

## Main\_Program [OB1]

### Main\_Program Properties

#### General

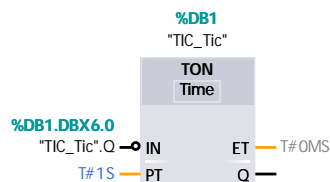
<b>Name</b>	Main_Program	<b>Number</b>	1	<b>Type</b>	OB
<b>Language</b>	FBD	<b>Numbering</b>	Manual		

#### Information

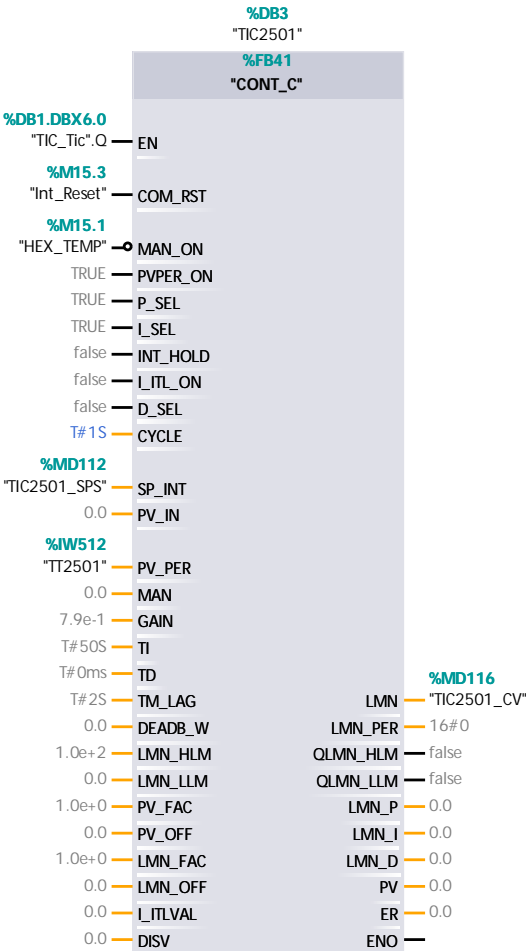
<b>Title</b>	"Main Program Sweep (Cycle)"	<b>Author</b>		<b>Comment</b>	Example 11.3 Heat Exchanger Cascade with Feedforward Control  Copyright (c) 2013 Dogwood Valley Press, LLC
<b>Family</b>		<b>Version</b>	0.1	<b>User-defined ID</b>	

