

Technical data sheet

315C-024-04/4Ex

Rotary actuator

Description
Rotary actuator for adjusting dampers in HVAC installations

- **Running time** 150 s / 90°
- **Torque** 4 Nm
- **Nominal voltage** 24 VAC/DC
- **Control** continuous control
2...10 VDC
- **Damper size** up to approx. 0,8 m²
- **Shaft coupling** form fit 8 mm (4E 8)
form fit 10 mm (4E10)
form fit 12 mm (4E12)


Technical data
Electrical data

Nominal voltage	24 VAC/DC, 50/60 Hz
Nominal voltage range	19...29 VAC/DC
Power consumption motor (motion)	1,0 W
Power consumption standby (end position)	0,8 W
Wire sizing	1,6 VA
Control	continuous control 2...10 VDC / Ri > 50 kΩ 4...20 mA / Rext. = 500 Ω
Feedback signal	2...10 VDC / max. 5 mA
Auxiliary switch	-
Contact load	-
Switching point	-
Connection motor	cable 1000 mm, 4 x 0,75 mm ²
Connection feedback potentiometer	-
Connection auxiliary switch	-
Connection GUAC	-

Functional data

Torque	> 4 Nm
Damper size	up to approx. 0,8 m ²
Synchronised speed	±5%
Direction of rotation	by mounting selectable
Manual override	Gearing latch disengaged with rotary switch, self-resetting
Angle of rotation	0°...max. 310° with mechanical end stops adjusted in 2,5° increments
Running time	< 150 s / 90°

Technical data

Functional data

Sound power level	< 30 dB(A)
Shaft coupling	form fit 8 mm (4E8) form fit 10 mm (4E10) form fit 12 mm (4E12)
Position indication	mechanical with pointer
Service life	> 60 000 cycles (0°...95°...0°)

Safety

Protection class	III (safety extra-low voltage)
Degree of protection	IP 54 (plug port downwards)
EMC	CE (2014/30/EU)
LVD	CE (2014/35/EU)
RoHS	CE (2011/65/EU)
Mode of operation	Typ 1 (EN 60730-1)
Rated impulse voltage	0,8 kV (EN 60730-1)
Control pollution degree	3 (EN 60730-1)
Ambient temperature normal operation	-30°C...+50°C
Storage temperature	-30°C...+50°C
Ambient humidity	5...95% r.H., non condensing (EN 60730-1)
Maintenance	maintenance free

Dimensions / Weight

Dimensions	160 x 60 x 38 mm
Weight	200 g

Operating mode / Properties

Operating mode

Through connecting the power supply to BU+BN (1+2) and a reference signal Y to BK (3) of 2...10 VDC, moves the actuator to its specified position. The actual damper position 0...100% is a feedback signal U on GY (4) for example to share with other actuators.

The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Direct mounting

Simple direct mounting on the damper shaft with form fit, supplied with an anti-rotation strap to prevent the actuator from rotating.

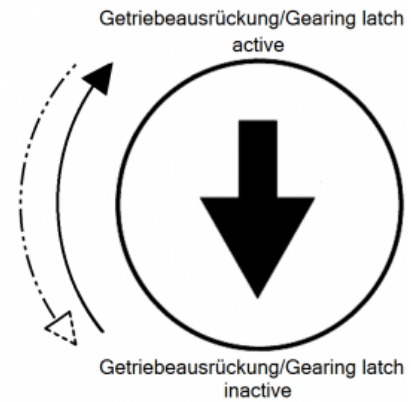
Manual override

Manual override is possible with the self-resetting rotary switch (the gearing latch remains disengaged as long as the rotary switch is activated).

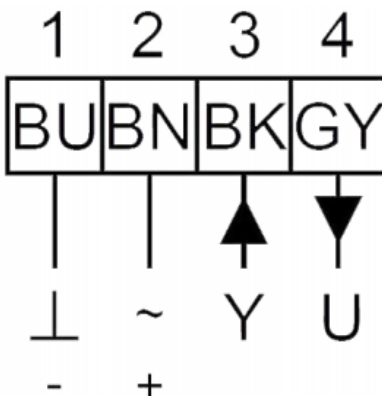
Adaption drive

- Actuator power off
- Setting the mechanical end stops
- Actuator power on
- Adaption to enable
- Actuator drive to position 0
- Actuator drive to position 1
- Adaption to disable if desired reached angular range or drive to endstop
- “Y” refers to the measured angular range

*Actuator will do adaption drive by each restart



Connection / Safety remarks



Safety remarks

- Connect via safety isolation transformer!
- The device is not allowed to be used outside the specified field of application, especially in airplanes.
- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
- The device may only be opened at the manufacturer's site.
- The device is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.
- When calculating the required torque, the specifications supplied by the damper manufacturer's (cross-section, design, installation site), and the air flow conditions must be observed.

Technical drawing

