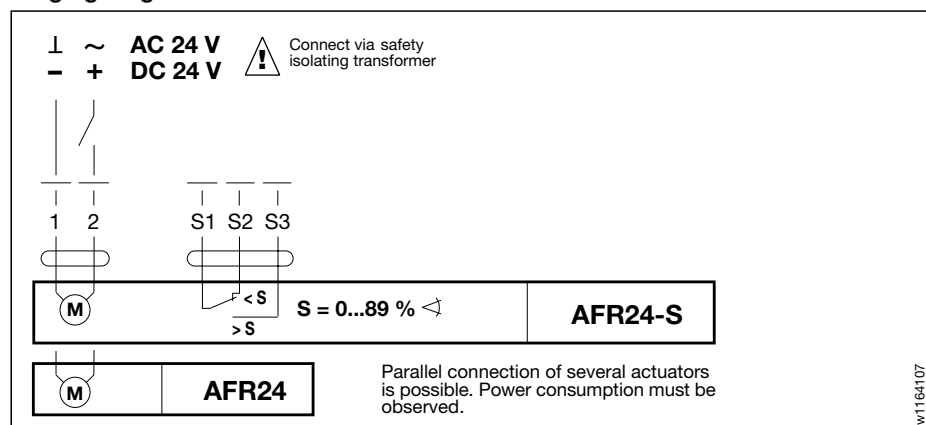








### Wirging diagram



Technical data	AFR24, AFR24-S
Nominal voltage	AC 24 V 50/60 Hz, DC 24 V
Nominal voltage range	AC 19.2...28.8 V, DC 21.6...28.8 V
For wire sizing	10 VA
Power consumption	
– motoring	5 W
– holding	1.5 W
Connecting cable	– motor 1 m long, 2 × 0.75 mm <sup>2</sup> – auxiliary switch (AFR230-S) 1 m long, 3 × 0.75 mm <sup>2</sup>
Auxiliary switch (AFR230-S)	1×SPDT 6 (3) A, AC 250 V 
– Switching point	adjustable 0...89 % 
Direction of rotation	selected by mounting L/R
Torque	– motor min. 15 Nm (at rated voltage) – spring return min. 15 Nm
Angle of rotation	max. 95° (adjustable from 33 % in 5.5 % steps  with limit stop ZDB-AF)
Running time	motor ≈ 150 s, spring return ≈ 16 s
Sound power level	motor max. 45 dB(A), spring ≈ 62 dB(A)
Service life	> 60 000 operations
Position indication	mechanical
Protection class	 (safety extra-low voltage)
Degree of protection	IP 54
Ambient temp. range	–30... + 50 °C
Non-operating temp.	–40... + 80 °C
Humidity test	to EN 60335-1
EMC	CE according to 89/336/EEC, 92/31/EEC, 93/68/EEC
Low Voltage Directive	CE according to 73/23/EEC
Maintenance	maintenance free
Weight	3000 g

**Dampers up to approx. 3 m<sup>2</sup>**

**Open/Close actuator  
(AC/DC 24 V)**

## Versatile applications

The AFR... spring return actuators are intended for the operation of air dampers that perform safety functions (e.g. frost and smoke protection, hygiene, etc.).

### Improved functional safety

The AFR... actuator moves the damper to its normal working position while tensioning the return spring at the same time. If the power supply is interrupted, the energy stored in the spring moves the damper back to its safe position. The actuator is overload-proof, needs no limit switches and halts automatically at the end stops.

### Variable end switch

The AFR24-S actuator has one adjustable auxiliary switch which allows angle of rotation of 0...89 ° to be signalled.

## Simple installation and commissioning

The actuator is fitted with a universal spindle clamp for quick and easy mounting directly onto the damper spindle. The actuator is also supplied with an anti-rotation strap for fixing it in position. The actuator is delivered with 5.5 % spring pre-tensioning (at the 0 % position). At first power-up the spring pre-tensioning is released and the actuator moves to the closed position (to max. - 5.5 %).

**Mechanical accessories, page 8**

KH-AF	Universal crank arm
IND-AF2	Pointer with circlip
ZDB-AF	Angle of rotation limiting
AV10-18	Universal spindle extension

**Mounting instructions, page 9**

### Important

Read the notes about the use and torque requirements of the damper actuators on page 3.

## Dimensions

