

NF24A-SR Damper Actuator

Application

Damper actuator with spring return and constant DC 0 to 10 V control for controlling air dampers in VAC plants with emergency function.

Easily mounted directly on the air damper axle with universal clamping device. The supplied locking element provides protection from distortion.

The valve actuating drive is overload resistant. The valve actuating drive stops automatically when the valve or motor stop is reached.

When the power supply is interrupted, the spring energy moves the air damper back into the emergency position.



Content	Page
Important Information Regarding Product Safety	2
Item	3
Technical Data	3
Accessories (not included in delivery)	3
Dimensions	4
Connection	5
Mounting	5
Manual adjustment	7
Mounting the Accessories	8

Änderungen vorbehalten - Contents subject to change - Sous réserve de modifications - Reservado el derecho a modificación - Wijzigingen voorbehouden - Con riserva di modifiche - Innehåll som skall ändras - Změny vyhrazeny - Zmiany zastrzeżone - Возможны изменения - A változtatások jogát fenntartjuk - 保留未经通知而改动的权力

Important Information Regarding Product Safety

Safety Instructions

This data sheet contains information on installing and commissioning the product "NF24A-SR". Each person who carries out work on this product must have read and understood this data sheet. If you have any questions that are not resolved by this data sheet, you can obtain further information from the supplier or manufacturer.

If the product is not used in accordance with this data sheet, the protection provided will be impaired.

Applicable regulations must be observed when installing and using the device. Within the EU, these include regulations regarding occupational safety and accident prevention as well as those from the VDE (Association for Electrical, Electronic & Information Technologies). If the device is used in other countries, it is the responsibility of the system installer or operator to comply with local regulations.

Mounting, installation and commissioning work on the devices may only be carried out by qualified technicians. Qualified technicians are persons who are familiar with the described product and who can assess given tasks and recognize possible dangers due to technical training, knowledge and experience as well as knowledge of the appropriate regulations.

Legend



WARNING

Indicates a hazard of medium risk which can result in death or severe bodily injury if it is not avoided.



CAUTION

Indicates a hazard of low risk which can result in minor or medium bodily injury if it is not avoided.



NOTICE

Indicates a hazard of medium risk which can result in material damage or malfunctions if it is not avoided.



NOTE

Indicates additional information that can simplify the work with the product for you.

Notes on Disposal

For disposal, the product is considered waste from electrical and electronic equipment (electronic waste) and must not be disposed of as household waste. Special treatment for specific components may be legally binding or ecologically sensible. The local and currently applicable legislation must be observed.

