

### Product Overview

The AX-RAF-20D Fire Damper Actuators are designed for fire and smoke dampers in ventilation and air-conditioning systems. These 24Vac/dc & 230Vac operated actuators comes with two default auxiliary SPDT switches and an optional thermal switch which operates at 72°C.



### Products Features

- Square shaft : Max 12x12 mm
- Control: On/Off
- Two auxiliary switches
- Optional thermal switch

### Product Specifications

Torque:	20Nm
Damper size:	4m <sup>2</sup>
Running time	Less than 180s . Spring reset time <30s
Power supply:	AC/DC 24V @ 50/60Hz or AC 100-240V @ 50/60Hz
Nominal voltage range:	24Vac (AC/DC 19.2V-28.8V), 230Vac (AC 85V-265V)
Power consumption:	Runtime: 10W, Idle:3W
Angle of rotation:	95° max (5° per step)
Wire Size:	0.5mm <sup>2</sup>
Direction:	Selectable by mounting L/R
Position indication:	Machine Instruction
Manual override available:	Yes
Auxiliary switch:	2x SPDT
Auxiliary switch rating:	1mA...3(1.5)A, AC220V
Sound power level, motor:	45dB (A)
Sound power level, spring return:	62dB (A)
Ingress protection:	IP54
Protection class:	S: III (Safety low voltage), ST: II (Complete insulated)
Ambient humidity:	95 % RH, Non Condensing (EN60730-1)
Ambient temperature:	-20°C to 50°C (-4°F to 122°F) IEC 721-3-3
Storage temperature:	-30°C to 80°C (-22°F to 176°F) IEC 721-3-2
Thermal temperature switch (optional):	Cut-off at 72°C (Ambient & Duct)
Weight:	<2.6 Kg
Compliance:	CE
Country Of Origin:	UK

### Order Codes

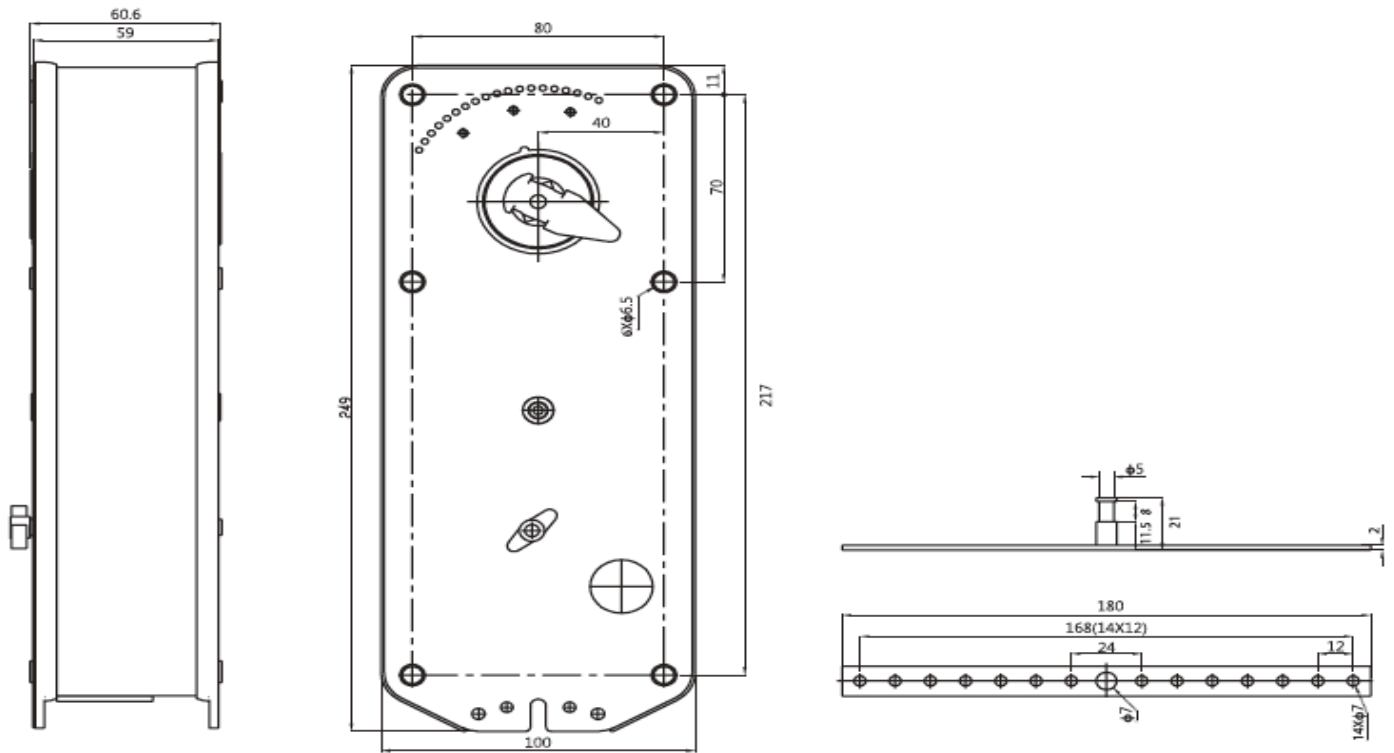
Part Number	Description
AX-RAF-20DS	Fire damper actuator, spring return, 20Nm, 2x SPDT Aux switches
AX-RAF-20DST	Fire damper actuator, spring return, 20Nm, 2x SPDT Aux switches , Thermal switch
	* Add suffix “-230” for 230Vac versions

