

AT2-DH3

Explosion-Proof ATEX/IECEX Exd
Digihelic®
differential pressure controller



- DH3 transmitter/controller now available from Comhas as single instrument ATEX/IECEX approved
- 3 in 1, digital display gage, control relay switches and transmitter
- Ideal instrument for pressure, velocity and flow applications

ATEX	CE 1370 II 2G Ex d IIC T6 Gb II 2D Ex tb IIIC T85°C Db, -60°C ≤ T _{amb} ≤ +60°C Certificate: BVI 14 ATEX 0072
IECEX	Ex d IIC T6 Gb Ex tb IIIC T85°C Db Certificate: IECEX EPS 14.0082
ENCLOSURE RATING	IP66 (IP65 with option OPV)



AT2-607D SPECIFICATIONS

Service:	air ir and compatible clean and dry gases.	
Wetted parts:	consult factory.	
DH3 case:	die cast aluminum case and bezel.	
Temperature limits:	DH3®: from 0 to 60°C (32 to 140°F). Case: from -60 to 60°C* (-76 to 140°F).	
Accuracy:	<5" w.c. (except $\pm 2.5"$ w.c.): All other ranges:	$\pm 1\%$; $\pm 0.5\%$ at 77°F (25°C) including hysteresis and repeatability (after 1 hour warm-up).
Stability:	< $\pm 1\%$ per year.	
Pressure limits:	Range ≤ 622.7 Pa (2.5" w.c.) Range ± 622.7 Pa ($\pm 2.5"$) and 1245 Pa (5" w.c.) Range 6227 Pa (25" w.c) and 12.45 KPa (50" w.c.) Range 24.91 KPa (100" w.c)	P-max: 172 KPa (25 psi); P-max: 34.4 KPa (5 psi); P-max: 34.4 KPa (5 psi); P-max: 62 KPa (9 psi).
Compensated temperature limits:	from 0 a 60°C (32 to 140°F).	
Thermal effects:	0.036/°C, from 25°C (0,020% of from 77°F).	
Power requirements:	12-28 Vdc, 12-28 Vac 50-400 Hz.	
Power consumption:	3 VA max.	
Output signal:	4-20 mA, max 900 ohm.	
Zero & span adjustments:	accessible via menus (possible only in safe area).	
Response time:	250 ms (damping set to 1). Without considering delay caused by Exd flame arrestors (up to 90 sec. from full scale to zero depending model and range).	
Display:	backlit 4 digit LCD 0.4" height LED indicators for set point and alarm status.	
Installation:	diaphragm in vertical position.	
Dial size:	5" (127 mm).	
Housing material:	alluminium (stainless steel option).	
Finishing:	texture epoxy coat RAL7038 (only aluminium enclosure).	
Electrical wiring:	screw terminal.	
Electrical connection:	2 x 1/2" NPT F standard (supplied without cable gland).	
Process connections:	1/8" female NPT brass (stainless steel optional). In case of acetylene presence it is requested to use stainless steel.	
Dimensions:	see drawing below.	
Weight:	5.6 Kg ab.	

SWITCH SPECIFICATIONS

Switch type:	2 Relè SPDT.
Rating relay:	1A @ 30 Vac/Vdc.
Set point adjustment:	adjustable via keypad on face (possible only in safe zone).

* Operating ambient temperature is defined also according to the options and pressure instrument choosed.

CAUTION FOR USE ONLY WITH AIR OR COMPATIBLE GASES!
CONTACT FACTORY FOR USE WITH GASES, OTHER THAN AIR AND NITROGEN.

IMPORTANT NOTES FOR INSTALLATION:

Cables must be fitted through 1/2" NPT cable gland or Atex/IECEX conduit (not supplied with instrument).

- Make sure after cabling to close tight cover and cable gland, in order to keep IP66 rating (IP65 with option OPV, pressure relief valve and/or regulation knob).

- Open cover only after de-energising instrument.

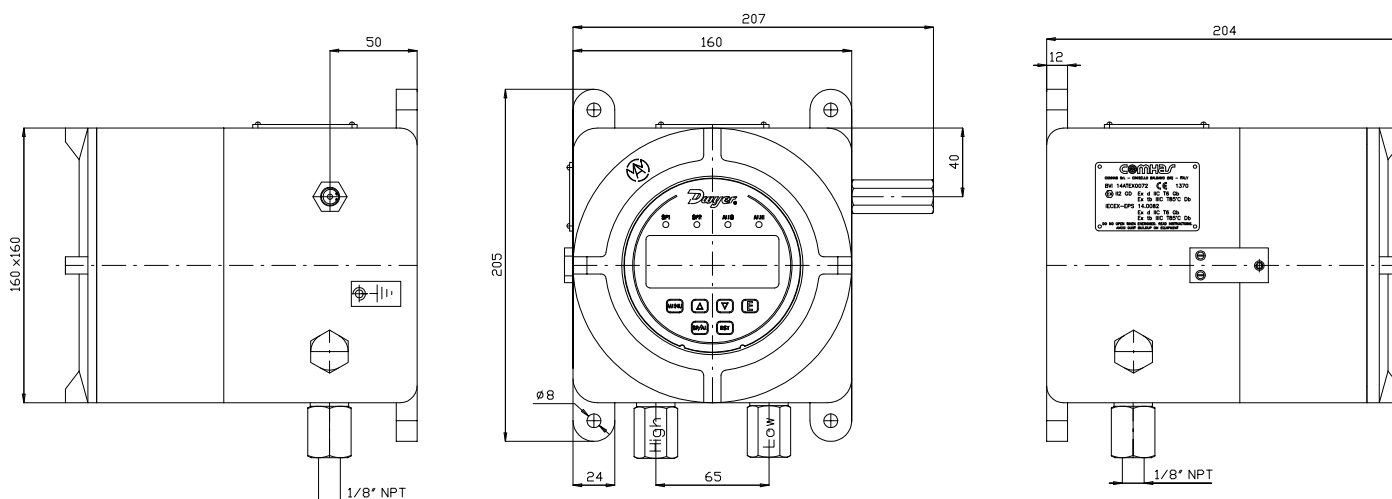
- Attention: check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous area.



STANDARD RANGES (OTHER RANGES AVAILABLE)

MODEL	OPERATING RANGES
DH3-002	0-0.25" w.c. (0-62.2 Pa)
DH3-003	0-0.5" w.c. (0-124.5 Pa)
DH3-004	0-1" w.c. (0-249.1 Pa)
DH3-005	0-2.5" w.c. (0-622.7 Pa)
DH3-006	0-5" w.c. (0-1245 Pa)
DH3-007	0-10" w.c. (0-2491 Pa)
DH3-009	0-25" w.c. (0-6227 Pa)
DH3-010	0-50" w.c. (0-12.45 KPa)
DH3-011	0-100" w.c. (0-24.91 KPa)
DH3-013	0.25-0.25" w.c. (62.2-0-62.2 Pa)
DH3-014	0.5-0.5" w.c. (124.5-0-124.5 Pa)
DH3-015	1-0-1" w.c. (249.1-0-249.1 Pa)
DH3-016	2.5-0-2.5" w.c. (622.7-0-622.7 Pa)
DH3-017	5-0-5" w.c. (1245-0-1245 Pa)
DH3-018	10-0-10" w.c. (2491-0-2491 Pa)

DIMENSIONS



Consult factory for different holes layout.

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OTHER OPTIONS
XXXXX: layout code for different holes sizes and layout.

Dimensions may change without any advice.