3255e_TI

Product Information



PDE2-Series (dP)

Air Differential Pressure Switch

The PDE2-Series (dP) is designed to measure differential pressure of air, non-combustible, and non-aggressive gases in HVAC systems. The control output is 2-point (ON/OFF). The differential pressure switch has an internal set point adjuster.



Use

 $Compatible \ with \ all \ common \ HVAC \ DDC \ and \ Analog \ Controls \ Systems, \ with/without \ Building \ Automation \ Systems$

Used in all common HVAC applications

Monitoring of primary or secondary air dampers

Supervision of heating / cooling coils to prevent overheating / freezing

Monitoring of fans and fan belts

Features

2-point (ON/OFF) output

Internal set point adjuster

Long-term stability of the measuring element

Professional and practical product design, withstands rough environmental conditions

Easy to use, install and maintain

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| | Pressure Range | | | | | | Switching Differential | | | | Switching Point |
|------------|----------------|---------|---------|-----------|-----------|-----------|------------------------|------|-------|-------|--------------------|
| Order Code | 20200Pa | 30300Pa | 50500Pa | 2001000Pa | 5002500Pa | 3001500Pa | 10Pa | 20Pa | 100Pa | 150Pa | Default Value |
| PDE2.NAb | • | | | | | | • | | | | 100Pa |
| PDE2.AAb | | • | | | | | • | | | | 150Pa |
| PDE2.BAb | | | • | | | | | • | | | 250Pa |
| PDE2.CAb | | | | • | | | | | • | | 500Pa |
| PDE2.DAb | | | | | • | | | | | • | 1250Pa |
| PDE2.EAb | | | | | | • | | | • | | 750Pa |

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| | Sensor Specification | Magazirad | Differential Air Processes | | | |
|-------------------------|---|---|---|--|--|--|
| | Sensor Specification | Measured | Differential Air Pressure | | | |
| Ξ | | Sensor Characteristics | Passive | | | |
| r ë | | Sensor Output (s) | ON / OFF | | | |
| Sensor Specification | | Measuring Range (s) | See Product Range, Page 1 | | | |
| e⊒ | | Default Switching Point (s) | See Product Range, Page 1 | | | |
| Š | | Switching Differential | See Product Range, Page 1 | | | |
| Sp | | Tolerance / Repeatability | 15% / 2% | | | |
| | | Max. Over Pressure | Max. 10.0kPa | | | |
| | | Switching Cycles | > 1.000.000 | | | |
| | Electrical Information | Switch Type | SPDT; Single-pole, change over contact | | | |
| | | Terminal Clamp | Screw terminal, max. 2.5mm² | | | |
| | | Relay Rating | AC 250V, max. 1.5A; DC 30V, max. 2A | | | |
| | Mechanical Information | Connection Nozzle Dimension | Ø6mm | | | |
| | | Cable Entry | M16, Ø6Ø8mm cables | | | |
| | | Sensing Element Position | Internal, bottom of the housing | | | |
| | User Interface | Set Point Adjustments | See Product Range, Page 1 | | | |
| | | Release Button | No button / Automatically | | | |
| | Color and Materials | Housing Cover | PC, Transparent | | | |
| | | Housing Bottom | POM, Grey | | | |
| | | Lock Screws | Nickel plated carbon steel | | | |
| | | Lock Nuts | Brass | | | |
| | | Cable Gland | ABS, Grey | | | |
| | | Gland Rubber Seal | Rubber, Black | | | |
| Ĕ | | Protection Caps | ABS, Red, RAL2002 (Vermilion) | | | |
| Technical Information | | User element | ABS, White | | | |
| na | | Connection Nozzle | P1 (-): POM, White / P2(+): POM, Grey | | | |
| E | | Diaphragm | Silicone, emission free | | | |
| nfc | Environmental Conditions | Operation Temperature | -40°C+85°C | | | |
| = | | Operation Humidity | <85% r.h., no condensation | | | |
| 8 | | Transport Temperature | -40°C+85°C | | | |
| Ē | | Transport Humidity | < 90% r.h., no condensation | | | |
| ਨੂੰ | | Storage Temperature | -40°C+85°C | | | |
| <u>"</u> | | Storage Humidity | < 85% r.h., no condensation | | | |
| | Norms and Directives | IP- Rating | IP54 (with cover) to IEC60529 | | | |
| | | Safety Class | III to EN 60 730 | | | |
| | | Product Standard 1 | Automatic Electric. Controls for household and similar use | | | |
| | | Product Standard 2 | 2009/EN 60 730-1 | | | |
| | | CE Conformities to | 2004/108/EG Electromagnetic Compatibility EMV | | | |
| | | CE Electromagnetic Compatibility Emitted Interference | 2000/EN60730-1 Emitted Interference | | | |
| | | CE Electromagnetic Compatibility Interference Resistance | 2000/EN60730-1 Interference Resistance | | | |
| | | RoHS Compatibility | RoHS 2011/65/EC | | | |
| | | Operation Climatic Condition | IEC 60 721-3-3 | | | |
| | | Operation Mechanical Condition | IEC 60 721-3-2 to class2M2 | | | |
| | | Transport to Climatic Condition | IEC 60 721-3-2 | | | |
| | | Transport Mechanical Condition | IEC 60 721-3-2 to class2M2 | | | |
| | | Storage Climatic Condition | IEC 60 721-3-1 | | | |
| | | Storage Mechanical Condition | IEC 60 721-3-1 to class2M2 | | | |
| | | Otologe meetamear condition | ILO GO 721 O 1 to GIOSSZINIZ | | | |
| Connection | NC / Low Pressure NO / High Pressure Common | 3 — 2NO 1 — 3 COM 1 NC 0 — 3 — 3 — 3 — 3 — 3 — 3 — 3 — 3 — 3 — | X _D =Switching difference AP=Pressure difference W=Top Switching point W AP | | | |
| | Accessories | Mounting Kit, Included in delivery | 2 plastic tubes; 2m soft PVC hose | | | |
| | Shipping & Handling | Minimum Order | 1 box with 1 piece | | | |
| | | Product Dimension (L x W x H) / Weight | 100 x 85 x 57.5mm / 140 g | | | |
| Miscellaneous | | Transport and Storage dimension (L x W x H) / Weight | 100 x 100 x 100mm / 250 g | | | |
| 6 | | Multi Pack (PU1) Minimum Order | 100 pieces in 2 cartons | | | |
| an | | Multi Pack (PU1) Transport and Storage dimension (L x W x H) / Weight | Switches 500 x 500 x 250mm / 16 kg | | | |
| <u></u> | | | Accessories 400 x 400 x 300mm / 10kg | | | |
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| ĕ | | Package Material | Rigid Cardboard | | | |
| _ | Order Notes | Order Code | See Product Range, Page 1, e.g. PDE2.NAb | | | |
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| | | All Information and technical data are subject to alteration | | | | |

