The SERIES DH3 Digihelic® Differential Pressure Controller is a 3-in-1 instrument possessing a digital display gage, control relay switches, and a transmitter with current output all packed in the popular Photohelic® gage style housing. Combining these 3 features allows the reduction of several instruments with one product, saving inventory, installation time and money. The Digihelic® controller is the ideal instrument for pressure, velocity and flow applications, achieving a 1% full scale accuracy on ranges down to the extremely low 0.25 in w.c. to 2.5 in w.c. full-scale. Ranges of 5 in w.c. and greater maintain 0.5% FS accuracy. Bi-directional ranges are also available. The Series DH3 Digihelic® controller allows the selection of pressure, velocity or flow operation in several commonly used engineering units; 2 SPDT control relays with adjustable deadbands are provided along with a selectable 4-20 mA process output. The backlit 4 digit LCD 0.4˝ height display, and an easy to use menu key to access 5 simplified menus which provide access to: security level; selection of pressure, velocity or flow operation; selection of engineering units; K-factor for use with flow sensors; rectangular or circular duct for inputting area in flow applications; set point control or set point and alarm operation; alarm operation as a high, low or high/low alarm; automatic or manual alarm reset; inputting area in flow applications; set point control or set point and alarm operation; alarm delay; view peak and valley process reading; digital damping for smoothing erratic process applications; scaling the 4-20 mA process output to fit your applications range and field calibration.

FEATURES/BENEFITS
- 3-in-1 instrument allows the reduction of several instruments with one product, saving inventory, installation time and money.
- Full scale accuracy of 1% even on extremely low ranges, and 0.5% for ranges above 5 in w.c. provide for greater measurement precision.
- Optional stainless steel bezel is the same installation diameter as Photohelic® gage and simplifies field upgrade to DH3 pressure controller.

APPLICATIONS
- SCFM duct flow
- Filter status
- Duct or building static pressure
- Damper and fan control

SPECIFICATIONS
- Service: Air and non-combustible, non-corrosive gases.
- Wetted Materials: Consult factory.
- Housing Material: Die cast aluminum case and bezel.
- Accuracy: ±1.5% for 0.25 in and ±0.25 in w.c. ranges. Ranges 0.5 in to 5 in w.c. and corresponding bi-directional (except ±2.5 in w.c.) ±1%; All other ranges: ±0.5% @ 77°F (25°C) including hysteresis and repeatability (after 1 hour warm-up).
- Stability: ±1% per year.
- Pressure Ranges: Ranges ≤ 2.5 in w.c.: 25 psi; ±2.5˝, 5 in w.c.: 5 psi; 10 in w.c.: 5 psi; 25 in w.c.: 5 psi; 50 in w.c.: 5 psi; 100 in w.c.: 9 psi.
- Temperature Limits: 32 to 140°F (0 to 60°C).
- Compensated Temperature Limits: 32 to 140°F (0 to 60°C).
- Thermal Effects: 0.020%/°F (0.036%/°C) from 77°F (25°C). For 0.25 in and 0.5 in w.c. ranges: ±0.03%/°F (±0.05%/°C).
- Power Requirements: 12-28 VDC, 12-28 VAC 50 to 60 Hz.
- Power Consumption: 3 VA max.
- Output Signal: 4-20 mA DC into 900 Ω max.
- Zero & Span Adjustments: Accessible via menu.
- Response Time: 250 ms (damping set to 1).
- Display: Backlit 4 digit LCD 0.4˝ height LED indicators for set point and alarm status.
- Electrical Connections: 12 pin male high density D-sub connection, 18” (46 cm) cable with 10 conductors included.
- Process Connections: 1/8” female NPT. Side or back connections.
- Mounting Orientation: Mount unit in vertical plane.
- Weight: 1.75 lb (794 g).
- Agency Approvals: CE.

SWITCH SPECIFICATIONS
- Switch Type: 2 SPDT relays.
- Electrical Rating: 1 A @ 30 VAC/VDC.
- Set Point Adjustment: Adjustable via keypad on face.

ACCESSORIES

Options

To order add suffix: Description
-SS 304 brushed stainless steel bezel. ‘Backward compatible with standard Magnehelic® gage installation diameter
-NIST NIST traceable calibration certificate
-FC Factory calibration certificate

Example: DH3-004-SS

Example: DH3-004-NIST

Example: DH3-004-FC