

## **Technical data sheet**

Damper actuator for adjusting dampers in technical building installations

- Air damper size up to approx. 2 m<sup>2</sup>
- Torque motor 10 Nm
- Nominal voltage AC 100...240 V
- Control Open/close, 3-point
- with connecting terminals



### **Technical data**

Electrical data	Nominal voltage	AC 100240 V	
	Nominal voltage frequency	50/60 Hz	
	Nominal voltage range	AC 85265 V	
	Power consumption in operation	2.5 W	
	Power consumption in rest position	0.6 W	
	Power consumption for wire sizing	5.5 VA	
	Connection supply / control	Terminals 4 mm <sup>2</sup> (cable ø410 mm, 3-wire)	
	Parallel operation	Yes (note the performance data)	
Functional data	Torque motor	10 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	35 dB(A)	
	Mechanical interface	Universal shaft clamp 826.7 mm	
	Position indication	Mechanical, pluggable	
Safety data	Protection class IEC/EN	II, reinforced insulation	
	Protection class UL	II, reinforced insulation	
	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	
	Low voltage directive	CE according to 2014/35/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	
	Hygiene test	According to VDI 6022 Part 1 / SWKI VA 104-01, cleanable and disinfectable, low emission	
	Type of action	Туре 1	
	Rated impulse voltage supply / control	2.5 kV	



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<b>Safety data</b> Pollເ	ition degree	3
Amb	ient humidity	Max. 95% RH, non-condensing
Amb	ient temperature	-3050°C [-22122°F]
Stor	age temperature	-4080°C [-40176°F]
Serv	icing	maintenance-free
Weight Weid	ght	0.74 kg

# Safety notes

Salety holes	
Ĺ	<ul> <li>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.</li> <li>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.</li> <li>Caution: Power supply voltage!</li> <li>Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with 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 and the design, as well as the installation situation 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 shaft with a universal shaft clamp, supplied with an anti-rotation 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	

Electrical accessories	Description	Туре
	Auxiliary switch 1x SPDT add-on	S1A
	Auxiliary switch 2x SPDT add-on	S2A
	Feedback potentiometer 140 Ω add-on	P140A
	Feedback potentiometer 1 k $\Omega$ add-on	P1000A
	Feedback potentiometer 10 k $\Omega$ add-on	P10000A
Mechanical accessories	Description	Туре
	Actuator arm for standard shaft clamp (one-sided)	AH-25
	Shaft extension 240 mm ø20 mm for damper shaft ø822.7 mm	AV8-25
	Ball joint suitable for damper crank arm KH8	KG8
	Ball joint suitable for damper crank arm KH8 / KH10	KG10A
	Damper crank arm Slot width 8.2 mm, clamping range ø1018 mm	KH8
	Shaft clamp one-sided, clamping range ø826 mm with insert, Multipack 20 pcs.	K-ENMA
	Shaft clamp one-sided, clamping range ø826 mm, Multipack 20 pcs.	K-ENSA



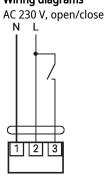
Description	Туре	
Shaft clamp reversible, clamping range ø820 mm	K-NA	
Form fit insert 8x8 mm, Multipack 20 pcs.	ZF8-NMA	
Form fit insert 10x10 mm, Multipack 20 pcs.	ZF10-NSA	
Form fit insert 12x12 mm, Multipack 20 pcs.	ZF12-NSA	
Form fit insert 15x15 mm, Multipack 20 pcs.	ZF15-NSA	
Form fit insert 16x16 mm, Multipack 20 pcs.	ZF16-NSA	
Mounting kit for linkage operation for flat installation	ZG-NMA	
Anti-rotation mechanism 180 mm, Multipack 20 pcs.	Z-ARS180	
Baseplate extension for NMA to NM	Z-NMA	
Position indicator, Multipack 20 pcs.	Z-PI	
Terminal protection IP54, Multipack 20 pcs.	Z-TP	

### **Electrical installation**

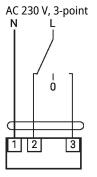


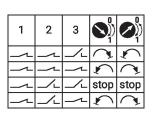
#### Caution: Power supply voltage!

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



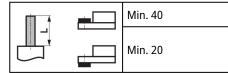
# Wiring diagrams





#### Dimensions

#### Spindle length



# Clamping range

	<u>O</u> I		
	826.7	≥8	≤26.7
*	820	≥8	≤20

\*Option: Shaft clamp mounted below (accessories K-NA needed)

