

**M9304-BDx-1N**  
**ON/OFF and Floating Actuators**
**Application**

The **JOHNSON CONTROLS SILENCE** electric damper actuator series have been developed to operate small and medium air damper in ventilation and air conditioning systems.

The compact design and universal adapter fitted with limitation of rotation angle make this actuator highly versatile.

**Features**

- ON/OFF and Floating control
- Load-independent running time
- Up to 5 actuators in parallel operation possible
- Plug-in terminal block connection
- Simple direct-mounting with universal adapter for fitting to 6...16 mm Ø round axis or with Z01DN adapter kit for 8, 10, 11 and 12 mm square shaft
- Selectable direction of rotation
- Limitation of rotation angle
- Manual release button
- 2 adjustable auxiliary switches  
(See back page for settings)
- Automatic shut-off at end position (overload switch)
- Energy saving at end positions
- Actuators available with 1 m halogen-free cable
- Customized versions available
- Devices meet CE requirements


**Technical Specifications**

Actuator	M9304-BDx-1N
Torque	4 Nm
Damper area*	0.8 m <sup>2</sup>
Running Time	35 s
Supply Voltage	AC 230 V
Frequency	50-60 Hz
Power Consumption	
- Running	2.8 W
- At end position	1.7 W
Dimensioning	3.6 VA / 0.1 A @ 2 ms
Control Signal	ON/OFF
Position Signal	None
Angle of rotation/Working range	90° (93° mech.)
Angle of rotation/Limitation	0°...30° and 90°...60°
Service life time	60,000 rotations
Auxiliary Switches	3(1.5) A, AC 230 V
- S1 setting range	5°...85° < adjustable
Noise level	40 dB (A)
Protection Class	II
Degree of Protection	IP 50
Cable aperture connection	M16 x 1.5
Mode of Action	Type 1
Ambient conditions	
- Operating temperature	-20...+50 °C / IEC 721-3-3
- Storage temperature	-30...+60°C / IEC 721-3-2
- Humidity	5...95% r.F. no condensed
Weight	0.950 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

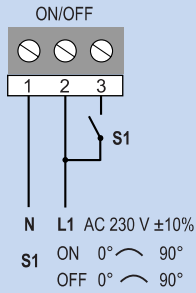
**Ordering Codes**

Codes	Descriptions
M9304-BDA-1N	AC 230 V
M9304-BDC-1N	AC 230 V, with 2 auxiliary switches

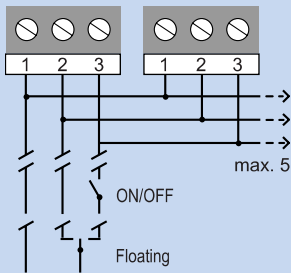
\*Caution: Please note damper manufacturer's information concerning the open/close torque.

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ON/OFF and Floating Actuators

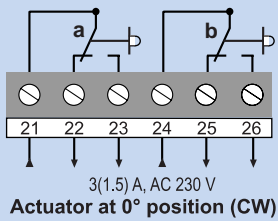
**Wiring Diagram**



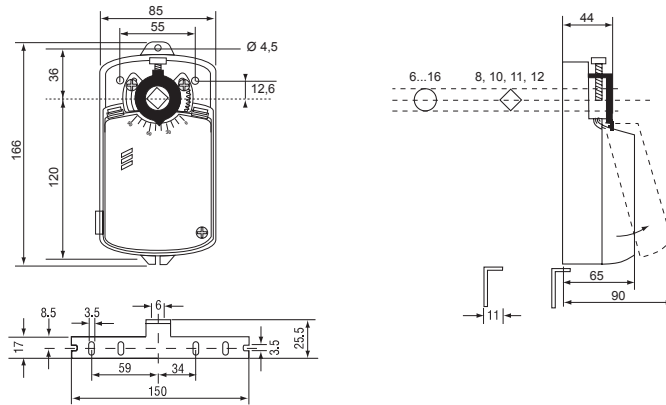
**Parallel Connections**



**Auxiliary Switches (S)**



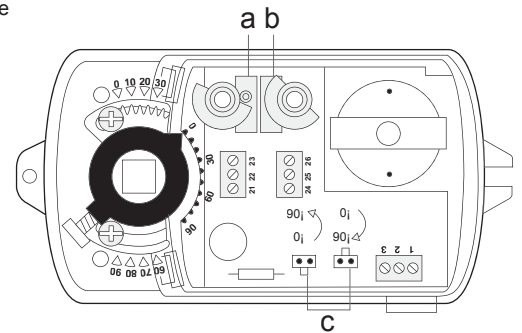
**Dimensions in mm**



**Changing the direction of rotation**

The direction of rotation can be changed by reversing plug **c**

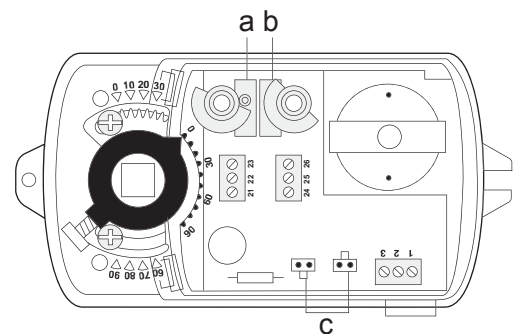
Factory setting:  
Clockwise rotation.



**Setting the auxiliary switches**

Factory setting  
Switch **a** at 10°  
Switch **b** at 80°

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 of 90° can be reduced by up to 30° from each end position by means of screw 1 and 2.

