

Damper actuator for adjusting dampers in technical building installations

- · Air damper size up to approx. 4 m²
- Nominal torque 20 Nm
- Nominal voltage AC/DC 24 V
- · Control Open-close, 3-point
- · with integrated auxiliary switch



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 19.228.8 V
Power consumption in operation	2 W
Power consumption in rest position	0.2 W
Power consumption for wire sizing	4 VA
Auxiliary switch	1 x SPDT, 0100%
Switching capacity auxiliary switch	1 mA3 (0.5 inductive) A, AC 250 V
Connection supply / control	Cable 1 m, 3 x 0.75 mm ²
Connection auxiliary switch	Cable 1 m, 3 x 0.75 mm ²
Parallel operation	Yes (note the performance data)
Torque motor	Min. 20 Nm
Direction of motion motor	selectable with switch 0 (ccw rotation) / 1 (cw

Functional data

Torque motor	Min. 20 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	150 s / 90°
Sound power level motor	45 dB(A)
Spindle driver	Universal spindle clamp reversible 1020 mm
Position indication	Mechanically, pluggable
Protection class IEC/EN	Il reinforced insulation

Total of older 120/211
Protection class UL
Protection class auxiliary switch IEC/EN
Degree of protection IEC/EN
Degree of protection NEMA/UL
EMC
Low voltage directive

Ambient temperature Non-operating temperature

Ambient humidity

Maintenance

Weight

Degree of protection IEC/EN	IP54
Degree of protection NEMA/UL	NEMA 2, 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
Certification UL	cULus according to UL 60730-1A, UL 60730-2-
	14 and CAN/CSA E60730-1:02
Mode of operation	Type 1.B
Rated impulse voltage supply / control	0.8 kV
Rated impulse voltage auxiliary switch	2.5 kV
Control pollution degree	3
Ambient temperature	20 E0°C

-30...50°C

-40...80°C

Maintenance-free

95% r.h., non-condensing

II reinforced insulation

II reinforced insulation

Sar



• The device must not be used outside the specified field of application, especially not in aircraft or in any other airborne means of transport.

1.2 kg

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Safety notes

- Outdoor application: only possible in case that no (sea)water, snow, ice, insolation
 or aggressive gases interfere directly with the actuator and that is ensured that the
 ambient conditions remain at any time within the thresholds according to the data
 sheet.
- 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 site 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 spindle with an universal spindle clamp,

supplied with an anti-rotation device to prevent the actuator from rotating.

Manual override Manual override with push-button possible (the gear 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.

Flexible signalization With adjustable auxiliary switch (0...100%)

Accessories

	Description	Туре
Electrical accessories	Auxiliary switch, add-on, 1 x SPDT	S1A
	Auxiliary switch, add-on, 2 x SPDT	S2A
	Feedback potentiometer 140 Ohm, add-on	P140A
	Feedback potentiometer 140 Ohm, add-on, grey	P140A GR
	Feedback potentiometer 200 Ohm, add-on	P200A
	Feedback potentiometer 500 Ohm, add-on	P500A
.*.	Feedback potentiometer 500 Ohm, add-on, grey	P500A GR
	Feedback potentiometer 1 kOhm, add-on	P1000A
	Feedback potentiometer 1 kOhm, add-on, grey	P1000A GR
	Feedback potentiometer 2.8 kOhm, add-on	P2800A
	Feedback potentiometer 2.8 kOhm, add-on, grey	P2800A GR
X	Feedback potentiometer 5 kOhm, add-on	P5000A
	Feedback potentiometer 5 kOhm, add-on, grey	P5000A GR
	Feedback potentiometer 10 kOhm, add-on	P10000A
, 0	Feedback potentiometer 10 kOhm, add-on, grey	P10000A GR
	Description	Туре
Mechanical accessories	Actuator arm, for standard spindle clamp (reversible) K-SA	AH-20
	Shaft extension 250 mm for CrNi (INOX)	AV12-25-I
	Shaft extension 250 mm, for damper spindles Ø 825 mm	AV8-25
	Angled ball joint with M8, suitable for damper crank arms KH8	KG8
	Straight ball joint with M8, suitable for damper crank arms KH8	KG10A
	Damper crank arm, for damper spindles	KH8
	Spindle clamp, one side for NMA, SMA	K-ENSA
	Spindle clamp, one side for SMA	K-ENSA-I
	Spindle clamp, reversible for SMA and NMQ	K-SA
	Universal mounting bracket 180 mm	Z-ARS180
	Universal mounting bracket 230 mm	Z-ARS230

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Accessories

Description	Type
Angle of rotation limiter, for K-NA	20334-00001
Form fit insert 10x10 mm, for NMA / SMA	ZF10-NSA
Form fit insert 12x12 mm, for NMA / SMA	ZF12-NSA
Form fit insert 15x15 mm	ZF15-NSA
Form fit insert 16x16 mm, for NMA / SMA	ZF16-NSA
Mounting kit for linkage operation, SMA for flat installation	ZG-SMA
Position indication for LMA, NMA, SMA, GMA	Z-PI
Base plate extension from SMA to SM/AM/SMD24R	Z-SMA

Electrical installation

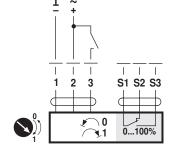


Notes

- · Connection via safety isolating transformer.
- Parallel connection of other actuators possible. Observe the performance data.

Wiring diagrams

AC/DC 24 V, open-close



Cable colours:

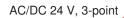
1 = black

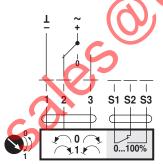
2 = red

3 = white S1 = violet

S2 = red

S3 = white





Cable colours:

1 = black

2 = red

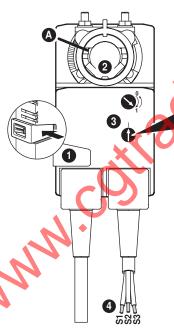
3 = white S1 = violet

S2 = red

S3 = white

Operating controls and indicators

Auxiliary switch settings





Note

Perform settings on the actuator only in deenergised state.

Gear disengagement

Holding button pressed down: Gear is disengaged.

Manual override is possible.

2 Spindle clamp

Turn until edge line (A) displays the desired switching position of the actuator and release button (1)

3 Auxiliary switch

Turn rotary knob until the arrow points to the vertical line.

4 Cable

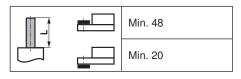
Connect continuity tester to S1 + S2 or to S1 + S3.

If the auxiliary switch should switch in the opposite direction, rotate the auxiliary switch by 180°.



Dimensions [mm]

Spindle length



Clamping range

	<u>OI</u>	_	♦ I
	1020	≥10	≤20
CrNi (INOX)	1220	≥10	≤20

With utilisation of a round spindle made of CrNi (INOX): Ø 12...20 mm

Dimensional drawings

