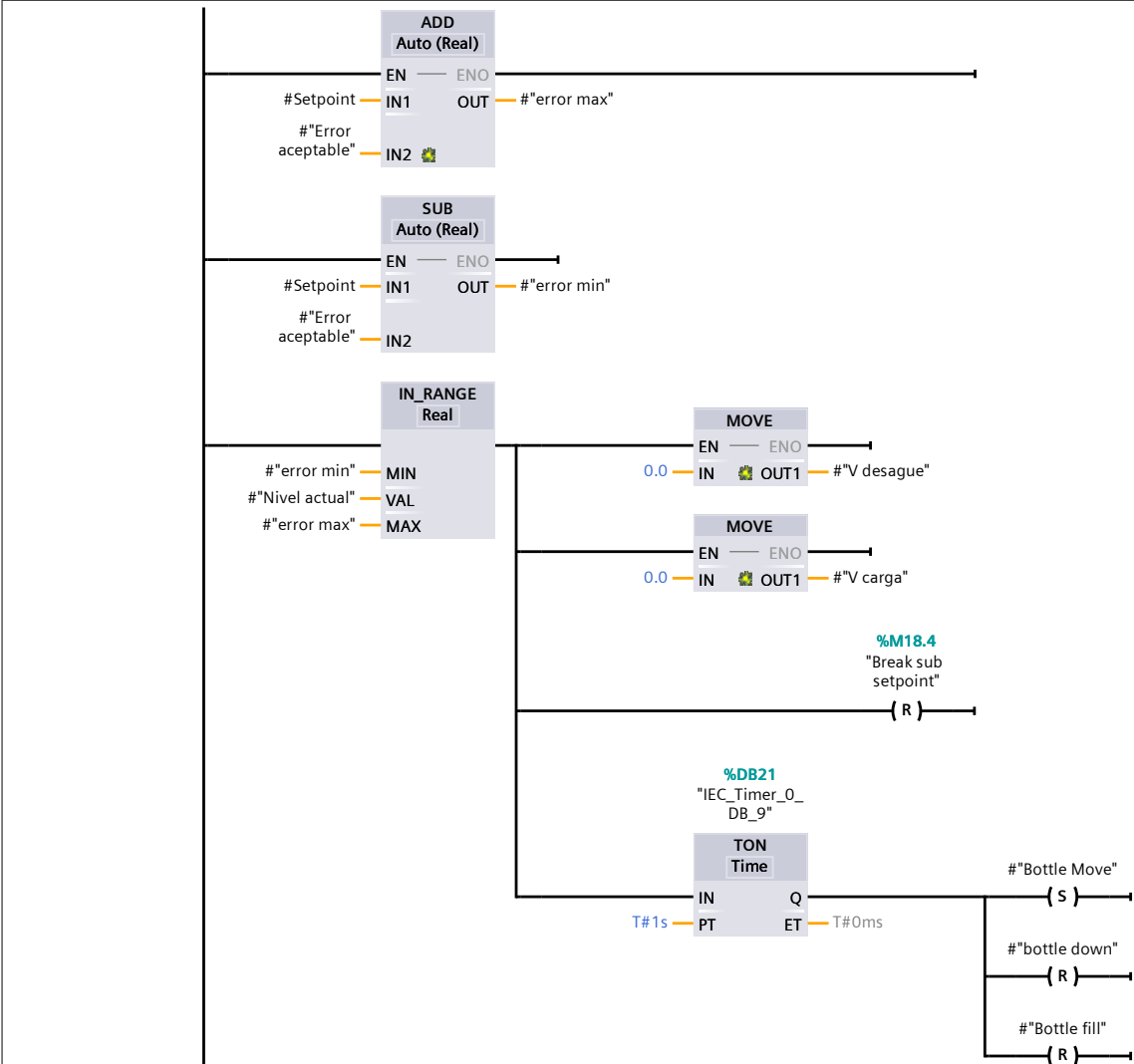
Name	Salida Valvulas	Number	2	Type	FB
Language	LAD	Numbering	Automatic		