Product Description**NF24A-SR****Item**

NF24A-SR Damper actuator AC/DC 24 V with spring return and 10 Nm torque

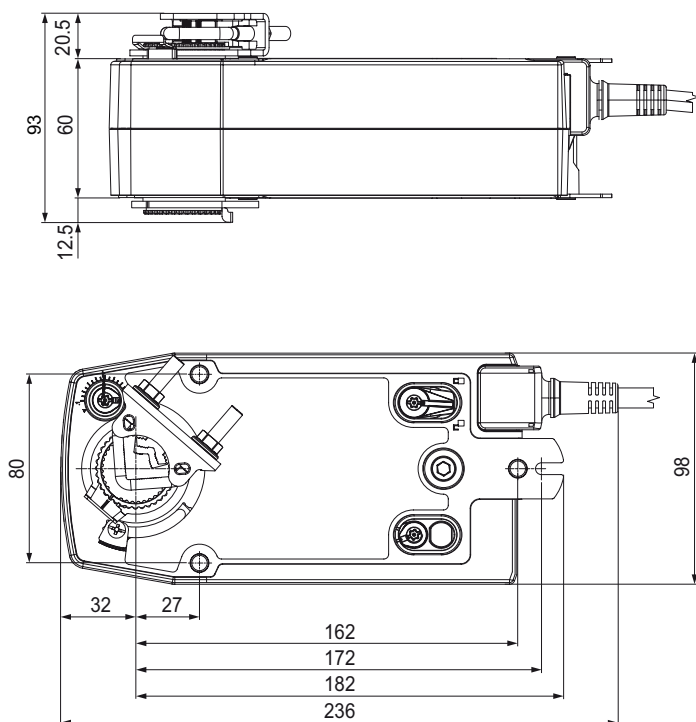
Technical Data

Nominal voltage	AC 24V; 50/60 Hz; 5.5 VA DC 24 V
Functional range	AC 19.2 V to 28.8 V; DC 21.6 V to 28.8 V
Power consumption	Operation 3.5 W Idle position 2.5 W Dimensioning 5.5 VA
Connection	Cable 1 m; 4x 0.75 mm ² for motor
Control	Actuating signal Y DC 0 to 10 V; input resistance 100 kΩ Working range: DC 2 to 10 V
Positioning feedback	DC 2 to 10 V; max. 0.5 mA
Torque	10 Nm (for damper surface areas up to 2 m ²)
Rotational direction	Motor selectable with L/R rotational direction switch Spring return selectable by mounting L/R
Rotational angle	Max. 95°, can be limited in both directions using adjustable mechanical stops
Run time	Motor ≤ 150 s Spring return ≤ 20 s between -20 °C and 50 °C; max. 60 s at -30 °C
Sound power level	Motor ≤ 45 dB (A) Spring return ≤ 62 dB (A)
Position indicator	Mechanical
Operating life	Min. 60,000 movements to emergency position
Manual adjustment	With manual wind-up crank and interlocking switch
Degree of protection	IP54
Protection class	III
Maintenance	Maintenance-free
Ambient temperature	-30 °C to +50 °C
Ambient humidity	95% r.h., non-condensing
Weight	1.8 kg




Accessories (not included in delivery)

AV8/25 Axle extension



Dimensions



3/4" terminal block (with insert)

Air damper axle	Length [mm]	 [mm]	 [mm]	 [mm]
Clamping device, top	≥ 85	10 to 22	10	14 to 25.4
Clamping device, bottom	≥ 15	10 to 22	10	14 to 25.4

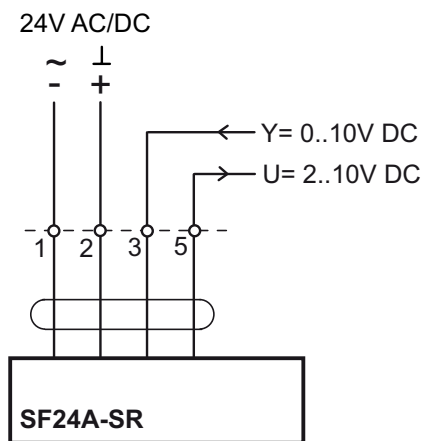
1" terminal block (without insert)

Air damper axle	Length [mm]	 [mm]	 [mm]
Clamping device, top	≥ 85	19 to 25.4 (26.7)	12 to 18
Clamping device, bottom	≥ 15	19 to 25.4 (26.7)	12 to 18

Product Description

NF24A-SR

Connection



Cable colors:

- 1 = Black
- 2 = Red
- 3 = White
- 5 = Orange

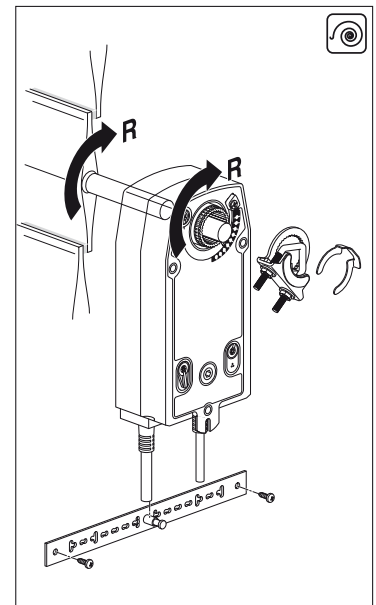
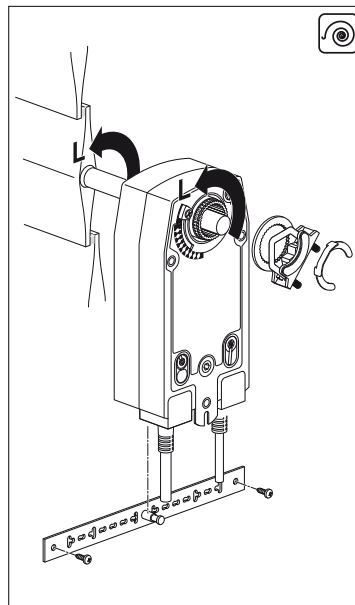
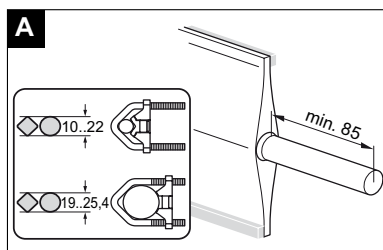
Mounting

