

Damper actuator for adjusting dampers in technical building installations

- Air damper size up to approx. 0.4 m²
- Torque motor 2 Nm
- Nominal voltage AC 100...240 V
- Control Open/close, 3-point
- Degree of protection IP66 - Optimum protection in smallest size


Technical data

Electrical data	Nominal voltage	AC 100...240 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 85...265 V
	Power consumption in operation	1.5 W
	Power consumption in rest position	1 W
	Power consumption for wire sizing	3 VA
	Connection supply / control	Cable 1 m, 3 x 0.75 mm ²
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	2 Nm
	Direction of motion motor	clockwise rotation
	Manual override	with magnet
	Angle of rotation	0...287.5°
	Angle of rotation note	Without limitation: endless 315° with one end stop clip mounted on the actuator
	Running time motor	75 s / 90°
	Sound power level, motor	35 dB(A)
	Mechanical interface	Universal shaft clamp 6...12.7 mm
	Position indication	Mechanical, pluggable (with integrated magnet for gear train disengagement)
	Safety data	Protection class IEC/EN
Protection class UL		II, reinforced insulation
Degree of protection IEC/EN		IP66
Degree of protection NEMA/UL		NEMA 2
Enclosure		UL Enclosure Type 2
EMC		CE according to 2014/30/EU
Low voltage directive		CE according to 2014/35/EU
Certification IEC/EN		IEC/EN 60730-1 and IEC/EN 60730-2-14
UL Approval		cULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1 The UL marking on the actuator depends on the production site, the device is UL-compliant in any case
Type of action		Type 1
Rated impulse voltage supply / control		2.5 kV
Pollution degree		3
Ambient humidity		Max. 95% RH, non-condensing
Ambient temperature		-30...50°C [-22...122°F]
Storage temperature		-40...80°C [-40...176°F]
Servicing		maintenance-free
Weight	Weight	0.24 kg

Safety notes


- This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea) water, snow, ice, insulation or aggressive gases interfere directly with the device and that it is ensured that the ambient conditions remain within the thresholds according to the data sheet at any time.
- Caution: Power supply voltage!
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- Junction boxes must at least correspond with enclosure IP degree of protection!
- In order to ensure that the IP66 protection can be guaranteed, the device must be mounted with its rear side tightly up against the damper housing.
- In the event the device is installed with a 180° rotation (front side pressed against the damper housing), then only a protection of IP54 is guaranteed.
- 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.
- Cables must not be removed from the device.
- To calculate the torque required, the specifications supplied by the damper manufacturers concerning the cross-section, the design, the installation situation and the ventilation conditions must be observed.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Product features

Simple direct mounting	The actuator is mounted directly on the damper shaft (Ø 6...12.7 mm) with a universal shaft clamp and then secured with the anti-rotation clip, to prevent it from rotating. The anti-rotation clip Z-ARCM is included in the scope of delivery.
Manual override	Manual override with magnet possible (the gear train is disengaged as long as the magnet adheres to the magnet symbol). The magnet for gear train disengagement is integrated in the position indication.
Adjustable angle of rotation	Adjustable angle of rotation with mechanical end stops.
High functional reliability	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.

Accessories

Mechanical accessories	Description	Type
	Anti-rotation clip, Multipack 20 pcs.	Z-ARCM
	Gear train disengagement magnet, Multipack 20 pcs.	Z-MA
	Position indicator, Multipack 20 pcs.	Z-PICM
	End stop clip, Multipack 20 pcs.	Z-ESCM
	Shaft extension 170 mm Ø10 mm for damper shaft Ø 6...16 mm	AV6-20

Electrical installation


Caution: Power supply voltage!

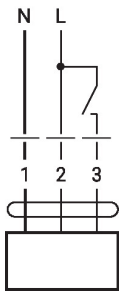
Parallel connection of other actuators possible. Observe the performance data.

Wire colours:

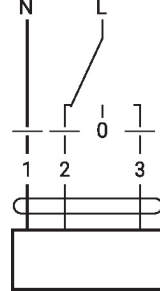
- 1 = blue
- 2 = brown
- 3 = white

Wiring diagrams

AC 230 V, open/close



AC 230 V, 3-point



1	2	3	
			stop

Installation notes



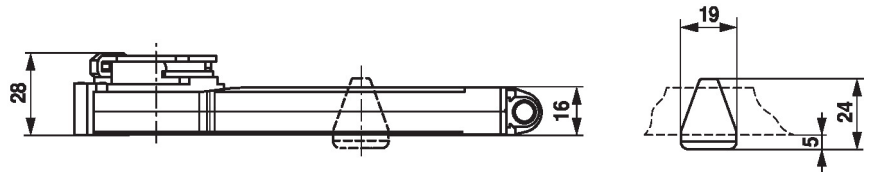
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Dimensions

Spindle length

	Min. 32
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Clamping range

6...12.7	6 / 8 / 10	6...12.7

