

**Overview**

- Voltage input  $\pm 10$  V,  $\pm 60$  VDC
- Voltage input  $\pm 100$  mVDC for measurements by external current shunt (precision resistor)
- Current input  $\pm 20$  mA
- Programmable characteristic curve with 16 control points
- Sensor supply
- 2 relay outputs
- LED display, 4 digits, programmable
- DIN housing 48 x 24 mm


**Technical data**
**Technical data - electrical ratings**

Voltage supply	85...265 VAC 100...300 VDC
Nominal frequency	50 / 60 Hz
Power consumption	6 VA 5 W
Sensor supply	24 VDC $\pm 25$ % / max. 30 mA
Display	LED, 7-segment display (programmable display intensity in 4 levels, with 60 unit stickers for front)
Display color	1 color - red
Number of digits	4-digits
Digit height	10 mm
Display range	-1999...9999 ("OuE" to signal overflow)
Display refresh	200 ms
Function	Digital display of 1 analog measured value With Min/Max memory and tare function
A/D transformer	Principle $\Sigma\Delta$ Resolution 16 bit Measuring rate 25/s Measuring accuracy $\pm(0.1$ % +3-digit) Temp. coeffic. 100 ppm/ $^{\circ}$ C
Analog input	Current or voltage input
Programmable parameters	Measuring range Display range can be linearised Decimal point Display intensity Display stabilization filter Relay outputs with time delay or hysteresis

**Technical data - electrical ratings**

Limits	2
Inputs	Voltage $\pm 10$ V Voltage $\pm 60$ VDC Voltage $\pm 100$ mVDC Current $\pm 20$ mA
Data memory	>10 years in EEPROM
Analog output	Without
Outputs relay	2 normally open contact
Standard DIN EN 61010-1	ISO 16750-2 (Electrical loads)
Emitted interference	EN 61000-6-3
Interference immunity	EN 61000-6-2

**Technical data - mechanical design**

Ambient temperature	-10...+60 $^{\circ}$ C
Storage temperature	-25...+85 $^{\circ}$ C
Relative humidity	95 % non-condensing
Connection	Spring-loaded terminal connector, detachable
Core cross-section	1 mm <sup>2</sup> (Grid 2.54) 2.5 mm <sup>2</sup> (Grid 7.62)
Protection EN 60529	IP 65 (face)
Operation / keypad	3 softkeys below bezel
Housing type	Built-in housing
Dimensions W x H x L	1/32 DIN 48 x 24 x 136 mm
Cutout dimensions	45 x 22.2 mm (+0.3)
Mounting depth	125 mm
Mounting type	Front panel installation by clip frame
Weight approx.	100 g
Material	Housing: Polycarbonate, UL 94V-0

**Inputs and outputs**

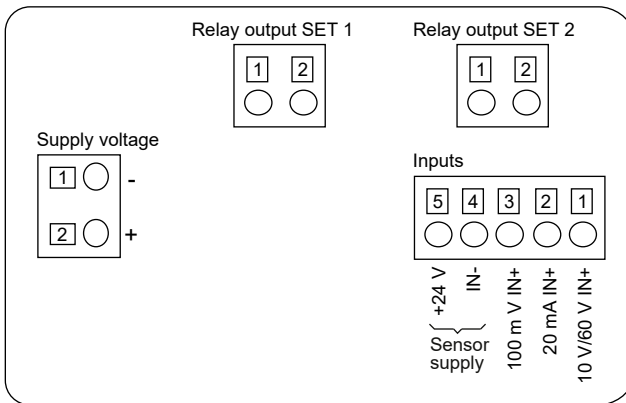
**Analog input**

Sensing range	Resolution	Input resistance
±10 V	1 mV	1 MΩ
±60 V	10 mV	1 MΩ
±100 mV	0.1 mV	100 MΩ
±20 mA	1 μA	12 Ω

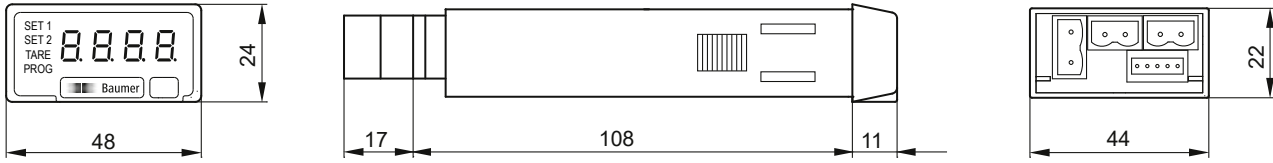
**Relay outputs (SET 1, SET 2)**

Switching voltage max.	250 VAC / 110 VDC
Switching current max.	1 A
Switching performance max.	150 VA / 30 W

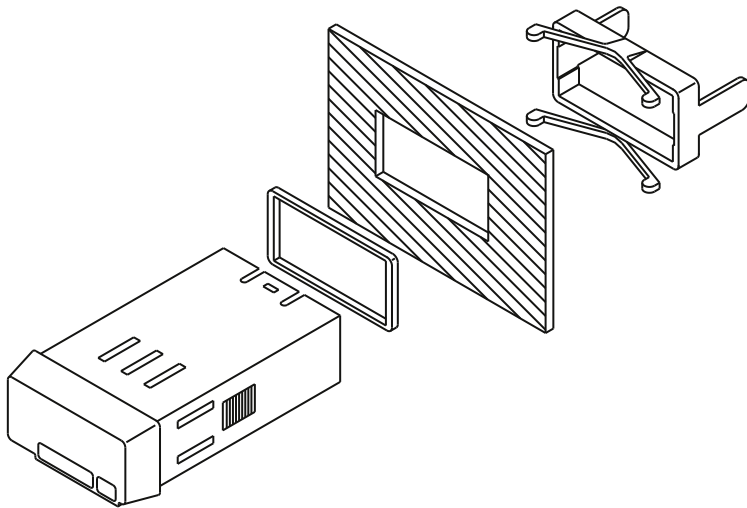
**Connection diagram**



**Dimensions**



PA220 - without clip frame



Clip frame mounting