



## COMPACT PRESSURE SWITCH

COB10002-10

## CONTENT

APPLICATION / FEATURES CHARACTERISTICS  
DIMENSIONS

### APPLICATION / FEATURES

The COMBUPx compact pressure switch is specially designed for monitoring air or gas pressure in gas-fired equipment and systems, such as burners.

- It allows for effective monitoring of pressure in gas pipelines.
- Its compact size makes it very easy to install, even in confined spaces.
- Thanks to its ergonomic structure, the user can adjust the operating parameters himself.
- It is available in several versions, offering different pressure settings to suit

various installation needs.

- COMBUPx can be configured as minimum or maximum pressure switches, depending on system requirements.
- The set point is adjustable up to 500 mbar, independent of the range effective.
- It can operate under a continuous working pressure of up to 600 mbar.
- It is compatible with gases of families 1, 2 and 3, as well as with other neutral gases non-corrosive.
- Fully compatible with other similar products, it integrates easily into existing systems.

### FEATURES

Kind	Adjustable	
Materials	Body	Cast aluminum
	Diaphragm	HNBR
	Switching contact	Ag-SnO2
	Setpoint adjustment	Rotary graduated knob
Temperature	Working temperature: -15 ~ +60 °C, Storage temperature: -20~+80 °C	
Electrical power	Switching voltage	Min. AC efficiency 24 V      max. 250 V DC min. 24 V                      max. 48 V
	Cutting power	6A AC max
	Switching current	AC eff max. 6 A for cos 1 AC eff max. 2 A for cos 0.6 AC eff min. 20 mA DC max. 1 A DC min. 20 mA
Kind	Gases family 1, 2 and 3 according to EN 437+A1:2009; Air	

IMPORTÉ PAR

# FEATURES

Model	COMBUP3	COMBUP10	COMBUP50 COMBUP150	COMBUP500
Pressure range (mbar)	1.0 ~ 3.0	2.0 ~ 10.0	5.0 ~ 50.0	5.0 ~ 150.0 100 ~ 500
	The COMBUP150 may deviate slightly from the setting tolerance in the range of 5.0 to 30 mbar			
Factory setting (mbar)	1.0	2.0	5.0	5.0 100
Differential pressure (ΔP)max	Δ1.0 mbar	Δ1.5 mbar	Δ 3.0 mbar	Δ 6 mbar Δ 20 mbar
Allowable pressure (mbar)	500 (50 kPa)			600 (60 kPa)
Rigidity dielectric	Terminal - Terminal	800 VAC/1 min		
	Terminal - Earth	1500 VAC/1 min		
Insulation resistance	100Δ , Min. DC500V Megger			
Adjusting the tolerance to room temperature	± 15% deviation between the switching point and the setpoint, which adjusts the pressure point in the event of a pressure drop when the membrane is in the vertical position.			
Allowable deviation	Permissible deviation from the set value Δ ± 15% during the service life test according to EN 1854			
Electrical connection	3-pin connector according to DIN - EN 175 301 - 803 (without earth connection).			
Pressure measurement	ø 9, length 10 mm, with threaded cap (test tip integrated in a ø9 metal housing)			
Process connection	Standard: Centered on the bottom of the case, 1/4" Female thread			
Degree of protection	IP 54 according to IEC 529 (EN60529)			
Leak Δ Sealing	Pmax X1.5 for 1 minute or Standard (EN1854 (7.2.2))			
Drift	The operating pressure drift must be within ± 15% before and after the endurance test.			
Guarantee	1 year			

#### Noticed

In the following cases, we recommend that you contact us before use.

1. Use only sufficiently cured silicone tubes.
2. Vapors containing silicone may impair the operation of electrical contacts. In case of low switching capacities, e.g. 24 V, less than 20 mA, we recommend using an RC module or an electronic switch (non-contact switch) in air containing silicone or oil.
3. A fall or impact may compromise the safety functions. These products must not be put into service, even if they show no damage.
4. In case of high humidity or aggressive gaseous components (H<sub>2</sub>S), we recommend using a pressure switch with gold contact.
5. Closed-circuit current monitoring is recommended under severe operating conditions.
6. Do not operate at a pressure lower than the minimum set pressure.

IMPORTÉ PAR



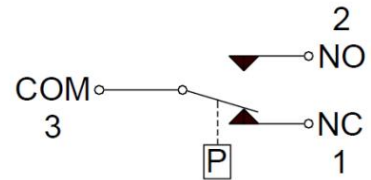
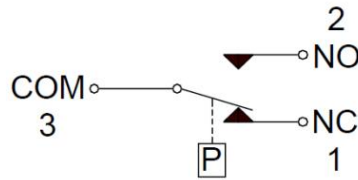
3, rue Jules Verne · Parc d'Activités Airspace · 33187 LE HAILLAN Cedex · FRANCE  
Tél. 05 56 08 62 59 · Fax : 05 56 42 58 15 · [www.cbm.fr](http://www.cbm.fr) · [info@cbm.fr](mailto:info@cbm.fr)

## Connection diagram

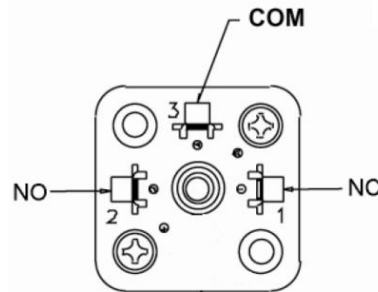
Function  
when used as...

