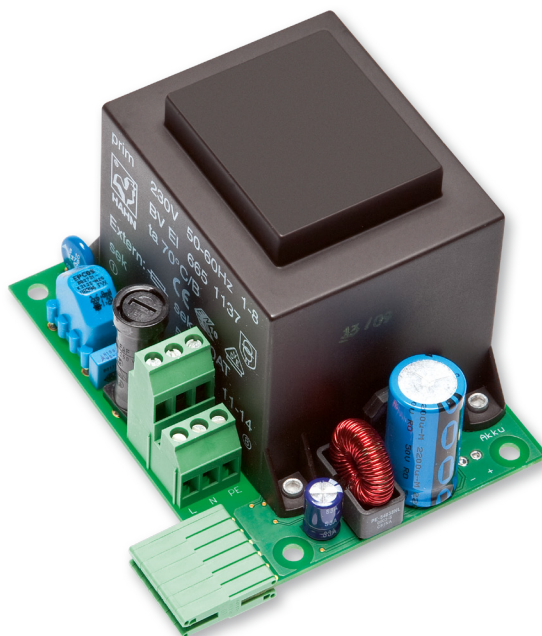


# Expansion modules

## Type EM-TRF



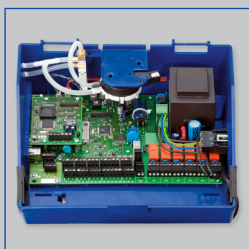
### For the connection of EASYLAB to the 230 V mains

Expansion module for the direct connection of EASYLAB controllers Type TCU3 and adapter modules Type TAM to the 230 V mains

- Double-stack terminal blocks for 230 V supply voltage connection
- Electric plug connection to the main PCB
- The expansion module is fitted into the casing with the EASYLAB base component



EASYLAB adapter  
module TAM



EASYLAB controller  
TCU3

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### Application

#### Application

- Expansion module Type EM-TRF for the EASYLAB system
  - For the connection of EASYLAB base components (controller TCU3 or adapter module TAM) to the 230 V AC supply voltage (mains)
  - Power supply for the base component and the connected modules
  - Factory mounted or for retrofitting into the EASYLAB base component casing
- Ready for installation, can be easily connected to the main PCB
  - Double-stack terminal blocks for 230 V AC supply voltage connection
  - Simple electrical connection of expansion module and EASYLAB main PCB using a connection plug
  - Simple wiring of switch-operated fume cupboard lighting in combination with the EM-LIGHT expansion module

#### Special characteristics

### Description

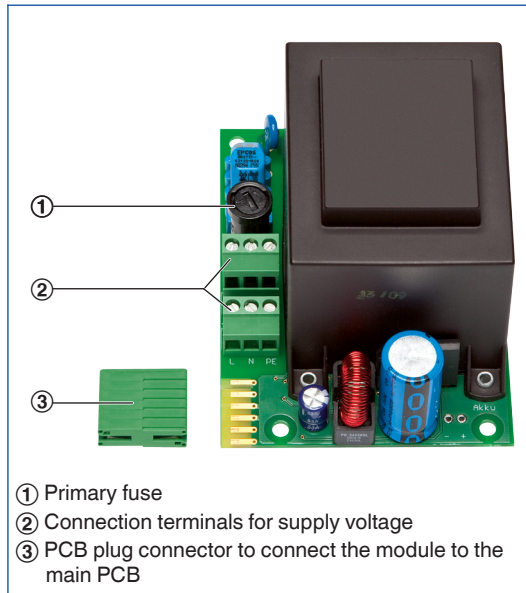
#### Parts and characteristics

- Mains transformer 230 V AC (primary), 24 V AC (secondary)
  - PCB plug connector to connect the module to the EASYLAB main PCB
- to the EASYLAB main PCB and the casing
  - Fixing with screws
  - Double-stack terminal blocks for simply 230 V supply voltage connection

#### Construction features

- PCB dimensions and fixing points correspond

EM-TRF



<b>Supply voltage</b>	230 V AC $\pm$ 10 %, 50/60 Hz
<b>Power consumption</b>	up to 40 VA for a controller with all expansion modules; up to 35 VA for a fume cupboard controller with control panel; up to 33 VA for a room controller with control panel; up to 29 VA for a room controller without control panel; up to 9 VA for an EASYLAB adapter module TAM
<b>Primary fuse</b>	50 mA slow blow, 250 V
<b>Double-stack terminal blocks</b>	Cable cross-section up to 2.5 mm <sup>2</sup>
<b>Operating temperature</b>	0 – 50 °C
<b>IEC protection class</b>	I (protective earth)
<b>Protection level</b>	IP 20
<b>EC conformity</b>	EMC to 2004/108/EU, low voltage to 2006/95/EU
<b>Weight</b>	1.3 kg

Expansion module for the EASYLAB base component (controller TCU3 or adapter module TAM) that can be directly connected to a 230 V AC supply voltage. The expansion module includes a transformer whose secondary voltage (24 V) is equal to the supply voltage for the controller and the expansion modules connected to it.

### Special characteristics

- Ready for installation, can be easily connected to the main PCB
- Double-stack terminal blocks for 230 V AC supply voltage connection
- Simple electrical connection of expansion module and EASYLAB main PCB using a connection plug

- Simple wiring of switch-operated fume cupboard lighting in combination with the EM-LIGHT expansion module

### Technical data

- Supply voltage: 230 V AC  $\pm$  10 %, 50/60 Hz
- Power consumption: up to 40 VA for a controller with all expansion modules; up to 35 VA for a fume cupboard controller with control panel; up to 33 VA for a room controller with control panel; up to 29 VA for a room controller without control panel; up to 9 VA for an EASYLAB adapter module TAM
- Double-stack terminal blocks: Cable cross-section up to 2.5 mm<sup>2</sup>
- Protection level: IP 20

- Any attachments are to be defined with the order code of the VAV terminal unit.
- Retrofit possible

**Bestellschlüsseldetail Anbaugruppe ELAB EASYLAB Regler TCU3 oder TAM**

**ELAB / ... / T... / ...**

**Expansion module EM-TRF for retrofit**

**EM-TRF**

**Installation and commissioning**

- As attachment for the EASYLAB base component: factory mounted
- For retrofitting: Mount the expansion module into the base casing
- The EASYLAB controller TCU3 or the adapter module TAM identifies the expansion module automatically