

Process displays

For current and voltage

With 2 limits

PA403



Features

- Voltage input AC/DC up to 600 V
- Current input AC/DC 1 A, 5 A and shunt (precision resistor) 60 or 100 mV
- Display range can be linearised
- Two limits
- LED display, 4-digits
- DIN housing 96 x 48 mm

PA403 - Process display

Technical data - electrical ratings

Voltage supply	12...265 VDC and 20...265 VAC
Power consumption	3 W
Display	LED, 7-segment display (with 100 unit stickers for front)
Number of digits	4-digits
Digit height	14 mm, 20 mm
Display range	-1999...9999 ("OuE" to signal overflow)
Display refresh	50 ms
Function	Digital display of 1 analog measured value
A/D transformer	Principle $\Sigma\Delta$ Resolution 16 bit Measuring rate 20/s Measuring accuracy $\pm(0.1\% + 3\text{-digit})$ Temp. coeffic. 100 ppm/°C
Analog input	Current or voltage input
Programmable parameters	Measuring range Display range can be linearised Decimal point Relay outputs with time delay or hysteresis
Limits	Without, 2
Data memory	>10 years in EEPROM
Outputs relay	Change-over contact, floating
Standard DIN EN 61010-1	Protection class II Overvoltage category II Pollution degree 2
Emitted interference	DIN EN 61000-6-3
Interference immunity	DIN EN 61000-6-2

Technical data - mechanical design

Ambient temperature	-10...+60 °C
Storage temperature	-25...+85 °C
Relative humidity	95 % non-condensing
Connection	Spring-loaded terminal connector, detachable
Core cross-section	1 mm ² (Grid 5.08) 2.5 mm ² (Grid 7.62)
Protection DIN EN 60529	IP 65 (face)
Operation / keypad	Membrane with softkeys
Housing type	Built-in housing
Dimensions W x H x L	96 x 48 x 96 mm
Cutout dimensions	92 x 45 mm (+0.3)
Mounting depth	83 mm
Mounting	Front panel installation by clip frame
Weight approx.	250 g
Material	Housing: Polycarbonate, UL 94V-0

Process displays

For current and voltage

With 2 limits

PA403

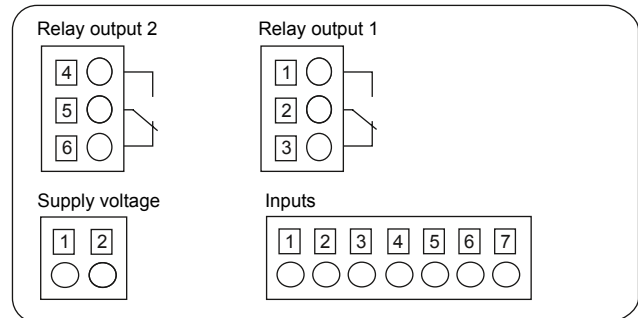
Part number

PA403.0 8 AX01

Voltage supply
8 12...265 VDC and 20...265 VAC

Outputs
0 Without relay, display 14 mm
1 Two relay outputs, display 14 mm
8 Without relay, display 20 mm
9 Two relay outputs, display 20 mm

Connection diagram



Accessories

Mounting accessories

ZPA4.001 Accessory for DIN rail mounting (ZPA4.001)

Inputs and outputs

Analog input

Input	Range	Resolution	Accuracy	Specification
Current AC and DC	1 A	50 μ A	$\pm 0.1\%$ (+5 mA)	Input resistance 0.07 Ω
	5 A	200 μ A	$\pm 0.1\%$ (+20 mA)	Input resistance 0.014 Ω
	Shunt 60 mV	5 μ V	$\pm 0.1\%$ (+300 μ V)	Input resistance 2.5 k Ω
	Shunt 100 mV	10 μ V	$\pm 0.1\%$ (+300 μ V)	Input resistance 2.5 k Ω
Voltage AC	20 V	1 mV	$\pm 0.1\%$ (+30 mV)	Input resistance 0.1 M Ω
	200 V	10 mV	$\pm 0.25\%$ (+300 mV)	Input resistance 1 M Ω
	600 V	25 mV	$\pm 0.35\%$ (+0.9 V)	Input resistance 3 M Ω
Voltage DC	20 V	1 mV	$\pm 0.05\%$ (+25 mV)	Input resistance 0.1 M Ω
	200 V	10 mV	$\pm 0.05\%$ (+250 mV)	Input resistance 1 M Ω
	600 V	25 mV	$\pm 0.05\%$ (+0.7 V)	Input resistance 3 M Ω

Alternating current (AC): signal max. 1 kHz

Relay outputs

Relay	Switching voltage max.	Switching current max.	Switching performance max.
2x changeover	250 VAC / 110 VDC	1 A	150 VA / 30 W

Process displays

For current and voltage

With 2 limits

PA403

Terminal assignment

Inputs

Voltage supply

Terminal	Assignment
1	Voltage supply
2	Voltage supply

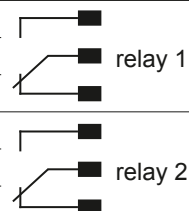
Analog inputs

Terminal	Assignment
1	Common 0 V
2	Current max. 5 A
3	Current max. 1 A
4	Shunt max. 100 mV
5	Voltage max. 20 V
6	Voltage max. 200 V
7	Voltage max. 600 V

Outputs

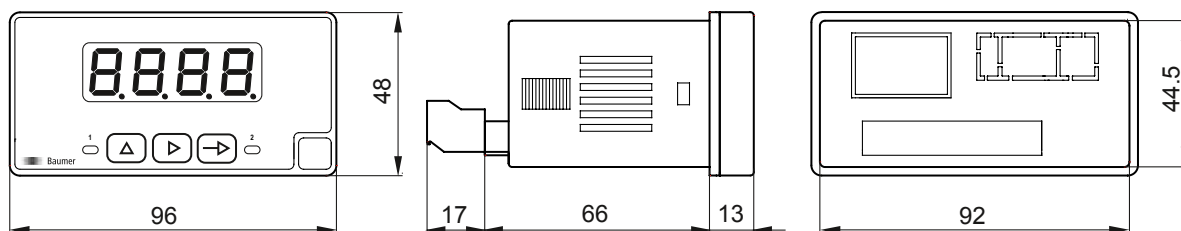
Limit outputs / two relays

Terminal	Assignment
1	normally open
2	changeover
3	normally closed
4	normally open
5	changeover
6	normally closed



Dimensions

PA403 - without clip frame



PA403 - clip frame mounting