**Minimum pressure switch** When the pressure falls below the set value, NO opens and NC closes

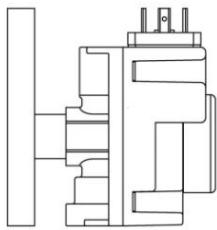
**Maximum pressure switch** When the pressure exceeds the set value, NC opens and NO closes



Connection by connector according to  
DIN 43650

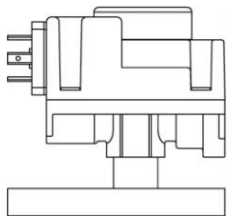


## Installation position

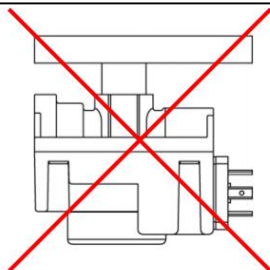


Standard installation position

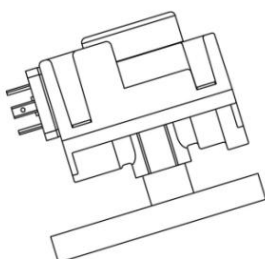
If a different installation position is used, be careful  
at modified operating points



When installed horizontally, the pressure switch switches to the  
highest pressure.



When installed horizontally above the head, the  
pressure switch switches to the lowest pressure.



When installed in an installation position  
intermediate, the pressure switch switches to the highest pressure  
high.

IMPORTÉ PAR

# DIMENSIONS

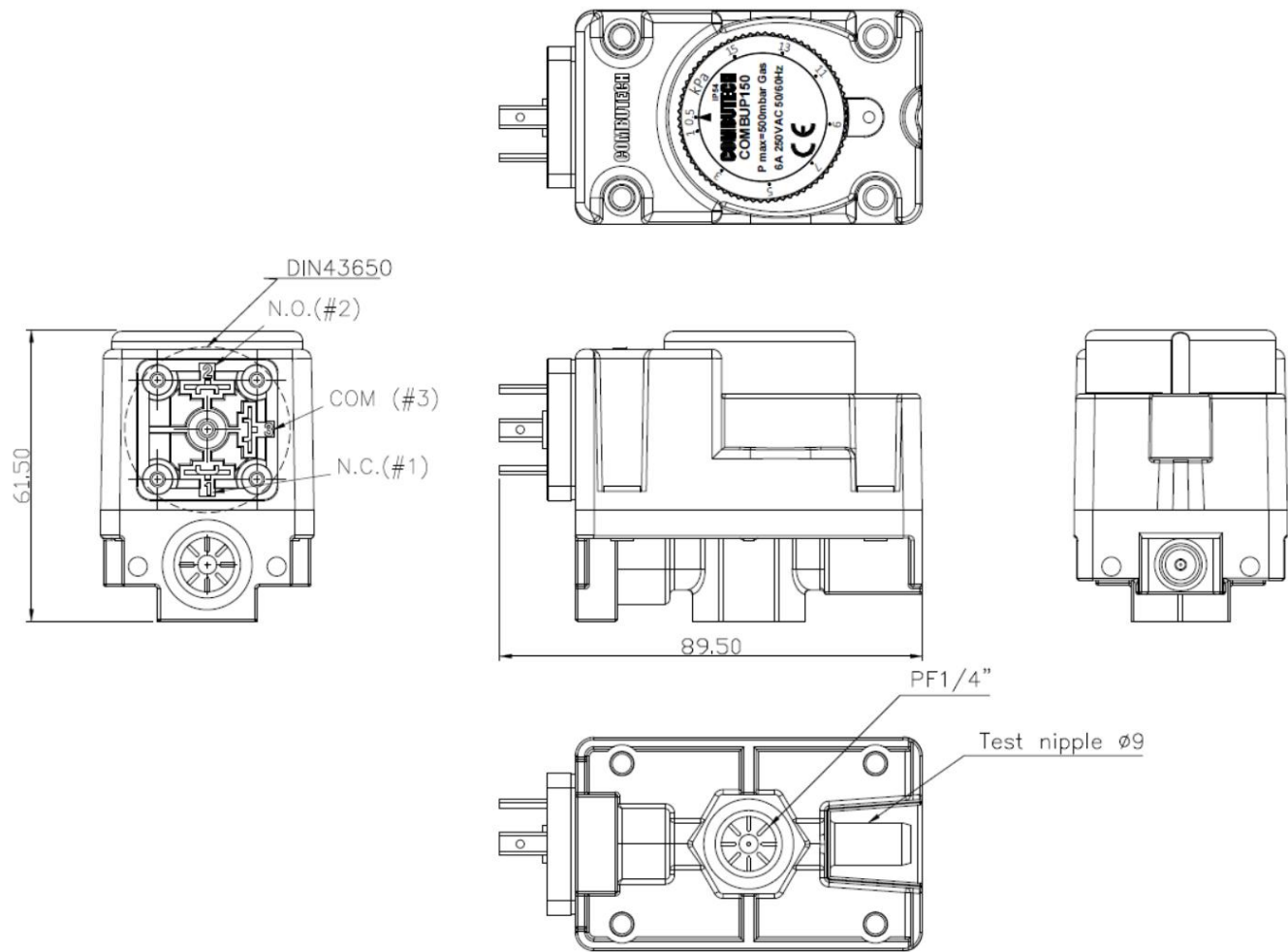


Fig 1. Gas pressure switch (V)

IMPORTÉ PAR



3, rue Jules Verne · Parc d'Activités Airspace · 33187 LE HAILLAN Cedex · FRANCE  
Tél. 05 56 08 62 59 · Fax : 05 56 42 58 15 · [www.cbm.fr](http://www.cbm.fr) · [info@cbm.fr](mailto:info@cbm.fr)