

Modulating damper actuator for adjusting dampers in technical building installations

- Air damper size up to approx. 0.2 m²
- Torque motor 1 Nm
- Nominal voltage AC/DC 24 V
- Control modulating 2...10 V
- Position feedback 2...10 V
- Mechanical interface Form fit 8x8 mm
- with plug



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	1.5 W
	Power consumption in rest position	0.5 W
	Power consumption for wire sizing	2.5 VA
	Connection supply / control	Connector plug (Cable-side connector socket not included in scope of delivery)
	Connection plug	Molex Mini-Fit Jr. 39303045
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	1 Nm
	Operating range Y	2...10 V
	Input Impedance	100 kΩ
	Position feedback U	2...10 V
	Position feedback U note	Max. 1 mA
	Position accuracy	±5%
	Direction of motion motor	clockwise rotation
	Direction of motion note	Y = 0 V, right end stop, position 0
	Manual override	No
	Angle of rotation	95°, fixed setting
	Running time motor	22 s / 90°
	Sound power level, motor	35 dB(A)
	Mechanical interface	Form fit 8x8 mm
	Position indication	No
Safety data	Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
	Degree of protection IEC/EN	IP20
	EMC	CE according to 2014/30/EU
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	Mode of operation	Type 1
	Rated impulse voltage supply / control	0.8 kV
	Pollution degree	2
	Ambient temperature	-30...50°C
	Storage temperature	-40...80°C
	Ambient humidity	Max. 95% RH, non-condensing
	Servicing	maintenance-free
Weight	Weight	0.09 kg
	Packaging quantity	Multipack 100 pcs.

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.
- The device is intended for factory installation in an equipment. The required protection against accidental contact with live parts must be provided by the damper or system manufacturer.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- 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.
- Connectors are equipment that may only be used for the intended purpose. The Molex connector has a locking mechanism and prevents unintentional disconnection. Operation under voltage is not permitted.
- 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

Mode of operation	The actuator is connected with a standard modulating signal of 0...10 V and drives to the position defined by the positioning signal. Measuring voltage U serves for the electrical display of the damper position 0.5...100% and as slave control signal for other actuators.
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 not included in the scope of delivery.
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.
Hidden synchronisation	If the actuator drives to the lower end stop during ongoing operation, it performs a synchronisation of the positioning signal at DC 2 V. This ensures that the signal range also corresponds to the effective functional range in ongoing operation. The bottom end stop is actively approached as soon as the positioning signal is DC 2.3 V.
Delivery notes	Incl. End stop clip

Accessories

Mechanical accessories	Description	Type
	Anti-rotation clip, Multipack 20 pcs.	Z-ARCM
	End stop clip, Multipack 20 pcs.	Z-ESCM
	Protective covering, Multipack 20 pcs.	Z-PCUM

Electrical installation



Supply from isolating transformer.

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

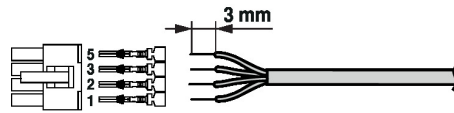
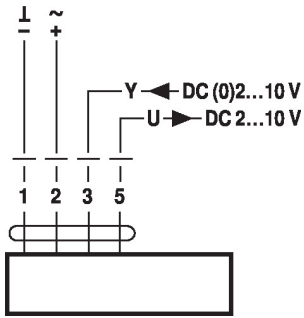
Cable-side connector socket is not included in scope of delivery

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Wiring diagrams

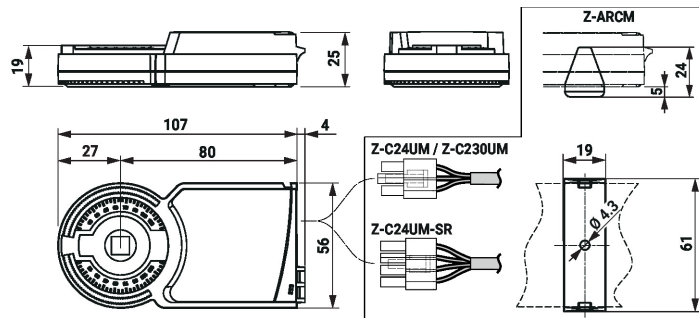
AC/DC 24 V, modulating

Molex PN 39014040 / 39000039 (0.5...1.0 mm²)

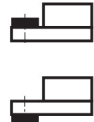
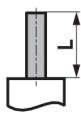


Dimensions

Dimensional drawings



Shaft length



Min. 25