

# TECHNICAL DOCUMENTATION

## Example 13.1

Project	Example 13.1
Designer	
Application	example_13_1.stu
Software Version	ControlExpert V15.0-SP1
Creation Date	6/16/2023 1:58:14 PM
Last Modification Date	6/16/2023 1:58:14 PM
Target PLC	BMX P34 1000 02.00CPU 340-10 Modbus

# MAST

**Specific properties**

Configuration	Cyclic
Task period configuration	0
Watchdog time configuration	250

# Conversion : [MAST]

```
120|      1|      10|      20|      30|      40|      50|      60|      70|      80|      90|      100|      110|
      134|
1  (* Example 13.1 *)
2  (* Copyright (c) 2011 Dogwood Valley Press, LLC *)
3
4          LD TT573_MEAS
5          ST TmpInt
6  (* Ensure value not below zero *)
7          LT 0
8          JMPCN TstUpr
9          LD 0
10         ST TmpInt
11  (* Ensure value not above 10000 *)
12  TstUpr: LD TmpInt
13         GT 10000
14         JMPCN DoCvrt
15         LD 10000
16         ST TmpInt
17  (* Convert to degrees C *)
18  (* INT_TO_REAL(TmpInt)/10000)*(700-90)+90 *)
19  DoCvrt: LD 700.0
20         SUB 90.0
21         ST TmpReal
22         LD TmpInt
23         INT_TO_REAL
24         DIV 10000.0
25         MUL TmpReal
26         ADD 90.0
27         ST TT573_DEGC
```

# FAST

**Specific properties**

Configuration	Periodic
Task period configuration	5
Watchdog time configuration	100

# Cross References

## Application:

### Variables or FB instances

Object	Referred into	Location	Usage
TmpInt	Conversion : [MAST]	(l 5, c: 7)	W
		(l 10, c: 7)	W
		(l 12, c: 13)	R
		(l 16, c: 7)	W
		(l 22, c: 7)	R
TmpReal	Conversion : [MAST]	(l 21, c: 7)	W
		(l 25, c: 8)	R
TT573_DEGC	Conversion : [MAST]	(l 27, c: 7)	W
TT573_MEAS	Conversion : [MAST]	(l 4, c: 6)	R

### EF objects

Object	Referred into	Location	Usage
int_to_real	Conversion : [MAST]	(l 23, c: 10)	FC

# Cross References

New\_DFB:

Variables or FB instances

Object	Referred into	Location	Usage
--------	---------------	----------	-------