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/DC 24 V
- Control Open/close, 3-point
- Degree of protection IP66 - Optimum protection in smallest size

Picture may differ from product

Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 19.2...28.8 V
	Power consumption in operation	0.5 W
	Power consumption in rest position	0.2 W
	Power consumption for wire sizing	1 VA
	Connection supply / control	Cable 1 m, 3x 0.75 mm²
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	2 Nm
	Direction of motion motor	clockwise rotation (cw)
	Direction of motion note	See “Electrical installation” (table in wiring diagrams)
	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	Form fit 8x8 mm
	Position indication	Mechanical, pluggable (with integrated magnet for gear train disengagement)
Safety data	Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP66
	Degree of protection NEMA/UL	NEMA 2
	Housing	UL Enclosure Type 2
	EMC	CE according to 2014/30/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
	Hygiene test	According to VDI 6022 Part 1 / SWKI VA 104-01, cleanable and disinfectable, low emission
	Type of action	Type 1

Technical data

Safety data	Rated impulse voltage supply / control	0.8 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	0.23 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, insolation 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.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.
- Junction boxes must at least correspond with housing 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 and the design, as well as 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 with its hollow shaft is mounted in a form-fit manner directly on the damper shaft 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 indicator.

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

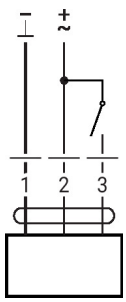
Electrical installation

Supply from isolating transformer.

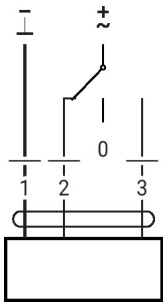
Parallel connection of other actuators possible. Observe the performance data.

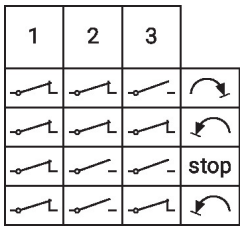
Wire colours:
1 = black
2 = red
3 = white

AC/DC 24 V, open/close



AC/DC 24 V, 3-point





Installation notes

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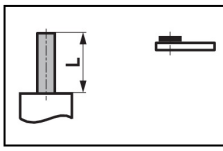
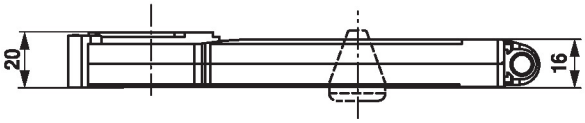
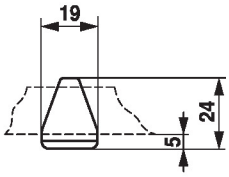
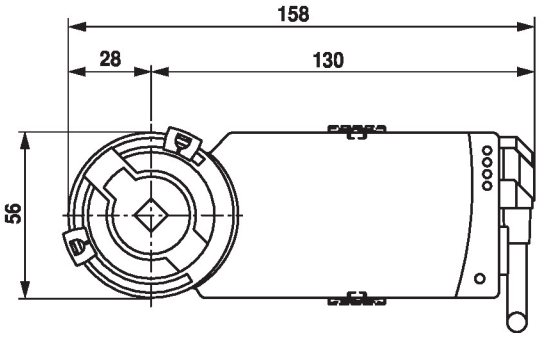
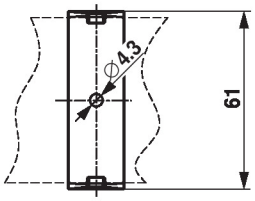
Dimensions

Spindle length

	Min. 25
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