



Process and Temperature Control Library

This new library for Control FPWIN Pro (Vers. 5.2) offers versatile, user-friendly and easily understandable functions, which help to reduce programming time for typical industrial tasks like PID control, 2- and 3- point control, limit control and averaging.

A new software concept using functions instead of function blocks allows program memory to be significantly reduced, especially when several control loops have to be programmed within one PLC.

Highlights:

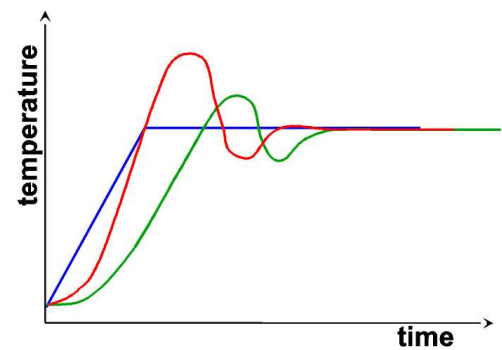
- Comfortable PID controller FB with analogue and PWM output
- Support of both heating and cooling output
- Ability to control multiple temperature zones
- Comfortable scaling functions for control output (manipulated value)
- Sensor break detection with predefined behaviour

The library contains functions for PID control, transfer elements for special treatment of the input and output signals, alarm functions, signal generation functions for tests and simulations and for generation of special set value profiles, and measurement functions for analysis.

New PID function: code saving, fast and user-friendly

ProcessControl_PID_INT	
bRun	iMv Out
iProcessValue	iProcessValue
iSetPointValue	iSetPointValue
rKp	rKp
tTI	tTI
tTd	tTd
T#100ms	tTs
.0	iDisturbance
10000	iMv UpperLimit
-10000	iMv LowerLimit
FALSE	bForwardCooling
FALSE	bPDMODE
.0	iManualMv Out
mPID	Memory

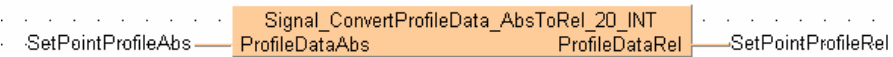
Optimal tuning reduces overshoot



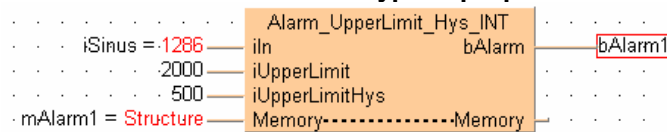
After installation, these items will appear in FPWIN Pro's navigator:



The sample libraries are a collection of example programmes packed in open functions with useful special functions e.g. for data arrays with variable size (for FPWIN Pro Ver. 5.2.3, released from Feb. 2007).

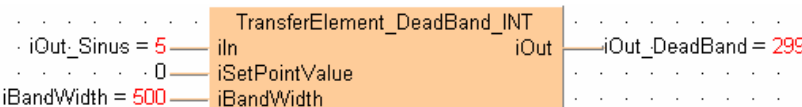


Alarm functions for different typical purposes



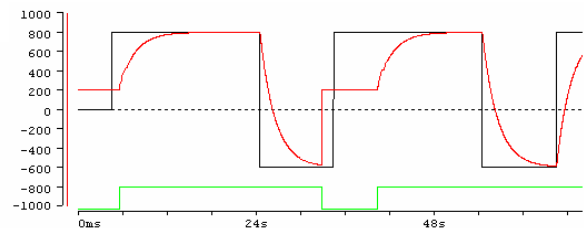
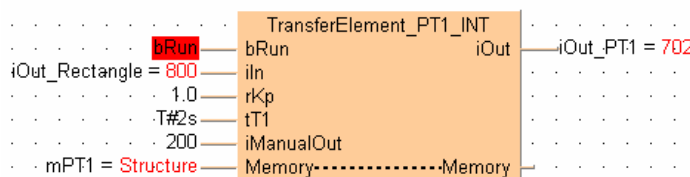
Alarm function with upper limit and hysteresis.

Transfer elements make the typical pre-processing of process data easy:

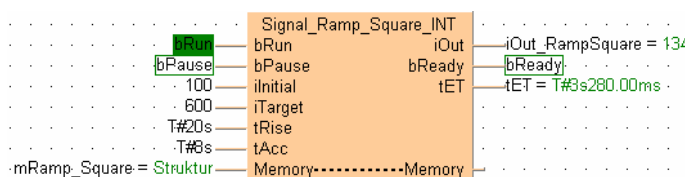


Dead band for filtering process values to avoid toggling the PID controls's output.

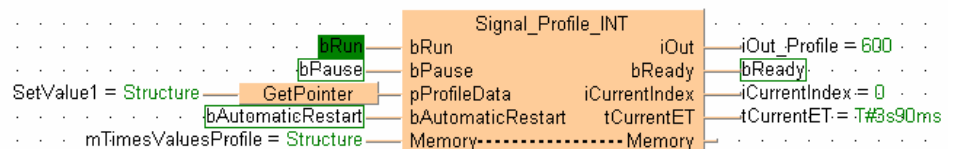
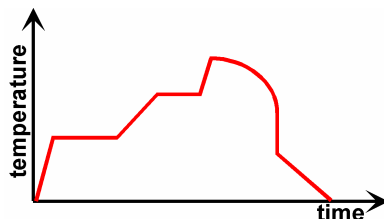
Transfer element for 1st order delay proportional:



Various signal functions, such as signal ramp provide simulations, which eliminates the need for extensive, time-consuming tests.



Example for a profile of set values.



Order information:

Item:

Product-No.:

Process- and Temperature Control Library (English/German)

NCL-PTC-LIBD-M