Information

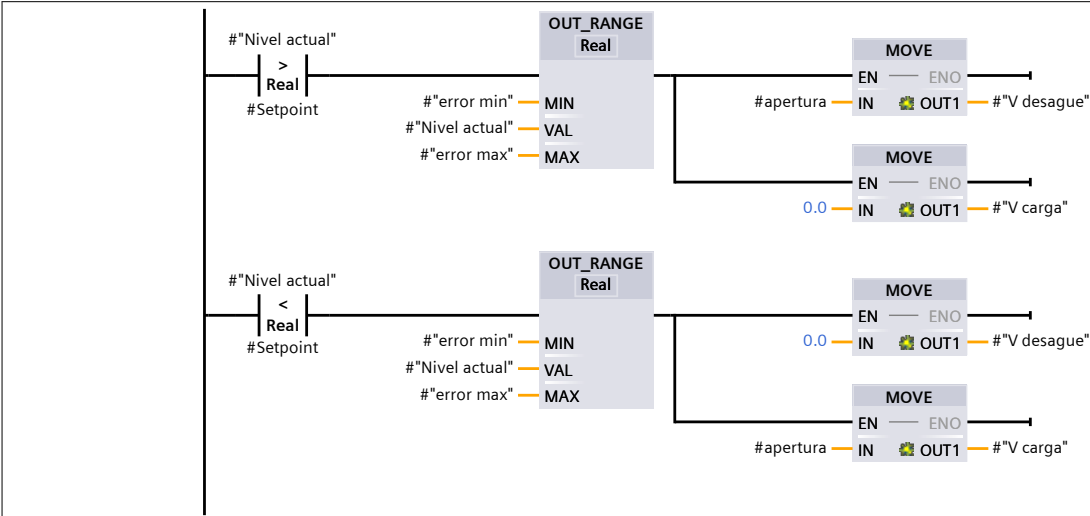
Title		Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value	Retain	Access- ible from HMI/OP C UA/We b API	Wri- ta- ble from HM I/O PC UA/ We b API	Visible in HMI engi- neer- ing	Set- point	Super- vision	Comment
▼ Input									
Nivel actual	Real	0.0	Non-retain	True	True	True	False		
Setpoint	Real	0.0	Non-retain	True	True	True	False		
Error aceptable	Real	0.0	Non-retain	True	True	True	False		
Sensor de posi- cion	Bool	false	Non-retain	True	True	True	False		
▼ Output									
V desague	Real	0.0	Non-retain	True	True	True	False		
V carga	Real	0.0	Non-retain	True	True	True	False		
Bottle Move	Bool	false	Non-retain	True	True	True	False		
bottle down	Bool	false	Non-retain	True	True	True	False		
Bottle fill	Bool	false	Non-retain	True	True	True	False		
InOut									
▼ Static									
diferencia	Real	0.0	Non-retain	True	True	True	False		
error min	Real	0.0	Non-retain	True	True	True	False		
error max	Real	0.0	Non-retain	True	True	True	False		
apertura	Real	0.0	Non-retain	True	True	True	False		
aux	Real	0.0	Non-retain	True	True	True	False		
apertura dis	Real	0.0	Non-retain	True	True	True	False		

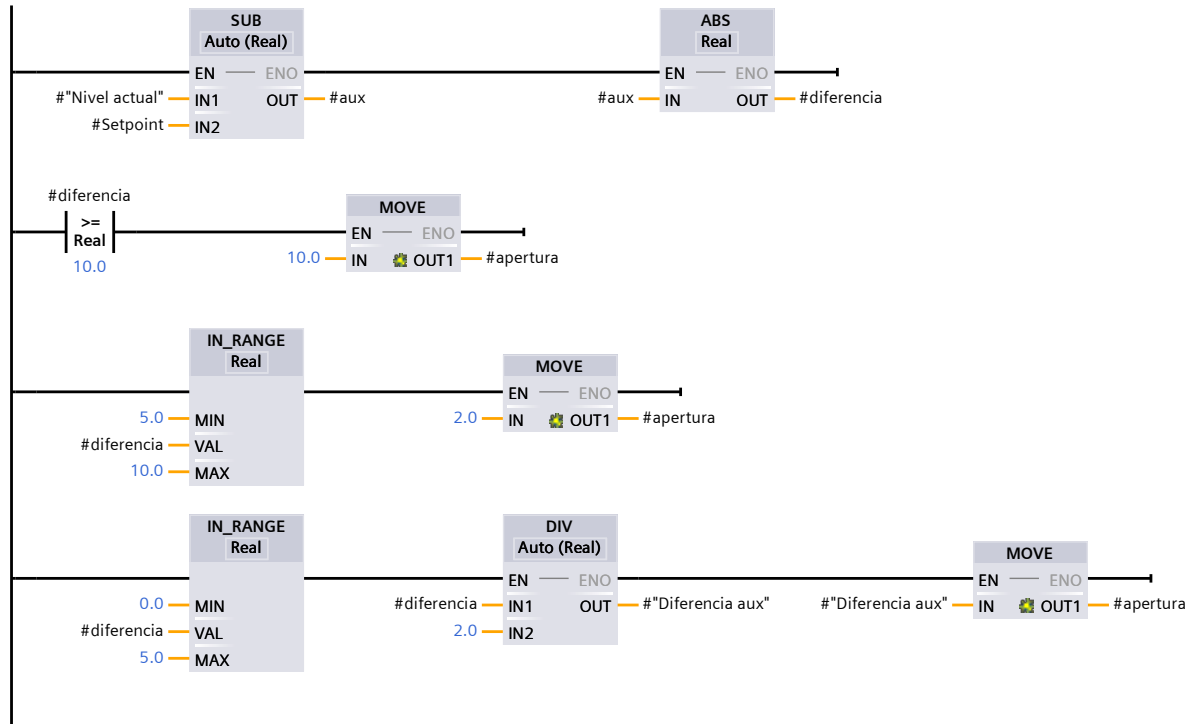
Totally Integrated Automation Portal									
Name	Data type	Default value	Retain	Access- ible from HMI/OP C UA/We b API	Wri- ta- ble fro m HM I/O PC UA/ We b API	Visible in HMI engi- neer- ing	Set- point	Super- vision	Comment
Alredy START	Bool	false	Non-retain	True	True	True	False		
Break resta	Bool	false	Non-retain	True	True	True	False		
aux door open	Bool	false	Non-retain	True	True	True	False		
Diferencia aux	Real	0.0	Non-retain	True	True	True	False		
Temp									
Constant									
Network 1:									



