

Technical data sheet

227C-024-10-S1

Continuous control rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in HVAC installations.

- **Torque Motor** 10 Nm
- **Nominal Voltage** 24 VAC/DC
- **Control** Continuous control DC 0(2)...10 V
- **Connection**
- **Auxiliary switch S1** 1x freely adjustable
- **Damper size** up to approx. 2 m²
- **Damper coupling** Clamp
∅ 8-15 mm / Ø 8-20 mm


Technical data

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| Electrical data | Nominal voltage | 24 VAC/DC |
| | Nominal voltage range | 19...29 VAC/DC |
| | Power consumption motor (motion) | 2,0 W |
| | Power consumption standby (end position) | 1,0 W |
| | Wire sizing | 3,5 VA |
| | Control | Continuous control 0(2)...10 VDC / Ri >100 kΩ 0(4)...20 mA / Rext.=500Ω |
| | Position feedback | 0(2)...10 VDC, max 5 mA |
| | Auxiliary switch | 1x SPDT (Ag) |
| | Contact load | 5 (2,5) A, 250 VAC |
| | Switching point | 0...95° |
| | Connection Motor | Cable 1000 mm, 4 x 0,75 mm ² (halogen free) |
| | Connection Auxiliary switch | Cable 1000 mm, 3 x 0,75 mm ² (halogen free) |
| | Connection Position feedback | - |
| | Connection GUAC | - |
| Functional data | Torque Motor | >10 Nm |
| | Synchronised speed | ±5% |
| | Direction of rotation | selected by switch |
| | Manual override | Gearing latch disengaged with pushbutton, self-resetting |
| | Angle of rotation | 0° ... max. 95°, can be limited with adjustable mechanical end stop |
| | Running time Motor | < 100 s / 90° |
| | Sound power level Motor | < 35 dB(A) |
| Damper coupling | Clamp ∅ 8-15 mm / Ø 8-20 mm | |

Technical data

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| Functional data | Position indication | mechanical with pointer |
| | Service life | >60'000 cycles (0° - 95° - 0°) >1'000'000 partial cycles (max. ±5°) |
| Safety | Protection class | III (low voltage safety current) |
| | Degree of protection | IP54 (Cable downwards) |
| | EMC | CE (2004/108/EG) |
| | LVD | CE (2006/95/EG) |
| | 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...+80°C |
| | Ambient humidity | 5...95% r.F., non- condensating (EN 60730-1) |
| | Maintenance | maintenance free |
| | Dimensions/ Weight | Dimensions |
| Weight | | ca. 530 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 0(2)...10VDC, moves the actuator to its specified position. The actual damper position 0...100% is a feedback signal U for example to share the signal 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 spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

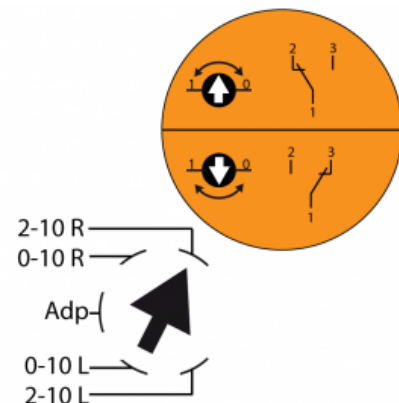
Manual override

Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

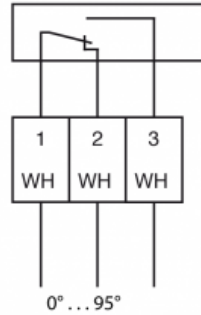
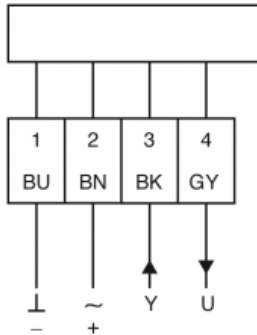
Mode- switch

Mode- switch with five positions at the housing

- Rotary direction right 2-10 V
- Rotary direction right 0-10 V
- Adp = Adaption
- Rotary direction left 0-10 V
- Rotary direction left 2-10 V



Connection / Safety remarks


Safety remarks

- Connect via safety isolation transformer
- The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
- In 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.
- When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
- The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing

