ATEX/IECEx Approved 1823 Differential Pressure Switch

The 1823 in Flame-Proof ATEX/IECEx Enclosure

Addressing critical applications in hazardous environments, the Series AT21823 ATEX/IECEx Approved 1823 Differential Pressure Switch combines small size with 2% repeatability. Set point adjustment inside the switch allows for set point settings across 9 ranges from the low of .07 in w.c. to a maximum 85 in w.c. differential pressure. Series AT2183 flame-proof enclosures are available in aluminum and are ideal for low pressure hazardous area applications. Various housing options such as an overpressure relief valve or external set point adjustment knob are available. External set point knob allows adjustment without opening the enclosure.

**Features/Benefits**
- Compact size and repeatability, provides a high-value switch for many industrial applications
- External set point knob provides easy access that simplifies making adjustments without opening enclosure
- Flame-proof enclosure protects the device in hazardous areas

**Applications**
- Hazardous area pressure switch
- Process applications
- Mechanical equipment control

**Attention:** Check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous area.

**Specifications**
- **Service:** Air and non-combustible, compatible gases.
- **Wetted Materials:** Consult factory.
- **Temperature Limits:** -30 to 180°F (-34 to 82.2°C); 1823-00, -20 to 180°F (-28.9 to 82.2°C) (Note: Product temperature limits differ from case).
- **Pressure Limits:** 10 psig (68.95 kPa) continuous, 25 psig (172.4 kPa) surge.
- **Switch Type:** SPDT.
- **Repeatability:** ±2% FS.
- **Electrical Rating:** 15 A @ 120 to 480 VAC, 60 Hz. Resistive 1/8 HP @ 125 VAC, 1/4 HP @ 250 VAC, 60 Hz. De-rate to 10 A for operation at high cycle rates.
- **Mounting Orientation:** Diaphragm in vertical position.
- **Set Point Adjustment:** Screw type inside mounting spud internal to switch. External set point adjustment knob optional.
- **Enclosure Rating:** IP66. IP65 with option OPV, overpressure relief valve or external set point adjustment knob.
- **Housing Material:** Aluminum.
- **Finishing:** Texture epoxy coat RAL7038.
- **Process Connections:** 1/8˝ NPT female brass (SS optional). In presence of acetylene it is necessary to use SS.
- **Electrical Connections:** Two 1/2˝ NPT female. Cable gland not included.
- **Weight:** 11.9 lb (5.4 kg).
- **ATEX Certificate:** BVI 14ATEX0072.
- **Agency Approvals:** ATEX Compliant 1370 II 2G Ex d IIC T6 Gb / II 2D Ex tb IIIC T85°C Db, -60°C≤Tamb≤+60°C IECEx Compliant: Ex d IIC T6 Gb / Ex tb IIIC T85°C Db.

**Model Chart**

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Example | AT21823-00-AOK11XT2 | Price
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Series | AT21823 | ATEX/IECEx approved 1823 differential pressure switch
Range | | $923.00
- 00 | .08 to .22 in w.c. (18 to 56 Pa) | -
 0 | .15 to 5 in w.c. (38 to 127 Pa) | -
 1 | .3 to 1 in w.c. (76 to 254 Pa) | -
 2 | 0.5 to 2 in w.c. (127 to 508 Pa) | -
 5 | 1.5 to 5 in w.c. (381 to 1270 Pa) | -
 10 | 2 to 10 in w.c. (.5 to 2.5 kPa) | -
 20 | 3 to 22 in w.c. (.76 to 5.6 kPa) | -
 40 | 5 to 44 in w.c. (1.27 to 11.17 kPa) | -
 80 | 9 to 85 in w.c. (2.28 to 21.6 kPa) | -
Housing Material | A | Aluminum
| | B | Blind
| | O | Glass top cover
Set point Adjustment | K1 | Without external set point adjustment knob
| | K2 | With external set point adjustment knob
Process Connection | 1 | 1/8˝ NPT female brass ports
| | 2 | 1/8˝ NPT female SS ports
Overpressure Plug | X | Standard without overpressure relief valve
| | OPV | Overpressure relief valve
Tag | T2 | SS information label
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(Items are subject to Schedule B discounts.

USA: California Proposition 65

**WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov