

Damper actuator for adjusting air dampers in ventilation and air-conditioning systems for building services installations

- For air dampers up to approx. 4 m²
- Torque 20 Nm
- · Nominal voltage AC 100 ... 240 V
- Control: Open-close or 3-point
- · with integrated auxiliary switch



Technical data						
Electrical data	Nominal voltage	AC 100 240 V, 50 / 60 Hz				
	Nominal voltage range	AC 85 265 V				
	Power consumption In operation	2.5 W @ nominal torque				
	At rest	0.6 W				
	For wire sizing	6 VA				
	Auxiliary switch	1 x SPDT, 1 mA 3 (0.5) A, AC 250 V □ (0 100% adjustable)				
	Connection Motor	Cable 1 m, 3 x 0.75 mm ²				
	Auxiliary switch	Cable 1 m, 3 x 0.75 mm ²				
Functional data	Torque (nominal torque)	Min. 20 Nm @ nominal voltage				
	Direction of rotation	Reversible with switch 0 resp. 1				
	Manual override	Gearing latch disengaged with pushbutton, can be locked				
	Angle of rotation	Max. 95°				
		mechanical end stops				
	Running time	150 s / 90°⊲				
	Sound power level	Max. 45 dB (A)				
	Position indication	Mechanical, pluggable				
Safety	Protection class	II Totally insulated □				
	Degree of protection	IP54 in any mounting position NEMA 2, UL Enclosure Type 2				
	EMC	CE according to 2004/108/EC				
	Low voltage directive	CE according to 2006/95/EC				
	Certification	cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02				
		Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14				
	Mode of operation	Type 1				
	Rated impulse voltage	2.5 kV				
	Control pollution degree	3				
	Ambient temperature range	−30 +50°C				
	Non-operating temperature	−40 +80°C				
	Ambient humidity range	95% r.h., non-condensating				
	Maintenance	Maintenance-free				
Dimensions / Weight	Dimensions	See «Dimensions» on page 2				

Safety notes



Weight

• The actuator is not allowed to be used outside the specified field of application, especially in aircraft or any other form of air transport.

Approx. 1.1 kg

- Caution: Power supply voltage!
- Assembly must be carried out by 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. It does not contain any parts that can be replaced or repaired by the user.
- · The cable must not be removed from the device.
- 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.

Damper actuator, AC 100 ... 240 V, 20 Nm, with integrated auxiliary switch



Safety notes

(Continued)

The device contains electrical and electronic components and is not allowed to be disposed
of as household refuse. All locally valid regulations and requirements must be observed.

Product features

Simple 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 with push-button possible (the gear is disengaged for as long as the button is

pressed or remains locked).

Adjustable angle of rotation Adjustable angle of rotation with mechanical end stops.

High functional reliability The actuator is overload-proof, requires no limit switches and automatically stops when the end

stop is reached.

Flexible signalization Flexible signalization with adjustable auxiliary switch (0 ... 100%).

Accessories

	Description	Data sheet	
Electrical accessories	Auxiliary switch SA	T2 - SA	
	Feedback potentiometer P.A	T2 - PA	
Mechanical accessories	Various accessories (clamps, shaft extensions etc.)	T2 - Z-SMA	

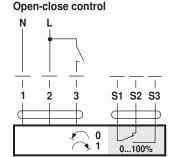
Electrical installation

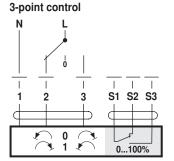
Wiring diagrams

Notes

· Caution: Power supply voltage!

• Other actuators can be connected in parallel. Please note the performance data.





Cable colours:

1 = blue 2 = brown

3 = white S1 = violet

S2 = red S3 = white

Auxiliary switch

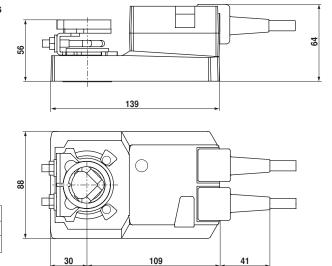
Direction of rotation





Dimensions [mm]

Dimensional drawings

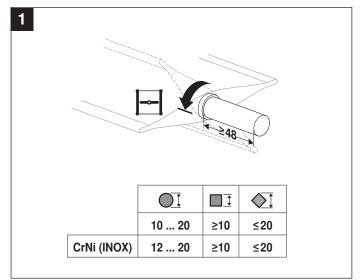


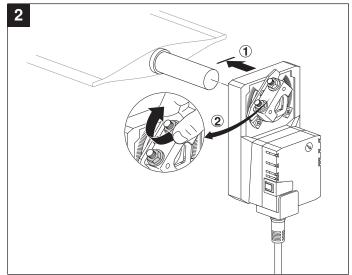
Damper spindle	Length	<u>OĪ</u>		♦]
-	≥48	10 20 1)	≥10	≤20
	≥20	10 20 ¹⁾	≥10	≤20

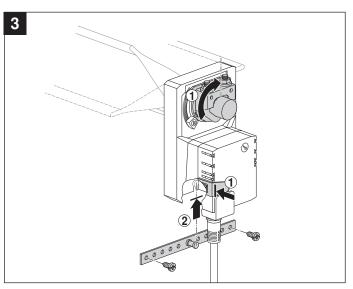
¹⁾ CrNi (INOX) 12 ... 20

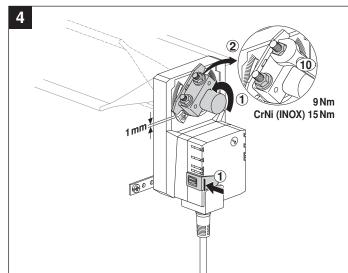


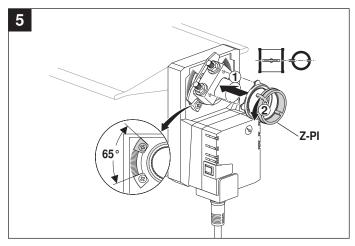
BELIMO

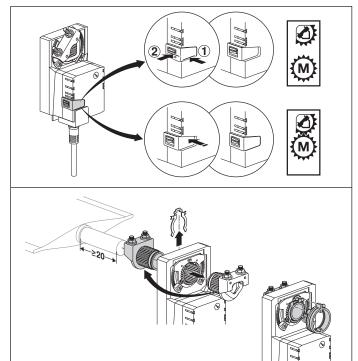






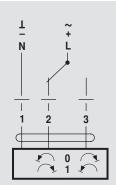






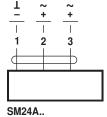


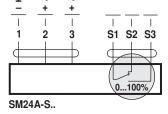


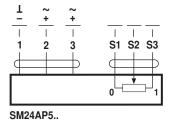




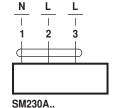
AC 24 V / DC 24 V

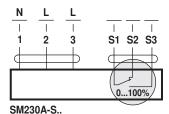


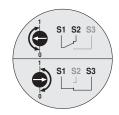




AC 100 ... 240 V

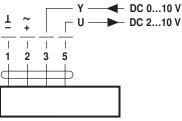








AC 24 V / DC 24 V





SM24A-MF..

← DC 0...10 V **◆**► MP SM24A-MP..



