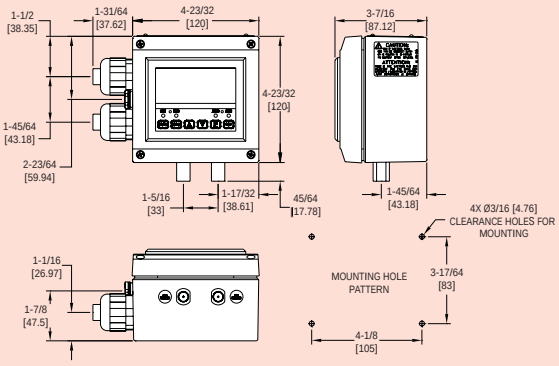
Series DHII Digihelic® II Differential Pressure Controller

NEMA 4 (IP66) Housing With Large, Bright LCD



The Digihelic® Controller just got better with the New Series DHII Differential Pressure Controller. The DHII takes all the fabulous features of the standard Digihelic® Pressure Controller and packages them in a robust NEMA 4 (IP66) housing.

The Digihelic® II Pressure Controller combines the 2 SPDT control relays, 4-20 mA process output and Modbus® communications with a large, brightly backlit 4 digit LCD display that can easily be seen from long distances. The electrical wiring has also been enhanced in the DHII with its detachable terminal blocks. The removable terminals allow the installer to easily wire the terminal block outside the housing and then attach to the circuit board, reducing wiring difficulties and installation time in the process.

The Digihelic® II Differential Pressure Control in the new NEMA 4 (IP66) enclosure enables this product to be the perfect choice when mounting pressure controls outdoors in such applications as rooftop air handlers. This housing also makes it the ideal solution for surface mounting in clean rooms or facilities where water or a cleaning solution is utilized in maintaining plant cleanliness.

ACCESSORIES

351-9, Mother Node™ silver RS-232 to RS-485 Converter with DB9F Connector. Includes 120 VAC to 12 VDC adapter.

A-438, Surface Mounting Brackets.
Digihelic® Links Communications Software.

SPECIFICATIONS

Service: Air and non-combustible, compatible gases.
Wetted Materials: Consult factory.
Housing Material: Aluminum, glass.
Accuracy: ±0.5% at 77°F (25°C) including hysteresis and repeatability (after 1 hour warm-up).
Stability: < ±1% per year.
Pressure Limits: Ranges 5″: 5 psi; 10″: 5 psi; 25″: 5 psi; 50″: 5 psi; 100″: 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).
Power Requirements:
High Voltage Power = 100 to 240 VAC, 50 to 400 Hz or 132 to 240 VDC.
Low Voltage Power = 24 VDC ±20%.
Power Consumption:
Low Voltage Power = 24 VDC - 130 mA max.
High Voltage Power = 100 to 240 VAC, 132 to 240 VDC - 7VA max.
Output Signal: 4-20 mA DC into 900 ohms max.
Zero & Span Adjustments: Accessible via menus.
Response Time: 250 ms (dampening set to 1).
Display: 4 digit backlit LCD 0.6″ height. LED indicators for set point and alarm status.
Electrical Connections: Euro type removable terminal blocks with watertight conduit fittings for 1/2″ watertight conduit.
Process Connections: 1/8″ female NPT.
Enclosure Rating: Designed to meet NEMA 4 (IP66).
Mounting Orientation: Mount unit in horizontal plane.
Size: 4.73″ x 4.73″ x 3.43″ (120 mm x 120 mm x 87.1 mm).
Weight: 2 lb 10 oz (1.19 kg).
Serial Communications: Modbus® RTU, RS485, 9600 Baud.

SWITCH SPECIFICATIONS

Switch Type: 2 SPDT relays.
Electrical Rating: 8 Amps at 240 VAC resistive.
Set Point Adjustment: Adjustable via keypad on face.

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MODELS

Available Pressure Engineering Units												
Model No.	**in. wc**	**ft. wc**	**mm wc**	**cm wc**	**psi**	**in. Hg**	**mm Hg**	**mbar**	**Pa**	**kPa**	**hPa**	**oz. in².**
DHII-002	.2500		6.350	0.635			0.467	0.623	62.28		0.623	0.114
DHII-004	1.000		25.40	2.540			1.868	2.491	249.1	0.249	2.491	0.578
DHII-006	5.000	.4167	127.0	12.70	.1806	.3678	9.342	12.45	1245	1.245	12.45	2.890
DHII-007	10.00	.8333	254.0	25.40	.3613	.7356	18.68	24.91	2491	2.491	24.91	5.780
DHII-008	25.00	2.083	635.0	63.50	.9032	1.839	46.71	62.27	6227	6.227	62.27	14.45
DHII-009*	50.00	4.167	1270	127.0	1.806	3.678	93.42	124.5		12.45	124.5	28.90
DHII-010*	100.0	8.333	2540	254.0	3.613	7.356	186.8	249.1		24.91	249.1	57.80

Bi-Directional* Ranges also available: **DHII-012** Range: 0.25 - 0 - 0.25″ w.c.
DHII-014 Range: 1.0 - 0 - 1.0″ w.c.
DHII-015 Range: 2.5 - 0 - 2.5″ w.c.
DHII-016 Range: 5 - 0 - 5″ w.c.
DHII-017 Range: 10 - 0 - 10″ w.c.

*Velocity and volumetric flow not available on bi-directional range units and models DHII-009 & DHII-010.