

## **Technical data sheet**

# Damper actuator for adjusting dampers in technical building installations

- Air damper size up to approx. 4 m<sup>2</sup>
- Nominal torque 20 Nm
- Nominal voltage AC 230 V
- Control Open-close, 3-point
- With connecting terminals



# **Technical data**

Electrical data	Nominal voltage	AC 230 V	
	Nominal voltage frequency	50/60 Hz	
	Nominal voltage range	AC 85264 V	
	Power consumption in operation	2.5 W	
	Power consumption in rest position	0.6 W	
	Power consumption for wire sizing	6 VA	
	Connection supply / control	Terminals 4 mm <sup>2</sup> (cable Ø 410 mm, 3-wire)	
	Parallel operation	Yes (note the performance data)	
Functional data	Torque motor	Min. 20 Nm	
	Direction of motion motor	Selectable with switch 0 (ccw rotation) / 1 (cw rotation)	
	Manual override	Gear disengagement 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	
Safety	Protection class IEC/EN	II Protective insulated	
	Protection class UL	II Protective insulated	
	Degree of protection IEC/EN	IP54	
	Degree of protection NEMA/UL	NEMA 2, UL Enclosure Type 2	
	EMC	CE according to 2004/108/EC	
	Low voltage directive	CE according to 2006/95/EC	
	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	
	Rated impulse voltage supply / control	2.5 kV	
	Control pollution degree	3	
	Ambient temperature	-3050°C	
	Non-operating temperature	-4080°C	
	Ambient humidity	95% r.h., non-condensing	
	Maintenance	Maintenance-free	
Weight	Weight approx.	0.93 kg	

#### Safety notes



- The device must not be used outside the specified field of application, especially not 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 actuator and that is ensured that the
  ambient conditions remain at any time within the thresholds according to the data
  sheet.
- Caution: Power supply voltage!



Safety notes			
	<ul> <li>Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>		
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).		
High functional reliability	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.		
Adjustable angle of rotation	Adjustable angle of rotation with mechanical end stops.		
Accessories			
	Description	Туре	
Electrical accessories	Auxiliary switch, add-on, 1 x SPDT	S1A	
	Auxiliary switch, add-on, 2 x SPDT	S2A	
	Auxiliary switch, add-on, 2 x SPDT, grey	S2A GR	
	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 2.8 kOhm, add-on	P2800A	

Feedback potentiometer 2.8 kOhm, add-on, grey

Feedback potentiometer 1 kOhm, add-on, grey Feedback potentiometer 5 kOhm, add-on

Feedback potentiometer 5 kOhm, add-on, grey

Feedback potentiometer 10 kOhm, add-on, grey

Actuator arm, for one-sided spindle clamp K-ENSA

Actuator arm, for standard spindle clamp (reversible) K-SA

Shaft extension 250 mm, for damper spindles Ø 8...25 mm

Straight ball joint with M8, suitable for damper crank arms KH8

Angled ball joint with M8, suitable for damper crank arms KH8

Feedback potentiometer 10 kOhm, add-on

Shaft extension 250 mm for CrNi (INOX)

Damper crank arm, for damper spindles

Spindle clamp, one side for SM..A

Universal mounting bracket 180 mm

Universal mounting bracket 230 mm

Angle of rotation limiter, for K-NA

Form fit insert 15x15 mm

Spindle clamp, one side for NM..A, SM..A

Spindle clamp, reversible for SM..A and NMQ..

Form fit insert 10x10 mm, for NM..A / SM..A

Form fit insert 12x12 mm, for NM..A / SM..A

Description

**Mechanical accessories** 

P2800A GR

P1000A GR

P5000A GR P10000A

P10000A GR

P5000A

Туре

AH-20

AH-25

AV8-25

KG10A

K-ENSA

K-ENSA-I K-SA

Z-ARS180

**Z-ARS230** 

ZF10-NSA

ZF12-NSA ZF15-NSA

20334-00001

KG8

KH8

AV12-25-I



### Accessories

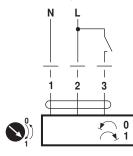
Description	Туре
Form fit insert 16x16 mm, for NMA / SMA	ZF16-NSA
Mounting kit for linkage operation, SMA for flat installation	ZG-SMA
Position indication for LMA, NMA, SMA, GMA	Z-PI
Base plate extension from SMA to SM/AM/SMD24R	Z-SMA
Terminal protection IP54	Z-TP
Cable sleeve for $Ø$ 4-6 mm, suitable for strain relief NG	43235-00001
Strain relief bushing (cable sleeve) for $\emptyset$ 6-8 mm, suitable for strain relief NG	43235-00002
Cable sleeve for Ø 8-10 mm, suitable for strain relief NG	43235-00003

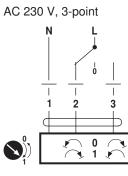
# **Electrical installation**

Notes	<ul> <li>Caution: Power supply voltage!</li> <li>Parallel connection of other actuators possible. Observe the performance data.</li> </ul>
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## Wiring diagrams

AC 230 V, open-close





#### **Dimensions** [mm]

#### Spindle length

	Min. 48
	Min. 20

#### **Clamping range**

	$\bigcirc$		$\mathbf{x}$
	1020	≥10	≤20
CrNi (INOX)	1220	≥10	≤20

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

