



# Fire Smoke Damper Actuator On/Off Spring Return 5Nm

## RAF 5

Feb.12



☐ RAF5

### Features

- 5Nm torque to regulate dampers up to approx. 1,0m<sup>2</sup>
- 2 pcs auxiliary potential-free switches, fixed
- Manual Override by crank handle
- Anti-rotation bracket provided for stability
- Adjustable angle of rotation, mechanical endstops
- Simple Direct mounting by universal adapter
- Available with 1 m cable connection
- Energy saving at end stops
- Thermal sensor when requested
- Hold safe position in case of high temperature

### Technical Data

<b>Power Supply</b>	24Vac/dc +/-10% 50-60Hz	
	230Vac +/-10% 50-60Hz	
<b>Power Consumption</b>		
Operating	7,2W for 24V	4,2W for 230V
At the end stops	2,5W for 24V	5,5W for 230V
<b>Wire sizing</b>	10VA	
<b>Angle of Rotation</b>	90° (95° mechanical)	
<b>Torque</b>	Min. 5Nm	Spring min. 5Nm
<b>Protection Class</b>	IP54 and II	
<b>Auxiliary Switch Rating</b>	3A(1,5A)@/230Vac	
<b>Direction of Rotation</b>	Bidirectional (right/left)	
<b>Angle of Rotation</b>	90°(95° mechanical)	
<b>Shaft Dimension</b>	Form Fit 12mm square ( incl.adapter 8 /10mm square) 10mm minimum shaft length	
<b>Running Time</b>	50-70sec	
	<20sec of spring back	
<b>Noise Level</b>	Below 45dB (A)	
<b>Usage Life</b>	Min. 60'000 open-close operations	
<b>Inventory Temperature</b>	+70° as per 721-3-2	
<b>Thermal Temp.Trip</b>	>72°	
<b>Ambient Temperature:</b>	-20...+ 50°C	
<b>Ambient Humidity:</b>	5...95%rH non-condensing	
<b>Weight</b>	1,8	
<b>Maintenance</b>	Maintenance free	
<b>Standards</b>	The actuators meet CE requirements	

### Short Description

By using the mounting clamp the actuators can be direct couple mounted over the damper shaft

The compact size allows for easy installation where space is limited.

### Damper Size

When calculating the torque required to operate dampers, it is essential to take into account all the data supplied by the damper manufacturer concerning cross sectional area, design, mounting and air flow conditions.

The recommended damper size are guide values

### Usage

The RAF5 spring return damper actuator series are designed specially for Fire and Smoke application.

The RAF5 high quality damper actuators are developed for use with fire and smoke dampers.

The actuator motorized the damper or other devices when power on and spring back to it original position when power is cut off or trip by the thermal sensor.

When temperature reaches 72 degree the damper is closed.

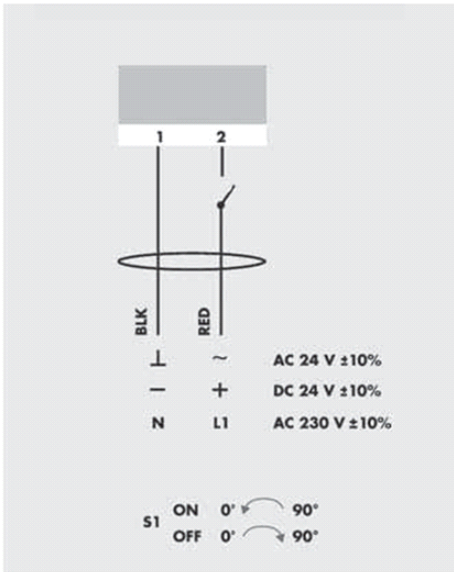
The actuator can be controlled by a suitable handle.

Well-suited for applications with security dampers used as anit-freze, antismoke or for sealing in the hygienic-sanitary field.

