

## Technical data sheet

# 227CS-024-05B

## Continuous control rotary drive

### Description

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

- **Running time Motor** 2 s / 90°
- **Torque Motor** 5 Nm
- **Nominal Voltage** 24 VAC/DC
- **Control** Continuous control  
(0)2...10 VDC
- **Damper size** up to approx. 1 m<sup>2</sup>
- **Damper coupling** Clamp  
◇ 8-15 mm / Ø 8-20 mm



### Technical data

#### Electrical data

Nominal voltage	24 VAC/DC
Nominal voltage range	19...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 / Ri > (100 kΩ) 50 kΩ (0)4...20 mA / Rext. = 500 Ω
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 <sup>2</sup> (halogen free)
Connection Auxiliary switch	-
Connection Position feedback	-
Connection GUAC	-

#### Functional data

Torque Motor	> 5 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	2 s / 90°
Sound power level Motor	< 55 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°) > 1'000'000 partial cycles (max. ±5°)

### Safety

Protection class	III (safety extra-low voltage)
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.H., non condensing (EN 60730-1)
Maintenance	maintenance free

### Dimensions / Weight

Dimensions	172,5 x 65 x 90 mm
Weight	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...10 VDC, 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. A supply of direct current (VDC) is preferred.

### 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).

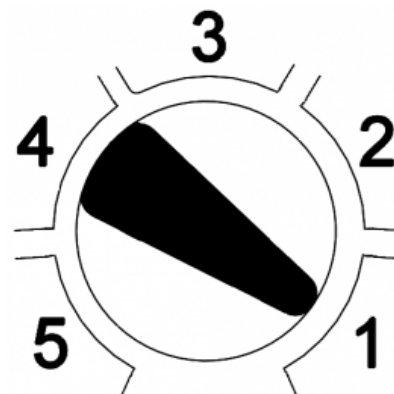
### Mode switch

Mode switch with five positions at the housing:

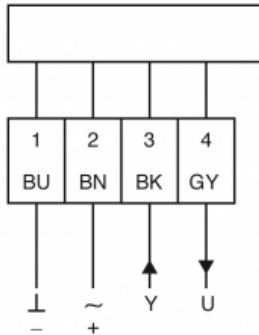
- 1: Rotary direction right 2-10 V
- 2: Rotary direction right 0-10 V
- 3: Adaption
- 4: Rotary direction left 0-10 V
- 5: Rotary direction left 2-10 V

### 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

