

Standard Signal Transmitter PMT50-1



PROFIBUS

- **Signal conditioning – Linearisation – Characteristic adjustment**
- **Input for standard signals 0/2..10 V and 0/4..20 mA**
- **Measuring range programmable**
- **Linearisation and characteristic adjustment programmable via 32 bases**
- **Automatic input fault detection**

Characteristics

The programmable universal transmitter PMT50 operates with analog input signals. The device convert input signals to analog output 0/4..20 mA; 0/2..10 V DC. Optional a serial interface is available. 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 transmitter. 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 $\pm 15\%$

Power consumption : < 5 VA

Operating temperature : -10..+55 °C

CE – conformity : EN 61326-1:2013; EN 60664-1:2007

Input : 0/2..10 V, 0/4..20 mA

Ri : current 10 Ω

voltage 10 k Ω

Accuracy : < 0.1 %, ± 1 Digit

Transmitter supply : 24 V DC max. 30 mA

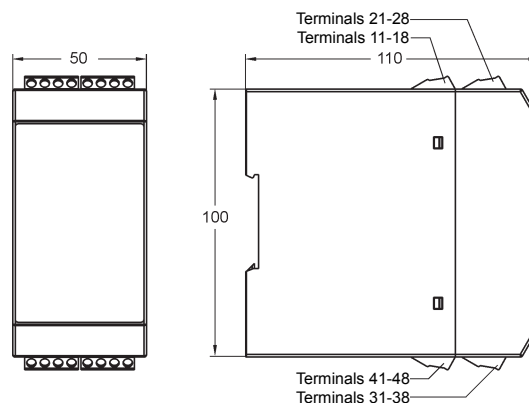
Fault detection : break of wire (only 4 mA / 2 V)

Outputs

Alarm outputs : relay SPDT
< 250 V AC < 250 VA < 2 A $\cos \varphi \geq 0,3$
< 300 V DC < 40 W < 2 A

Analog output	: 0/4..20 mA burden $\leq 500 \Omega$, 0/2..10 V burden > 500 Ω , isolated output burden depending
Fault indication	: break of wire in the measuring circuit → analog output programmable 0 mA, < 3.6 mA or > 21.5 mA → alarm relay(s) min. or max. programmable
Bus system	
Modbus	: RS485, RTU or ASCII max. 38400 Baud
Profibus	: Profibus DP
Connection	: 9pol. D-SUB connector in the front
Display	: graphic-LCD-Display, 128 x 64 Pixel, with white LCD backlight
Case	: Polyamide (PA) 6.6 , UL94V-0 acc. to DIN EN 60715, DIN rail TS35
Weight	: approx. 450 g
Connection	: screw terminals 0.14..2.5 mm ² AWG 26..AWG14
Protection class	: case IP30, terminals IP20 acc. to BGV A3

Dimensions

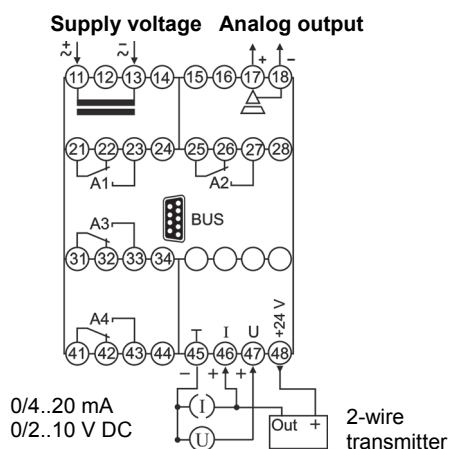


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Connection diagram

Model PMT50-1

Standard signals 0/4..20 mA, 0/2..10 V



Ordering code

1. 2. 3. 4. 5. 6.
PMT50 - - - - - -

1. Model/input

1 standard signals 0/4..20 mA, 0/2..10 V DC

2. Analog output

AO 0/4..20 mA, 0/2..10 V DC, isolated

3. Alarm outputs

00 not installed

2R 2 relay outputs, A1, A2 SPDT

4. Alarm outputs/BUS configuration

00 not installed

2R 2 relay outputs, A3, A4 SPDT

MB Modbus RTU/ASCII, RS485

PB Profibus DP

5. Supply voltage

0 230 V AC, $\pm 10\%$ 50-60 Hz

1 115 V AC, $\pm 10\%$ 50-60 Hz

5 24 V DC, $\pm 15\%$

6. Options

00 without option

Bus connection

Modbus

PIN	Signal	EIA/TIA-485 name
5	D1	B / B'
9	D0	A / A'
1	Common	C / C'

Profibus

3	RxD / TxD-P
5	DGND
6	VP / +5V max. 10 mA
8	RxD / TxD-N

9 pole D-Sub connector
in the front

