

Program blocks / 02_Controller

On-Off [FB12]

On-Off Properties							
General							
Name	On-Off	Number	12	Type	FB	Language	SCL
Numbering	Automatic						
Information							
Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Default value	Retain
▼ Input			
SetPoint	Real	0.0	Non-retain
Hysteresis	Real	0.0	Non-retain
PV	Real	0.0	Non-retain
▼ Output			
MV	Real	0.0	Non-retain
InOut			
▼ Static			
UpperLimit	Real	0.0	Non-retain
LowerLimit	Real	0.0	Non-retain
Temp			
Constant			

```
0001 #UpperLimit := #SetPoint + #Hysteresis / 2;
0002 #LowerLimit := #SetPoint - #Hysteresis / 2;
0003
0004 IF #PV > #UpperLimit THEN
0005     #MV := -10.0;
0006     IF #PV = #LowerLimit THEN
0007         #MV := 0.0;
0008     END_IF;
0009 END_IF;
0010
0011
0012 IF #PV < #LowerLimit THEN
0013     #MV := 10.0;
0014
0015     IF #PV = #UpperLimit THEN
0016         #MV := 0.0;
0017     END_IF;
0018 END_IF;
```