



## ERE temperature controller

### Features

- Sensor input, intrinsically safe
- Temperature range from 0 to +450 °C
- Sensor fault and short circuit monitoring
- Low temperature alarm

### Description

The intrinsically safe device ERE monitor temperatures between 0 and +450 °C from heaters and other temperature dependant equipment. The ERE is a two-position controller of intrinsically safe construction. Because of the intrinsically safe Pt100 inputs, commercially available Pt100 sensors can be utilised.

### Function

Using the potentiometer on the front of the housing, the temperature setting can be set between 0 and +450 °C.

Temperatures below -100 °C are identified by the device as an error. A further potentiometer is used for line balancing when a 2-wire Pt100 is connected. For sensor temperatures above the target value, the ERE switches the relay off automatically. If the temperature is then fallen below, the relay will be switched on again.

### Additional products

Pt100 M, media-protected  
Type 03-8140-00..  
Type 03-9040-000.

### Explosion protection

#### Ex protection type

ⒺII (2)G [EEx ib] IIC

#### Certification

TÜV 00 ATEX 1627

#### Min. ambient temperature

-20 °C

#### Max. ambient temperature

+50 °C

### Technical data

#### Protection class

IP 20

#### Measuring input

2-/3-wire Pt100

#### Measuring range Pt100

0 °C up to +450 °C

#### Switching hysteresis

1.5 K

#### Switch point precision

+/-1 K

#### Low temperature alarm (ERE)

5 K below switch point

#### Weight

360 g

#### Dimensions (width x length x height)

55 mm x 75 mm x 110 mm

### Electrical data

#### Nominal voltage

AC 230 V, 50/60 Hz

#### Output

Switch current AC 3 A, cos φ 0.7

Voltage AC 250 V

Switch current DC 0.1 A

Voltage DC 24 V

#### Alarm relay

Switch current AC 3 A, cos φ 0.7

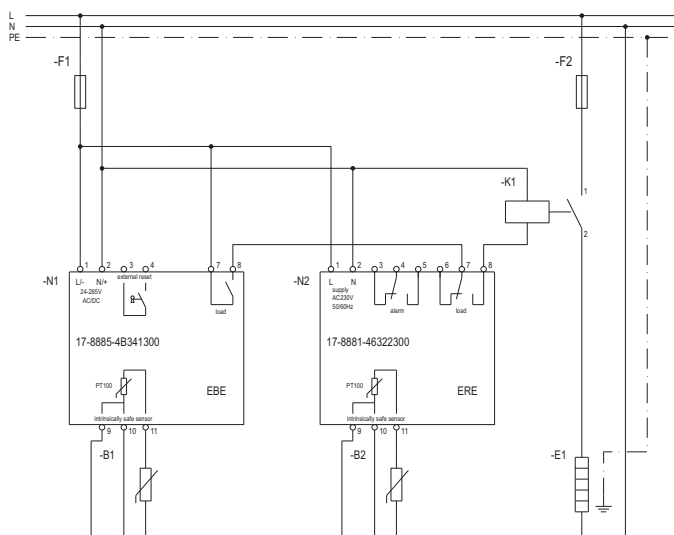
#### Contact type

1 change-over contact

#### Terminals

2.5 mm<sup>2</sup>

### Circuit diagram



**Order no.**  
**17-8881-4632/2300**

Technical data subject to change without notice.