

Overview

- For voltage ±10 V or current ±20 mA
- For temperature sensors Pt100-3 wires
- Display range can be linearised
- LED display, 4-digits, programmable
- 2 limit presets
- 1 relay output
- Analog output 4...20 mA
- Setpoint generator 4...20 mA
- DIN housing 96 x 48 mm



Technical data

Technical data - electrical ratings

| | |
|-------------------------|--|
| Voltage supply | 20...265 VAC 20...265 VDC |
| Nominal frequency | 50 / 60 Hz |
| Power consumption | 3 W |
| Sensor supply | 24 V ±3 V / max. 30 mA |
| Display | LED, 7-segment display |
| Display color | 1 color - white |
| Number of digits | 4-digits |
| Digit height | 14 mm |
| Display range | -1999...9999 ("OuE" to signal overflow) |
| Display refresh | 50 ms |
| Function | Digital display of 1 analog measured value Temperature Setpoint generator |
| A/D transformer | Principle $\Sigma\Delta$ Resolution 16 bit Measuring rate 20/s Measuring accuracy ±(0.1 % +3-digit) |
| Analog input | Current. voltage. temperature |
| Programmable parameters | Measuring range Relay outputs with time delay or hysteresis 2 presets (limits) Analog output Resolution 0.1 or 1 °C/°F |
| Limits | 2 |
| Inputs | Voltage ±10 V Voltage ±200 VDC Current ±20 mA Temperature sensor Pt100 Thermocouple J, K, T, N |

Technical data - electrical ratings

| | |
|-------------------------|---|
| Measuring range | Thermocouple J: -150 ... +1100 °C Thermocouple K: -150 ... +1200 °C Thermocouple T: -150 ... +400 °C Thermocouple N: -150 ... +1300 °C Pt 100: -200 ... +800 °C |
| Data memory | >10 years in EEPROM |
| Analog output | 4 ... 20 mA |
| Outputs relay | Change-over contact, floating |
| Standard DIN EN 61010-1 | ISO 16750-2 (Electrical loads) |
| Interference immunity | DIN EN 61326-3-1 |
| Approval | CE |

Technical data - mechanical design

| | |
|-----------------------|--|
| Operating temperature | -10...+60 °C |
| Connection | Spring-loaded terminal connector, detachable |
| Core cross-section | 1.5 mm ² |
| Protection EN 60529 | IP 65 (face) |
| Operation / keypad | Membrane with softkeys |
| Housing type | Built-in housing |
| Dimensions W x H x L | 1/8 DIN 96 x 48 x 96 mm |
| Cutout dimensions | 92 x 45 mm (+0.3) |
| Mounting depth | 83 mm |
| Mounting type | Front panel installation by clip frame |
| Weight approx. | 150 g |

Inputs and outputs

Analog input

| Input | Range | Resolution | Specification |
|----------------------|---|--------------------------|---------------------------|
| Current | ±20 mA | 2 µA | Input resistance 20 Ω |
| Voltage | ±10 V ±200 VDC | 1 mV 20 mV | Input resistance 2 MΩ |
| Temperature Pt100 | Offset programmable -9.9...99 °C Measuring current <1 mA | 1 or 0.1 °C/°F 15 bit | Line resistance max. 40 Ω |
| Thermocouple J,K,T,N | Cold junction compensation -10...+60 °C Offset programmable -9.9...99 °C | 1 or 0.1 °C/°F 15 bit | Line resistance max. 40 Ω |

Temperature range thermo sensor

| Temperature | Thermocouple J | Thermocouple K | Thermocouple T | Thermocouple N | Pt100 |
|--------------------|-----------------|-----------------|----------------|-----------------|-----------------|
| Degrees Celsius | -150...+1100 °C | -150...+1200 °C | -150...+400 °C | -150...+1300 °C | -200...+800 °C |
| Degrees Fahrenheit | -238...+2012 °F | -238...+2192 °F | -238...+752 °F | -238...+2372 °F | -328...+1472 °F |

Relay outputs

| Relay | Switching voltage max. | Switching current max. | Switching performance max. |
|---------------|------------------------|------------------------|----------------------------|
| 1x changeover | 250 VAC / 110 VDC | 1 A | 150 VA / 30 W |

Analog output

| Output | Range | Resolution | Load resistance |
|---------|-----------|------------|-----------------|
| Current | 4...20 mA | 13 bit | Max. 500 Ω |

Scaling configurable relating to value display, accuracy ±0.1 %, transformation 20/s

Terminal assignment

Voltage supply

| Pin | Assignment VAC | Assignment VDC |
|-----|----------------|----------------|
| 1 | Phase | - |
| 2 | Neutral | + |

