

Description

Damper actuator serie S4 to operate and position air dampers in HVAC systems.

- For air dampers up to approx. 1 m²
- Nominal voltage 24 Vac/dc and 230 Vac
- Control: Open-close or 3-point and proportional
- Characteristics: universal spindle clamp for easy direct mounting, shaft dimensions Ø 10 to 16 mm round / 10 to 12 mm square, minimum shaft length 50 mm, anti-rotation bracket provided for stability, manual over ride by push button, selectable direction of rotation, adjustable angle of rotation with mechanical end stops, manual override with push-button possible (the gear train is disengaged for as long as the button is pressed), the actuator is overload protected, requires no limit switches and automatically stops when the end is reached. Operate the manual control without applying excessive force, keeping the release button pressed for the entire stroke of movement. Rotate slowly and smoothly, avoiding jerky movements or sudden changes in direction.



Technical features

Actuator model		S4A	S4B	S4AM	S4BM
Damper area	m ²		1		
Nominal torque	Nm		4		
Power supply	V	24 AC/DC	100...240 AC	24 AC/DC	100...240 AC
Frequency	Hz		50/60		
Power consumption					
- in operation	W	2.2	3.2	2.2	3.2
- at rest	W	0.5	0.7	0.5	0.7
- for wire sizing	VA	4.4	6.4	4.4	6.4
Running time	s		45		
Sound power level	max. db (A)		45		
Control signal		2-3 point	2-3 point	0(2)...10 V DC 0(4)...20 mA	0(2)...10 V DC 0(4)...20 mA
Auxiliary switch rating			3 (1.5) A, 250 V AC		
Life Cycle	cycles		60.000		
Rotation angle					
- operating			0-90°		
- limitation			5-85° (steps of 5°)		
Protection class			II		
Protection degree			IP54		
Working range °C			-20...+70° C		
Working range RH			5...95% RH, non-condensating		
Storage temperature			-40...+70° C		
Maintenance			free		
Weight	g	900	1000	1000	900
Standards			CE-conformity, RoHs		
Option			suffix S for models with 2 SPDT auxiliary switches		

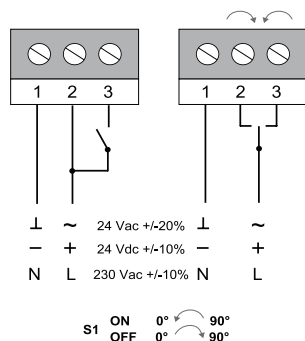


Electrical wirings for models at 2 / 3 point

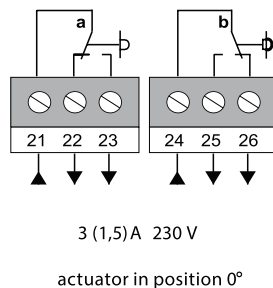
Wiring diagram

2- point

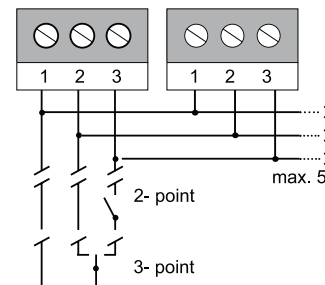
3- point



Auxiliary switches



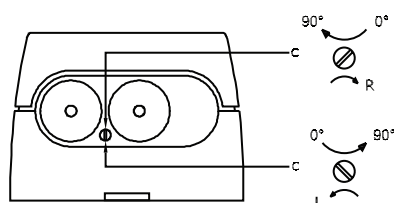
Parallel connections



Max 5 actuators

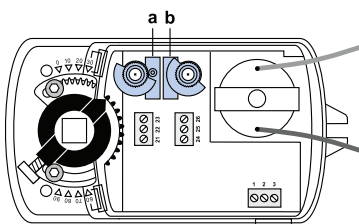
Settings

Changing direction of rotation



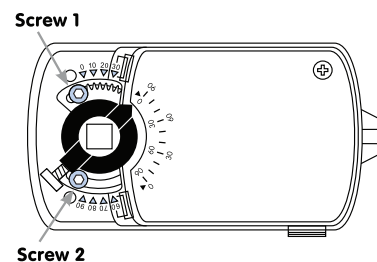
Auxiliary switch adjustment

Factory setting:
switch a at 10° - switch b at 80°
The switching position can be changed manually.



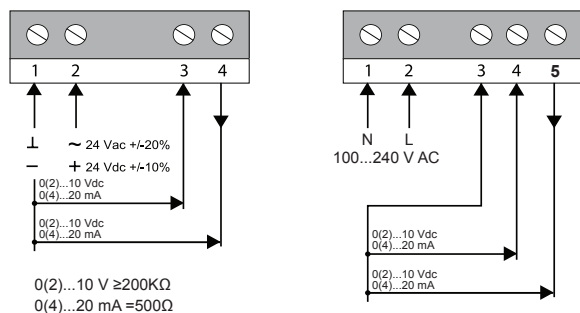
Angle of rotation limiting

The angle of rotation at 90° can be reduced by up to 30° from each end position with screw 1 and 2.



Electrical wirings for proportional models

Wiring diagram



DIP settings

DIP 1
Feedback signal



OFF: 0(2)...10 V
ON: 0(4)...20 mA

DIP 2
Input signal starting point



OFF: 0...10 V o 0...20 mA
ON: 2...10 V o 4...20 mA

DIP 3
Input signal



OFF: 0(2)...10 V
ON: 0(4)...20 mA

DIP 4
free



Dimensions (mm)

