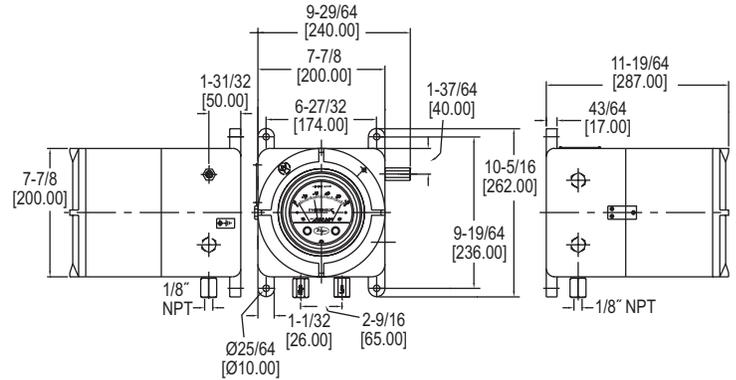


# ATEX APPROVED PHOTOHELIC® SWITCH/GAGES WITH 120, 240 OR 24 VAC POWER

Photohelic® Switch/Gages in Flame-Proof ATEX Enclosures



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.

**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

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

RANGE CHART					
Model	Range in w.c.	Model	Range in w.c.	Model	Range in w.c.
A3000-00	0 to .25	A3006	0 to 6.0	A3040	0 to 40
A3000-0	0 to .50	A3008	0 to 8.0	A3050	0 to 50
A3001	0 to 1.0	A3010	0 to 10	A3060	0 to 60
A3002	0 to 2.0	A3015	0 to 15	A3080	0 to 80
A3003	0 to 3.0	A3020	0 to 20	A3100	0 to 100
A3004	0 to 4.0	A3025	0 to 25	A3150	0 to 150
A3005	0 to 5.0	A3030	0 to 30		

MODEL CHART												
Example	AT3	A3001	-120VAC	-X	X	X	-A	B	1	X	T2	AT3A3001-120VAC-XXX-AB1XT2
<b>Housing</b>	AT3											ATEX Approved Series A3000 Photohelic® Switch/Gages
<b>Range</b>		A3XXX										Specify range by wiring Photohelic® model number. See range chart.
<b>Power</b>			120VAC 240VAC 24VAC									Power requirement 120 VAC Power requirement 240 VAC Power requirement 24 VAC
<b>Pressure Rating</b>				X								Standard -25 in Hg to 25 psig Medium pressure max. static 35 psig High pressure max. static 80 psig
<b>Construction</b>					X							Standard silicone construction
<b>Temperature Rating</b>						X						Standard temperature 20 to 120°F Low temperature to -20°F
<b>Housing Material</b>							A					Aluminum
<b>Cover</b>								B	O			Blind Glass cover
<b>Process Connection</b>										1 2		1/8" NPT female brass ports 1/8" NPT female SS ports
<b>Overpressure Plug</b>										X	OPV	Standard without overpressure relief valve Overpressure relief valve Material same as ports
<b>Tag</b>											T2	SS information label

**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 and ±4% on -00 models.  
**Pressure Limits:** -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).  
**Temperature Limits:** 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) (**Note:** Product temperature limits differ from case).  
**Dial Size:** 4" (101.6 mm).  
**Mounting Orientation:** Diaphragm in vertical position.  
**Set Point Adjustment:** Adjustable knobs on Photohelic® gage face behind enclosure cover. Follow instructions and safety warnings to open cover.

**SWITCH SPECIFICATIONS**

**Switch Type:** Each setpoint has 2 Form C relays (DPDT).  
**Repeatability:** ±1% of FS.  
**Electrical Rating:** 10 A @ 28 VDC, 10 A @ 120, 240 VAC.  
**Electrical Wiring:** Screw terminals.  
**Power Requirements:** 120 VAC, 50/60 Hz; 240 VAC & 24 VAC power optional.  
**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:** Three 1/2" NPT female. Cable gland not included.  
**Weight:** 28.4 lb (12.9 kg).  
**ATEX Approved Products from Comhas with ECN:** BVI 14ATEX0072.  
**Agency Approvals:** CE 1370 Ex II/2 GD Ex d IIC Gb T6; -60°C ≤ Ta ≤ +60°C Ex tb IIC Db T 85°C.

Differential Pressure Gages/Switches, Dial