Using solid state technology, the Series AT23000MR and AT23000MRS ATEX Approved Photohelic® Switch/Gages combine the functions of a precise, highly repeatable differential pressure switch with a large easy-to-read analog pressure gage. Gage reading is unaffected by switch operation and will indicate accurately even if power is interrupted. AT23000MR series employ versatile electromechanical relays with low amperage ratings—ideal for dry circuits. For applications requiring high cycle rates, choose AT23000MRS models with SPST (NO) solid state relays. Easy to adjust set point indicators are controlled by knobs located on the gage face (accessible opening case after de-energizing instrument). All models provide both low and high limit control. Compatible with air and other non-combustible, non-corrosive gases, they can be used in systems with pressures to 25 psig (5.52 bar). Flame-proof ATEX enclosures are available with glass window which allows viewing of set point needles and process pressure.

Important notes for installation:
- Cables must be fitted through 1/2˝ NPT cable gland or ATEX conduit (not supplied for viewing of set point needles and process pressure.
- Important notes for installation:
- Open cover only after de-energizing instrument.
- Make sure after cabling to close tight cover and cable gland, in order to keep IP66 rating (IP65 with option OPV, overpressure relief valve).
- Check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous area.

**Range Chart**

<table>
<thead>
<tr>
<th>Model</th>
<th>Range, in w.c.</th>
<th>Minor Dv</th>
<th>Model</th>
<th>Range, Pa</th>
<th>Minor Dv</th>
</tr>
</thead>
<tbody>
<tr>
<td>3000-00</td>
<td>0 to 0.25</td>
<td>.005</td>
<td>3000-60 Pa</td>
<td>0 to 60</td>
<td>2.0</td>
</tr>
<tr>
<td>3000-0</td>
<td>0 to 0.5</td>
<td>.01</td>
<td>3000-125 Pa</td>
<td>0 to 125</td>
<td>5.0</td>
</tr>
<tr>
<td>3001</td>
<td>0 to 1.0</td>
<td>.02</td>
<td>3000-250 Pa</td>
<td>0 to 250</td>
<td>5.0</td>
</tr>
<tr>
<td>3002</td>
<td>0 to 2.0</td>
<td>.05</td>
<td>3000-500 Pa</td>
<td>0 to 500</td>
<td>10.0</td>
</tr>
</tbody>
</table>

**Example**

<table>
<thead>
<tr>
<th>Model</th>
<th>Range, in w.c.</th>
<th>Minor Dv</th>
<th>Model</th>
<th>Range, Pa</th>
<th>Minor Dv</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT23000MR-XXX-AB1XT2</td>
<td>T2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Specifications**

- **Service:** Air and non-combustible, compatible gases.
- **Wetted Materials:** Consult factory.
- **Housing Material:** Aluminum.
- **Finishing:** Texture epoxy coat RAL7038.
- **Accuracy:** ±2% of FS at 70°F (21.1°C), ±3% on -0, -60 Pa and ±4% on -00 models.
- **Pressure Limits:** 20 in Hg to 25 psig (-0.677 bar to 1.72 bar), MP option; 35 psig (2.41 bar), HP option; 80 psig (5.52 bar).
- **Temperature Limits:** 20 to 120°F. (-6.67 to 48.9°C). Option LT low temperature to -20°F (28.8°C); Case: -58 to 140°F (-50 to 60°C). (Note: Product temperature limits differ from case).
- **Power Requirements:** 24 VDC, regulated ±10%.
- **Electrical Wiring:** Screw terminals.
- **Mounting Orientation:** Diaphragm in vertical position.
- **Enclosure Rating:** IP66, IP65 with option OPV, overpressure relief valve.
- **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.
- **Dial Size:** 4˝ (101.6 mm).
- **Set Point Adjustment:** Adjustable knobs on face behind enclosure cover. Follow instructions and safety warnings to open cover.
- **Weight:** 12.5 lb (5.7 kg).
- **ATEX Approved Products from Conhas with ECN:** NEMKO 10ATEX1096.
- **Agency Approvals:** CE 0470 XII2 GD Ex d IIC Gb T 85°C; +60°C Ex tb IIIC Db T 85°C.

**Switch Specifications (3000MR)**

- **Switch Type:** Each setpoint has 1 Form C relay (SPDT).
- **Relay Contacts:** (resistive load) 1 Form C rated 1.0 A @ 30 VDC, 0.3 A @ 110 VDC or 0.5 A @ 125 VAC. Gold clad silver - suitable for dry circuits.

**Switch Specifications (3000MRS)**

- **Switch Type:** Each setpoint has a solid state relay.
- **Switching Voltage:** 20 to 280 VAC (47 to 63 Hz).
- **Switching Current:** 1.0 amp (AC) max., 0.01 mA (AC) min., (2) SPST NO.