



CIT 100

Process Display

- ▶ 4-digit, 14-segment LED display
- ▶ digit height 13.8 mm
- ▶ cost-effective device for panel mounting

The process display CIT 100 is a cost-effective, microprocessor controlled display device in compact 96 x 48 DIN case. Beside the possibility of combination with our pressure transmitters and hydrostatic level transmitters the process display is suitable for acquire temperature and potentiometer signals.

Special effort has been put on easy operation and parameter setting. All functions can be set via the three front push-buttons.

For supplying 2-wire-transmitters the CIT 100 is equipped with an integrated supply.

The process display can optionally be equipped with two relay outputs and / or one analogue output. The switching points can be set individually for each contact. The active contact of the device is shown in the display via LED.

- ▶ programming information are indicated on the 14-segment LED display via continuous text
- ▶ different input signals possible, e.g. current, voltage, temperature and potentiometer signals
- ▶ optional: two relay outputs
- ▶ optional: analogue outputs 4 ... 20 mA, 0 ... 20 mA (electrically insulated)

Characteristics



CIT 100
Process Display

Analogue input	
Input signal	voltage / 2- or 3-wire current Pt 100 / 2-, 3- or 4-wire potentiometer

Current input	
Measuring range	-1 ... 25 mA
Programmable value	0 ... 20 mA 4 ... 20 mA
Input resistance	20 Ω + PTC 25 Ω

Voltage input	
Measuring range	-20 mV ... 12 VDC
Programmable value	0 ... 1 V 0.2 ... 1 V 0 ... 10 V 2 ... 10 V
Input resistance	10 M Ω

Pt 100- and potentiometer input	
Measuring range	Pt 100: - 200 °C ... + 850 °C (IEC 60751) potentiometer: 10 Ω ... 100 k Ω
Max. cable resistance per wire	50 Ω
Sensor current, Pt 100	0.2 mA
Effect of sensor cable resistance (3-, 4-wire), Pt 100	< 0.002 Ω / Ω
Short circuit detection	< 15 Ohm

Performance	
Accuracy	± 0.1 % of measured value
TC	voltage: $\leq \pm 0.4$ μ A current: $\leq \pm 2$ μ V/K Pt 100: $\leq \pm 0.02$ °C/K potentiometer: $\leq \pm 0.01$ Ω /K
Response time (0...90%, 100...10%)	temperature input : < 1 s mA-/V- /mV input : < 400 ms

Display	
Display	± 1999 ... 9999, 14 segment LED (red), height 13.8 mm
Decimal point	programmable
Measured value update	2,2 x / sec.

Analogue output (optional)	
Signal range	0 ... 20 mA
Programmable signal range	0 ... 20 mA 4 ... 20 mA 20 ... 0 mA 20 ... 4 mA
Load	20 mA / 800 Ω / 16 V _{DC}
Current limit	< 28 mA
Sensor error detection	0 / 3.5 / 23 mA (or none)

Relay outputs (optional)

Number / type	2 relays with SPDT (two-way contact)
Max. current	250 V RMS
Max. voltage	2 A / AC
Max. AC-performance	500 VA

Supply

Device	24 ... 230 V _{AC} ± 10% / 50 ... 60 Hz 24 ... 250 V _{DC} ± 20%
Current consumption	≤ 3.5 W

