

## Product information

# Resistance Transmitter PMT50Ex-2



- **Signal conditioning – linearisation – output characteristic transformation**
- **Input for resistance and Potentiometer**
- **Measuring range configurable**
- **Linearisation or transformation of output characteristic via 32 base-points programmable**
- **Automatic input fault detection**

### Characteristics

The programmable Temperature Transmitter PMT50 operates with RTD and thermocouple input signals. The device convert the signal to analog output 0/4..20 mA; 0/2..10 V DC. The device offers a linearisation function for any sensor curves and a simulator function. The integrated transmitter supply 24 V DC max. 30 mA allows the feeding of 2-and 3-wire sensors. 4 alarm outputs for monitoring and controlling are available.

### Technical data

#### Power supply

Supply voltage : 230 V AC  $\pm 10\%$   
 115 V AC  $\pm 10\%$   
 24 V DC  $\pm 15\%$   
 $U_m = 253\text{ V AC}$  or  $125\text{ V DC}$

Power consumption :  $< 5\text{ VA}$   
 Operating temperature :  $-10..+55\text{ }^\circ\text{C}$   
 CE-conformity : CE, 2014/34/EU

#### Explosion protection

Marking : II (1) G [Ex ia] IIC/IIB or  
 II (1) D [Ex iaD]

**Input** : Resistance 0..20 k $\Omega$   
 Potentiometer min. 1 k $\Omega$ ..max. 100 k $\Omega$

Fault detection : broken line (resistance, only)  
 Accuracy :  $< 0.2\%$ ,  $\pm 1$  Digit

#### Outputs

Alarm outputs : relay SPDT  
 $< 250\text{ V AC}$   $< 250\text{ VA}$   $< 2\text{ A}$ ;  $\cos\Phi \geq 0.3$   
 $< 300\text{ V DC}$   $< 40\text{ W}$   $< 2\text{ A}$

Analog output : 0/4..20 mA burden  $\leq 500\ \Omega$   
 0/2..10 V burden  $> 500\ \Omega$ , isolated  
 output changes automatically  
 (burden depending)

- Accuracy : 0.2 %; TK 0.01 % / K

Fault function : Broken line or short circuit detection  
 $\rightarrow$  analog output 0 mA,  $< 3.6\text{ mA}$  or  $> 21.5\text{ mA}$   
 $\rightarrow$  alarm relays min. or max.

#### Display

: graphic-LCD-display, 128 x 64 Pixel  
 with white LCD backlight

#### Case

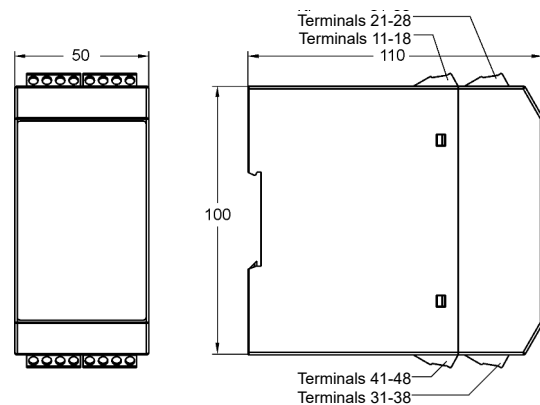
: Polyamide (PA) 6.6, UL94V-0  
 TS35

Weight : approx. 450 g

Connection : screw terminals 0.14..2.5 mm<sup>2</sup>  
 AWG 26..AWG14

Protection class : case IP30, terminals IP20 acc. to  
 BGV A3

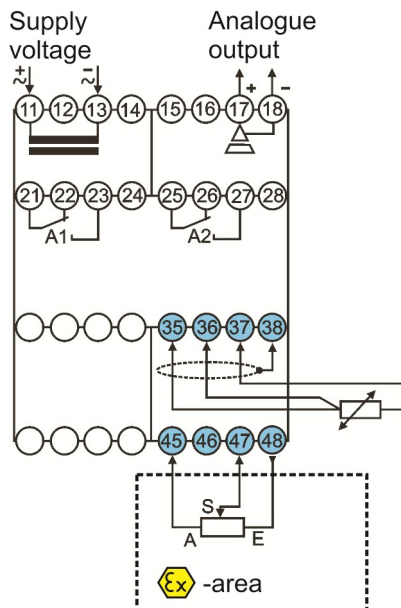
### Dimensions



## Product information

### Connection diagram

**Device type PMT50Ex-2**  
 Resistance, Potentiometer



### Ordering code

PMT50Ex -  1. -  2. -  3. -  4. -  5. -  6.

<b>1. Device type/input</b>	
2	Resistance in the range 0..20 kΩ Poti 1 kΩ..100 kΩ
<b>2. Analog output</b>	
AO	0/4..20 mA, 0/2..10 V DC isolated
<b>3. Alarm outputs</b>	
00	not installed
2R	2 relay outputs, A1, A2 SPDT
<b>4. Alarm outputs</b>	
00	not installed
<b>5. Supply voltage</b>	
0	230 V AC, ± 10 % 50-60 Hz
1	115 V AC, ± 10 % 50-60 Hz
5	24 V DC, ± 15 %
<b>6. Options</b>	
00	without option