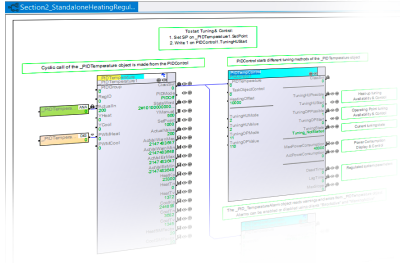


PIDRegulator

This package contains different variations of a PID controller. In addition to temperature regulation, the creation of a self-defined controller is shown, as well as using multiple controllers in a group with set value control. Controllers with multiple control parameter setting variants can be selected to find the optimal parameters for the system to regulate. Example classes for evaluating alarms or warning are included.

The ProgManual is a guide for quickly and easily implementing the controller. For more details, see the class documentation.



FEATURES

- PID Controller with various operating modes (automatic, semi-automatic, manual)
- Interactive and ISA PID models are available
- Intelligent Anti-Wind-Up and Anti-Starving mechanisms
- State space step response setting methods (Ziegler Nichols, Takahashi, Cohen Coon, Chien-Hrones-Reswick)
- Frequency analysis methods (Ziegler Nichols, Relay Feedback, Biased Relay Feedback)
- Grouping function with set value control
- Power adaptation with simultaneously activated heating and cooling control

SOFTWARE VERSIONS

Design environment	LASAL CLASS 2
Operating system	RTOS, Salamander

SYSTEM REQUIREMENTS

Performance Index



Visualization Memory Requirements

Code Size [KB]	211
User Heap [KB]	10
LSE Project Size [KB]	4569
SRAM [bytes]	8

COMPONENTS

Library PIDRegulator

- Contains all classes of the package for importing or updating existing applications

Add-On

- TemperatureController

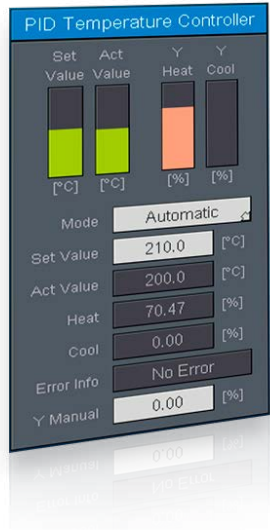
Application Demo

- Shows the use of package classes on an example

Documentation

- All class documentation, as well as user and program manual where required

TemperatureController



The TemperatureController Add-On includes basic functions for temperature control. Current values can be displayed, base parameters configured and controlled according to the standard PID regulator principle. This temperature controller can be used for both cooling and heating. Through the interplay between the two actions, a good control curve can be achieved.

This Add-On contains the program elements for the LASAL CLASS project, as well as the LASAL SCREEN projects for multiple resolutions.

FEATURES

- Display of the current temperature value
- Base parameter configuration
- LASAL CLASS network with standard PID controller

SOFTWARE VERSIONS

Design environment	LASAL CLASS 2, LASAL SCREEN, LASAL Machine Manager
Operating system	RTOS, Salamander

SYSTEM REQUIREMENTS

Performance Index	A	B	C	D	E
Visualization Memory Requirements					
User Heap [KB]	33				
LSE Project Size [KB]	14				
SRAM [bytes]	0				

AVAILABLE RESOLUTIONS [px]

800x480, 800x600, 800x1280, 1024x768, 1280x800, 1366x768

