

PS

Differential Pressure Switch

thermokon[®]
HOME OF SENSOR TECHNOLOGY

Datasheet

Subject to technical alteration

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» APPLICATION

Adjustable differential pressure switch PS for monitoring differential pressure of air and other non-flammable and non-aggressive gases. Possible applications: Monitoring of air filters, fans, industrial cooling air cycles, flows in ventilation ducts.

» TYPES AVAILABLE

Differential pressure switch

- PS<type>

<type>: 300 | 500 | 1500 | 4500

» 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.

CAUTION! Risk of electric shock due to live components within the enclosure, especially devices with mains voltage supply (usually between 90..265 V).



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

» PRODUCT TESTING AND CERTIFICATION



Declaration of conformity

The declaration of conformity of the products are available on our website <https://www.thermokon.de/>.

» NOTES ON DISPOSAL



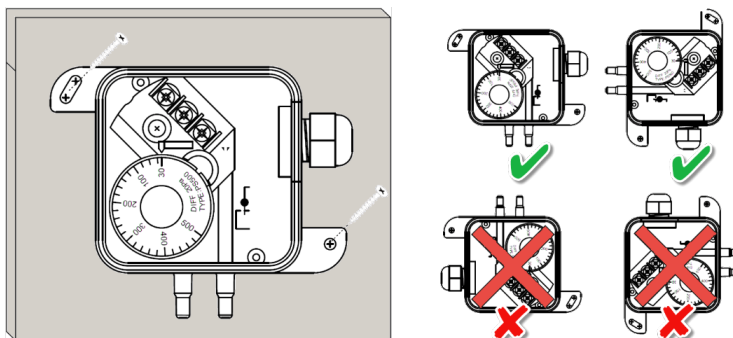
As a component of a large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location, hence the Waste Electrical and Electronic Act (WEEE) is not applicable. However, most of the products may contain valuable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

» TECHNICAL DATA

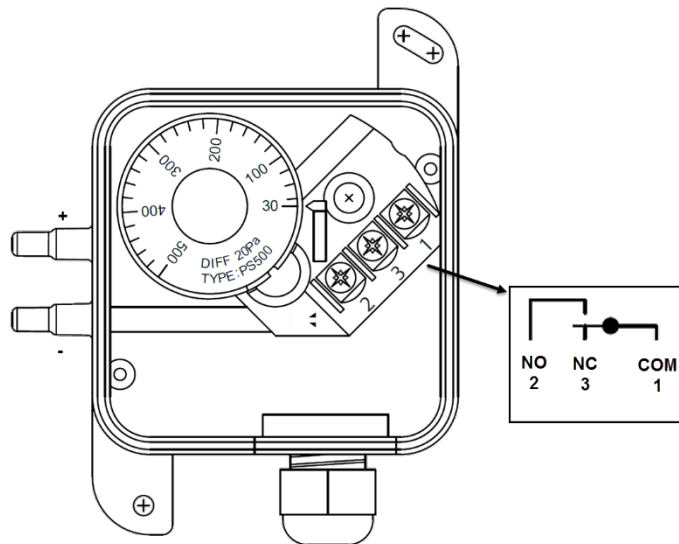
Measuring values	differential pressure
Medium	air, non-aggressive gases, non-flammable gases
Output switch contact	NO/NC Kreis, switching difference PS300..500 : 20 Pa PS1500 : 80 Pa PS4500: 180 Pa
Measuring range pressure	PS300 : 30..300 Pa PS500 : 30..500 Pa PS1500: 100..1500 Pa PS4500: 500..4500 Pa
Accuracy pressure	PS300..500: typ. ± 5 Pa PS1500: typ. ± 10 Pa PS4500: typ. ± 50 Pa
Max. working overpressure	50 kPa
Switching values	switching load, max. 250 V; 3 A resistive load, 2 A inductive load, service life: >1.000.000 switching operations
Enclosure	ABS, Cover: PC, silicone membrane
Protection	IP54 according to EN 60529
Cable entry	M16 for cable max. $\varnothing=8$ mm
Connection electrical	Screw terminal block, max. 1,5 mm ²
Connection mechanical	connection pressure: ABS, tube: PVC soft
Ambient conditions	-20..+60 °C, 0..85% rH short term condensation
Weight	150 g
Delivery content	2 fixing screws, 2 plastic duct connectors, 2 m PVC-tube soft, $\varnothing=4/7$ mm

» MOUNTING ADVICES

To be installed flush mounted in vertical position, either the pressure inlets or the electrical cable downwards.



» CONNECTION PLAN



When differential pressure increases:

- ➔ 1-3 open
- ➔ 1-2 closed

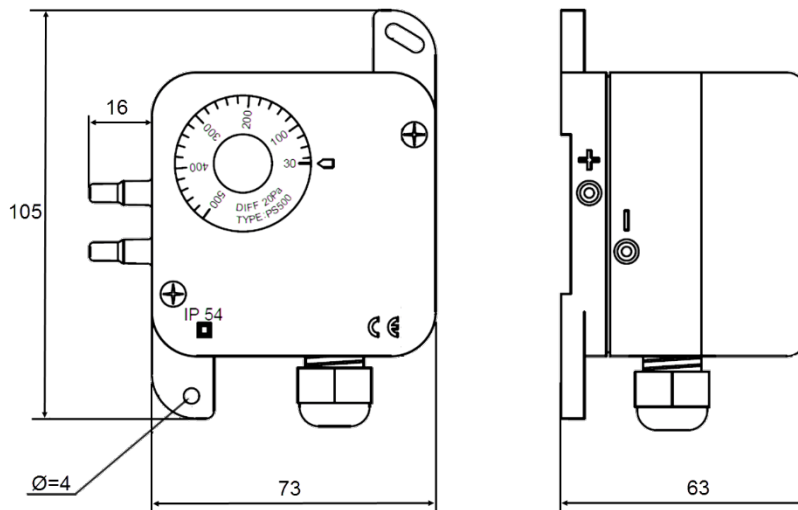
» COMMISSIONING

1. Open the lid.
2. Select the desired switching point by turning the selection wheel.
3. Route the cables through the strain relief and connect the cables properly to the terminal block.
4. Close the lid.

CAUTION! – Apply power supply only, if the device has been installed correctly!

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

» DIMENSIONS (MM)



» ACCESSORIES (OPTIONAL)

- 2 fixing screws
- 2 plastic duct connectors
- 2 m PVC-tube soft, $\varnothing=4/7$ mm
- Metal duct connectors MKS40 (L=40 mm)
- Metal duct connectors MKS100 (L=100 mm)

included in delivery
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 included in delivery
 Item No. 265138
 Item No. 302531