



SampleLibrary\_Test

RSE - Control Systems

UK

9/12/2025 3:44 PM



### Valve\_Example\_PWM [FB293]

#### Valve\_Example\_PWM Properties

##### General

Name	Valve_Example_PWM	Number	293	Type	FB	Language	LAD
Numbering	Automatic						

##### Information

Title	Examlle Function Block - PWM Valve Control	Author		Comment	***For Testing Documenta- tion Only ***	Family	
Version	0.1	User-defined ID					

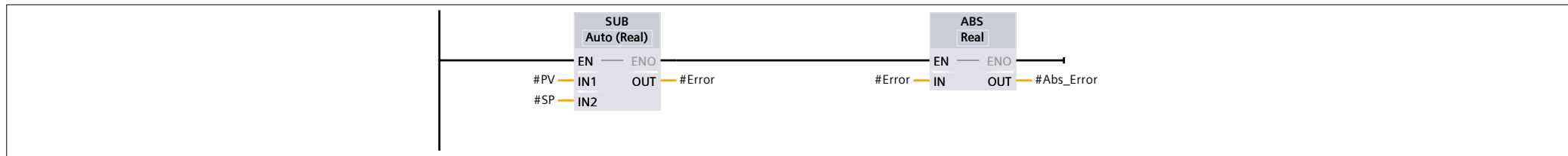
Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ Input									
ENable	Bool	false	Non-retain	True	True	True	False		
Rev_Acting	Bool	false	Non-retain	True	True	True	False		Reverse Acting ( Decrease Output , Valve Closes)
PV	Real	0.0	Non-retain	True	True	True	False		Process Variable
SP	Real	0.0	Non-retain	True	True	True	False		Setpoint
DB	Real	0.0	Non-retain	True	True	True	False		
Pulse_TM	Int	0	Non-retain	True	True	True	False		
Pulse_Base	Int	0	Non-retain	True	True	True	False		
Wait_TM	Int	0	Non-retain	True	True	True	False		
Wait_Base	Int	0	Non-retain	True	True	True	False		
▼ Output									
Open_CMD	Bool	false	Non-retain	True	True	True	False		
Close_CMD	Bool	false	Non-retain	True	True	True	False		
InOut									

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writable from HMI/OPC UA/Web API	Visible in HMI engineering	Setpoint	Supervision	Comment
▼ Static									
Error	Real	0.0	Non-retain	False	False	False	False		Error Value (Real)
Abs_Error	Real	0.0	Non-retain	False	False	False	False		Absolute Error Value
Neg_Error	Bool	false	Non-retain	True	True	True	False		Process Variable above Setpoint (eg, Too Low)
Pos_Error	Bool	false	Non-retain	True	True	True	False		Process Variable below Setpoint (eg, Too High)
Open_Reqd	Bool	false	Non-retain	True	True	True	False		Open Required ( Open Valve Required)
Close_Reqd	Bool	false	Non-retain	True	True	True	False		Close Required ( Close Valve Required)
In_DB	Bool	false	Non-retain	True	True	True	False		Input Data Block
Pulse_Time_PT	DInt	0	Non-retain	True	True	True	False		
▼ Pulse_ON_Tmr	TON_TIME		Non-retain	True	True	True	True		
PT	Time	T#0ms	Non-retain	True	True	True	False		
ET	Time	T#0ms	Non-retain	True	False	True	False		
IN	Bool	false	Non-retain	True	True	True	False		
Q	Bool	false	Non-retain	True	False	True	False		
Pulse_OFF_Tmr_DN	Bool	false	Non-retain	True	True	True	False		
Pulse_ON_Tmr_DN	Bool	false	Non-retain	True	True	True	False		
Wait_Time_PT	DInt	0	Non-retain	True	True	True	False		
▼ Pulse_OFF_Tmr	TON_TIME		Non-retain	True	True	True	True		
PT	Time	T#0ms	Non-retain	True	True	True	False		
ET	Time	T#0ms	Non-retain	True	False	True	False		
IN	Bool	false	Non-retain	True	True	True	False		
Q	Bool	false	Non-retain	True	False	True	False		
▼ Temp									

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
Pulse_TM_D	DInt								
Wait_TM_D	DInt								
DB_LOW_TMP	Real								
Constant									

