



## SERIES AT3A3000 | ATEX APPROVED PHOTOHELIC® SWITCH/GAGE

### FEATURES/BENEFITS

- 3-in-1 ATEX approved instrument allows the reduction of several instruments with one product, saving inventory, installation time, and money
- Flame-proof ATEX enclosure with optional glass window and aluminum housing protects the device in hazardous areas while giving local visibility to process pressure and set point status

### APPLICATIONS

- Hazardous area pressure measurement and switching
- Air conditioning systems
- Clean rooms
- Fume exhaust systems

### DESCRIPTION

Flame-proof ATEX approved **SERIES AT3A3000** Photohelic® Switch/Gages, function as versatile, highly repeatable pressure switches combined with a precise pressure gage employing the time-proven Magnehelic® gage design. The Photohelic® switch/ gage measures and controls positive, negative or differential pressures of air and compatible gases. Standard models are rated to 25 psig (1.7 bar) with options to 35 psig (2.4 bar) or 80 psig (5.5 bar). Two phototransistor actuated, DPDT relays are included for low/high limit control. Easy to adjust set point indicators are controlled by knobs located on the gage face (accessible opening case after de-energizing instrument). Set points can be interlocked to provide variable dead band— ideal for control of fans, dampers, etc. Gage reading is continuous and unaffected by switch operation, even during loss of electrical power. Flame-proof ATEX enclosures are available in aluminum with glass window which allows for viewing of set point needles and process pressure.



### GAGE SPECIFICATIONS

<b>Service</b>	Air and non-combustible, compatible gases.
<b>Wetted Materials</b>	Consult factory.
<b>Accuracy</b>	±2% of FS at 70°F (21.1°C); ±3% on -0 and ±4% on -00 models.
<b>Pressure Limits</b>	-20 in Hg to 25 psig (-0.677 to 1.72 bar). MP option; 35 psig (2.41 bar), HP option; 80 psig (5.52 bar).
<b>Temperature Limits</b>	20 to 120°F (-6.67 to 48.9°C) LT low temperature option to -20°F available; Case: -76 to 140°F (-60 to 60°C) ( <b>Note:</b> Product temperature limits differ from case).
<b>Dial Size</b>	4" (101.6 mm).
<b>Mounting Orientation</b>	Diaphragm in vertical position.
<b>Set Point Adjustment</b>	Adjustable knobs on Photohelic® gage face behind enclosure cover. Follow instructions and safety warnings to open cover.

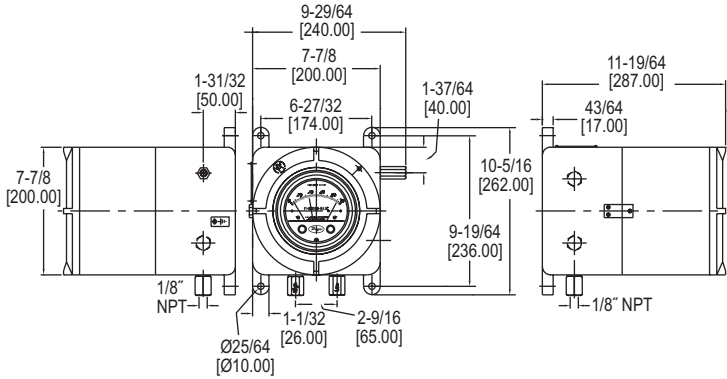
### SWITCH SPECIFICATIONS

<b>Switch Type</b>	Each setpoint has 2 Form C relays (DPDT).
<b>Repeatability</b>	±1% of FS.
<b>Electrical Rating</b>	10 A @ 120 VAC, 6 A @ 240 VAC, 60 Hz res. 10 A @ 28 VDC.
<b>Electrical Wiring</b>	Screw terminals.
<b>Power Requirements</b>	120 VAC, 50/60 Hz; 240 VAC & 24 VAC power optional.
<b>Enclosure Rating</b>	IP66. IP65 with option OPV, overpressure relief valve.
<b>Housing Material</b>	Aluminum.
<b>Finishing</b>	Texture epoxy coat RAL7038.
<b>Pressure Connections</b>	1/8" NPT female brass (SS optional). In presence of acetylene it is necessary to use SS.
<b>Electrical Connections</b>	Three 1/2" FNPT. Cable gland not included.
<b>Weight</b>	28.4 lb (12.9 kg).
<b>ATEX Approved Products from Comhas with ECN</b>	BVI 14ATEX0072.
<b>Agency Approvals</b>	CE 1370 II2 GD Ex d IIC Gb T6; -60°C ≤ Ta ≤ +60°C Ex tb IIIC Db T 85°C.

