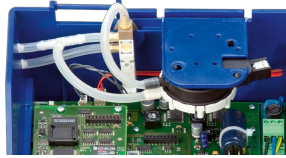




EXPANSION MODULE EM-AUTOZERO



EASYLAB CONTROLLER  
INCLUDING EM-AUTOZERO

## EM-AUTOZERO

### AUTOMATIC ZERO POINT CORRECTION FOR EASYLAB

Expansion module for EASYLAB controllers that offers automatic zero point correction for long-term stable volume flow rate measurement and reduced maintenance

- Particularly recommended for the volume flow or differential pressure measurement in sensitive areas
- EASYLAB controller automatically identifies and uses the expansion module
- The expansion module is fitted into the casing with the EASYLAB base component
- Easy retrofitting
- No additional configuration effort

## Application



### Application

- Expansion module Type EM-AUTOZERO for the EASYLAB system
- EM-AUTOZERO, automatic zero point correction for long-term stable volume flow rate measurement and reduced maintenance.
- Can be used with fume cupboard, supply air, extract air or differential pressure controller EASYLAB TCU3
- For use in laboratories, clean rooms in the pharmaceutical and semiconductor industries, operating theatres, intensive care units, and offices with very demanding control requirements

### Special characteristics

- Long-term stable volume flow rate measurement and reduced maintenance
- Automatic zero point correction as soon as the supply voltage is applied
- Cyclical zero point correction during operation (every 8 hours)
- No additional configuration effort
- The EASYLAB controller identifies the expansion module automatically

## Description



### Parts and characteristics

- Solenoid valve
- 2-pole plug-in connection cable for the connection to the EASYLAB main PCB

- Tubes for the connection of the static differential pressure transducer

#### Construction features

- Dimensions and fixing correspond to the EASYLAB casing
- The expansion module is inserted into a recess of the holder for the differential pressure transducer (no tools required)
- Integration with the tube connection between the static differential pressure transducer and the differential pressure sensor
- Plug ensures easy connection to the EASYLAB controller

## INFORMAȚII TEHNICE

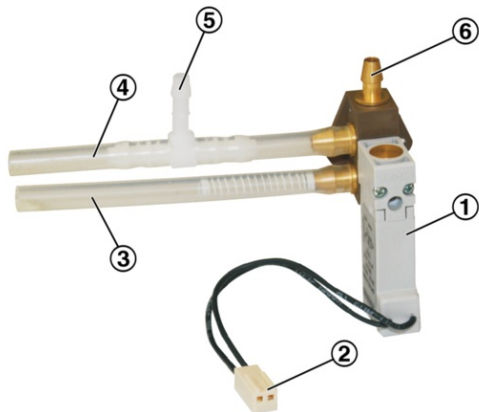
The solenoid valve of the EM-AUTOZERO expansion module is integrated with the tube connection between the static differential pressure transducer and the differential pressure sensor of the VAV terminal unit.

The TCU3 controller provides the control input signal for cyclical zero point corrections.

For this purpose, the measuring tubes of the differential pressure transducer are temporarily short circuited, then the zero voltage is measured.

This measured value is used as a correction value for the volume flow rate measurement until the next zero point correction.

#### EM-AUTOZERO



- ① Solenoid valve
- ② Plug
- ③ Differential pressure sensor - plus connection
- ④ Differential pressure sensor - minus connection
- ⑤ Pressure transducer - minus connection
- ⑥ Pressure transducer - plus connection

<b>Supply voltage</b>	24 V DC from the controller TCU3
<b>Power rating</b>	1.8 W
<b>Maximum pressure</b>	10 bar
<b>Operating temperature</b>	0 – 50 °C
<b>IEC protection class</b>	III (protective extra-low voltage)
<b>Protection level</b>	IP 20
<b>EC conformity</b>	EMC according to 2004/108/EC
<b>Weight</b>	0.100 kg

Expansion module for the EASYLAB controller TCU3, used for automatic zero point correction.

Long-term stable volume flow rate measurement and reduced maintenance.

The expansion module comprises a solenoid valve, the connection cable and connection tubes.

#### Special characteristics

- Long-term stable volume flow rate measurement and reduced maintenance
- Automatic zero point correction as soon as the supply voltage is applied
- Cyclical zero point correction during operation (every 8 hours)
- No additional configuration effort
- The EASYLAB controller identifies the expansion module automatically

#### Technical data

- Solenoid valve
- Supply voltage 24 V DC from the controller TCU3
- Power rating 1.8 W
- Maximum pressure 10 bar
- Protection level IP 20

Order code detail for control component  
ELAB (TCU3) or TAM

ELAB / ...Z... / ...

Expansion module EM-AUTOZERO for retrofit

EM – AUTOZERO