Technical data sheet

GRUNER Schalten und Bewegen

225S-230T-05-S2

Rotary drive without spring return

Description

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

- Torque Motor Nominal Voltage
 - 5 Nm 230 VAC/DC
- Control
- Connection Auxiliary switch S2
- Damper size
- Damper coupling
- 2/3 Point 2x freely adjustable
- up to approx. 1 m² Clamp
- ◊ 8-12 mm / Ø 8-16 mm



Nominal voltage	Nominal voltage	230 VAC/DC
	Nominal voltage range	80265 VAC/DC
	Power consuption Motor (Motion)	2,5 W
	Power consuption Standby (end position)	1,0 W
	Wire sizing	4,0 VA
	Control	2/3 point
	Position feedback	-
	Auxiliary switch	2x SPDT (Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	0°95°
	Connection Motor	screw terminals, on cable
		0,51,5mm ²
	Connection Auxiliary switch	screw terminals, on cable
		0,51,5mm ²
	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	< 35 dB(A)
	Damper coupling	clamp
		≬ 8-12 mm/ Ø 8-16 mm



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Functional data	Position indication	mechanical with pointer
	Service life	> 60'000 cycles (0° - 95° - 0°)
Safety	Protection class	II (double insulation)
	Degree of protection	IP 52 (Cable port 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	4 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	-30°+50°
	Storage temperature	-30°+80°
	Ambient humidity	595% r.F.,
		non- condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/Weight	Dimensions	145 x 65 x 61 mm
	Weight	ca. 530 g

Operating mode / Properties

Operating mode

2- point.

Through connecting the power supply to 1+2 and the direction of rotation switch on position "R" moves the actuator to position 1. Is also 1+2+3 connected to the power supply the actuator is moving to position 0.

3- point.

Through connecting the power supply to 1+2 and the direction of rotation switch on position "R" moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also1+3 connected to the power supply the actuator is moving in direction 0.

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

Signaling

The two integrated auxiliary switches are freely adjustable in the angle of $0 - 95^{\circ}$. These are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

Direct mounting

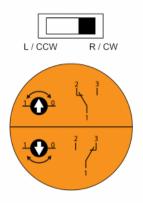
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override

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

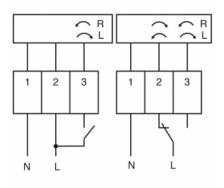
Rotary direction switch

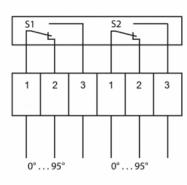
R/CW= clockwise L/ CCW= counter clockwise





Connection / Safety remarks





Safety remarks

-Attention mains voltage -The actuator is not allowed to be used outside the specified field of application, especially in airplanes.

-In 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

