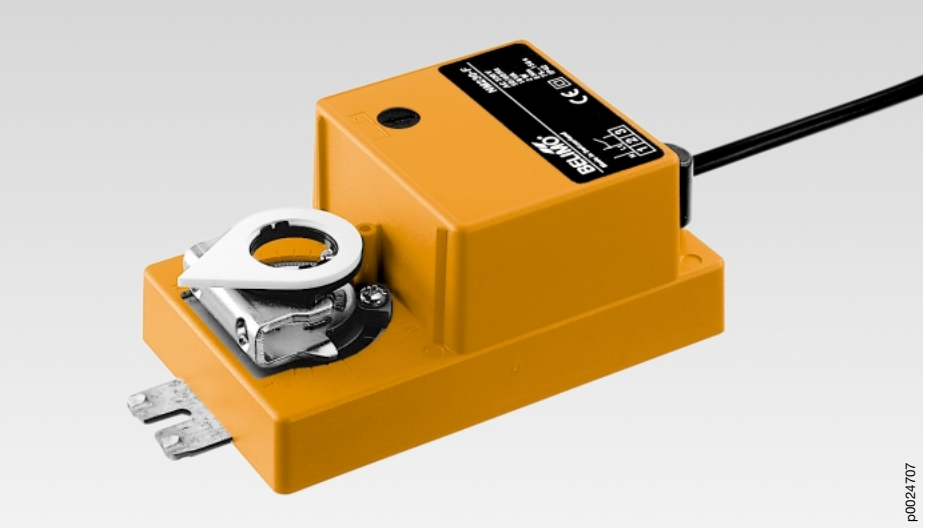
NM230-F Form-fit damper actuator 8 Nm



Dampers up to approx. 1.5 m²

Open/Close actuator (AC 230 V)

Control by single-pole contact (single-wire control)

Improved functional safety
The damper actuator has no limit switches and is overload-proof. It stops automatically when it reaches the damper or actuator end stop.

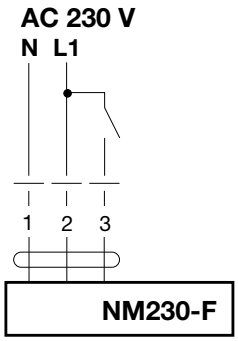
Easy functional check
A functional check of damper operation is simplicity itself: the gearing can be disengaged by simply pressing a pushbutton on top of the case. While the pushbutton remains depressed, the damper can be operated by hand.

Simple installation
The NM230-F, with its hollow shaft, is placed over the 8 mm square spindle of the damper and secured by two screws.

Electrical accessories
SN1, SN2 Auxiliary switches

Important
Read the notes about the use and torque requirements of the damper actuators on page 3 in the documentation 2. NM-… .

Wiring diagram



To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductors (with at least a 3 mm contact gap).

Parallel connection of several actuators with 1-wire control is possible. Power consumption must be observed.

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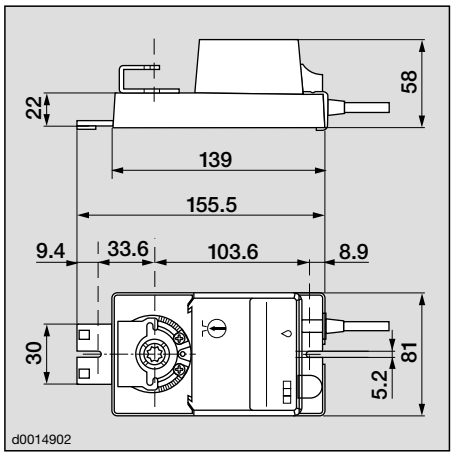
Technical data	NM230-F
Nominal voltage	AC 230 V 50/60 Hz
Nominal voltage range	AC 198…264 V
For wire sizing	18 VA
Power consumption	2 W
Connecting cable	1 m long, 3 x 0.75 mm²
Direction of rotation	selected with L / R switch
Torque	min. 8 Nm (at rated voltage)
Angle of rotation	max. 95° (adjustable by mechanical stops)
Running time	75...150 s (0...8 Nm)
Sound power level	max. 35 dB(A)
Position indication	mechanical
Protection class	II (all insulated)
Degree of protection	IP 54 (bottom cable entry)
Ambient temperature range Non-operating temperature Humidity test	–20...+50 °C –40...+80 °C to EN 60335-1
EMC Low Voltage Directive	CE according to 89/336/EEC, 92/31/EEC, 93/68/EEC CE according to 73/23/EEC
Maintenance	maintenance free
Weight	800 g

