

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	
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: P5-6

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Plant Waterer

Additional internal memory:

Tag Address

Sec_Ctr DB4 (TON_SFB) Seconds counter for clock

Min_Ctr DB5 (CTU_SFB) Minutes counter for clock

Hour_Ctr DB6 (CTU_SFB) Hours counter for clock

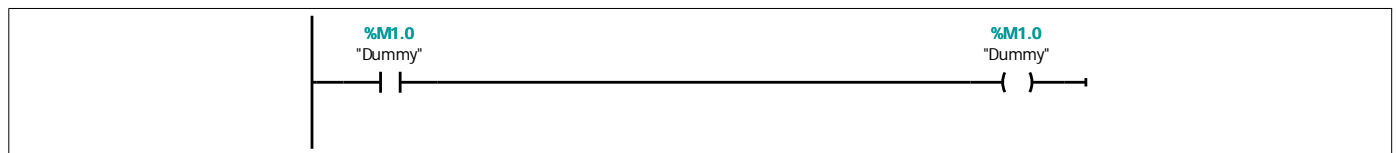
Tic_Tmr DB1 (TON_SFB) Generates 1 second tic for clock

Max_Wtr_Tmr DB2 (TON_SFB) Times maximum watering interval

Ons1_Bit M5.0 One-shot storage bit

Start_Pump M6.0 Start pump command from timer or operator

Override_Pls M6.1 Override pulse to reset counters, start pump

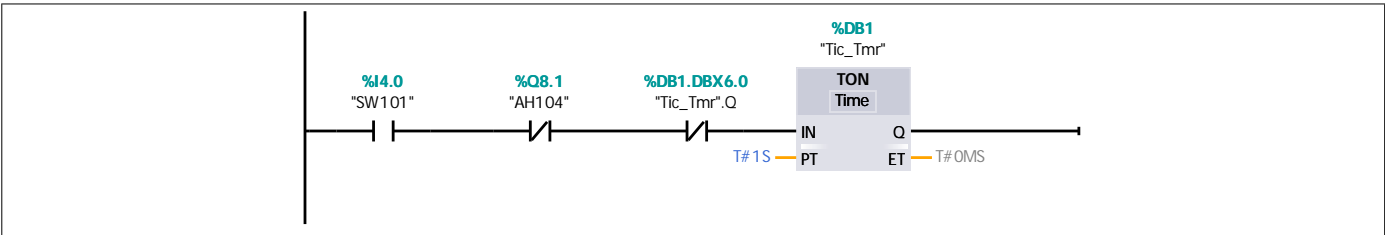


Network 2: Clock

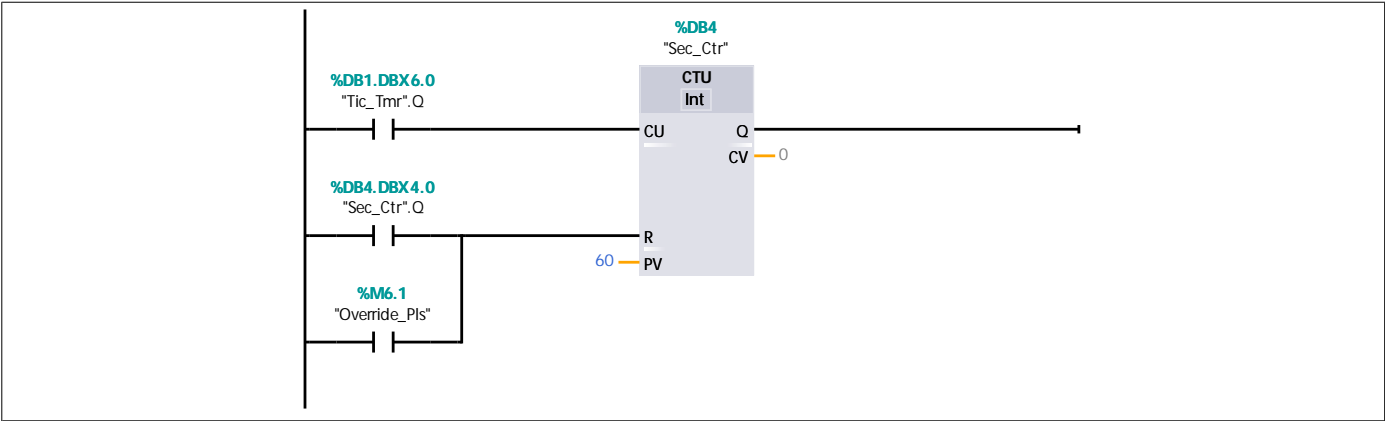
Generate a tick every second that is counted for seconds.