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		

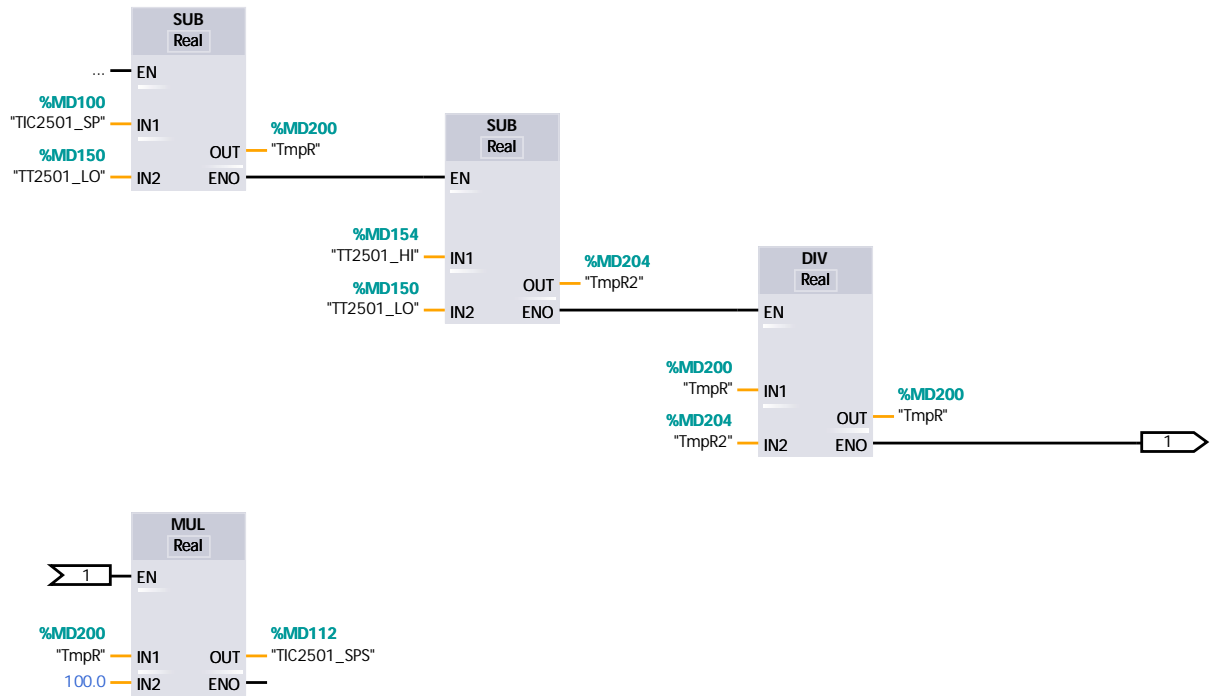
### Network 1: Timer for TIC



### Network 2: TIC2501 Heat Exchanger temp. master loop

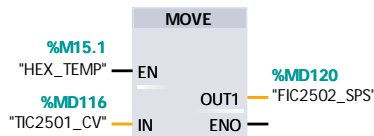


Network 3: Scale TIC operator setpoint to 0-100 required by PID



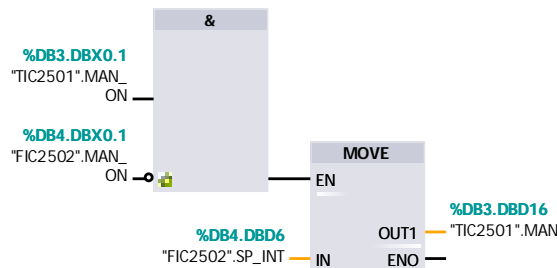
Network 4: Both loops auto

Copy TIC out to FIC SP.

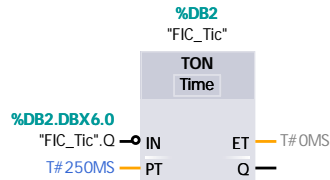


Network 5: When master in manual and slave in auto

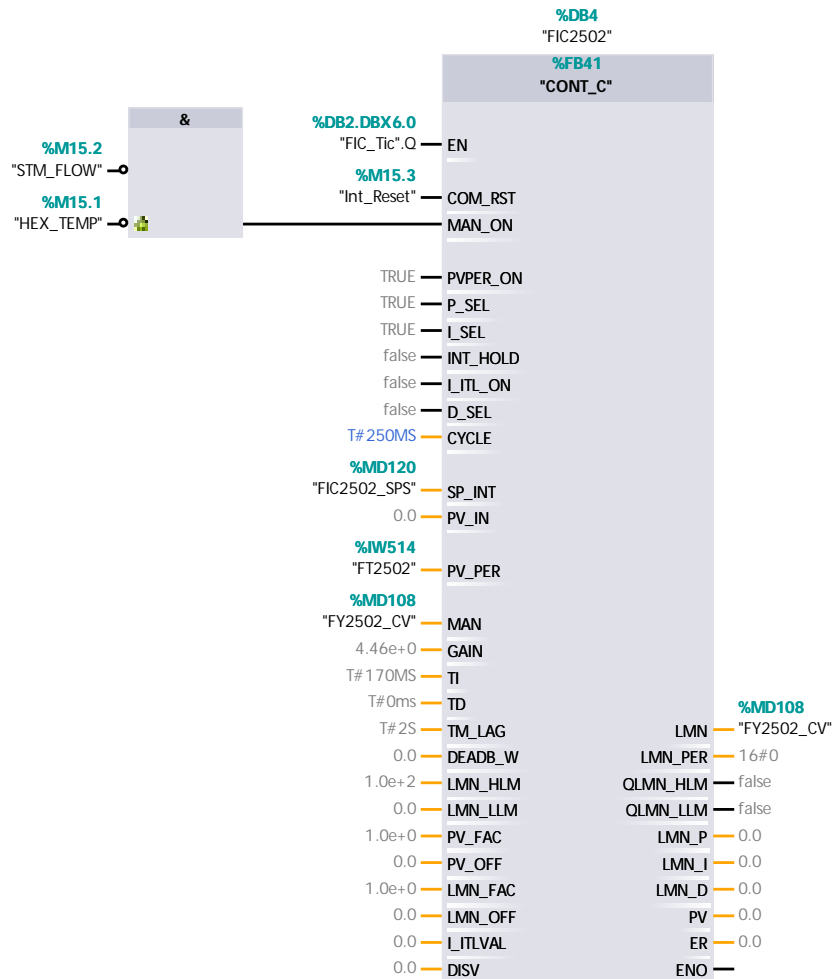
Copy flow SP to TIC manual out.