Dimensions



Dampers up to approx. 1.5 m²

Modulating damper actuator (AC 24 V)

Control DC 0…10 V and position feedback DC 2…10 V

Self-adapting, automatic angle of rotation and running time adjustment

Improved functional safety

The damper actuator has no limit switches and is overload-proof. It stops automatically when it reaches the damper or actuator end stop.

Automatic commissioning, easy functional check

When the power supply is first switched on, or when the override pushbutton is pressed, the actuator performs an automatic function test. It runs to each end position and, in the process, adapts its electrical working range of DC 2…10 V and running time of 150 s to the effective mechanical angle of rotation of the damper. After performing this function, the actuator moves to the position demanded by the positioning signal.
A functional check of damper operation is simplicity itself: the gearing can be disengaged by simply pressing a pushbutton on top of the case. While the pushbutton remains depressed, the damper can be operated by hand.

Simple installation

The actuator, with its hollow shaft, is placed over the 8 mm square spindle of the damper and secured by two screws.

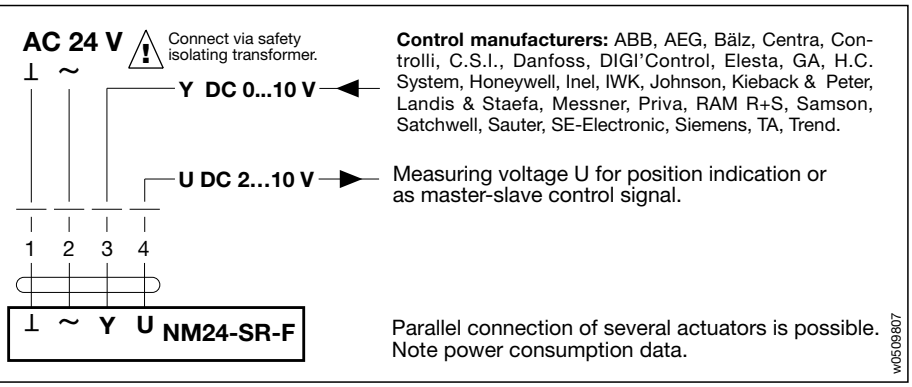
Electrical accessories

SN1, SN2	Auxiliary switches
SG…24	Positioners
ZAD24	Digital position indicator

Important

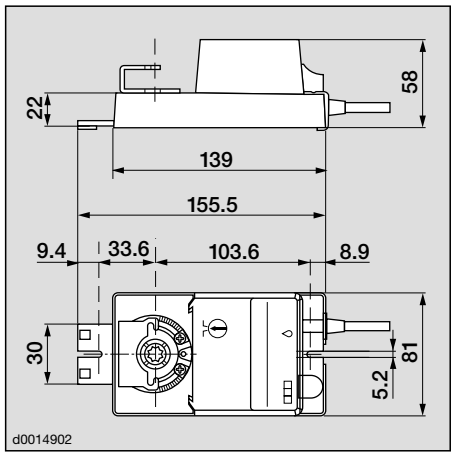
Read the notes about the use and torque requirements of the damper actuators on page 3 in the documentation 2. NM-… .