When 60 seconds counted, increment minutes.

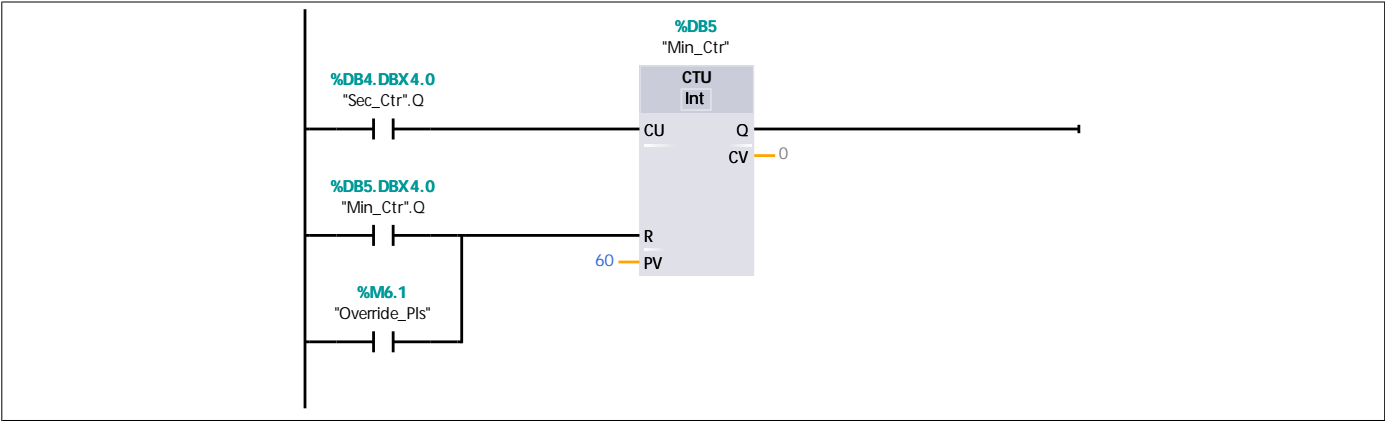
When 60 minutes counted, increment hours.



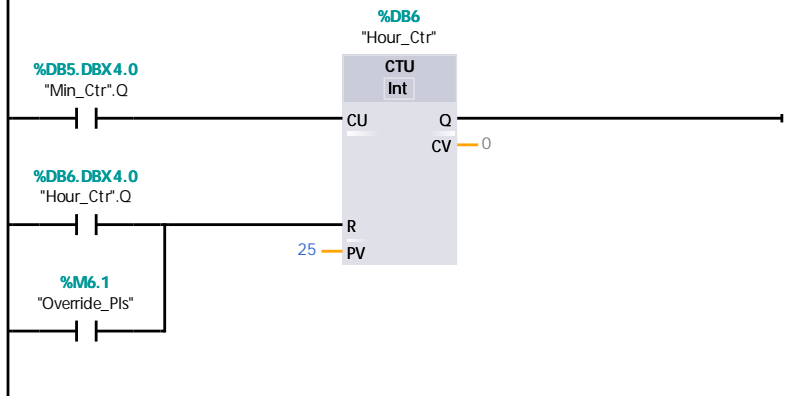
Network 3:



Network 4:

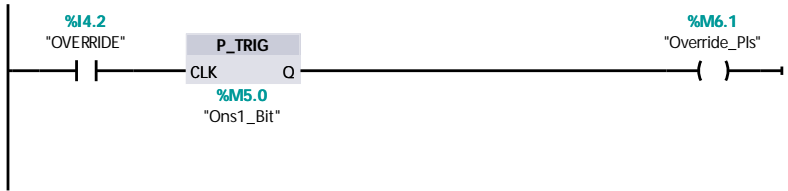


Network 5:



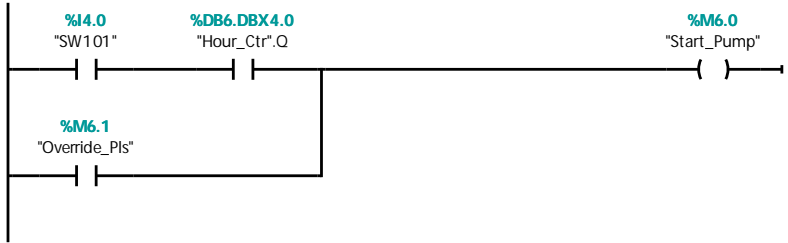
Network 6:

Generate override start and reset for counters on override positive transition.



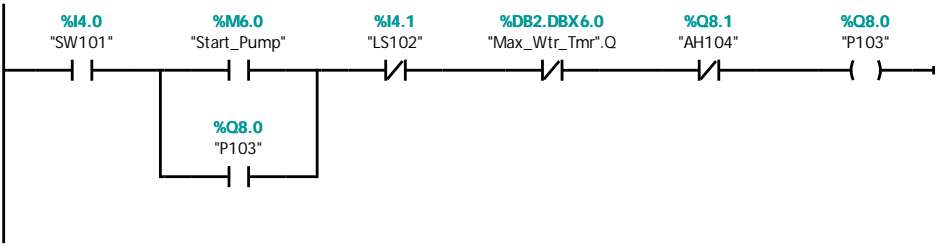
Network 7: Start pump command from clock or operator

Start pump command when reached 8 hours or operator override.

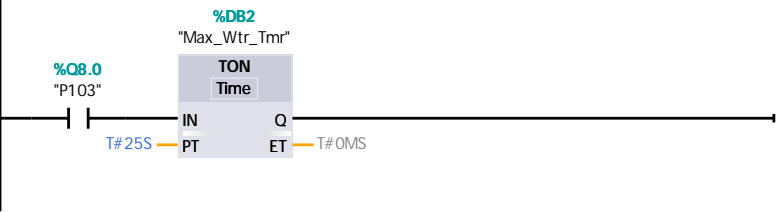


Network 8: Control P103 Pump

Turns off when level correct, maximum water time, or alarm.

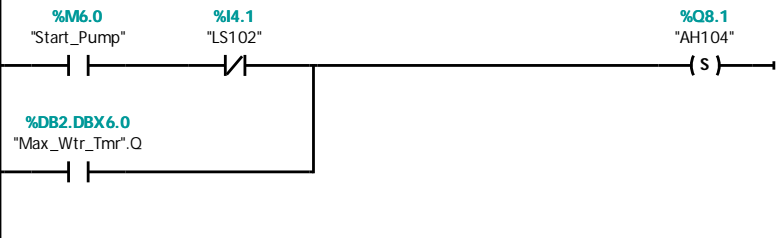


Network 9: Pump Timer



Network 10: Alarm

Alarm if level switch off when attempting to start pump or if maximum watering time reached.
Set/reset used instead of "sealing" so that only positive transition of override clears alarm. Alarm will reactivate if alarm conditions met.



Network 11: Alarm horn