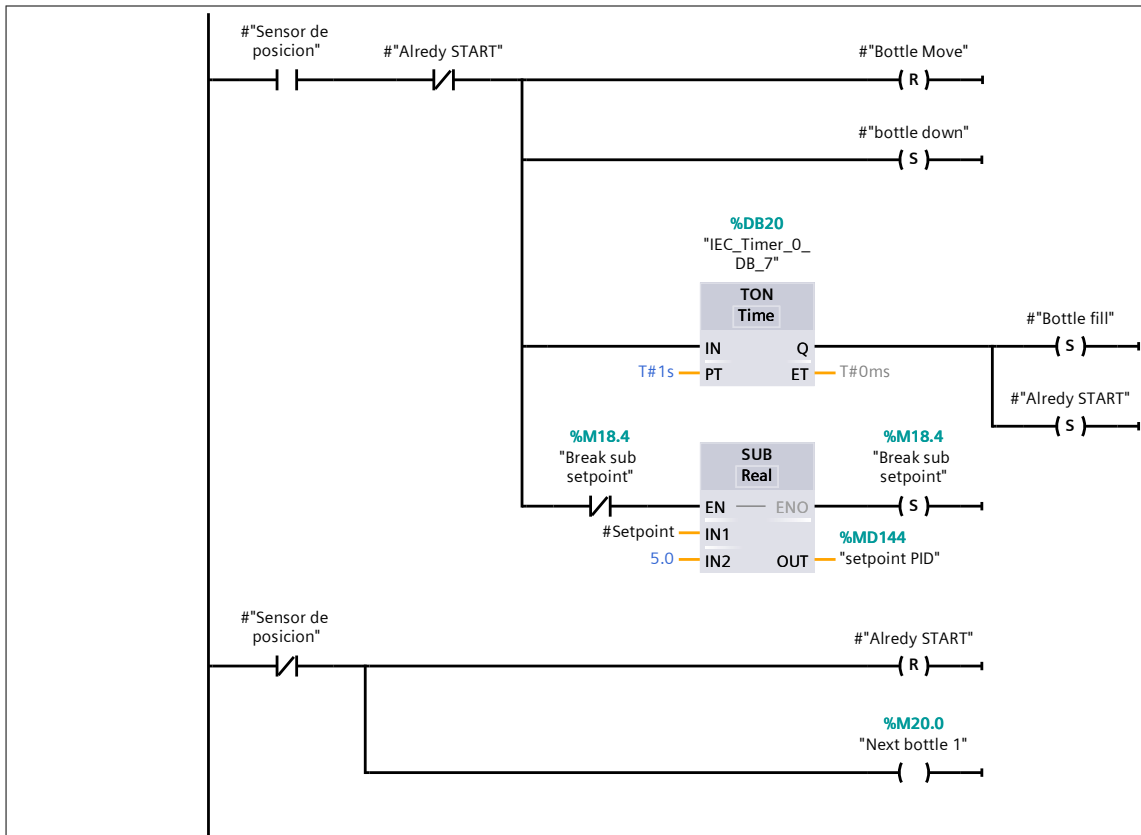
Network 2:



