

Damper actuator for adjusting dampers in technical building installations

- Air damper size up to approx. 3.2 m²
- Torque motor 16 Nm
- Nominal voltage AC/DC 24 V
- Control Open/close, 3-point
- Running time motor 20 s



### **Technical data**

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Nominal voltage	AC/DC 24 V
Nominal voltage frequency	50/60 Hz
Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
Power consumption in operation	4 W
Power consumption in rest position	0.5 W
Power consumption for wire sizing	6.5 VA
Power consumption for wire sizing note	Imax 8.2 A @ 5 ms
Connection supply / control	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
Parallel operation	Yes (note the performance data)
Torque motor	16 Nm

#### **Functional data**

Torque motor	16 Nm
Direction of motion motor	selectable with switch 0 (ccw rotation) / 1 (cw rotation)
Manual override	with push-button, can be locked
Angle of rotation	Max. 95°
Angle of rotation note	can be limited on both sides with adjustable mechanical end stops
Running time motor	20 s / 90°
Sound power level, motor	55 dB(A)
Mechanical interface	Universal shaft clamp reversible 1020 mm
Position indication	Mechanically, pluggable
Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)

## Safety data

Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
Power source UL	Class 2 Supply
Degree of protection IEC/EN	IP54
Degree of protection NEMA/UL	NEMA 2
Enclosure	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
Mode of operation	Type 1
Rated impulse voltage supply / control	0.8 kV
Pollution degree	3
Ambient humidity	Max. 95% RH, non-condensing
Ambient temperature	-3050°C [-22122°F]
Storage temperature	-4080°C [-40176°F]
Servicing	maintenance-free



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Weight Weight 0.97 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 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.
- · 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

Simple direct mounting on the damper shaft with a universal shaft clamp, supplied with an antirotation device to prevent the actuator from rotating.

Manual override

Manual override with push-button possible (the gear train 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 protected, requires no limit switches and automatically stops when the end stop is reached.

#### **Accessories**

FI	lectrical	accesso	ries

Description	Туре
Auxiliary switch 1 x SPDT add-on	S1A
Auxiliary switch 2 x SPDT add-on	S2A
Feedback potentiometer 140 Ω add-on	P140A
Feedback potentiometer 200 Ω add-on	P200A
Feedback potentiometer 500 $\Omega$ add-on	P500A
Feedback potentiometer 1 kΩ add-on	P1000A
Feedback potentiometer 2.8 kΩ add-on	P2800A
Feedback potentiometer 5 kΩ add-on	P5000A
Feedback potentiometer 10 kΩ add-on	P10000A



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#### Mechanical accessories

Description	Туре
Actuator arm for standard shaft clamp (reversible)	AH-20
Shaft extension 240 mm Ø20 mm for damper shaft Ø 1221 mm CrNi	AV12-25-I
Shaft extension 240 mm Ø20 mm for damper shaft Ø 822.7 mm	AV8-25
Ball joint suitable for damper crank arm KH8, Multipack 10 pcs.	KG8
Ball joint suitable for damper crank arm KH8 / KH10, Multipack 10 pcs.	KG10A
Damper crank arm Slot width 8.2 mm, clamping range Ø1018 mm	KH8
Shaft clamp one-sided, clamping range Ø826 mm, Multipack 20 pcs.	K-ENSA
Shaft clamp one-sided, clamping range Ø1226 mm, for CrNi shaft	K-ENSA-I
(INOX), Multipack 20 pcs.	
Shaft clamp reversible, clamping range Ø1020 mm	K-SA
Anti-rotation mechanism 230 mm, Multipack 20 pcs.	Z-ARS230
Form fit insert 10x10 mm, Multipack 20 pcs.	ZF10-NSA
Form fit insert 12x12 mm, Multipack 20 pcs.	ZF12-NSA
Form fit insert 15x15 mm, Multipack 20 pcs.	ZF15-NSA
Form fit insert 16x16 mm, Multipack 20 pcs.	ZF16-NSA
Mounting kit for linkage operation for flat installation	ZG-SMA
Position indicator, Multipack 20 pcs.	Z-PI
Base plate extension for SMA to SM/AM/SMD24R	Z-SMA

### **Electrical installation**

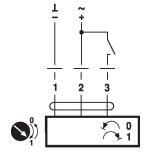


Supply from isolating transformer.

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

# Wiring diagrams

AC/DC 24 V, open/close

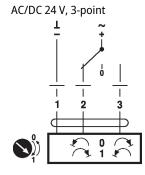


Cable colours:

1 = black

2 = red

3 = white



Cable colours:

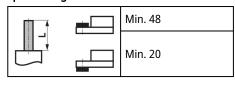
1 = black

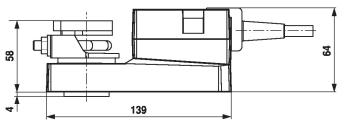
2 = red

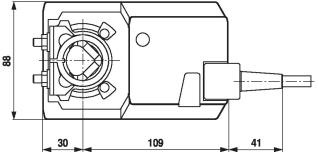
3 = white

## **Dimensions**

### Spindle length

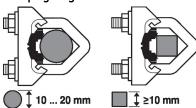


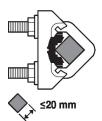






# Clamping range





When using a round shaft made of CrNi (INOX): Ø 12...20 mm