

# The factory-set differential pressure switch 911.82



## Applications

Factory-set differential pressure switch for monitoring overpressure, vacuum and differential pressure of air or other non-combustible, non-aggressive gases.

Class of control and regulation function: A

Possible fields of application include:

- Monitoring air filters and ventilators
- Overheating protection for fan heaters
- Monitoring flows in ventilation ducts
- Frost protection for heat exchangers

## Versions

Customer specific adjusted values for switching pressure and switching differential

## Temperature range

Operating temperature from -20°C to +85°C  
Storage temperature from -40°C to +85°C

## Switching pressure

Factory setting between 20 ... 1000 Pa

## Switching differential

Factory setting between 10% ... 20% of the switching pressure, min. 10 Pa

## Accuracy of the switching pressure @ 20°C

Uncertainty  $\pm 10\%$ , min.  $\pm 10$  Pa  
Repeatability  $\pm 1\%$ , min.  $\pm 3$  Pa  
Higher accuracy on request.

## Maximum operating pressure

10 kPa

## Medium

Air, non-combustible and non-aggressive gases

## Diaphragm material

Silicone, tempered at 200°C, free of gas emissions  
Other materials available on request.

## Housing materials

Switch body and cover of plastic

## Life

Mechanically more than 1 million cycles

## Weight

With cover 94 gr, without cover 82 gr

## Pressure connections

2 plastic pipe connection pieces (P1 and P2), external diameter 6.0 mm:

P1 for connection to higher pressure (marked +)  
P2 for connection to lower pressure (marked .)

## Electrical rating

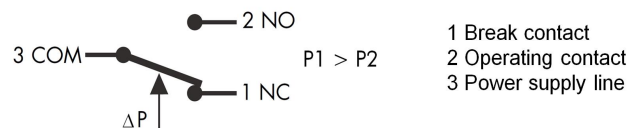
Standard version: max. 1.5 A (0.4 A) / 250 VAC  
Low-voltage version: max. 0.1 A / 24 VDC

## Electrical connections

Tab terminal 6.3 mm x 0.8 mm in accordance with DIN 46244 or push-on screw terminals

Cable conduit with cable strain relief

## Arrangement of contacts



## Protection

IP54 or IP65 with cover, IP00 without cover

## Protection class

Protection class II is only met by using a cover.

The pressure switch without protection cap is provided for installation in equipment. The construction of the equipment and the type of installation determine the protection class.

## Warning

Read instructions before use. This regulating and control unit must be installed in compliance with the applicable regulations.

