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 instrument. Each setpoint has 2 Form C relays (DPDT).

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 setpoint status

APPLICATIONS
- Hazardous area pressure measurement and switching
- Air conditioning systems
- Hazardous area pressure measurement and switching

SPECIFICATIONS
- Service: Air and non-combustible, compatible gases.
- Wetted Materials: Consult factory.
- Housing material: Aluminum.
- Finishing: Texture epoxy coat RAL7038.
- 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 -25°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.

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

Housing AT3 ATEX Approved Series A3000 Photohelic® Switch/Gages
Range A3XXX Specify range by wiring Photohelic® model number. See range chart
Power 20VAC 240VAC 24VAC Power requirement 120 VAC
Pressure Rating X MP HP Standard -25 in Hg to 25 psig
Construction X Standard silicone construction
Temperature Rating X LT Standard temperature 20 to 120°F
Low temperature to -20°F
Housing Material A Aluminum
Cover B O Blind Glass cover
Process Connection 1 2 1/8” NPT female brass ports
Overpressure Plug X OPV Standard without overpressure relief valve
Outlet X OPV Overpressure relief valve
Material same as ports
Tag T2 SS information label

Dwyer Instruments, Inc. | www.dwyer-inst.com

USA: California Proposition 65
\*WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov