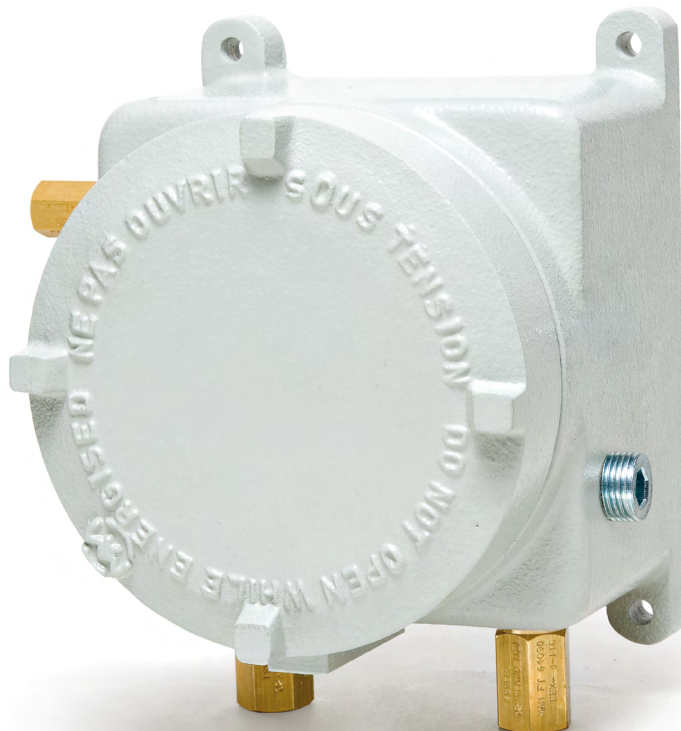


# AT2-1800

Differential pressure switch  
for low ranges ATEX/IECEX Exd



- 1800 differential pressure switch now available from Comhas as single instrument ATEX/IECEX approved
- 9 models for set points from 18 Pa to 21.6 KPa
- Repeatability  $\pm 2\%$

<b>ATEX</b>	CE 1370 II 2G Ex d IIC T6 Gb II 2D Ex tb IIIC T85°C Db, $-60^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$ Certificate: BVI 14 ATEX 0072
<b>IECEX</b>	Ex d IIC T6 Gb Ex tb IIIC T85°C Db Certificate: IECEX EPS 14.0082
<b>ENCLOSURE RATING</b>	IP66 (IP65 with option OPV)



## AT2-607D SPECIFICATIONS

<b>Service:</b>	air and compatible clean and dry gases.
<b>Wetted parts:</b>	consult factory (silicon rubber diaphragm)
<b>Temperature limits*:</b>	Pressure switch 1800: from -34 to 82.2°C (-30 to 180°F) from -28.9 to 82.2°C (-20 to 180°F) - mod.1823-00 Case: from -60 to 60°C*
<b>Pressure limits:</b>	68.95 kPa continuous (10 Psig); 172.4 kPa surge (25 Psig)
<b>Switch:</b>	SPDT type
<b>Ripeatability:</b>	±2%.
<b>Electrical rating:</b>	15A @ 120-480 Vac, 60 Hz, Resistive 1/8 HP @ 125 Vac, 1/4 HP @ 250 Vac, 60 Hz. Derate to 10 A for operation at high cycles rates.
<b>Electrical wiring:</b>	3 screw type, common, normally open and normally closed.
<b>Set point adjustement:</b>	internal or with external knob (optional).
<b>Mounting orientation:</b>	diaphragm in vertical position.
<b>Housing material:</b>	alluminium (optional stainless steel).
<b>Finishing:</b>	texture epoxy coat RAL7038 (only aluminium case)
<b>Process connections:</b>	1/8" female NPT brass (stainless steel optional). In case of acetylene presence it is request to use stainless steel.
<b>Electrical connection:</b>	2 x 1/2" NPT F standard (supplied without cable gland).
<b>Dimensions:</b>	see drawing below.
<b>Weight:</b>	5.4 Kg ab.

\* 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).

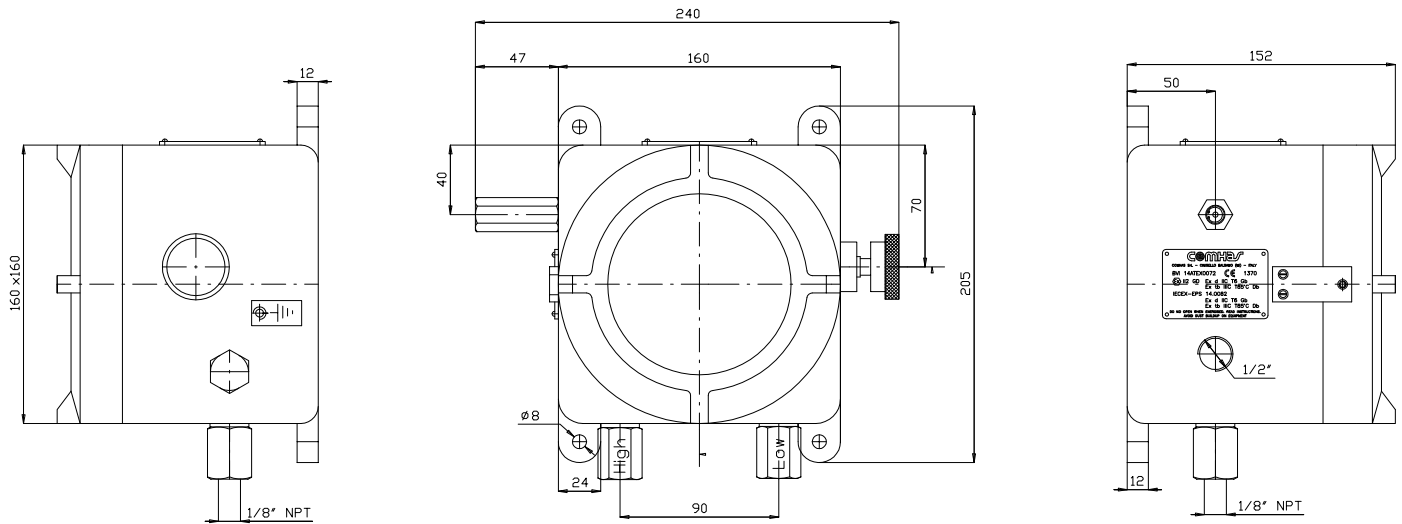
- Make sure after cabling to close tight cover and cable gland, in order to keep IP66 rating (IP65 with option OPV, pressure relief valve and/or regulation knob).
- Open cover only after de-energising instrument.
- Attention: check local safety rules and warnings on unit and manual for a correct use of the instrument in hazardous area.



## STANDARD RANGES (OTHER RANGES AVAILABLE)

Model	OPERATING RANGES	AT MIN SET POINT	AT MAX SET POINT
<b>1823-00</b>	0.08-0.22 Inch W.C. (18-56 Pa)	0.05 Inch W.C. (13 Pa)	0.05 Inch W.C. (13 Pa)
<b>1823-0</b>	0.15-0.5 Inch W.C. (38-127 Pa)	0.06 Inch W.C. (15 Pa)	0.06 Inch W.C. (15 Pa)
<b>1823-1</b>	0.3-1.0 Inch W.C. (76-254 Pa)	0.08 Inch W.C. (20 Pa)	0.08 Inch W.C. (20 Pa)
<b>1823-2</b>	0.5-2.0 Inch W.C. (127-508 Pa)	0.10 Inch W.C. (25 Pa)	0.12 Inch W.C. (30 Pa)
<b>1823-5</b>	1.5-5.0 Inch W.C. (381-1270 Pa)	0.14 Inch W.C. (35 Pa)	0.28 Inch W.C. (71 Pa)
<b>1823-10</b>	2.0-10 Inch W.C. (0,5-2,5 Kpa)	0.18 Inch W.C. (46 Pa)	0.45 Inch W.C. (114 Pa)
<b>1823-20</b>	3-22 Inch W.C. (0,76-5,6 Kpa)	0.35 Inch W.C. (89 Pa)	0.70 Inch W.C. (178 Pa)
<b>1823-40</b>	5-44 Inch W.C. (1,27-11,17 Kpa)	0.56 Inch W.C. (142 Pa)	1.10 Inch W.C. (279 Pa)
<b>1823-80</b>	9-85 Inch W.C. (2,28-21,6 Kpa)	1.30 Inch W.C. (330 Pa)	3.0 Inch W.C. (760 Pa)

## DIMENSIONS



Consult factory for different holes layout.



<b>CODE</b>	<b>AT2</b>	-	<b>1800</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Housing</b>			1800																	
<b>Ranges</b>	0.08-0.22 Inch W.C. (18-56 Pa)																			00
	0.15-0.5 Inch W.C. (38-127 Pa)																			0
	0.3-1.0 Inch W.C. (76-254 Pa)																			1
	0.5-2.0 Inch W.C. (127-508 Pa)																			2
	1.5-5.0 Inch W.C. (381-1270 Pa)																			5
	2.0-10 Inch W.C. (0.5-2.5 Kpa)																			10
	3-22 Inch W.C. (0.76-5.6 Kpa)																			20
	5-44 Inch W.C. (1.27-11.17 Kpa)																			40
	9-85 Inch W.C. (2.28-21.6 Kpa)																			80
<b>Case material</b>	Alluminium																			A
	Stainless steel (s.s. connection included)																			S
<b>Housing options</b>	Blind top cover																			B
	Glass transparent cover																			0
	Without hand knob*																			K1
	With external hand knob (IP65)																			K2
	1/8" NPT F brass pressure port																			1
	1/8" NPT F stainless steel (only for aluminium housing)																			2
	Standard - without overpressure relief valve																			X
	Overpressure relief valve* (material: same as presure ports)																			OPV
	Stainless steel tag																			
<b>Other options</b>	See "other options" - Possible more than one option																			...

\* IP65 in case of relief valve installation (OPV). Relief valve is used to keep atmospheric pressure inside the case.  
Suggested in case of risk of having static pressure ≥19 Bar (static pressure admitted is indicated on tag and it will be anyway always <19 bar).

**OTHER OPTIONS**

- B: buna-n diaphragm.
- SF: silicon free (included option "B").
- BGAP: microswitch.
- GOLD: gold contacts.
- MIL: mil switch.
- XXXXX: layout code for different holes sizes and layout.

ACCESSORIES: Atex cable gland.

Dimensions may change without any advice.



info@comhas.com - www.comhas.com - T: +39 02 6129.8551