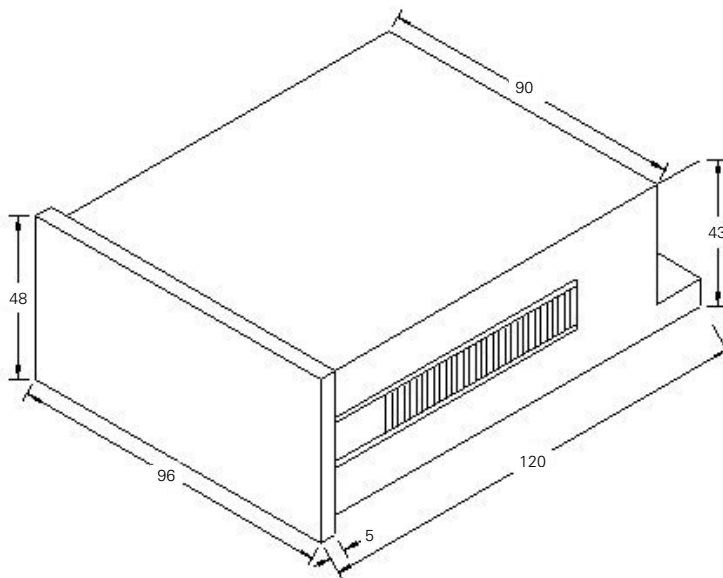
Permissible temperatures

Electronics / environment / storage	-20 ... 60 °C
-------------------------------------	---------------

Miscellaneous

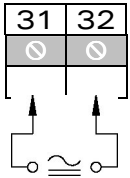
Material	PC black
Ingress protection	front side IP 65, electrical connection IP 00
Electromagnetic compatibility	emission and immunity according to EN 61326
Weight	230 g

Dimensions

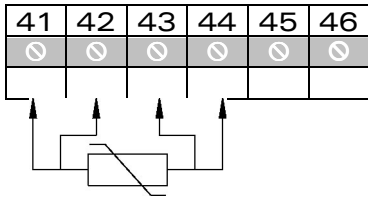


Wiring diagrams

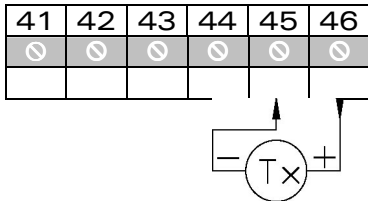
Supply:



Pt 100, 4-wire

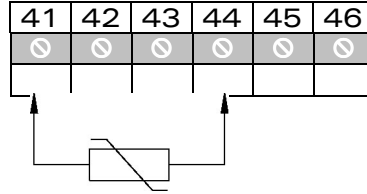


2-wire-transmitter

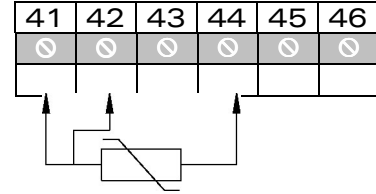


Input:

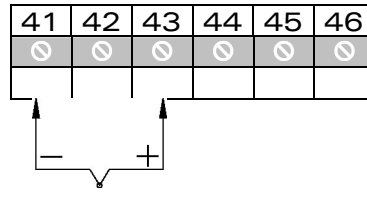
Pt 100, 2-wire



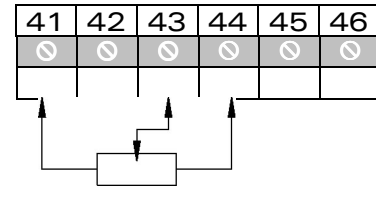
Pt 100, 3-wire



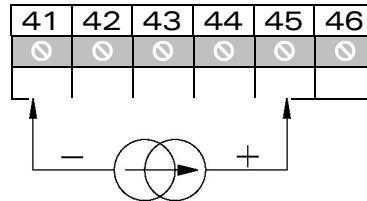
TC, internal CJC



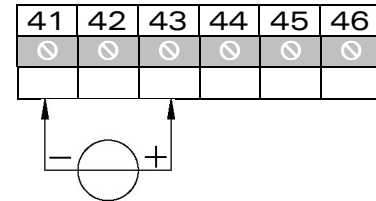
potentiometer



current

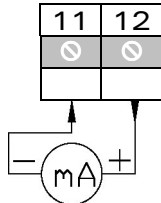


voltage

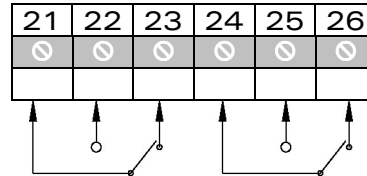


Output:

current



relay output



Ordering code / Prices

Version:

- Standard version
- with 2 relay outputs
- with analogue output
- with analogue output and 2 relay outputs

Ordering code:

- CIT 100-1
- CIT 100-2
- CIT 100-3
- CIT 100-4