

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

10 kPa for all pressure ranges.

Temperature range

Operating temperature from -20°C to +85°C.

For EC Gas Appliances Directive is operating temperature from -20°C to +60°C.

Storage temperature from -40°C to +85°C.

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								
	up to max. 1.0A (0.4) / 250 V AC			1					
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	

Diaphragm material

Silicone. NBR 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 -)

Weight

911.81x with/without cover

94/ 82 g

Mechanical working life

Over 10⁵ 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 or push-on screw terminals.

Arrangement of contacts



- 1 Break contact
- 2 Operating contact
- 3 Power supply line

Protection category

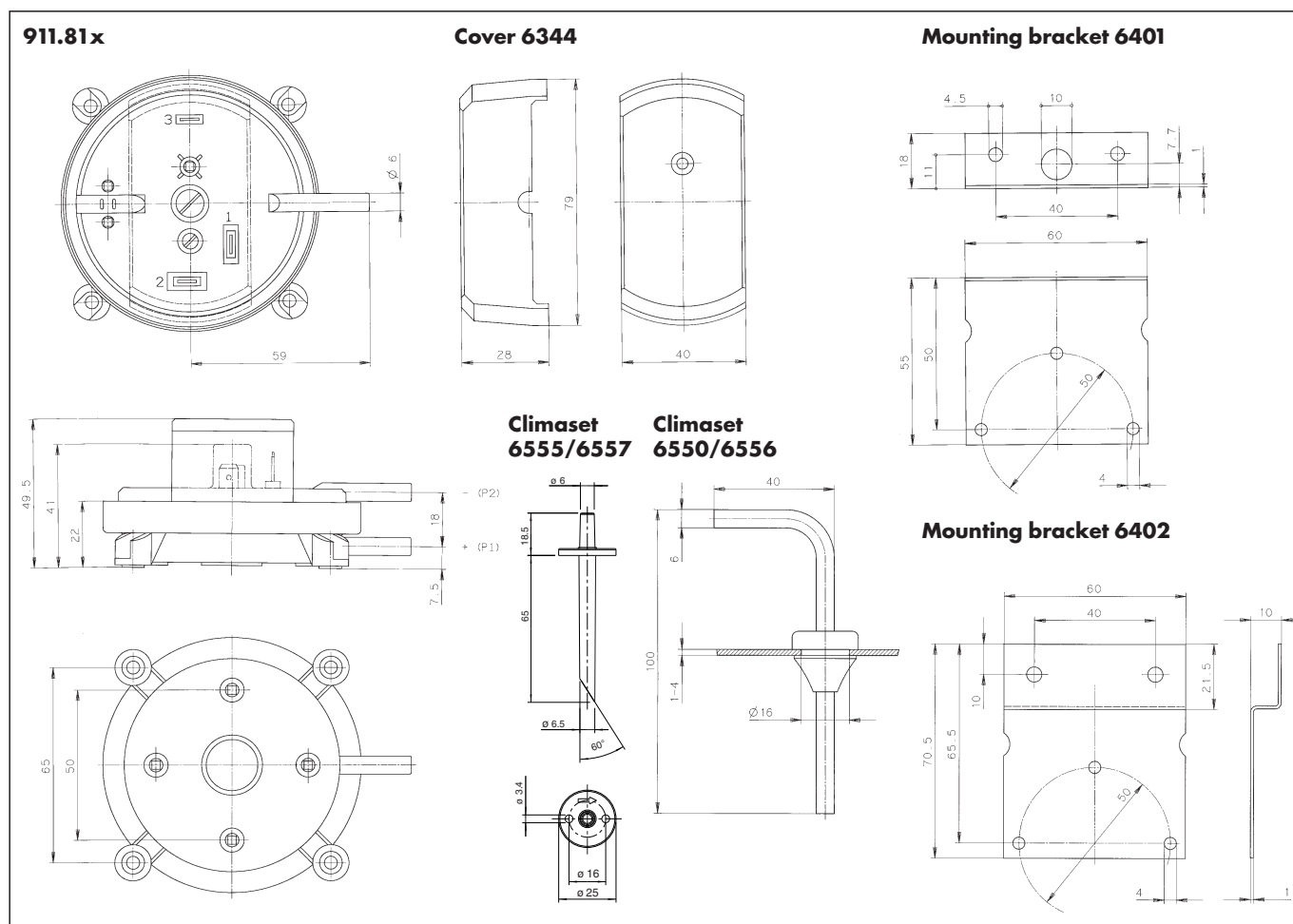
911.81x with/without cover

IP 20/IP 00

CE Conformity

each depending on technical specification: Low Voltage Directive 2006/95/EC; RoHS Directive 2002/95/EC; Gas Appliances Directive 2009/142/EC.

Differential pressure switch 911.81x



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



Beck GmbH
Druckkontrolltechnik
P.O. Box 11 31
D-71140 Steinenbronn
Telephone +49 (71 57) 52 87-0
Telefax +49 (71 57) 52 87-83
e-mail sales@beck-sensors.com
<http://www.beck-sensors.com>