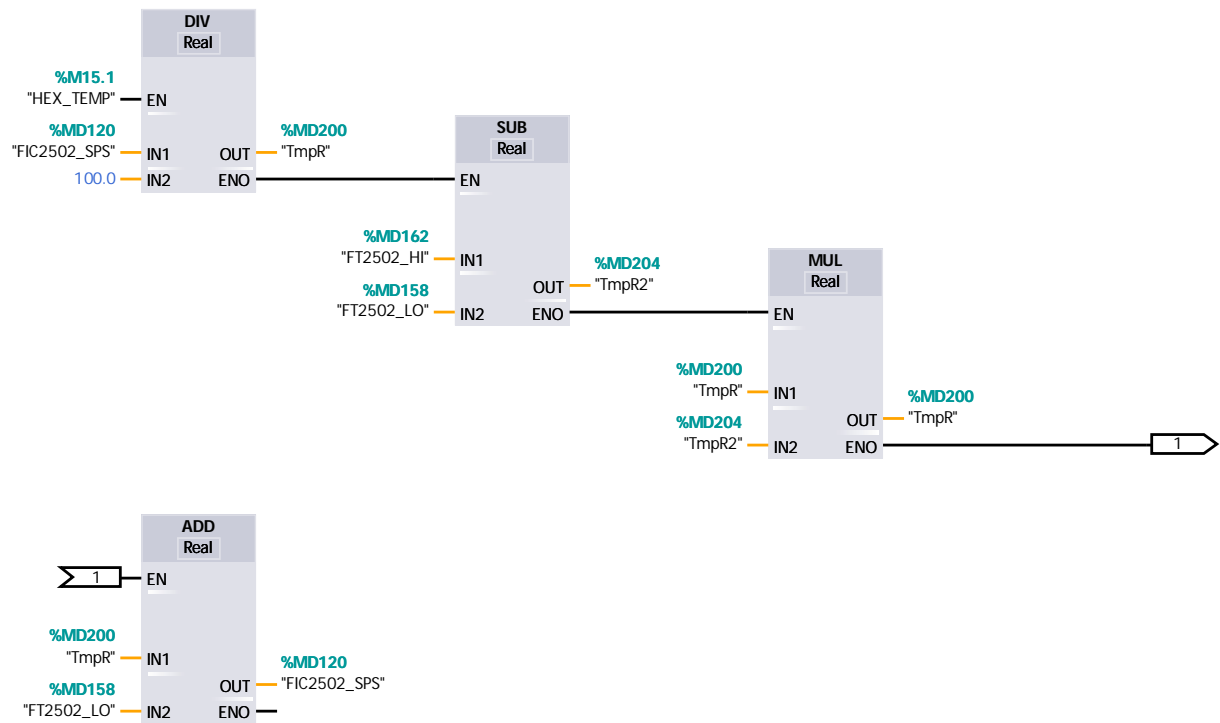
Network 6: FIC timer



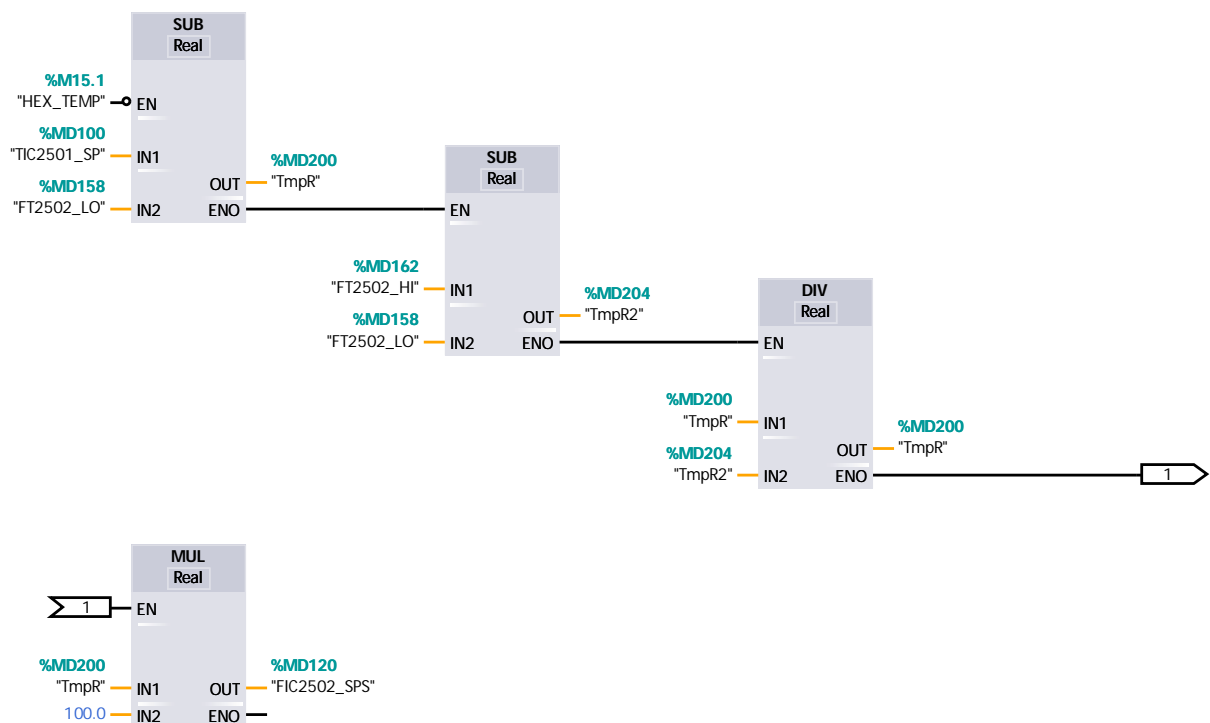
## Network 7: FIC2502 Slave flow loop



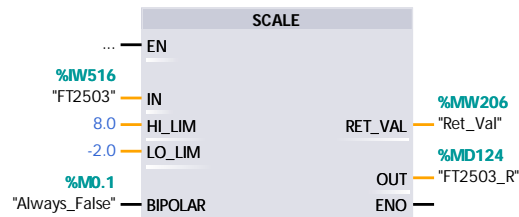
## Network 8: If controlling temperature, scale flow SP back to 0-8 gpm fange for operator.



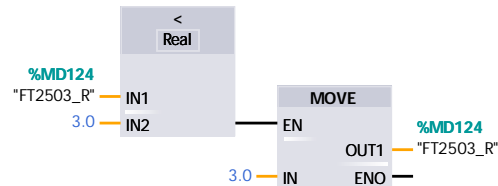
**Network 9: If not controlling temperature, scale operator SP to 0-100 for PID.**



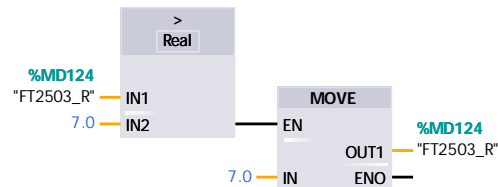
**Network 10: Convert feedforward measurement**



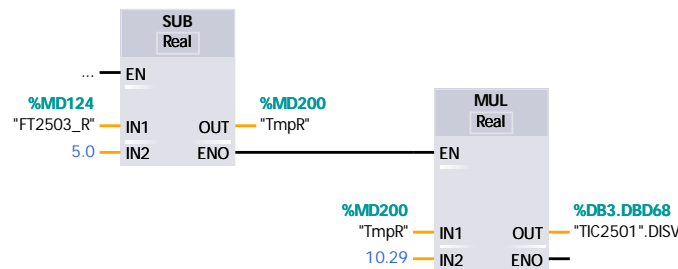
**Network 11: Limit valid range to 3 to 7 gpm**



**Network 12:**



**Network 13: Feedforward calculation**



**Network 14:**

