

**Technical data sheet**

## 227C-024-05

### Continuous control rotary drive

**Description**

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

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


**Technical data**

<b>Electrical data</b>	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. = 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	-
<b>Functional data</b>	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°, 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

<b>Functional data</b>	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°) >1'000'000 partial cycles (max. ±5°)
<b>Safety</b>	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% relative humidity, non condensing (EN 60730-1)
	Maintenance	maintenance free
	<b>Dimensions/ Weight</b>	Dimensions
Weight		ca. 530 g

## Operating mode / Properties

### Operating mode

Applying the power supply to BU+BN (1+2) and a reference signal Y to BK (3) of 0(2)...10VDC, moves the actuator to position 1. 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 stops automatically when the end position 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)

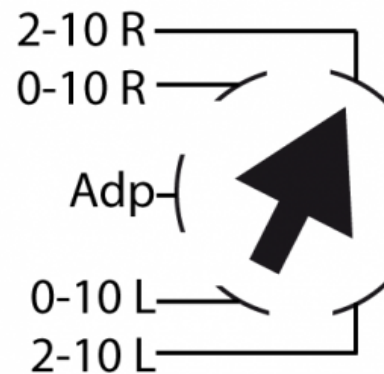
### Mode switch

Mode switch with five positions at the housing

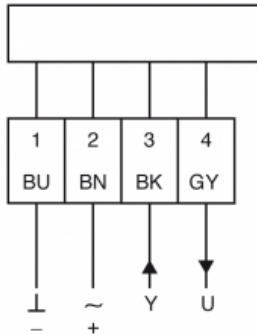
- Rotary direction right 2-10 V
- Rotary direction right 0-10 V
- Adp = Adaption
- Rotary direction left 0-10 V
- Rotary direction left 2-10 V

### Adaption drive

- Adaption on angle of rotation < 90°
- Actuator power-off
- Setting the mechanical end stops
- Actuator power-on
- Adaption to enable
- Actuator adaption on angular range
- Adaption to disable
- “Y” refers to the measured angular range



## 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

