

Technical data sheet

227CS-024-02A

Continuous control rotary drive without spring return

Description

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

- Running time Motor 1 s / 90°
- Torque Motor 2 Nm
- Nominal Voltage 24 VAC/DC
- Control Continuous control
DC (0)2...10 VDC
- Damper size up to approx. 0.4 m²
- Damper coupling Clamp
∅ 8-15 mm / Ø 8-20 mm



Technical data

Electrical data

| | |
|--|--|
| Nominal voltage | 24 VAC/DC |
| Nominal voltage range | 22...29 VAC/DC |
| Power consumption motor (motion) | 11,0 W |
| Power consumption standby (end position) | 1,0 W |
| Wire sizing | 15,0 VA |
| Control | Continuous control (0)2...10 VDC / R _i >(100 kΩ) 50kΩ (0)4...20 mA / R _{ext} .= 500Ω |
| Position feedback | (0)2...10 VDC, max 5 mA |
| Auxiliary switch | - |
| Contact load | - |
| Switching point | - |
| Connection Motor | Cable 1000 mm, 4 x 0,75 mm ² (halogen free) |
| Connection Auxiliary switch | - |
| Connection Position feedback | - |
| Connection GUAC | - |

Functional data

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|-------------------------|---|
| Torque Motor | > 2 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° |
| Running time Motor | < 1 s / 90° |
| Sound power level Motor | < 60 dB(A) |
| Damper coupling | Clamp ∅ 8-15 mm / Ø 8-20 mm |

Technical data

Functional data

| | |
|---------------------|--|
| Position indication | mechanical with pointer |
| Service life | > 60'000 cycles (0° - 95° - 0°) > 1'500'000 partial cycles (max. ±5°) |

Safety

| | |
|--------------------------------------|--|
| Protection class | III (safety extra-low voltage) |
| Degree of protection | IP54 (Cable downwards) |
| EMC | CE (2014/30/EU) |
| LVD | CE (2014/35/EU) |
| RoHS | CE (2011/65/EG) |
| 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 condensing (EN 60730-1) |
| Maintenance | maintenance free |

Dimensions/ Weight

| | |
|------------|--------------------|
| Dimensions | 172,5 x 65 x 90 mm |
| Weight | ca. 790 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.

The extended voltage range 24 VAC/DC ± 20% can cause, at under voltage condition and heavy torque, longer running times.

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)

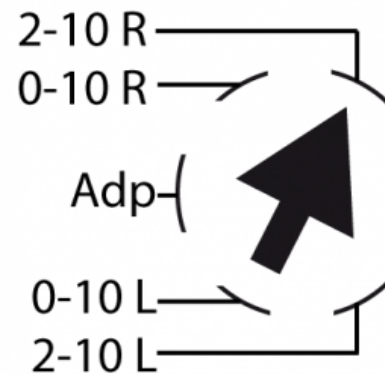
Mode- switch

Mode- switch with five positions at the housing

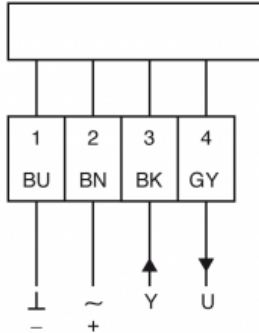
- 1 Rotary direction right 2-10 V
- 2 Rotary direction right 0-10 V
- 3 Adp = Adaption
- 4 Rotary direction left 0-10 V
- 5 Rotary direction left 2-10 V

Adaption drive

Adaption drive is only possible with internal endstops (93°±2°).



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.
- 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.
- 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

