

Totally Integrated Automation Portal		
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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	Example 13.1 - Analog conversion with STL
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:

%FC1

"Test_Conv"

EN

ENO

Test_Conv [FC1]

Test_Conv Properties

General

Name	Test_Conv	Number	1	Type	FC
Language	STL	Numbering	Manual		

Information

Title	Example 13.1	Author		Comment	Analog Conversion Copyright (c) 2013 Dogwood Valley Press, LLC
Family		Version	0.1	User-defined ID	

Name	Data type	Default value
Input		
Output		
InOut		
Temp		
Constant		
▼ Return		
Test_Conv	Void	

Network 1:

```

0001 // Save transducer reading for min and max checks
0002     L    "TT573_MEAS"
0003     T    "TmpInt "
0004 // Check for greater than minimum
0005     L    5530
0006     <I
0007     JCN   TUpR
0008     L    5530
0009     T    "TmpInt "
0010 // Check for less than maximum
0011 TUpR: L    "TmpInt "
0012     L    27648
0013     >I
0014     JCN   DoCv
0015     L    27648
0016     T    "TmpInt "
0017 // Do conversion of transducer reading to temp. in degrees C
0018 // (INT-TO-REAL(TmpInt)-5530)/22118)*(700-90)+90
0019 DoCv: L    "TmpInt "
0020     ITD                                // Int to double
0021     DTR                                // double to real
0022     L    5530.0
0023     -R                                // subtract 5530
0024     L    22118.0
0025     /R                                // divide by 22118

```

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0026	T	"TmpR "	// Save for later multiply
0027	L	700.0	
0028	L	90.0	
0029	-R		// do 700 - 90
0030	L	"TmpR "	
0031	*R		// mult by result of 1st divide
0032	L	90.0	
0033	+R		// add 90
0034	T	"TT573_DEGC "	