NENUTEC ©

A NAME WITH QUALITY

Fire Damper Actuator
Spring Return 5 Nm
2 Point Control

The technical specifications might not be congruent.

- SAFA…05 S (T) series
- NENUTEC security damper actuators are especially designed for fire damper applications in different sizes according fire protection inspection EN 1366-2. Suitable for smoke damper applications.
- SAFA...05 S (T) spring return damper actuators, tension the spring return while the actuator moves the damper to its normal working position. In case of emergency (power supply is interrupted or thermal tripping device is over heated) the stored energy in the spring triggers and moves the damper back to its safe position.

Product Features

- Torque 5 Nm
- Damper size 1.0 m^2
- Power Supply AC/DC 24 V and AC 230 V
- Control 2 Point (Open/Closed)
- 2 auxiliary switches not adjustable (SPDT)
- Shaft dimensions standard ☐12/12 mm square (Insert ☐10/10 mm and ☐8/8 mm available)
- Minimum shaft length 10 mm
- Selectable direction of rotation
- Actuator with 1000 mm cable connection
- Thermal duct and ambient sensor on request
- Manual override with crank handle
- Customer version on request

Model Selection Table

Torque	Running Time	Power Supply	Auxiliary Switch	Thermal Sensor	Model / Type
5 Nm	Ⓜ 50…70 sec / ≤ 20 sec	AC/DC 24 V ± 10%	2 x SPDT	No	SAFA 1-05 S
5 Nm	Ⓜ 50…70 sec / ≤ 20 sec	AC/DC 24 V ± 10%	2 x SPDT	Yes (SAF 72-1)	SAFA 1-05 S T
5 Nm	Ⓜ 50…70 sec / ≤ 20 sec	AC 230 V ± 10%	2 x SPDT	No	SAFA 2-05 S
5 Nm	Ⓜ 50…70 sec / ≤ 20 sec	AC 230 V ± 10%	2 x SPDT	Yes (SAF 72-1)	SAFA 2-05 S T

D-310A.E-205/CW22-10

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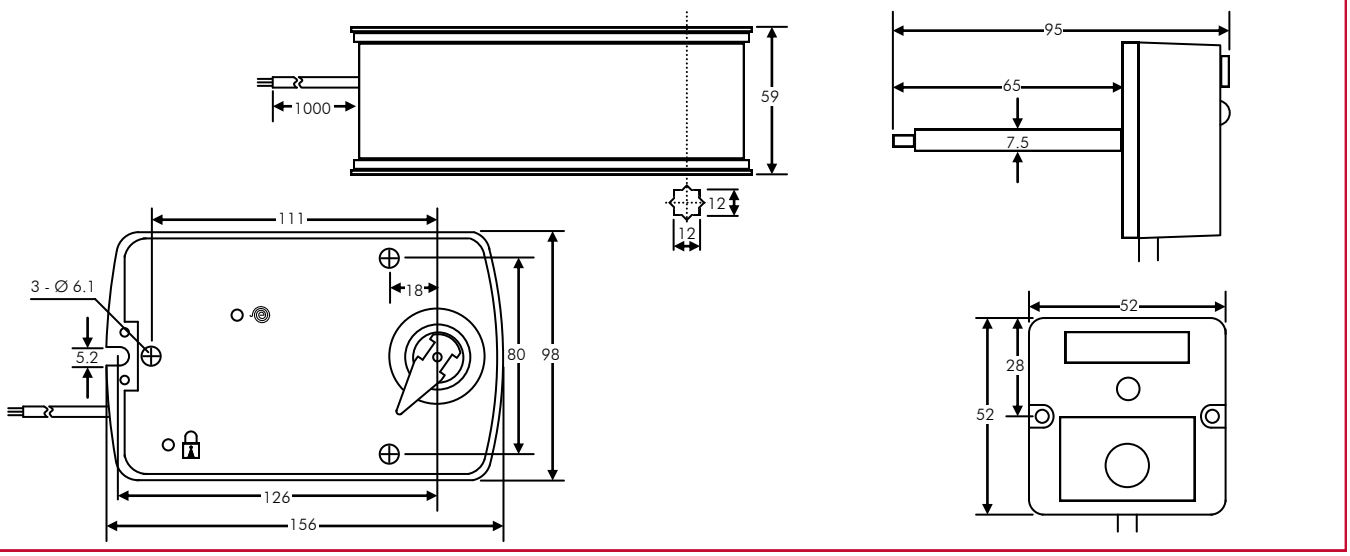
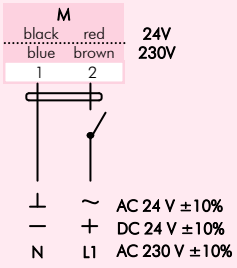
Actuator Dimensions (mm)