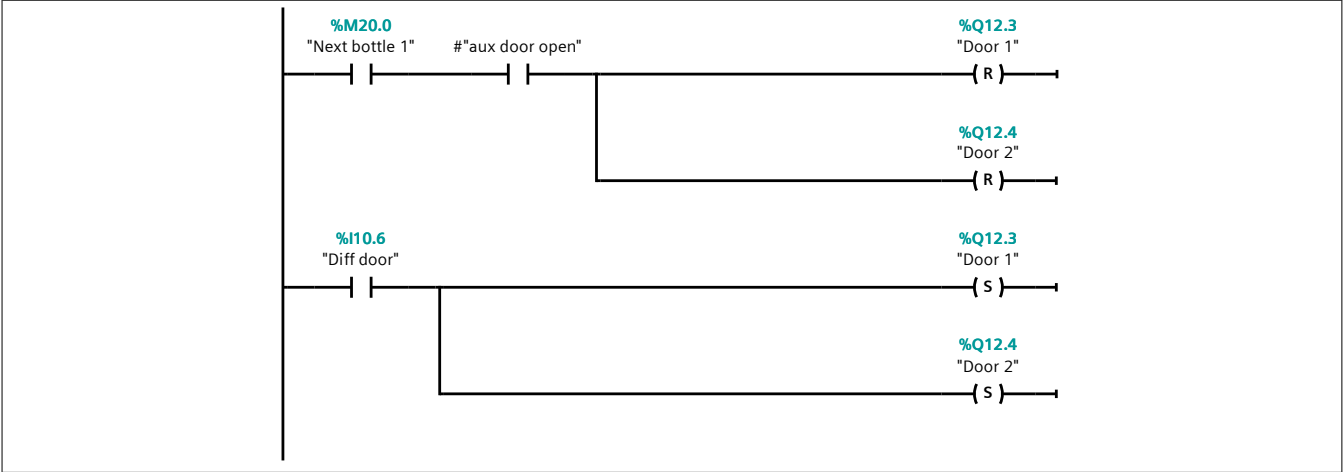
Network 3: Velocidad de llenado



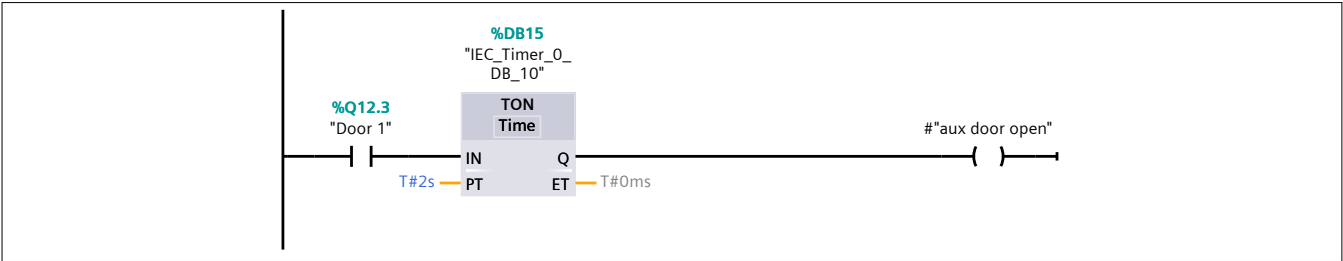
Network 4: BRAZO



Network 5: Door



Network 6:



Totally Integrated Automation Portal		
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PLC_1 [CPU 1211C DC/DC/DC] / Program blocks / PID intento 1

Señal sensor [FB3]

Señal sensor Properties

General

Name	Señal sensor	Number	3	Type	FB
Language	LAD	Numbering	Automatic		

Information

Title		Author		Comment	
Family		Version	0.1	User-defined ID	

Name	Data type	Default value	Retain	Access- sible from HMI/OP C UA/Web API	Wri- ta- ble from HM I/O PC UA/ Web API	Visible in HMI engi- neer- ing	Set- point	Super- vision	Comment
▼ Input									
InAnalog	Real	0.0	Non-retain	True	True	True	False		
NivelMax	Real	0.0	Non-retain	True	True	True	False		
▼ Output									
Nivel (mm)	Real	0.0	Non-retain	True	True	True	False		
Nivel (%)	Real	0.0	Non-retain	True	True	True	False		
InOut									
▼ Static									
aux	Real	0.0	Non-retain	True	True	True	False		
Temp									
Constant									

Network 1:

--	--	--