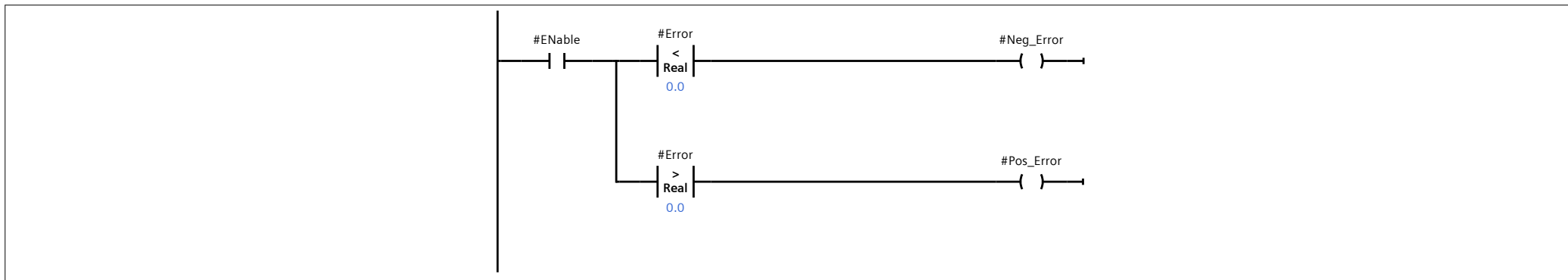
### Network 1: Errors

Gets error From the Process Variable Minus the Setpoint Value



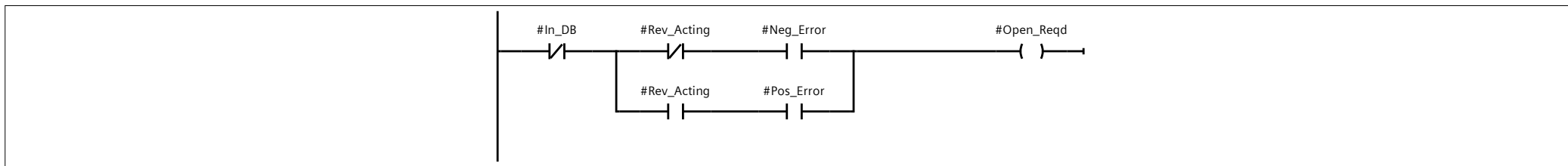
### Network 2: Positive or Negative Error

Determines Where Process Variable compares to Setpoint ( Too High or Too Low)



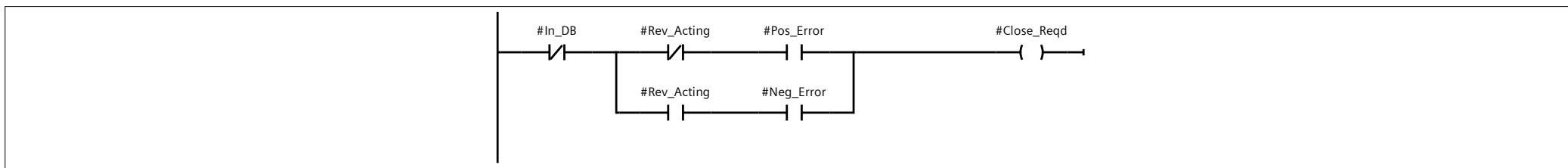
### Network 3: Turn on Valve

Logic for Setting Run Mode , Determined by if Negative or Positive Error

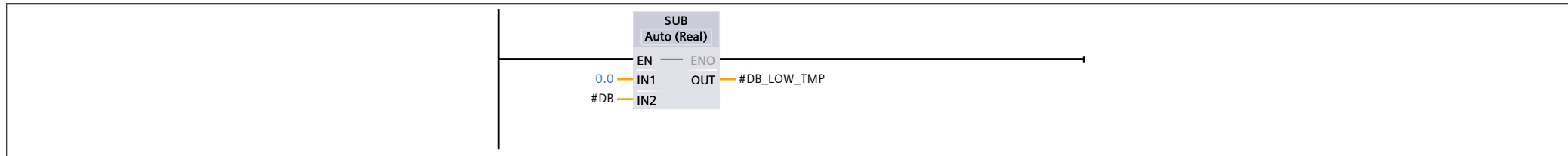


### Network 4: Turn Off Valve

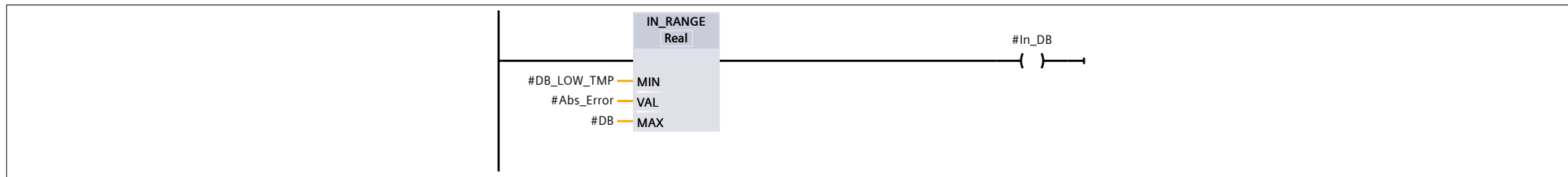
Logic for Setting Run Mode to Close , Determined by if Negative or Positive Error



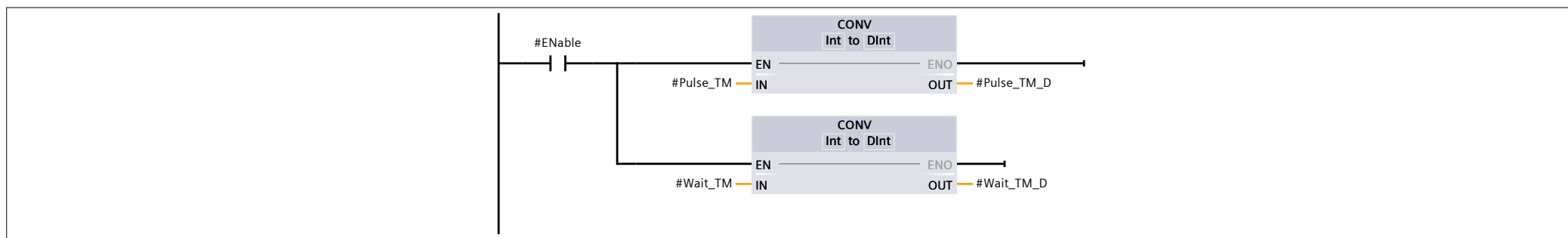
### Network 5:



Network 6:



Network 7:



Network 8: \*\*\*This I just an Example Function and Doesnt Contain all Working netorks \*\*\*\*\*