

Damper actuator for factory installation in an equipment in technical building installations

- Air damper size up to approx. 0.2 m<sup>2</sup>
- Torque motor 1 Nm
- Nominal voltage AC 100...240 V
- Control Open/close, 3-point
- Mechanical interface Form fit 8x8 mm
- with plug



## Technical data

<b>Electrical data</b>	Nominal voltage	AC 100...240 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 85...265 V
	Power consumption in operation	2 W
	Power consumption in rest position	1.5 W
	Power consumption for wire sizing	4.5 VA
	Connection supply / control	Connector plug (Cable-side connector socket not included in scope of delivery)
	Connection plug	Molex Mini-Fit Jr. 39303035
	Parallel operation	Yes (note the performance data)
<b>Functional data</b>	Torque motor	1 Nm
	Direction of motion motor	clockwise rotation
	Manual override	No
	Angle of rotation	0...287.5°
	Angle of rotation note	can be limited by adjustable mechanical end stop 315° with one end stop clip mounted on the actuator Without limitation: endless
	Running time motor	22 s / 90°
	Sound power level, motor	35 dB(A)
	Mechanical interface	Form fit 8x8 mm
	Position indication	No
<b>Safety data</b>	Protection class IEC/EN	0, basic insulation
	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP20
	Degree of protection NEMA/UL	NEMA 1
	Enclosure	UL Enclosure Type 1
	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	cURus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1
	Hygiene test	According to VDI 6022 Part 1 / SWKI VA 104-01, cleanable and disinfectable, low emission
	Type of action	Type 1

**Technical data**

<b>Safety data</b>	Rated impulse voltage supply / control	2.5 kV
	Pollution degree	2
	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
<b>Weight</b>	Weight	0.09 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.
- The device is not designed for applications where chemical influences (gases, fluids) are present or for utilisation in corrosive environments in general.
- The device is considered a component and intended for installation in an equipment at the factory. The required protection against accidental contact with live parts must be provided by the damper or system manufacturer.
- Caution: Power supply voltage!
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with 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.
- The plug connections may only be used according to the installation instructions. The Molex plug connection has a mandatory locking mechanism that prevents unintentional disconnection. Operating the locking mechanism and the entire plug connection under voltage is not permitted.
- 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**

<b>Simple direct mounting</b>	The actuator is mounted directly on the damper shaft (ø6...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.
<b>Adjustable angle of rotation</b>	Adjustable angle of rotation with mechanical end stops.
<b>High functional reliability</b>	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.
<b>Restriction 3-point controller</b>	- For applications with 3-point open-loop control, a minimum pulse length of 1 sec. is recommended to increase position accuracy. - For applications with 3-point closed-loop control, a pulse length of 0.5 sec. is possible to reduce oscillation.

**Parts included**

End stop clip

Accessories

Mechanical accessories

Description

Type

- Anti-rotation clip, Multipack 20 pcs.
- End stop clip, Multipack 20 pcs.
- Protective covering, Multipack 20 pcs.

- Z-ARCM
- Z-ESCM
- Z-PCUM

Electrical installation



Supply from isolating transformer.

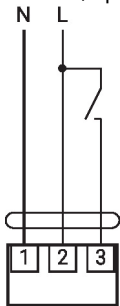
Parallel connection of other actuators possible. Observe the performance data.

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

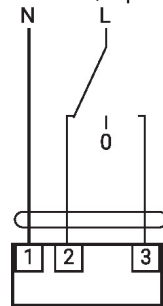
The plug connections may only be used according to the installation instructions. The Molex plug connection has a mandatory locking mechanism that prevents unintentional disconnection. Operating the locking mechanism and the entire plug connection under voltage is not permitted.

Wiring diagrams

AC 230 V, open/close

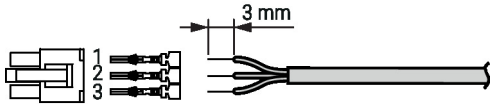


AC 230 V, 3-point



1	2	3	
			stop

Molex PN 39014030 / 39000039 (0.5...1.0 mm<sup>2</sup>)



Dimensions

Spindle length

	Min. 25
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