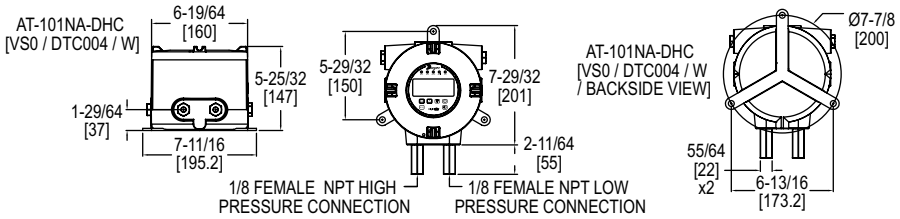
Rometec srl - www.rometec.it - info@rometec.it - Rometec srl - www.rometec.it - info@rometec.it

ATEX/IECEX APPROVED DIGIHELIC® DIFFERENTIAL PRESSURE CONTROLLER

Series DHC with Flameproof ATEX/IECEx Enclosure





The **Series AT-DHC ATEX/IECEx Approved Digihelic® Differential Pressure Controller** is a 3-in-1 instrument possessing a digital display gage, control relay switches, and a transmitter with both current and voltage outputs. Combining these 3 features allows the reduction of several instruments with one product, saving inventory, installation time, and cost. The Series AT-DHC ATEX/IECEx Approved Digihelic® differential pressure controller is the ideal instrument for hazardous area pressure, velocity, and volumetric flow applications reading in several commonly used engineering units with optional unidirectional or bidirectional ranges. These units achieve a 1.5% or better accuracy on extremely low ranges, and 0.5% accuracy for ranges at or above 1 in w.c. Calibration can be performed in the field (in safe zone only) making maintaining its accuracy more manageable. Additionally, the Series AT-DHC Digihelic® differential pressure controller includes 2 SPDT control relays with adjustable deadbands. Programming the unit is simple using the built-in menu. With scalable 4-20 mA, selectable voltage process outputs, and selectable Modbus® or BACnet communication, this controller can easily fit into your application. Flameproof enclosures are available in aluminum and can include a glass window for viewing process information and set point status on the digital display.

BENEFITS/FEATURES

- All the capabilities and value of the Series DHC in an ATEX/IECEx approved enclosure
- Long service life and minimized downtime due to durable, rugged housing and high-quality components
- High impact strength and high temperature rated for applications where hazardous environments exist

APPLICATIONS

- Hazardous area pressure, velocity, and volumetric flow measurement and switching

SPECIFICATIONS

Service: Air and non-combustible, compatible gases.
Wetted Materials: Consult factory.
Accuracy: ±0.5% FSO for all ranges, except 0.5 in w.c. @ ±1% FSO, and ranges at or below ±0.25 in w.c. @ ±1.5% FSO.
Stability: < ±1% / year FSO.
Temperature Limits: -4 to 158°F (-20 to 70°C). (**Note:** Product temperature limits differ from case).
Pressure Limits: See pressure limit chart.
Power Requirements: 12-28 VDC, 12-28 VAC 50 to 400 Hz.
Output Signal: 4-20 mA (4-wire); 0-10 V, 0-5 V, 1-5 V, and 2-10 V (4-wire).
Response Time: 400 ms (damping set to 0).
Zero and Span Adjustments: Accessible via menus in safe zone only.
Power Consumption: 3 VA max.
Display: Backlit LCD display, LED set-point indicators.
Mounting Orientation: Not position sensitive.
Enclosure Rating: IP66 (IP65 for versions VS1, VS2, and VL1).
Housing Material: Aluminum.
Finishing: Texture epoxy coat RAL7038.
Process Connections: 1/8″ female NPT ports.
Electrical Connections (Device): 15 pin male high density D-sub connection; 18″ (46 cm) cable with 15 conductors included.
Electrical Connections (Enclosure): Two 1/2″ NPT female. Cable gland not included.
Switch Type: 2 SPDT relays.
Electrical Rating: 1 A @ 30 VAC/VDC.
Set Point Adjustment: Adjustable via menus in safe zone only.
Communication: BACnet MS/TP or Modbus® RTU.
Supported Baud Rate: 9600, 19200, 38400, 57600, 76800, 115200.
Device Load: 1/8 unit load.
Thermal Effects: 0.02% FS / °F (0.036% FS / °C).
Weight: 12.3 lb (5.6 kg).
ATEX Certificate: INERIS 21ATEX0033X.
IECEx Certificate: IECEx INE 21.0064X.
Compliance: ATEX: CE 0080 II 2G Ex db IIC T5, T6 Gb -60°C≤Ta≤+50°C (T6) -60°C≤Ta≤+60°C (T5); II 2D Ex tb IIIC T75°C Db; IECEx: Ex db IIC T5, T6 Gb -60°C≤Ta≤+50°C (T6) -60°C≤Ta≤+60°C (T5) Ex tb IIIC T75°C Db.

MODEL CHART

Example	AT	-101NA	-DHC	-002	-B	1VS0	12	AT-101NA-DHC-002-B1VS012
Enclosure	AT							ATEX/IECEx approved enclosure
Housing Material		101NA						Aluminum enclosure
Series			DHC					Digihelic® differential pressure controller
Range				002				0.25 in w.c.
				003				0.5 in w.c.
				004				1 in w.c.
				006				2.5 in w.c.
				008				5 in w.c.
				009				10 in w.c.
				010				25 in w.c.
				011				50 in w.c.
				012				100 in w.c.
				202				±0.25 in w.c.
				203				±0.5 in w.c.
				204				±1 in w.c.
				206				±2.5 in w.c.
				208				±5 in w.c.
				209				±10 in w.c.
				053				60 Pa
				055				125 Pa
				056				250 Pa
				253				±60 Pa
				255				±125 Pa
				256				±250 Pa
				082				6 mm w.c.
				084				25 mm w.c.
				282				±6 mm w.c.
				284				±25 mm w.c.
Cover					B			Blind
					W			Glass window
Port/Valve Configurations						1VS0		Brass with STD port/no valve
						1VL0		Brass with LD port/no valve
						1VS1		Brass with STD port/STD valve
						1VS2		Brass with STD port/LD valve
						1VL1		Brass with LD port/LD valve
						2VS0		SS with STD port/no valve
						2VL0		SS with LD port/no valve
						2VS1		SS with STD port/STD valve
						2VS2		SS with port/LD valve
						2VL1		SS with port/LD valve

PRESSURE LIMITS

Port/Valve	One Pressure Port Connected	Both Pressure Ports Connected
VS0	10 kPa	10 kPa
VL0	10 kPa	10 kPa
VS1	20 kPa	15 kPa
VS2	40 kPa	20 kPa
VL1	20 kPa	15 kPa

USA: California Proposition 65
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Rometec srl - www.rometec.it - info@rometec.it - Rometec srl - www.rometec.it - info@rometec.it