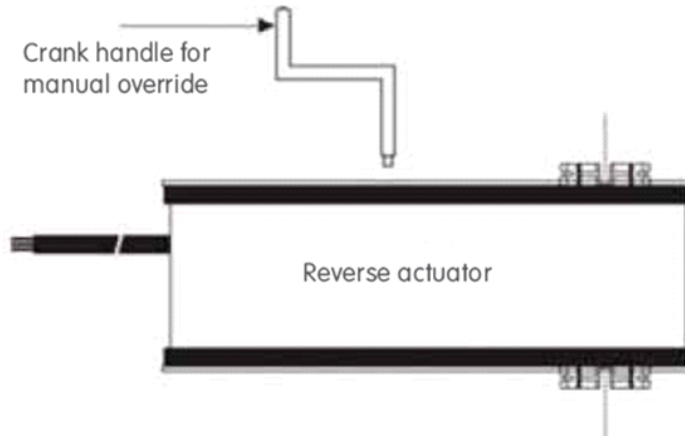
### Ordering

<b>RAF5 24D</b>	Fire Smoke Actuator	5Nm	24Vac/dc
<b>RAF5 220D</b>	Fire Smoke Actuator	5Nm	230Vac
<b>RAF5 24DTH</b>	Fire Smoke Actuator	5Nm	24Vac/dc c/w Thermal Sensor
<b>RAF5 220DTH</b>	Fire Smoke Actuator	5Nm	230Vac c/w Thermal Sensor

### Electrical wiring

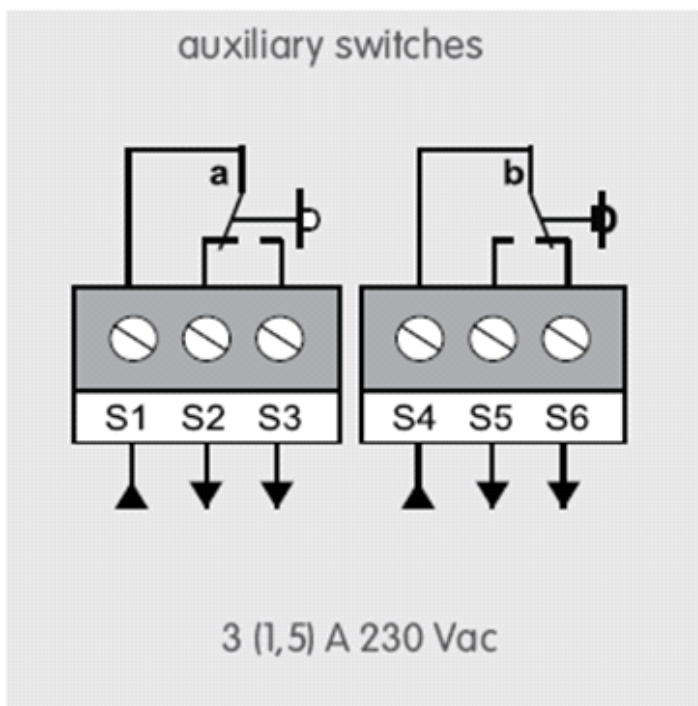


### Direction of rotation setting



### Auxiliary switches setting

Factory setting:  
switch a fixed at 5°.  
switch b fixed at 85°.  
The switches are not adjustable