Technical Specifications

	SAFA 1... S (T)	SAFA 2... S (T)
Torque (M)	5 Nm	5 Nm
	5 Nm	5 Nm
Damper Size	1.0 m^2	1.0 m^2
Shaft dimensions	□12 mm square (□8/8mm and □10/10mm insert)	□12 mm square (□8/8mm and □10/10mm insert)
Power Supply	AC/DC 24 V ± 10%	AC 230 V ± 10%
Frequency	50 - 60 Hz	50 - 60 Hz
Control Signal	2 point (Open/Closed)	2 point (Open/Closed)
Power Consumption		
- Operating	4.8 W	4.2 W
- End Position	2.4 W	2.5 W
For Wire Sizing	10.0 VA	10.0 VA
Auxiliary Switch Rating	3 (1.5) A, AC 250 V	3 (1.5) A, AC 250 V
Protection Class	III (III)	II (⧈)
Angle of Rotation	0°...90° (-5°...90° mechanical)	0°...90° (-5°...90° mechanical)
Angle of Limiting	mechanical end stop	mechanical end stop
Weight	2.0 Kg	2.1 Kg
Life Cycle	60'000 rotation	60'000 rotation
Sound Level	45 dB (A)	45 dB (A)
IP Protection	IP 54 (dust protected & protected against splash water)	IP 54 (dust protected & protected against splash water)
Thermal Sensor Temperature	+72° (Duct Sensor and ambient Sensor)	+72° (Duct Sensor and ambient Sensor)
Operating Temperature	-20°...+50° C / IEC 721-3-3	-20°...+50° C / IEC 721-3-3
Inventory Temperature	-30°...+60° C / IEC 721-3-3	-30°...+60° C / IEC 721-3-3
Ambient Humidity	5%...95% rH non condensing / EN 60730-1	5%...95% rH non condensing / EN 60730-1
Maintenance	Maintenance free	Maintenance free
Mode of Operation	Type I / EN 60730-1	Type I / EN 60730-1
Mode of Fire Protection	EN 1366-2	EN 1366-2
EMC	CE according to 89 / 336 / EEC	CE according to 89 / 336 / EEC

Wiring Diagram SAFA 1/2...S (T)
Power Supply AC/DC 24 V - AC 230 V



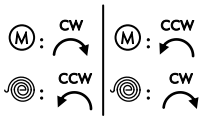
2 Point

⚠ Connect via safety isolating transformer

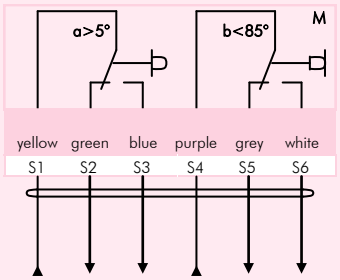
Changing Direction of Rotation SAFA 1/2... S (T)

Factory-set CW!

The direction of rotation can be defined dependently on the assembly of the shaft adapter inclusive adapter ring. Important remark:



Wiring Diagram SAFA 1/2... S (T)
Auxiliary Switches



3 (1.5) A, AC 250 V
Actuator at 0° position

Fixed Auxiliary Switch SAFA 1/2... S (T)

Auxiliary Switch **a** is not adjustable. It is factory-set at > 5° or < 5°.

Auxiliary Switch **b** is not adjustable. It is factory-set at < 85° or > 85°.

Remark
Both auxiliary switches are not adjustable!

Thermal Sensor

The thermal sensor SAF 72-1 consists of a duct and an ambient sensor.

The thermal sensor is correctly mounted when it is placed beside the actuator and the duct sensor goes into the duct.

The duct sensor and/or the ambient sensor will be tripped when the duct and ambient temperature rises above 72°C and then the mechanical spring of the actuator will close the damper immediately.

Thermal Sensor SAF 72-1