

**EXPANSION MODULE EM-**TRF-USV



EASYLAB CONTROLLER TCU3



**EASYLAB ADAPTER MODULE TAM** 

# **EM-TRF-USV**

# FOR AN UNINTERRUPTED POWER SUPPLY OF THE EASYLAB CONTROLLER AND ITS ADAPTER MODULE TAM AS WELL AS THE TROX UNIVERSAL CONTROLLER.

Extension module enables direct connection to a 230 V AC mains supply

- Double connection terminals for supply voltage 230 V AC
  Electric plug connection to the main PCB
  Extension module is integrated into the housing of the EASYLAB or TROX UNIVERSAL controller
- Uninterrupted power supply (UPS) for the connected modules
  Integral battery charging electronics with charge status indicator
  Signalling of a power failure at the control units
- Controller performance in case of a power failure is definable

General information

- Enables direct connection of the TCU3 controller board to a 230 V AC mains supply without additional power supply units for the following components:
- EASYLAB controller and its adapter module TAM
- TROX UNIVERSAL controller
- Secure power supply through emergency power accumulator
- Control or defined behaviour of the control damper and/or alarm signalling in case of mains failure
- Power supply of the TCU3 including connected modules, actuators and control units
- Suitable for factory installation or retrofitting

#### **Special features**

- Ready-to-install and matched to the fixing points in the basic housing
- Double connection terminals for supply voltage 230 V AC
- Simple electrical connection of expansion module and controller board TCU3 motherboard through connector plug
- Simple wiring of switchable fume cupboard lighting in conjunction with the EM-LIGHT extension module for EASYLAB fume cupboard controller
- Intelligent charge control with trickle charging, deep discharge protection, and reverse polarity protection
- Operating state indicator light
- Configurable control behaviour in the event of a power failure
- In the event of a power failure: configurable alarm transmission and visual signalling on the control panel, if present

### **Parts and characteristics**

- Mains transformer 230 V AC (primary), 24 V AC (secondary)
- Intelligent charge control with trickle charging, deep discharge protection, and reverse polarity protection Operating state indicator light
- Board connector plug for connection to the TCU3 controller board  $\,$
- Safety latch for controller housing TCU3

#### **Construction features**

- Dimensions and fixing suitable for the controller housing of an EASYLAB or TROX UNIVERSAL controller or EASYLAB TAM
- Fixing with screws
- Double connection terminals for easy wiring of the supply voltage 230 V AC

## Commissioning

- . When ordering an air terminal unit with EASYLAB, TROX UNIVERSAL controller or EASYLAB TAM specifying order option U: EM-TRF-USV installed, connected and ready for operation
- For retrofitting: installation required

### Important:

After installation of the EM-TRF-USV, the TCU3 controller board must no longer be supplied with 24 V

### **Useful additions**

• EasyConnect: Configuration software for commissioning and diagnostics of the UPS function

## Supply package

When ordering an air terminal unit or TAM for the first time:

- Extension module EM-TRF-USV installed in TCU3
- Emergency power accumulator mounted and connected to the control unit or enclosed with the TAM

### For retrofitting:

- Extension module EM-TRF-USV
- Emergency power accumulator must be ordered separately