Wiring diagram



Technical data	NM24-SR-F
Nominal voltage	AC 24 V 50/60 Hz
Nominal voltage range	AC 19.2...28.8 V
For wire sizing	3 VA
Power consumption	1.3 W running, 0.5 W at rest
Connecting cable	1 m long, 4 x 0.75 mm²
Control signal Y	DC 0...10 V @ input resistance 100 kΩ
Operating range	DC 2...10 V (for 0...100 % angle of rotation)
Measuring voltage U	DC 2...10 V @ ≤ 0.7 mA (for 0...100 % angle of rotation)
Synchronisation tolerance	± 5 %
Override control	Y open or 0 V = 0 % angle of rotation Y at AC 24 V = 100 % angle of rotation
Direction of rotation (at Y = 0 V)	selected with L / R switch at switch position L ↶ resp. R ↷
Torque	min. 8 Nm (at rated voltage)
Angle of rotation	max. 95° (adjustable by mechanical stops)
Running time	150 s, regardless of the mechanically limited angle of rotation from 0…35 °∢ to 0…95 °∢
Sound power level	max. 35 dB(A)
Position indication	mechanical
Protection class	⏚ (safety low voltage)
Degree of protection	IP 54 (bottom cable entry)
Ambient temperature range Non-operating temperature Humidity test	−20...+50 °C −40...+80 °C to EN 60335-1
EMC	CE according to 89/336/EEC, 92/31/EEC, 93/68/EEC
Maintenance	maintenance free
Weight	900 g

Dimensions



Mounting instructions for Form-fit damper actuators NM...-F

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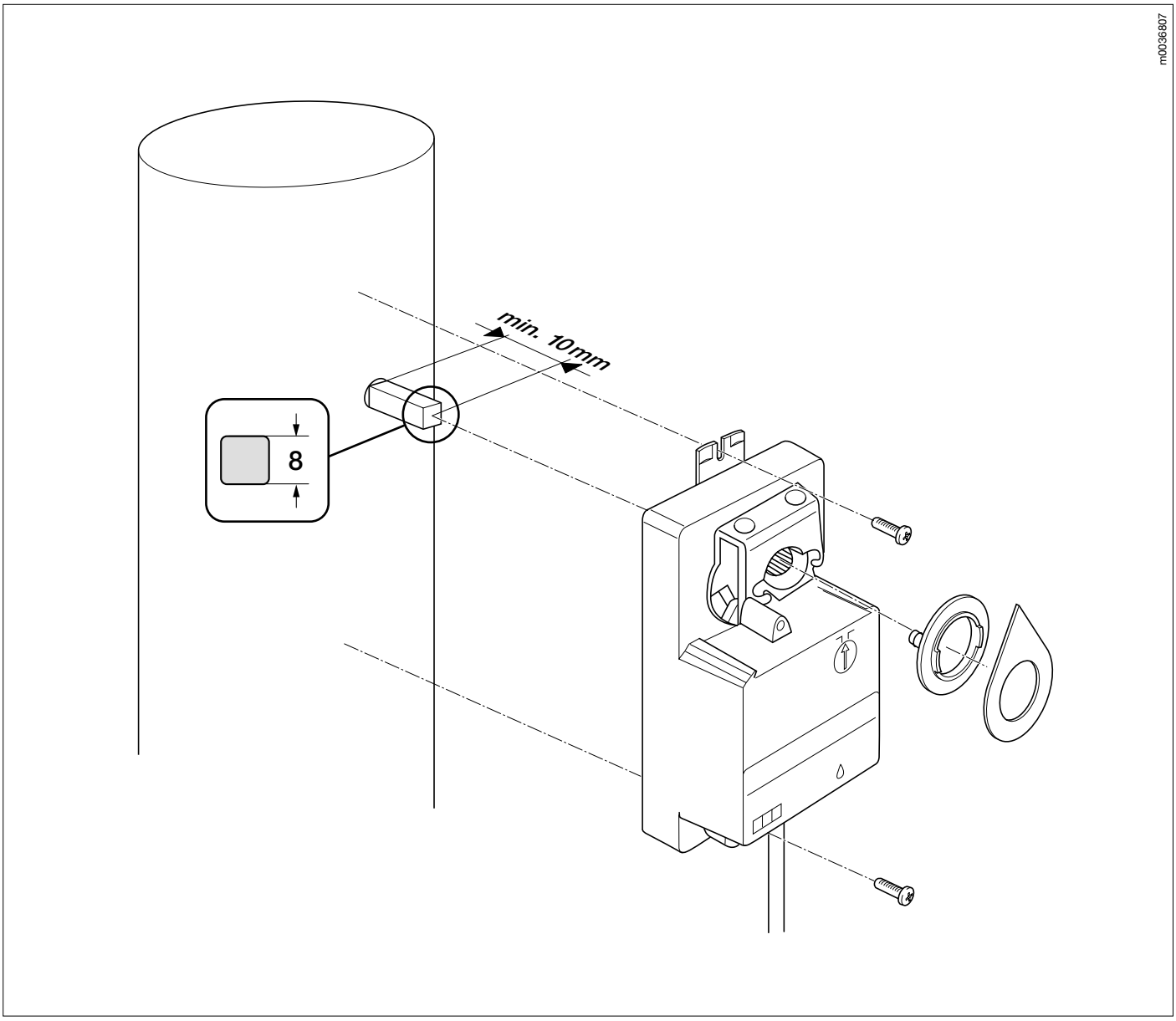

