

M9304-Axx-1N**ON/OFF and Floating Actuators****Application**The **JOHNSON CONTROLS SILENCE**

electric actuators have been specially developed for use with small air dampers in ventilation and air conditioning systems. Thanks to their very small size and clever construction they are also ideal for applications where space is limited.

A key feature of the design is the Johnson Controls stem adapter which also incorporates angle-of-rotation limiting and position indication

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-AGA-1N | M9304-AGC-1N | M9304-ADA-1N | M9304-ADC-1N |
|---------------------------------------------|-----------------------------------|--------------------------|-----------------------|--------------------------|
| Torque | 4 Nm | | | |
| Damper area* | 0.8 m ² | | | |
| Running Time | 35 s | | | |
| Supply Voltage | AC/DC 24 V | | AC 230 V | |
| Frequency | 50-60 Hz | | | |
| Power Consumption | | | | |
| - Running | 2.5 W | | 4.0 W | |
| - At end position | 0.75 W | | 3.0 W | |
| Dimensioning | 4.1 VA / 3.4 A @ 2 ms | | 5.0 VA / 0.5 A @ 2 ms | |
| Control Signal | ON/OFF or Floating | | | |
| 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 | None | 3(1.5) A, AC 230 V | None | 3(1.5) A, AC 230 V |
| - S1 setting range | None | 5°...85° < adjustable | None | 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 | 0.9 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 | | | |

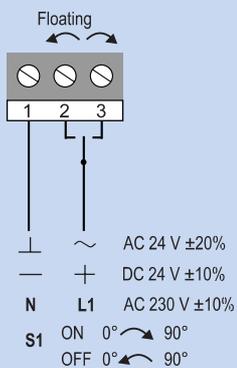
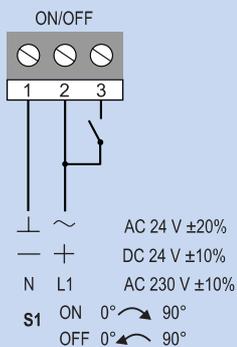
*Caution: Please note damper manufacturer's information concerning the open/close torque.

Ordering Codes

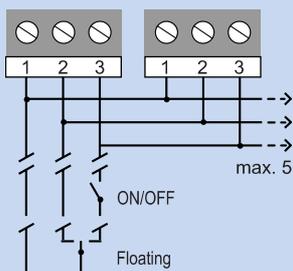
| Codes | Descriptions |
|---------------------|---------------------------------------|
| M9304-AGA-1N | AC/DC 24 V |
| M9304-AGC-1N | AC/DC 24 V, with 2 auxiliary switches |
| M9304-ADA-1N | AC 230 V |
| M9304-ADC-1N | AC 230 V, with 2 auxiliary switches |

M9304-Axx-1N
ON/OFF and Floating Actuators

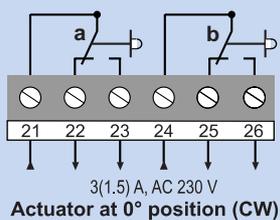
Wiring Diagrams



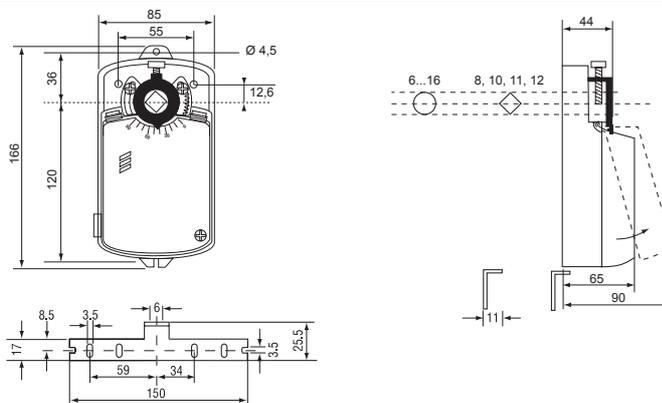
Parallel Connections



Auxiliary Switches (S)



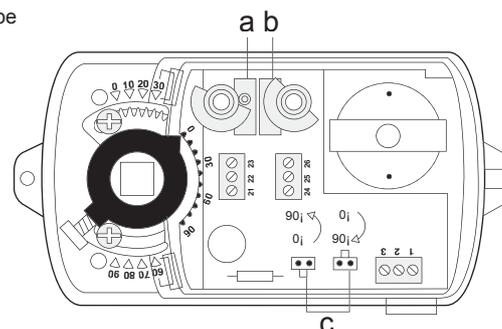
Dimensions in mm



Changing the direction of rotation

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

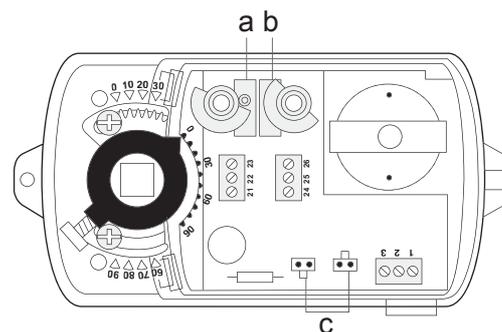
Factory setting:
Clockwise rotation.



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.