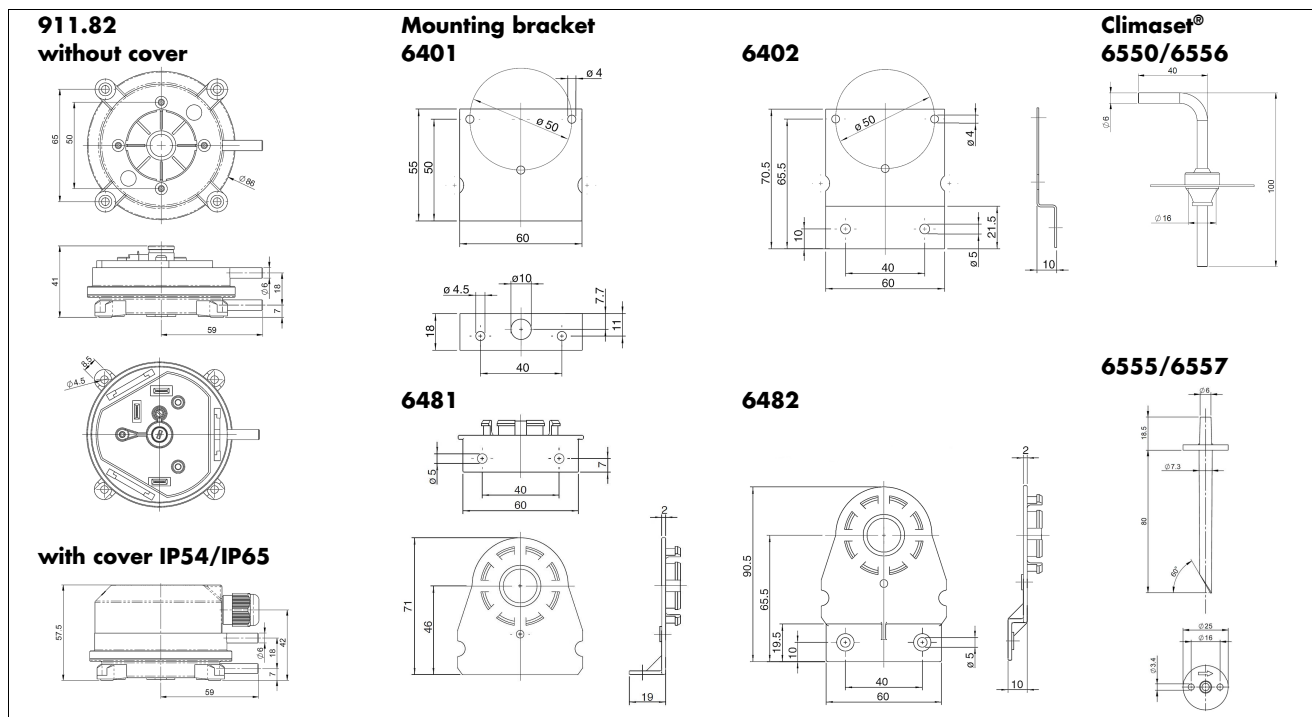
## CE Conformity

Each depending on technical version:  
EU Low Voltage Directive; EU RoHS Directive,  
EU Gas Appliances Directive

## Specifications according to EN1854

Deviation:  $\pm 15\%$ , min.  $\pm 10$  Pa  
Drift:  $\pm 15\%$

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Order matrix		911.82	X	X	2	0	X	X
Pressure ranges	20 to 150 Pascal (0.2 to 1.5 mbar)		1					
	150 to 700 Pascal (1.5 to 7.0 mbar)		2					
	700 to 1000 Pascal (7.0 to 10.0 mbar)		3					
Switching contacts	gold-plated for low voltages, screw terminals enclosed			1				
	up to maximum 1.5 A (0.4) / 250 VAC, screw terminals enclosed			2				
	up to maximum 1.5 A (0.4) / 250 VAC with tab terminals 6.3x0.8 mm			3				
	gold-plated for low voltages with tab terminals 6.3x0.8 mm			4				
Fitting method	mounted directly without bracket				2			
Adjustment knob	without adjustment knob					0		
IP protection category	IP54 with cable conduit M20x1.5						2	
	IP54 with cable conduit NPT1/2						3	
	IP00 without cover						4	
	IP54 with cap nut conduit AF20						5	
	IP65 with cable conduit M20x1.5						6	
	IP65 with cap nut conduit AF20						7	
	IP65 with cable conduit NPT1/2						8	
	Packaging	45 pcs. per carton with cover / 60 pcs. per carton without cover						
	Folding boxes included							2

Accessories	Article-No.
Metal mounting bracket S-shaped	<b>6402</b>
Metal mounting bracket L-shaped	<b>6401</b>
Snap-on plastic bracket, S-shaped	<b>6482</b>
Snap-on plastic bracket, L-shaped	<b>6481</b>
Climaset® consisting of 2m PVC piping and two plastic nipples	<b>6555</b>
Climaset® consisting of 2m silicone piping and two plastic nipples	<b>6557</b>
Climaset® consisting of 2m PVC piping and two angled metal pipes	<b>6550</b>
Climaset® consisting of 2m silicone piping and two angled metal pipes	<b>6556</b>
Set consisting of three push-on screw terminals	<b>6415</b>



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