

Cyclic interrupt

	Name	Data type	Default value	Comment
1	Input			

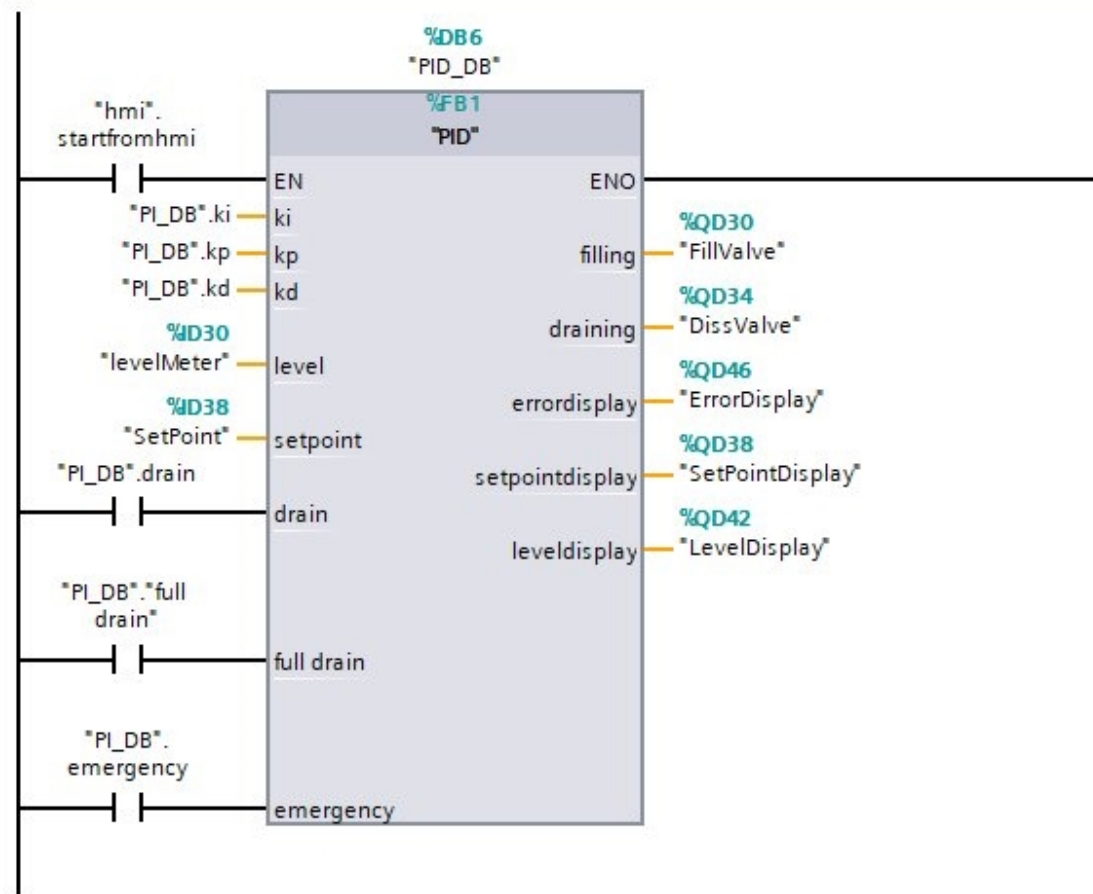


▼ Block title:

Comment

▼ Network 1:

Comment



▼ Network 2: TO BE SURE THAT KP ON PID WILL BE ALWAYS BIGGER THAN 1

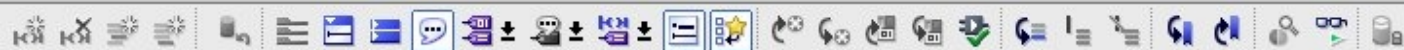
Comment

```

1 IF "PI_DB".kp < 1 THEN
2   "PI_DB".kp := 1;
3 END_IF;

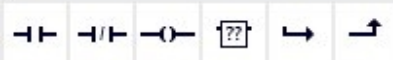
```