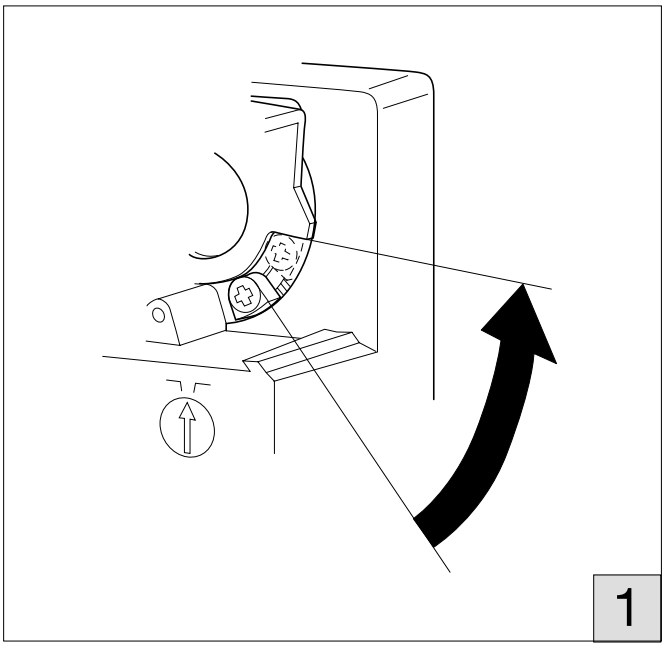

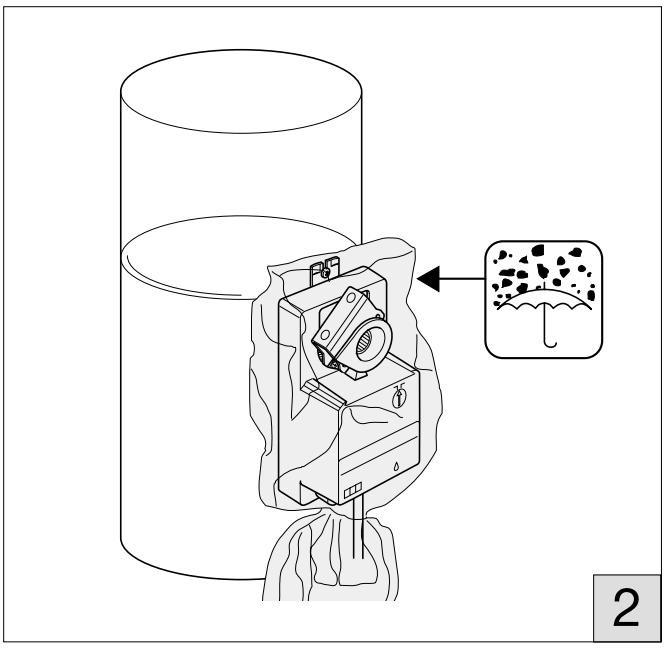

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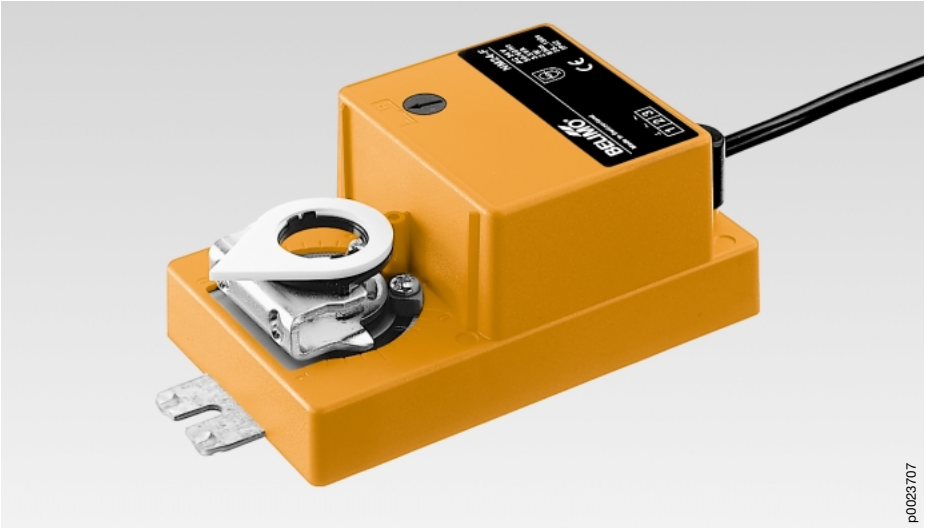
2. NM/E2-2



Dampers up to approx. 1.5 m²

Open/Close actuator (AC/DC 24 V)

Reversible

Improved functional safety
The damper actuator has no limit switches and is overload-proof. It stops automatically when it reaches the damper or actuator end stop.

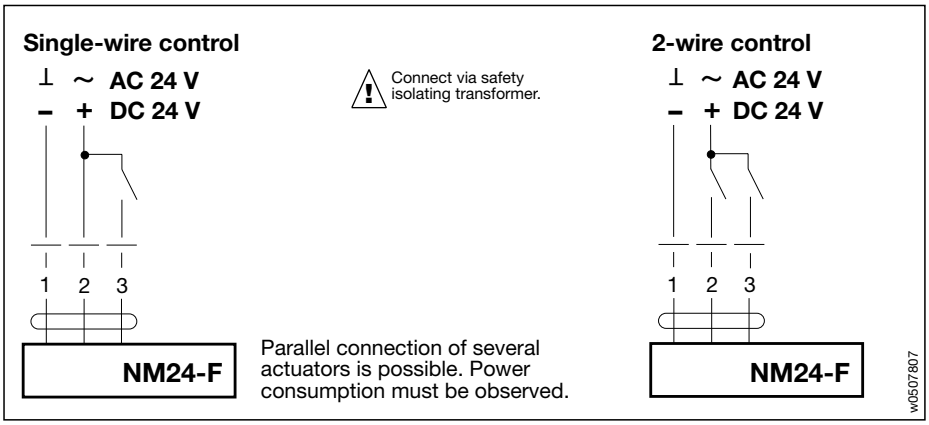
Easy functional check
A functional check of damper operation is simplicity itself: the gearing can be disengaged by simply pressing a pushbutton on top of the case. While the pushbutton remains depressed, the damper can be operated by hand.

Simple installation
The NM24-F, with its hollow shaft, is placed over the 8 mm square spindle of the damper and secured by two screws.

Electrical accessories
SN1, SN2 Auxiliary switches

Important
Read the notes about the use and torque requirements of the damper actuators on page 3 in the documentation 2. NM-… .

Wiring diagram



Technical data	NM24-F
Nominal voltage	AC 24 V 50/60 Hz, DC 24 V
Nominal voltage range	AC/DC 19.2...28.8 V
For wire sizing	3.5 VA
Power consumption	2 W
Connecting cable	1 m long, 3 x 0.75 mm²
Direction of rotation	selected with L / R switch
Torque	min. 8 Nm (at rated voltage)
Angle of rotation	max. 95° (adjustable by mechanical stops)
Running time	75...150 s (0...8 Nm)
Sound power level	max. 35 dB(A)
Position indication	mechanical
Protection class	⧫ (safety low voltage)
Degree of protection	IP 54 (bottom cable entry)
Ambient temperature range Non-operating temperature Humidity test	–20...+50 °C –40...+80 °C to EN 60335-1
EMC	CE according to 89/336/EEC, 92/31/EEC, 93/68/EEC
Maintenance	maintenance free
Weight	800 g

Dimensions