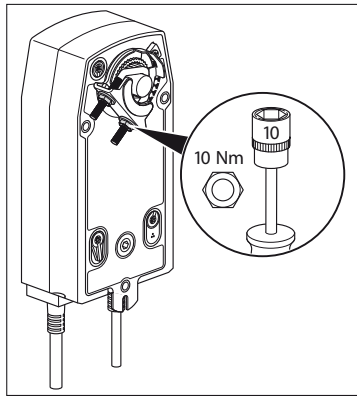
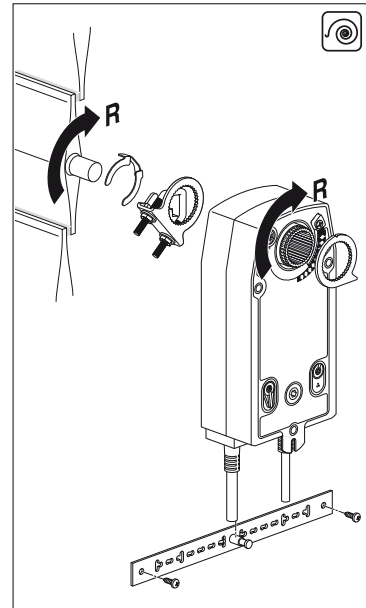
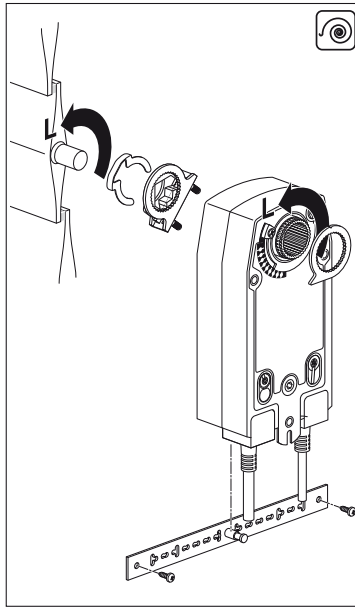
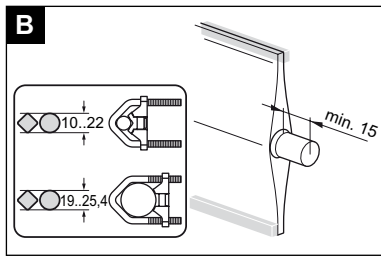


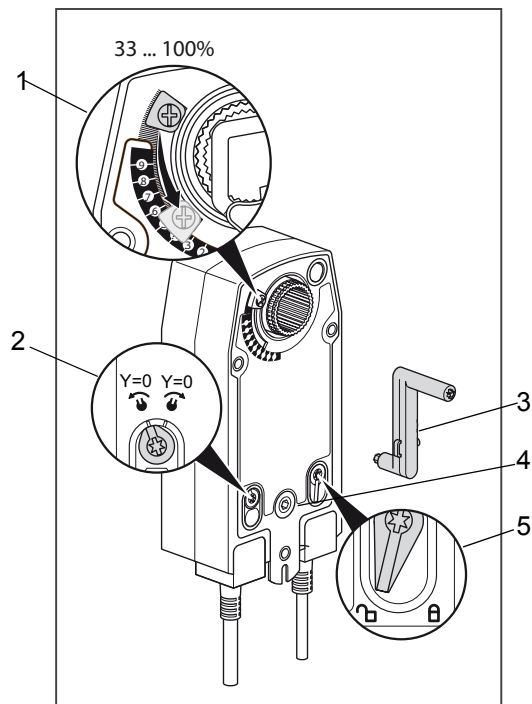
WARNING

Contact with live parts of electrical domestic installation can cause death due to electric shock. Only connect the device and switch on the power supply if you are qualified to do so. Be sure to comply with VDE guidelines and local wiring regulations.

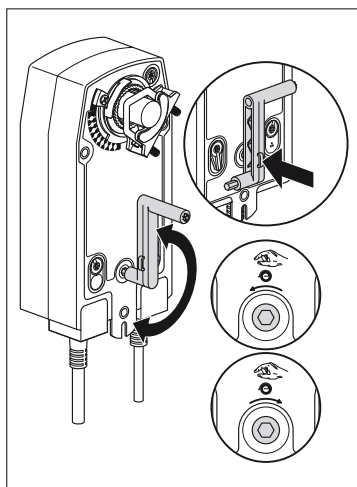
- ▶ The unit is connected according to the terminal connection diagram or the legally binding system circuit diagram.
- ▶ Only the manufacturer may open the valve actuating drive.
- ▶ The cable may not be removed from the valve actuating drive.





Rotational angle limitation and rotational direction switch

- (1) Mechanical rotational angle limitation
- (2) Rotational direction switch
- (3) Crank
- (4) Coupling sleeve for manual crank
- (5) Lock switch

Manual adjustment

Mounting the Accessories

AV8/25

For air damper axles with diameters between 8 mm and 25 mm.

Length: approx. 250 mm; diameter 20 mm

