

## Datasheet

Subject to technical alteration  
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## Application

Differential pressure transmitter with 8 selectable ranges and adjustable outputs (0..10 V or 4..20 mA). For monitoring the differential pressure of air and other non-flammable and non-aggressive gases. Possible applications: Monitoring for air filters, fans, industrial cooling air cycles as well as overheating protection, control of air and fire dampers. Screw mounting onto flat surface, prepared for mounting on DIN rail TS35 (35x7,5 mm) according to EN 60715.

## Types available

Type	Measuring range <sup>1)</sup>
DPA 250-D <sup>2)</sup> / DPA 250	0..250 Pa
DPA 2500-D <sup>2)</sup> / DPA 2500	0..2500 Pa
DPA 7000-D <sup>2)</sup> / DPA 7000	0..7000 Pa

<sup>1)</sup> Details for measuring range, please refer to configuration

<sup>2)</sup> Type with display

## Security Advice – Caution



The installation and assembly of electrical equipment should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorised modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual



## Notes on Disposal

As a component of a large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location, hence the Waste Electrical and Electronic Act (WEEE) is not applicable. However, most Thermokon products contain valuable materials that should be recycled rather than disposed as domestic waste. Please note the relevant regulations for local disposal.

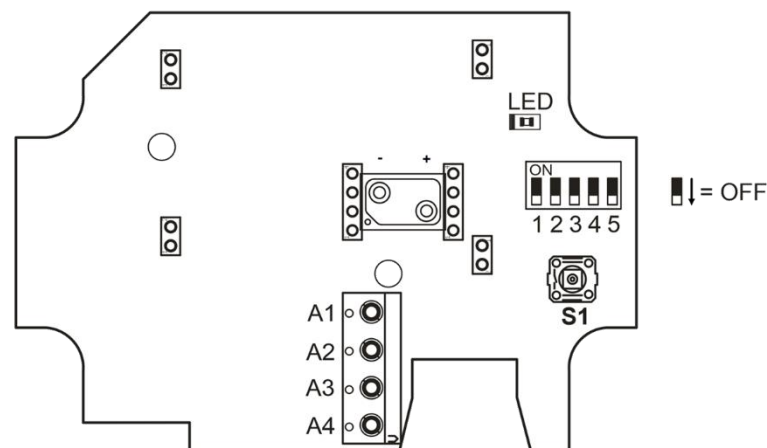
## Technical Data

Measuring values		differential pressure
Medium		air and non-aggressive gases
Output voltage		0..10 V (selectable), min. load 10 kΩ
Output Amp		4..20 mA (selectable), max. load 500 Ω
Power supply		15..24 V = (±10%) or 24 V ~ (±10%)
Power consumption		V: typ. 1,1 W (24 V =)   1,7 VA (24 V ~) A: max. 20 mA (24 V =)
Measuring range pressure	DPA250	0..+25   0..+50   0..+100   0..+250 (default)   -25..+25   -50..+50   -100..+100   -150..+150 Pa
	DPA2500	-100..+100   0..+100   0..+250   0..+500 (default)   0..+1000   0..+1500   0..+2000   0..+2500 Pa
	DPA7000	0..+1000   0..+1500   0..+2000   0..+2500 (default)   0..+3000   0..+4000   0..+5000   0..+7000 Pa
Accuracy pressure	DPA250 DPA2500   DPA7000	typ. ±1 Pa at range <250 Pa ±1,5% of greatest measuring range, ±6 Pa at range <250 Pa
Max. working overpressure		400 kPa
Sensor		piezo measuring element
Display		LCD 37,5x31,6 mm (optional)
Enclosure		PA6
Protection		IP54 according to EN 60529, IP65 with bolted cover
Cable entry		M20 for cable max. Ø=8 mm
Connection electrical		terminal block, max. 1,5 mm <sup>2</sup>
Connection mechanical		pressure connection male Ø=5,0 mm / Ø=6,3 mm, connection tube: PVC, soft
Ambient condition		-10..+50 °C, max. 95% rH non-condensing
Weight		150 g
Mounting		screw mounting onto flat surface, prepared for mounting on DIN rail TS35 (35x7,5 mm) according to EN 60715
Delivery content		2 mounting screws, 2 plastic duct flanges, 2 m PVC connection tube

## Mounting Advices

Before installing the device, please check the leak tightness of the pressure lines.

