

# **Technical data sheet**

# 227S-024D-05-S1 Rotary drive

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

• Torque Motor Nominal Voltage 24 VAC/DC Control 2/3 Point

Connection

Auxiliary switch S1 1x freely adjustable • Damper size up to approx. 1 m<sup>2</sup> Clamp

• Damper coupling

◊ 8-15 mm / Ø 8-20 mm



Electrical data	Nominal voltage	24 VAC/DC
	Nominal voltage range	1929 VAC/DC
	Power consuption motor (motion)	3,5 W
	Power consuption standby (end position)	1,0 W
	Wire sizing	6,5 VA
	Control	2/3 Point
	Position feedback	-
	Auxiliary switch	1 x SPDT(Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	095°
	Connection Motor	Cable 1000 mm,
		3 x 0,75 mm <sup>2</sup> (halogen free)
	Connection Auxiliary switch	Cable 1000 mm,
		3 x 0,75 mm <sup>2</sup> (halogen free)
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>5 Nm
	Synchronised speed	-
	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 min 20°.
	Running time Motor	2035 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp
		♦ 8-15 mm / Ø 8-20 mm

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#### Technical data

Functional data	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
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	595% relative humidity,
		non condensing (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	115 x 65 x 61 mm
	Weight	ca. 530 g
	•	

#### Operating mode / Properties

# Operating mode

#### 2 point:

Applying the power supply to BU+BN (1+2),rotation direction switch on position "R" the actuator moves to position 1. If BK (1+2+3) is also connected to the power supply the actuator moves to position 0.

### 3 point:

Applying the power supply to BU+BN (1+2),rotation direction switch on position "R" the actuator moves to position 1. When the power supply is interrupted the actuator remains in its current position. If BU+BK (1+3) are connected to the power supply the actuator moves to position 0.

The actuator is overload-proof, requires no limit switches and stops automatically when the end position is reached.

# **Direct mounting**

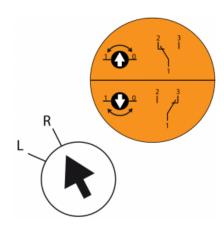
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with anchoring supports to prevent the actuator from rotating.

#### Manual override

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

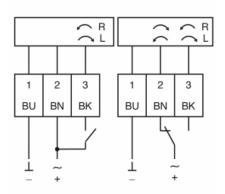
# Rotary direction switch

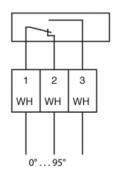
R= clockwise L= counter clockwise





#### 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

