

Differential pressure switch 911.81x



Applications

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

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

With this pressure switch without a scale the switching pressure can be adjusted very precisely with the central adjusting screw using a screwdriver and a pressure gauge. The switching differential can also be adjusted in the same way as for the Series 930.8x Climair®.

Type	Adjustment range for upper switching pressure from to	Switching differential set to	Tolerance for upper and lower switching pressure
911.811	20 100 Pa	10 Pa	± 10%
911.812	40 200 Pa	20 Pa	± 10%
911.813	100 300 Pa	25 Pa	± 10%
911.814	200 500 Pa	50 Pa	± 10%

Switching pressure specifications apply to vertical installation. If the switches are installed horizontally, the switching values are approx. 20 Pa higher.

Maximum operating pressure

100 kPa for all pressure ranges.

Temperature range

Medium and ambient temperature from -20°C to +85°C.
Storage temperature from -40°C to +85°C.

Diaphragm material

Silicone. Other materials available on request.

Pressure connections

2 pipe connection pieces (P1 and P2), external diameter 6.0 mm:
P1 for connection to higher pressure (designated +)
P2 for connection to lower pressure (designated -)

Housing materials

Switching casing and connection P2 made of PA 6.6, fitting section and connection P1 made of POM.

Weight

911.81x with/without cover 94/ 82 g

Mechanical working life

Over 10⁶ switching operations.

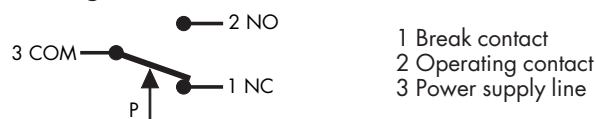
Electrical rating

Standard version max. 1.0 A (0.4 A) / 250 V AC
Low-voltage version max. 0.1 A / 24 V DC

Electrical connections

AMP flat plug 6.3 mm x 0.8 mm in accordance with DIN 46244 or push-on screw terminals.

Arrangement of contacts



Protection category

911.81x with/without cover IP 20/IP 00

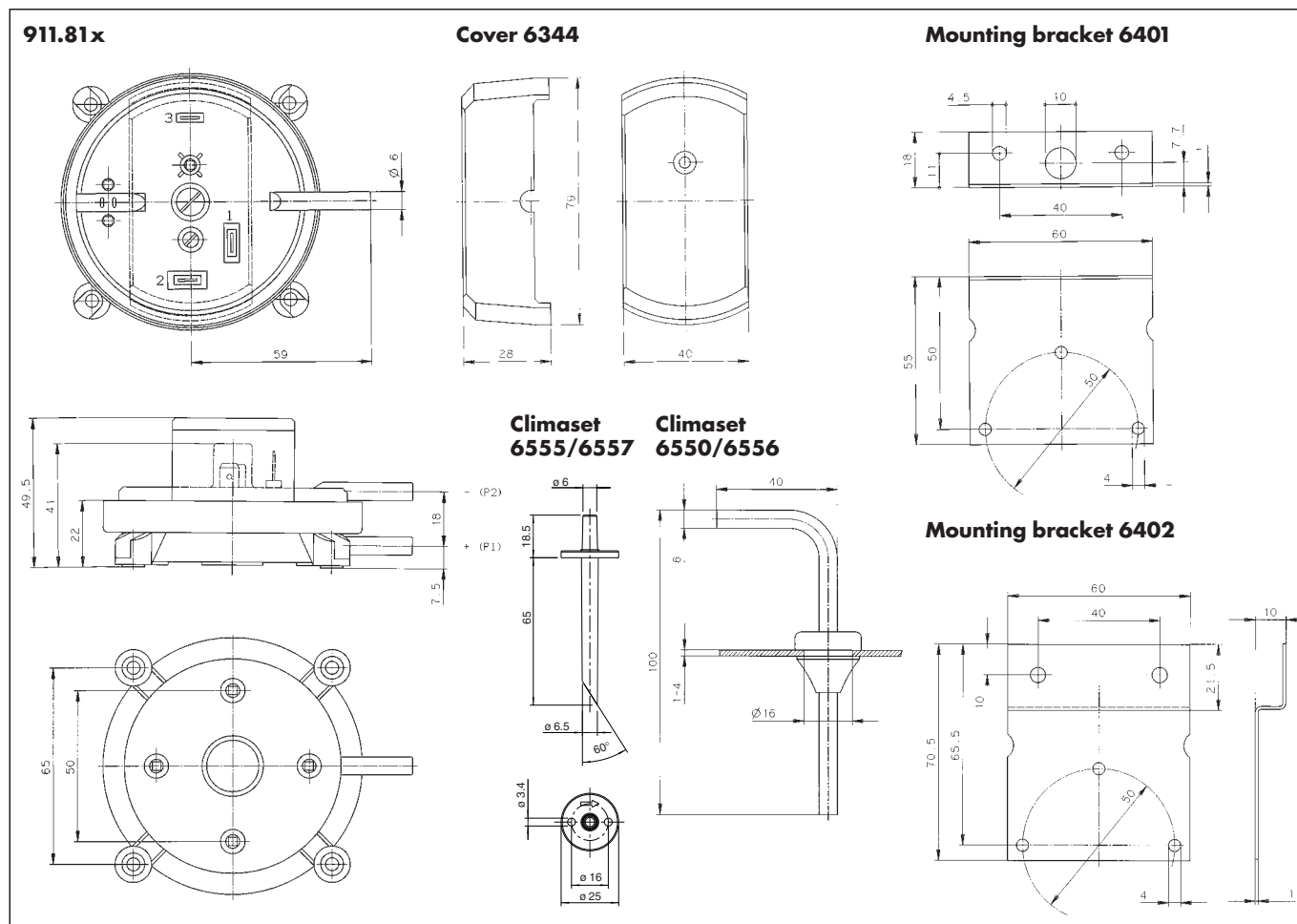
CE Conformity

each depending on technical specification: Low Voltage Directive 2006/95/EC; RoHS Directive 2002/95/EC.

Order matrix

Pressure ranges	0.2 to 1.0 mbar (20 - 100 Pa)	911.81	1						
	0.4 to 2.0 mbar (40 - 200 Pa)								2
	1.0 to 3.0 mbar (100 - 300 Pa)								3
	2.0 to 5.0 mbar (200 - 500 Pa)								4
Switching contacts	for low voltages			1					
	up to max. 1.0A (0.4) / 250 V AC			2					
Fitting method	mounted directly without bracket				2				
	with S-shaped mounting bracket				3				
	with L-shaped mounting bracket				4				
IP protection category	IP 20 with transparent cover						1		
	IP 00 without cover						2		
Packaging	bulk packed, 60 pcs. per carton							1	

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Accessories

L-shaped mounting bracket	Article No. 6401
S-shaped mounting bracket	Article No. 6402
Set consisting of three push-on screw terminals	Article No. 6415
IP 20 cover for 911.81	Article No. 6344
Climaset consisting of 2m PVC piping and two angled metal pipes	Article No. 6550
Climaset consisting of 2m silicone piping and two angled metal pipes	Article No. 6556
Climaset consisting of 2m PVC piping and two plastic nipples	Article No. 6555
Climaset consisting of 2m silicone piping and two plastic nipples	Article No. 6557
0.8 mm nozzle for damping pressure surges	Article No. 6338
0.5 mm nozzle for damping pressure surges	Article No. 6334