## Connection Plan



A1	Output 4..20 mA
A2	Output 0..10 V
A3	GND
A4	+ 24 V = / 24 V ~

## Configuration

### Measuring ranges

DIP 1	DIP 2	DIP 3	Range	DPA 250	DPA 2500	DPA 7000
OFF	OFF	OFF	1	0..+25 Pa	-100..+100 Pa	0..+1000 Pa
OFF	OFF	ON	2	0..+50 Pa	0..+100 Pa	0..+1500 Pa
OFF	ON	OFF	3	0..+100 Pa	0..+250 Pa	0..+2000 Pa
OFF	ON	ON	4	0..+250 Pa	0..+500 Pa	0..+2500 Pa
ON	OFF	OFF	5	-25..+25 Pa	0..+1000 Pa	0..+3000 Pa
ON	OFF	ON	6	-50..+50 Pa	0..+1500 Pa	0..+4000 Pa
ON	ON	OFF	7	-100..+100 Pa	0..+2000 Pa	0..+5000 Pa
ON	ON	ON	8	-150..+150 Pa	0..+2500 Pa	0..+7000 Pa

default

### Response time/backlight

DIP 4	Response time
OFF	0,8 s
ON	4 s

Standard

DIP 5	Display backlight (only devices with display)
OFF	OFF
ON	ON

Standard

### Zero-calibration

**Attention! For executing zero point calibration the power supply must be connected one hour before.**

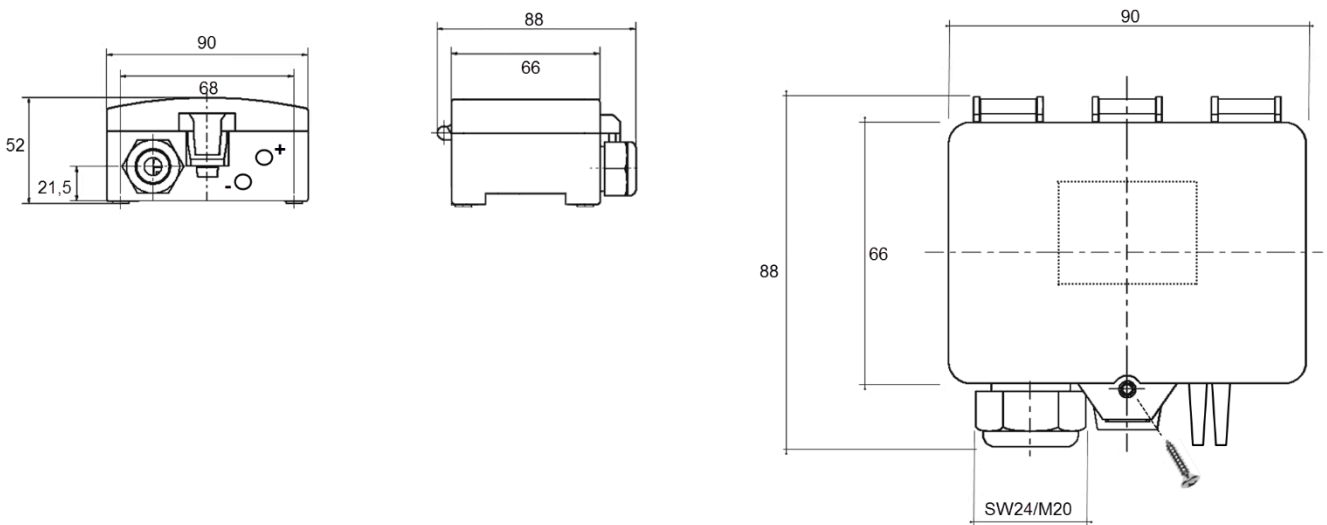
- Release both connection tubes from the pressure terminals + and -
- Press the button S1 until the LED lights permanently
- Wait until the LED flashes again and reinstall the connection tubes to the pressure ports (note + and -)

In normal operation zero point calibration should be executed every 12 months.

### Change measuring unit (only devices with display)

To change the displayed measurement size unit push button S1 briefly (several times) until the required measuring unit (Pa, inchWC mmWC, kPa, mbar, psi) is shown at the display.

## Dimensions (mm)



To gain protection IP 65 according to EN 60527 the cover has to be bolted at the prepared position, e.g. using a screw 3,5x10 mm according to EN 7981.

**Accessories** (enclosed in shipment)

2 fixing screws	Item No. 289870
2 plastic duct flanges	Item No. 484596
2 m PVC connection tube $\varnothing$ 4/7 mm	Item No. 484268
Spring for mounting on DIN rail TS35	Item No. 255165