



Compact Trainer: Process Closed Loop Control (E6.3.3.1)

E6.3.3 PROCESS ENGINEERING

E6.3.3.1 Compact Trainer: Process Closed Loop Control

| Cat. No. | Description | E6.3.3.1 |
|-----------|--|----------|
| 734 064N | PID digital controller Net | 1 |
| 734 02 | Reference variable generator | 1 |
| 734 121 | Digital Temperature Controlled System | 1 |
| 734 265 | Digital Liquid Controlled System | 1 |
| 734 111 | Set of machines 10 W | 1 |
| 666 630 | Blower | 1 |
| 666 632 | Windmill type anemometer | 1 |
| 734 011 | Two position controller | 1 |
| 524 016S2 | Profi-CASSY Starter 2 | 1 |
| 726 09 | Panel frame T130, two-level | 1 |
| 726 86 | DC-Power Supply \pm 15 V/3 A | 1 |
| 500 59 | Safety bridging plugs, black, set of 10 | 3 |
| 500 592 | Safety bridging plugs with tap, black, set of 10 | 1 |
| 500 641 | Safety connecting lead, 100 cm, red | 3 |
| 500 642 | Safety connecting lead, 100 cm, blue | 3 |
| 500 644 | Safety connecting lead, 100 cm, black | 3 |
| 726 10 | Panel frame T150, two-level | 1* |
| 734 482 | WinFACT COM3LAB / CASSY Edition | 1* |
| | additionally required: 1 PC with Windows 7/8/10 | |

* additionally recommended

Process Closed Loop Control

Large, intricate processes are often broken down into sub-processes in the interest of clarity. This facilitates the step-by-step commissioning of production facilities and efficient error resolution when a breakdown occurs. The setup is comprised of various different sub-processes.

Each controlled system on its own is perfect for the execution of numerous experiments. At the same time the module experiment design featuring experiment plates allows for easy combination of sub-processes. If you integrate additional electronic transfer components (from E 6.3.4), then additional dead time and time constants arise that influence the entire process.

Following equipments could be connected:

- Temperature regulations
- Fill level control
- Flow controlling
- Current control
- Speed control

Experiments are operated and evaluated with CASSY Lab 2 and WinFACT.