

Device Description

AF24SR Actuating Drive with Spring Return

Application

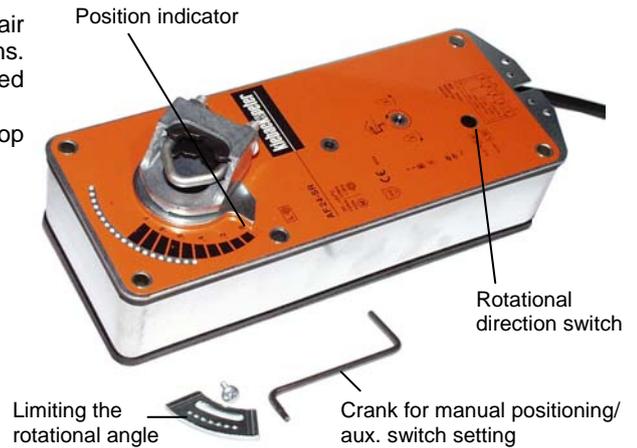
The AF24SR actuating drive with spring return is used to control air valves with fail-safe operation in ventilation and air conditioning systems. The drive is equipped with a universal terminal block and is mounted directly on the air valve axle. The actuating drive is overload resistant. When the valve or motor stop is reached, the motor stops automatically.

Types

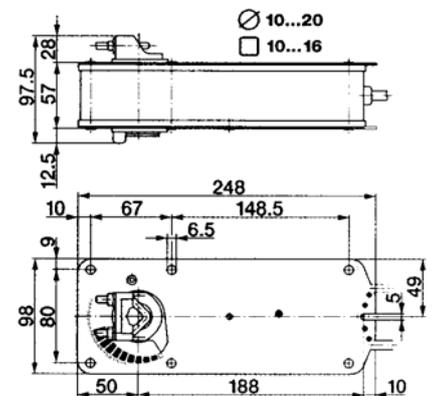
AF24SR AC 24 V actuating drive with spring return
Control using continuous signal Y DC 0..10 V

Technical data

Mains	Nominal voltage AC 24 V, 50/60 Hz, 10 VA Functional range AC 19.2..28.8 V
Connection	Cable 1 m long, 5 x 0.75 mm ² (Connection 4 x 0.75 mm ²)
Actuating signal	Continuous signal Y DC 0..10 V, 0.1 mA
Working range	DC 2..10 V
Torque	Motor: 15 Nm at nominal voltage Spring return: 15 Nm
Rotational angle	Max. 95°, adjustable 26..95% rotational angle by rotational angle limitation (supplied)
Rotational direction	Motor: Set using rotational direction switch Spring return: Set using mounting type CCW or CW (see reverse side)
Position indicator	Scale on actuating drive
Positioning feedback	V = DC 2..10 V, max. 0.5 mA for positioning range 0..100%
Run time	Motor: approx. 150 s Spring return: approx. 16 s
Degree of protection	IP54
Ambient temperature	-30..+50°C
Weight	2.7 kg
Maintenance	Maintenance-free



Dimensions



Function

The actuating drive with spring return moves the air valve into operating position while applying tension to the return spring. When the power supply is interrupted, the return spring moves the air valve back into the fail-safe position. When the power supply is switched off, the air valve can be moved manually into any position using the crank that is supplied with the actuating drive (see reverse side). The actuating drive is released either manually or automatically when the power supply is applied. If the unit is operated manually when the mains power supply is connected, the drive first moves to the fail-safe position as a check, and then moves to the position indicated by actuating signal Y 0..10 V.

Installation

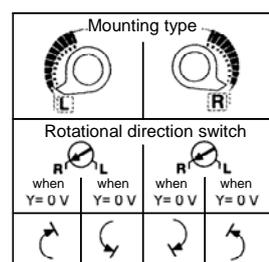
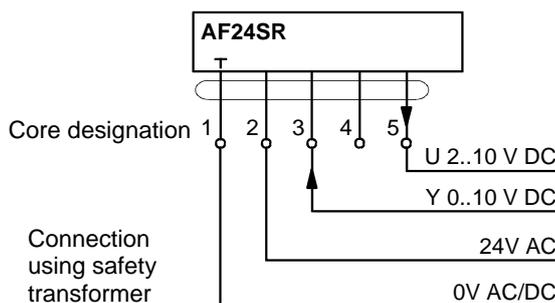


Caution

Electrical installation and unit connection may only be carried out by qualified technicians.