Analog output

| Pin | Assignment |
|-----|---------------|
| 1 | 4...20 mA (-) |
| 2 | 4...20 mA (+) |

Limit outputs / relay

| Pin | Assignment |
|-----|-----------------|
| 1 | Normally open |
| 2 | Changeover |
| 3 | Normally closed |



Analog inputs / process

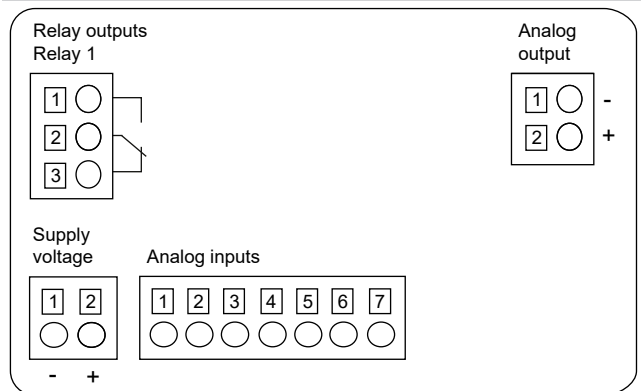
| Pin | Assignment |
|-----|---------------------|
| 1 | IN- / sensor supply |
| 2 | n.c. |
| 3 | n.c. |
| 4 | n.c. |
| 5 | 20 mA IN+ |
| 6 | Sensor supply +24 V |
| 7 | 10 V, 200 V IN+ |

Terminal assignment

Analog inputs / Pt100 / thermocouple

| Pin | Assignment Pt100 | Thermocouple |
|-----|------------------|----------------|
| 1 | Pt100 Common | Thermocouple - |
| 2 | Pt100 | Thermocouple + |
| 3 | n.c. | n.c. |
| 4 | Pt100 | n.c. |
| 5 | n.c. | n.c. |
| 6 | n.c. | n.c. |
| 7 | n.c. | n.c. |

Connection diagram

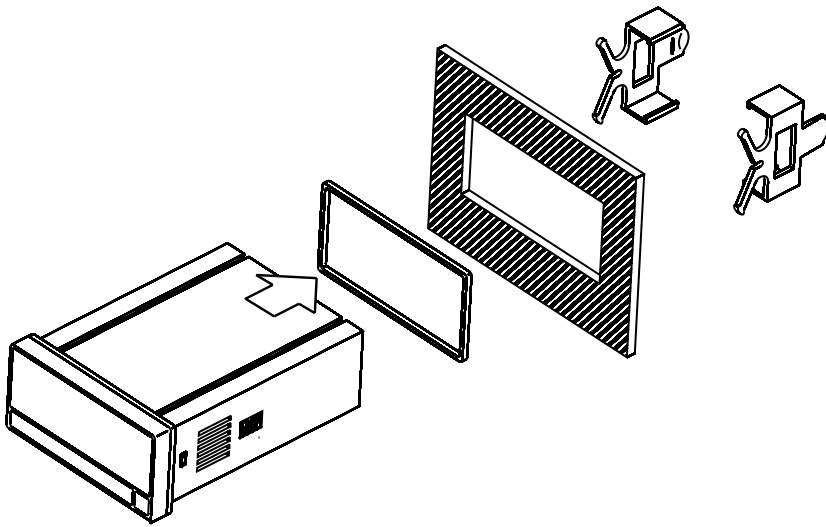
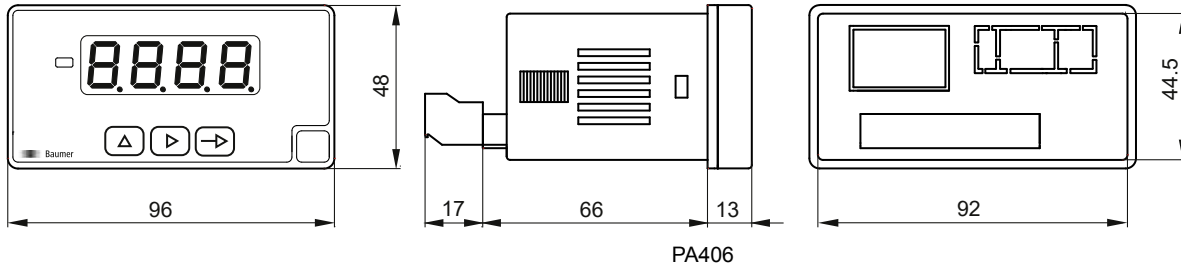


PA406.0F8AX01

For standard signals, temperature & setpoint generator, with 2 limits

Article number: 11041674

Dimensions



Clip frame mounting