# AX-RAF-20D



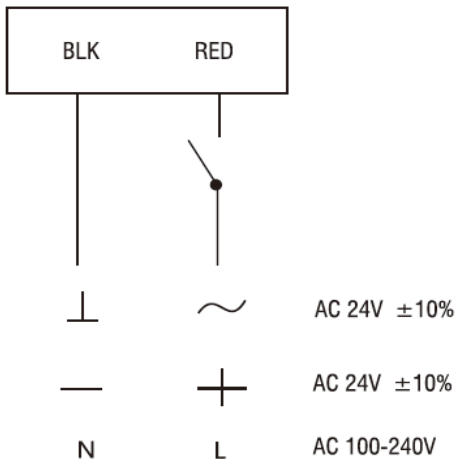
Fire Damper Actuator, Spring Return & Aux Sw, 20Nm

## Dimensions (mm)

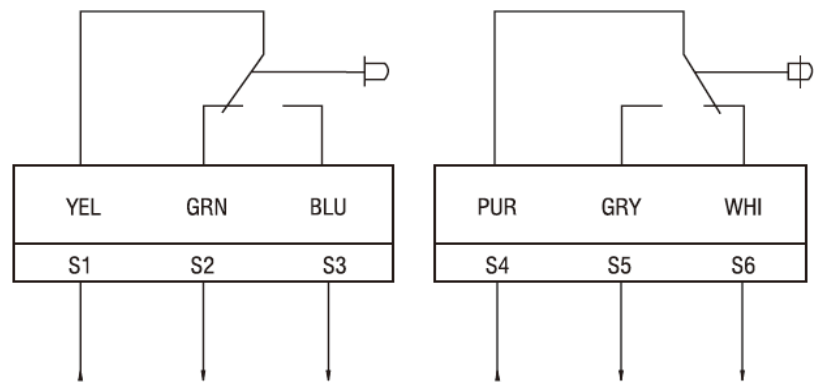


## Wiring Diagram

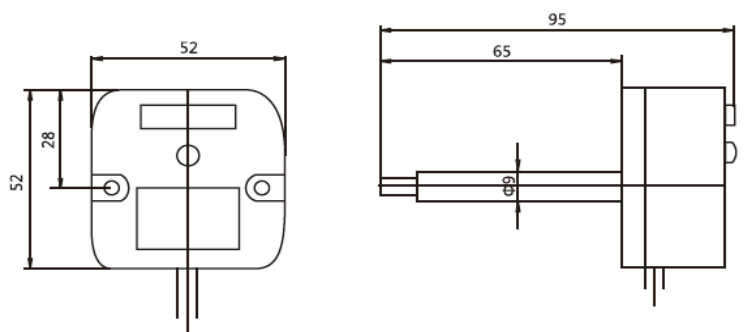
### Actuator



### Auxiliary switch



Resistance load 3A, 230V  
Inductive load 1.5A, 230V



### Operation

When power is applied, the actuator moves the damper at the same time as tensioning the return spring. It returns to the safety position by spring energy when the supply voltage is interrupted.

Plug the handle into the hexagonal hole. Move the handle in the direction of the arrow icon slowly. The output shaft and pointer will start rotating. After moving to the required position, rotate the lock knob towards the lock icon to lock the output shaft. To unlock, rotate the lock knob in the opposite direction.

DO NOT operate it manually when the spring is returning. It could cause mechanical damage.

### Datasheet Contents

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