

**M9206-Bxx-1**  
ON/OFF Spring Return Actuator

**Application**

The **JOHNSON CONTROLS** electric, spring return damper-actuator series has been specially developed for the motorized operation of safety airdampers (anti-icing) in air conditioning systems, smoke evacuation dampers and sealing dampers. When the control signal is applied the actuator drives the damper to the operational position, while evenly tensioning the integrated spring. After a power failure the stored energy in the spring immediately brings the damper to the safety position. Manual operation is automatically cancelled when the actuator is in electrical operation. The compact design and universal adapter fitted with limitation of rotation angle make this actuator highly versatile.

**Features**

- 2-point control
- Electrical connections with halogen-free cable
- Up to 5 actuators in parallel operation possible
- Plug-in terminal block connection
- Simple direct mounting with universal adapter on Ø 10 mm to 16 mm shaft or 10 mm to 14 mm square shaft. 45 mm min shaft length
- Selectable direction of rotation
- Limitation of rotation angle
- 1 adjustable auxiliary switches (See back page for settings)
- Automatic shut-off at end position (overload switch)
- Energy saving at end positions
- Customized versions available
- Devices meet CE requirements



**Technical Specifications**

Actuator	M9206-BGx-1	M9206-BDx-1
Torque	6 Nm	
Damper area*	1.1 m <sup>2</sup>	
Running Time Motor	10...40 s	10...65 s
Running Time Spring Return	35...70 s	
Supply Voltage	AC/DC 24 V	AC 230 V
Frequency	50-60 Hz	
Power Consumption		
- Running	6.9 W	10.7
- At end position	4.2 W	7.2 W
Dimensioning	9.8 VA / 3.5 A @ 2 ms	11.0 VA / 0.2 A @ 2 ms
Control Signal	2-Point ON/OFF	
Position Signal	None	
Angle of rotation/Working range	90° (93°mech.)	
Angle of rotation/Limitation	34.5°...90°	
Auxiliary Switches	3(1.5) A, AC 230 V	
- Setting range	0°...90°	
Cable	1.2 m halogen-free	
Life time	60.000 rotations	
Noise level	50 dB (A)	
Protection Class	II	
Degree of Protection	IP 54	
Mode of Action	Type 1	
Ambient conditions		
- Operating temperature	-32...+60 °C / IEC 721-3-3	
- Storage temperature	-40...+85°C / IEC 721-3-2	
- Humidity	5...95% r.F. non condensed	
Weight	1.6 Kg	
Service	Maintenance-free	
Standards		
- Mechanics	EN 60 529 / EN 60 730-2-14	
- Electronics	EN 60 730-2-14	
- EMC Emissions	EN 50 081-1:92 / IEC 61000-6-3:96	
- EMC Immunity	EN 50 082-2:95 / IEC 61000-6-2:99	

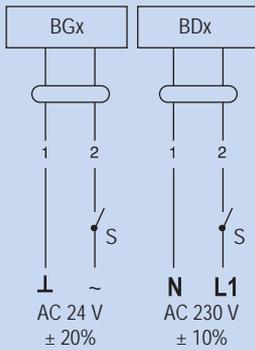
\*Caution: Please note damper manufacturer's information concerning the open/close torque.

**Ordering Codes**

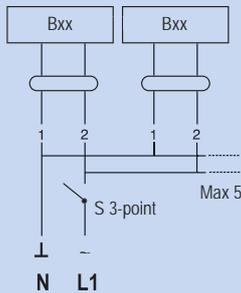
Codes	Descriptions
M9206-BGA-1	AC/DC 24 V
M9206-BGB-1	AC/DC 24 V, with 1 auxiliary switch
M9206-BDA-1	AC 230 V
M9206-BDB-1	AC 230 V, with 1 auxiliary switch

**M9206-Bxx-1**  
**ON/OFF Spring Return Actuator**

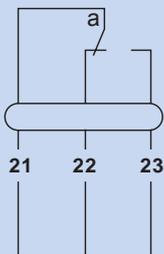
**Wiring Diagram**



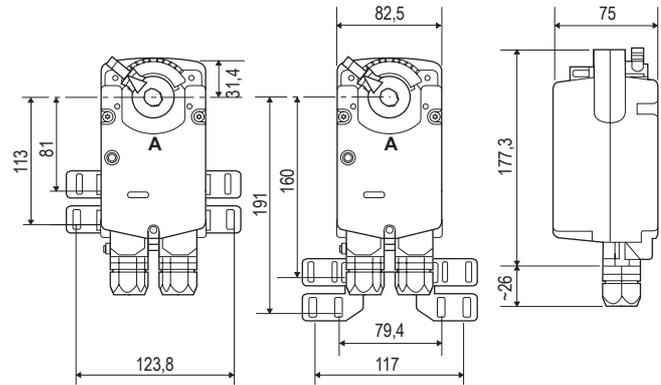
**Parallel Connections**



**Auxiliary Switches (S)**

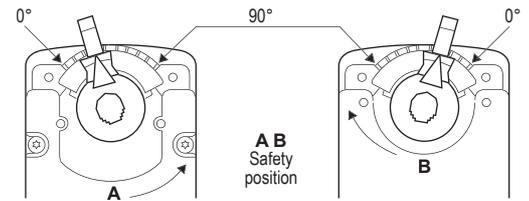


**Dimensions in mm**



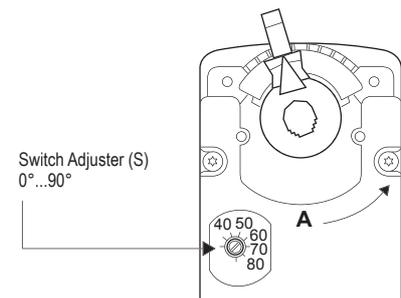
**Changing the direction of rotation**

The direction of rotation can be changed by simply turning the actuator and reversing the shaft adapter.



**Setting the auxiliary switches**

The switch point is adjustable from 0°...90°. The switching position can be manually changed to any required position by turning the ratchet.



**Limitation of rotation Angle**

The angle of rotation/working range can be adjusted mechanically by repositioning the adapter in 5° steps. The minimum rotation range is 34.5°.