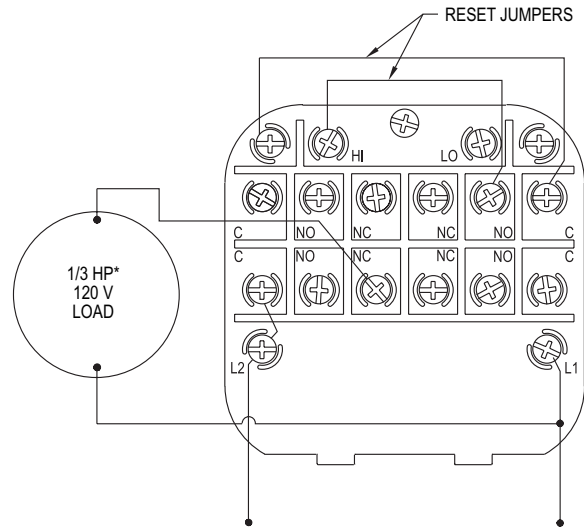




## DIMENSIONS



## WIRING DIAGRAM



**\*Note:** For larger motors, use the Photohelic® Switch/Gage in a maintained contact, 120 Volt Control or Push Button Circuit of the motor starter.

## HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

<p><b>RANGE/SERIES*</b></p> <p><b>AT3A3001:</b> 0 to 1 in w.c.  <b>AT3A3002:</b> 0 to 2 in w.c.  <b>AT3A3003:</b> 0 to 3 in w.c.  <b>AT3A3004:</b> 0 to 4 in w.c.  <b>AT3A3005:</b> 0 to 5 in w.c.  <b>AT3A3000-60PA:</b> 0 to 60 Pa  <b>AT3A3000-125PA:</b> 0 to 125 Pa  <b>AT3A3000-250PA:</b> 0 to 250 Pa  <b>AT3A3000-300PA:</b> 0 to 300 Pa  <b>AT3A3000-750PA:</b> 0 to 750 Pa</p> <p><b>POWER</b></p> <p><b>-120VAC:</b> 120 VAC  <b>-240VAC:</b> 240 VAC  <b>-240VAC:</b> 24 VAC</p> <p><b>PRESSURE RATING</b></p> <p><b>-X:</b> Standard construction 15 psig  <b>-MP:</b> Medium pressure 35 psig  <b>-HP:</b> High pressure 80 psig</p> <p><b>CONSTRUCTION</b></p> <p><b>X:</b> Standard construction</p> <p><b>TEMPERATURE RATING</b></p> <p><b>X:</b> Standard  <b>LT:</b> Low temperature option</p>	<p><b>AT3A3001</b> <b>-120VAC</b> <b>-MP</b> <b>X</b> <b>LT</b> <b>-A</b> <b>B</b> <b>1</b> <b>OPV</b> <b>T2</b></p>	<p><b>TAG</b></p> <p><b>T2:</b> Stainless steel tag</p> <p><b>OVERPRESSURE PLUG</b></p> <p><b>X:</b> Standard without overpressure relief valve  <b>OPV:</b> Overpressure relief valve</p> <p><b>PROCESS CONNECTION</b></p> <p><b>1:</b> 1/8" NPT female brass ports  <b>2:</b> 1/8" NPT female SS ports</p> <p><b>COVER</b></p> <p><b>B:</b> Blind top cover  <b>O:</b> Glass top cover</p> <p><b>HOUSING MATERIAL</b></p> <p><b>-A:</b> Aluminum</p>
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\*Only our most popular models and options are listed. For additional available models, please visit: <http://www.dwyer-inst.com/Product/Pressure/DifferentialPressure/Gage-Switches-Dial/SeriesAT3A3000>