▶	"PI_DB"	%DB3
▶	"PI_DB".kp	



Main

	Name	Data type	Default value	Comment
1	▼ Input			
2	■ Initial_Call	Bool		Initial call of this OB

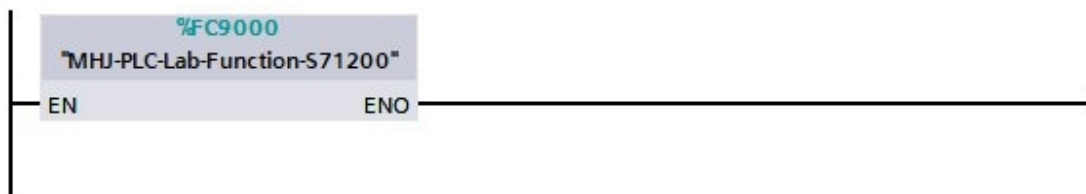


▼ Block title: "Main Program Sweep (Cycle)"

Comment

▼ Network 1: FOR FACTORY I/O

Comment

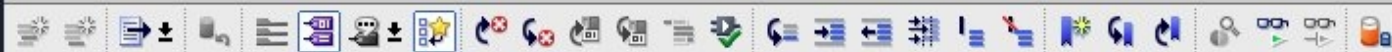


▶ Network 2:



PID

[illegible]



Block interface

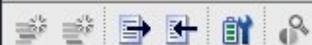


IF...	CASE... OF...	FOR... TO DO...	WHILE... DO...	(*...*)	REGION
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```

1
2  #errordisplay := ABS(#setpoint - #level);
3  //display setpoint to 100%
4  #setpointdisplay := REAL_TO_DINT(#setpoint*10.0);
5  //display level to 100%
6  #leveldisplay :=REAL_TO_DINT( #level*10.0);
7  #temp := REAL_TO_DINT(#kp);
8  #error := #setpoint - #level;
9  #integralop := #integralop + #error;
10 #u := (#error * #kp) + (#integralop * (#ki / 10)) + (#kd * (#err2 - #error));
11 #filling := #u;
12 #draining := -#u;
13 IF (#filling > 10.0) THEN
14     #integralop := #oldintegral;
15     #filling := 10.0;
16 END_IF;
17
18 IF (#filling < 0.0) THEN
19     #integralop := #oldintegral;
20     #filling := 0.0;
21 END_IF;
22 IF (#draining > 10.0) THEN
23     #integralop := #oldintegral;
24     #draining := 10.0;
25 END_IF;
26
27 IF (#draining < 0.0) THEN
28     #integralop := #oldintegral;
29     #draining := 0.0;
30 END_IF;
31 #oldintegral := #integralop;
32 #err2 := #error;
33 IF #drain THEN
34     #draining := 10.0;
35
36 END_IF;
37 IF #"full drain" THEN
38     #draining := 10.0;
39     #filling := 0;
40 END_IF;
41 IF #emergency THEN
42     #draining := 0;
43     #filling := 0;
44 END_IF;

```

PLC tags

	Name	Tag table	Data type	Address	Retain	Acces...	Writa...	Visibl...	Comment
1	start	Standard-Variab..	Bool	%I0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2	stop	Standard-Variablen...	Bool	%I0.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3	drain	Standard-Variablen...	Bool	%I0.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
4	levelMeter	Standard-Variablen...	Real	%ID30	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5	SetPoint	Standard-Variablen...	Real	%ID38	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
6	FillValve	Standard-Variablen...	Real	%QD30	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
7	DissValve	Standard-Variablen...	Real	%QD34	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
8	SetPointDisplay	Standard-Variablen...	DInt	%QD38	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
9	LevelDisplay	Standard-Variablen...	DInt	%QD42	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
10	ErrorDisplay	Standard-Variablen...	Real	%QD46	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
11	Tag_1	Standard-Variablen...	Bool	%M0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
12	Tag_2	Standard-Variablen...	Real	%MD100	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
13	scaledlevel	Standard-Variablen...	Int	%MW2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
14	setscaled	Standard-Variablen...	Int	%MW12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
15	Tag_3	Standard-Variablen...	Bool	%M2.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
16	<Add new>				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	