S1=Yellow

S2=Green

S3=Blue

S4=Purple

S5=Grey

S6=White

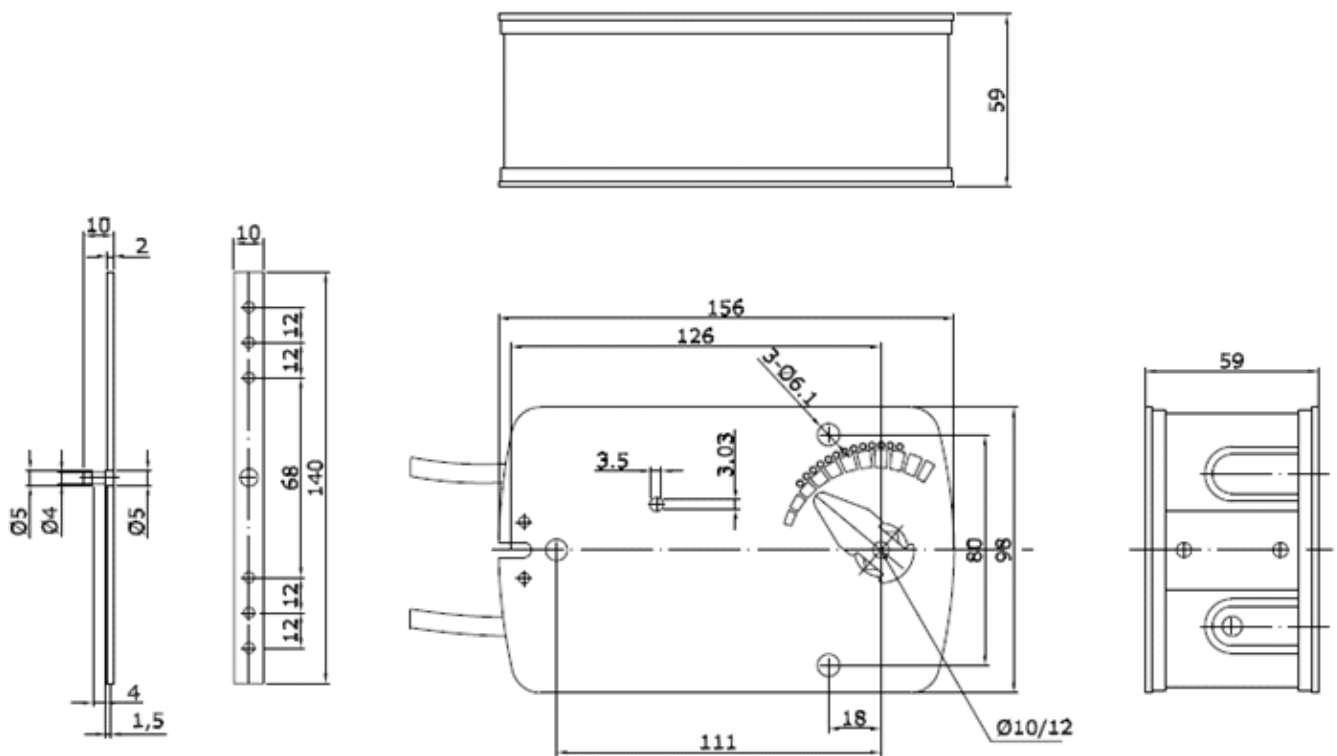


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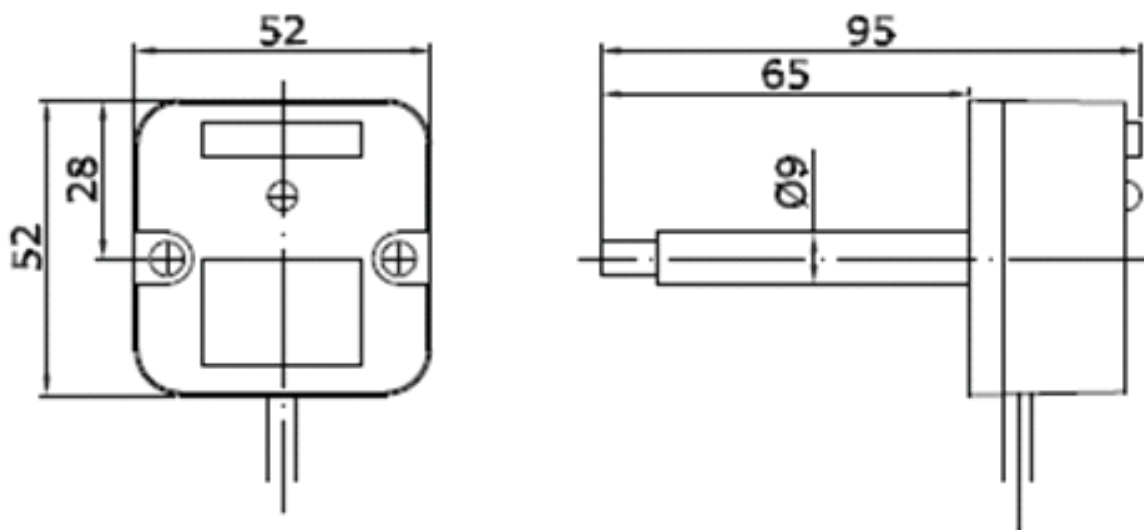
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DIMENSIONS (mm)



## Thermal sensor



### **Notice: manual operation instruction**

Insert the hand handle into the hex hole, smoothly and slowly turn around the handle by clockwise (or counter clockwise) rotation, according to the diagram of the product label.

At the same time, the outputshaft will follow and turn by clockwise (or counter clockwise) rotation.

When the outputshaft moves to the required position, then turn the handle conversely by counter clockwise (or clockwise) with 90°, the outputshaft will be blocked.

Then turn slightly the handle by another clockwise (or counter clockwise), the outputshaft will move again.

**[Attention]: Please do not operate manually when the actuator is speedily rebounding, otherwise it causes easily unlocking by manual or assembly damage.**

### Installation and Mounting Instruction

