

Torque motor 10 Nm

Damper actuator for adjusting dampers in

technical building installations

 ${\, \bullet \,}$  Air damper size up to approx. 2  $m^2$ 

Nominal voltage AC 100...240 V
 Control Open/close, 3-point

# **Technical data sheet**

NM230A

## **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	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
	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
	ЕМС	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	Туре 1
	Rated impulse voltage supply / control	2.5 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



Weight	Weight	0.72 kg	
Safety notes			
Â	<ul> <li>systems and must not in any other airborne r</li> <li>Outdoor application: o aggressive gases inter conditions remain with</li> <li>Caution: Power supply</li> <li>Only authorised specia installation regulations</li> <li>The device may only be can be replaced or rep</li> <li>Cables must not be rer</li> <li>To calculate the torque concerning the cross-s conditions must be obs</li> <li>The device contains elements</li> </ul>	nly possible in case that no (sea) water, s ere directly with the device and that it is in the thresholds according to the data s voltage! lists may carry out installation. All applic must be complied during installation. e opened at the manufacturer's site. It do aired by the user. noved from the device. required, the specifications supplied by ection, the design, the installation situat	plication, especially in aircraft or snow, ice, insolation or sensured that the ambient sheet at any time. table legal or institutional oes not contain any parts that the damper manufacturers ion and the ventilation nust not be disposed of as
Product features			6 I II I II II II
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 1 x SPDT Auxiliary switch 2 x SPDT Feedback potentiometer	add-on	S1A S2A P140A

Feedback potentiometer 200  $\Omega$  add-on

Feedback potentiometer 500  $\Omega$  add-on Feedback potentiometer 1 k $\Omega$  add-on

Feedback potentiometer 2.8 k $\Omega$  add-on

Feedback potentiometer 5 k $\Omega$  add-on

Feedback potentiometer 10  $k\Omega$  add-on

P200A

P500A

P1000A

P2800A

P5000A P10000A



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NM230A

Mechanical accessories	Description	Туре
	Actuator arm for standard shaft clamp (one-sided)	AH-25
	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 with insert, Multipack 20 pcs.	K-ENMA
	Shaft clamp one-sided, clamping range Ø826 mm, Multipack 20 pcs.	K-ENSA
	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
	Base plate extension for NMA to NM	Z-NMA
	Position indicator, Multipack 20 pcs.	Z-PI

## **Electrical installation**



Caution: Power supply voltage!

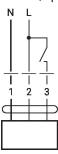
Parallel connection of other actuators possible. Observe the performance data.

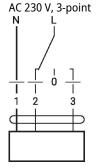
## Wire colours:

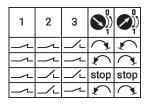
- 1 = blue
- 2 = brown
- 3 = white

### Wiring diagrams

AC 230 V, open/close







## Dimensions

## Spindle length

<b>⊨</b> □	Min. 40
	Min. 20

### **Clamping range**

	<u>O</u> I		$\mathbf{\nabla}$
	826.7	≥8	≤26.7
*	820	≥8	≤20

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