Install the actuating drive in accordance with VDE guidelines and local regulations. The unit is connected according to the terminal connection diagram or the legally binding system circuit diagram.

Wiring diagram



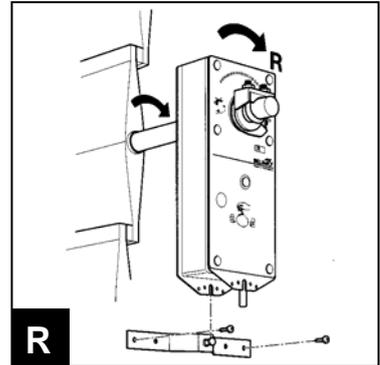
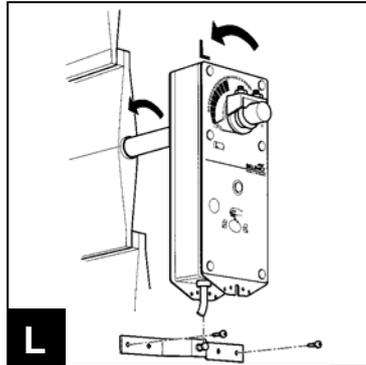
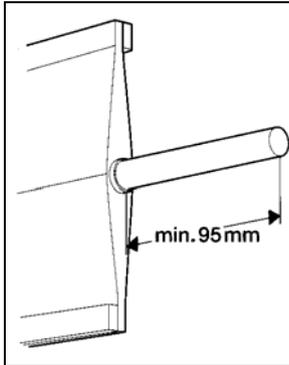
Mounting type CCW or CW, see reverse side

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Mounting and setting instructions

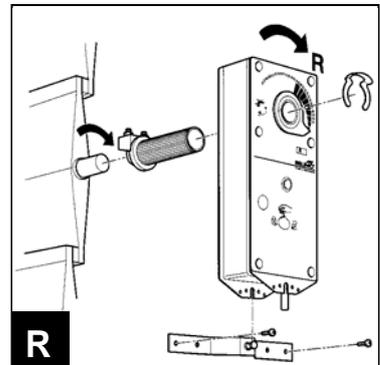
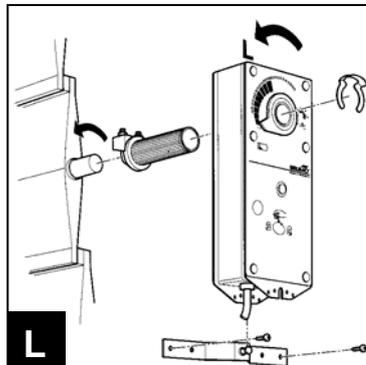
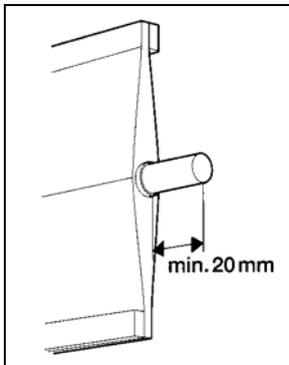
Mounting type CCW or CW
For air valve axles
at least 95 mm long

- L CCW: Spring return
counterclockwise rotation
- R CW: Spring return
clockwise rotation



Mounting type CCW or CW
For air valve axles
at least 20 mm long
replug terminal block

- L CCW: Spring return
counterclockwise rotation
- R CW: Spring return
clockwise rotation



Mounting accessories

- ZG/AF2 Accessories for actuating linkage
- AV10/18 Axle extension approx. 240 mm for valve axles \varnothing 10..18 mm / \square 10..14 mm
(Description: see technical data sheet 3.50-31.090-01)

- 1 Manual positioning and
valve setting with
crank
- 2 Limiting the rotational
angle

