

**M9304-GGA-1N
Modulating Actuators**
Application

The **JOHNSON CONTROL 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

- DC 0...10 V
- 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. 45-min shaft length
- Selectable direction of rotation
- Limitation of rotation angle
- Manual release button
- 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-GGA-1N
Torque	4 Nm
Damper area*	0.8 m ²
Running Time	35 s
Supply Voltage	AC/DC 24 V
Frequency	50-60 Hz
Power Consumption	
- Running	2.5 W
- At end position	0.75 W
Dimensioning	3.5 VA / 2.5 A @ 2 ms
Control Signal	DC 0...10 V
Position Signal	DC 0...10 V
Angle of rotation/Working range	90° (93° mech.)
Angle of rotation/Limitation	0°...30° and 90°...60°
Service life time	60,000 rotations
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

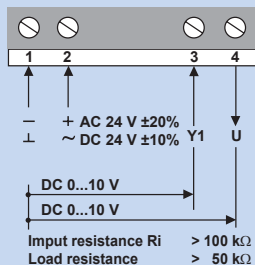
*Caution: Please note damper manufacturer's information concerning the open/close torque.

Ordering Codes

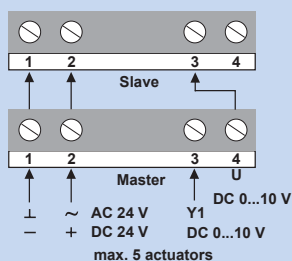
Codes	Descriptions
M9304-GGA-1N	AC/DC 24 V

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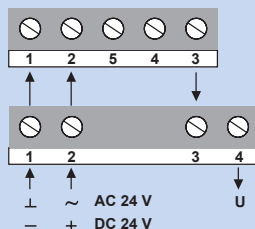
Wiring Diagram



Parallel Connections



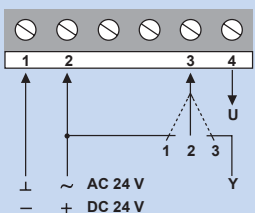
Positioner



The actuator M9304-GGA-1N can also be controlled using the Positioner (M9000-PA and M9000-PF) with a control signal of DC 0...10V.

For further information concerning the PA and PF positioner please refer to data sheet 6.20

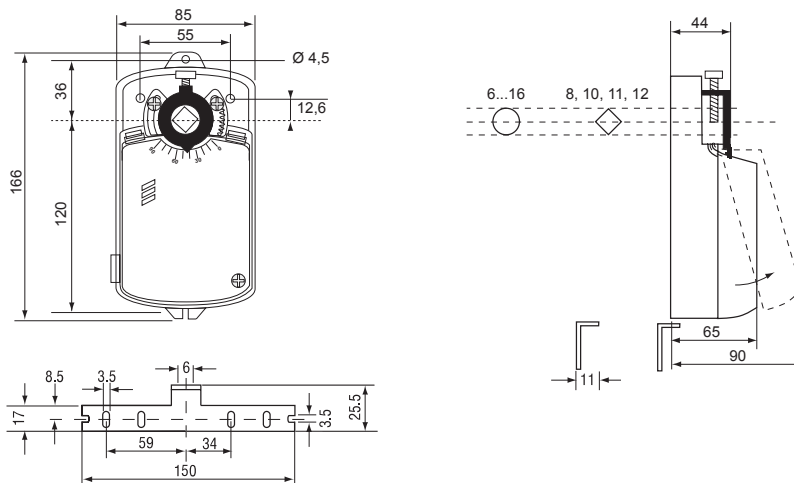
Override Control



The actuator M9304-GGA-1N can be forced to override control when wired in accordance with the diagram.

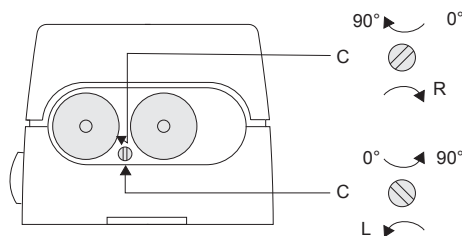
Switch position:
1= Actuator runs at 10 V
2= Actuator runs at 0 V
3= Automatic control operation

Dimensions in mm



Changing the direction of rotation

R = Factory setting



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.

