

## **Technical data sheet**

## 227CS-024-02A

# Continuous control rotary drive without spring return

#### Description

Actuator for adjusting air dampers of  $90^{\circ}$  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

	Nominal voltage	24 VAC/DC	
	Nominal voltage range	2229 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)210 VDC / Ri >(100 k $\Omega$ ) 50k $\Omega$ (0)420 mA / Rext.= 500 $\Omega$	
	Position feedback	(0)210 VDC, max 5 mA	
	Auxiliary switch	-	
	Contact load	-	
	Switching point	-	
	Connection Motor	Cable 1000 mm, 4 x 0,75 mm² (halogen free)	
	Connection Auxiliary switch	-	
	Connection Position feedback	-	
	Connection GUAC	-	
unctional data			
	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	595% 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.

## **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 selfresetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

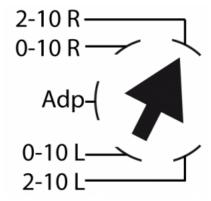
## Mode-switch

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

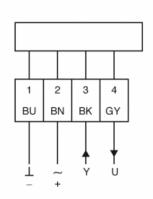
## Adaption drive

Adaption 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

