

- 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

<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	2.5 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 ø4...10 mm, 3-wire)
	Parallel operation	Yes (note the performance data)
<b>Functional data</b>	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 8...26.7 mm
	Position indication	Mechanical, pluggable
<b>Safety data</b>	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
	Type of action	Type 1
	Rated impulse voltage supply / control	2.5 kV
	Pollution degree	3
	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

**Weight**    Weight    0.74 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, insulation 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.
- Caution: Power supply voltage!
- 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.
- 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**

<b>Simple direct mounting</b>	Simple direct mounting on the damper shaft with a universal shaft clamp, supplied with an anti-rotation device to prevent the actuator from rotating.
<b>Manual override</b>	Manual override with push-button possible (the gear train is disengaged for as long as the button is pressed or remains locked).
<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.

**Accessories**

<b>Electrical accessories</b>	<b>Description</b>	<b>Type</b>
	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 Ω 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

Mechanical accessories

Description

Type

Actuator arm for standard shaft clamp (one-sided)	AH-25
Shaft extension 240 mm $\varnothing$ 20 mm for damper shaft $\varnothing$ 8...22.7 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 $\varnothing$ 10...18 mm	KH8
Shaft clamp one-sided, clamping range $\varnothing$ 8...26 mm with insert, Multipack 20 pcs.	K-ENMA
Shaft clamp one-sided, clamping range $\varnothing$ 8...26 mm, Multipack 20 pcs.	K-ENSA
Shaft clamp reversible, clamping range $\varnothing$ 8...20 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
Base plate extension for NM..A to NM..	Z-NMA
Position indicator, Multipack 20 pcs.	Z-PI
Terminal protection IP54, Multipack 20 pcs.	Z-TP

Electrical installation

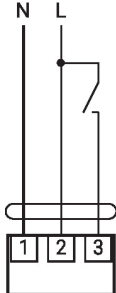


Caution: Power supply voltage!

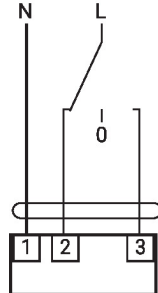
Parallel connection of other actuators possible. Observe the performance data.

Wiring diagrams

AC 230 V, open/close



AC 230 V, 3-point

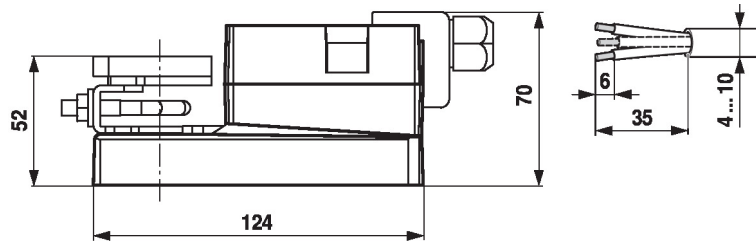


1	2	3		
			stop	stop

Dimensions

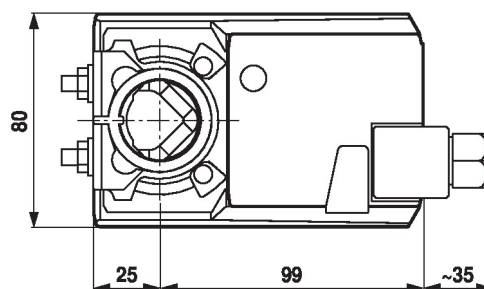
Spindle length

	Min. 40
	Min. 20



Clamping range

	8...26.7	$\geq 8$	$\leq 26.7$
	8...20	$\geq 8$	$\leq 20$



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