# AX-RAF-20D

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

## **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.



Two auxiliary switches

Optional thermal switch

#### **Products Features**

- Square shaft : Max 12x12 mm
- Control: On/Off

# **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:	1mA3(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 NumberDescriptionAX-RAF-20DSFire damper actuator, spring return, 20Nm, 2x SPDT Aux switchesAX-RAF-20DSTFire damper actuator, spring return, 20Nm, 2x SPDT Aux switches , Thermal switch<br/>\* Add suffix "-230" for 230Vac versions

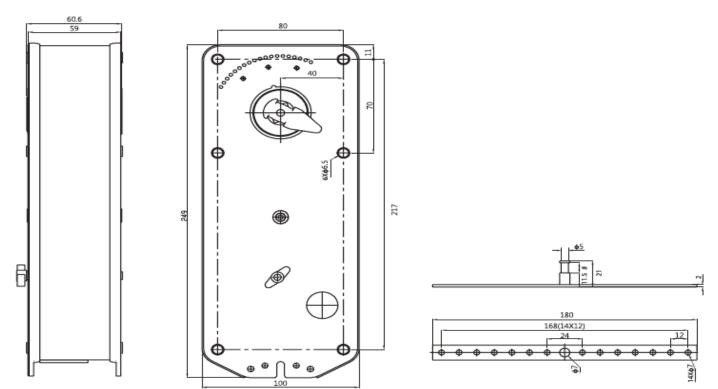
Issue 1.0	
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# AX-RAF-20D

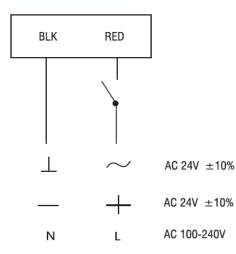
# Fire Damper Actuator, Spring Return & Aux Sw, 20Nm

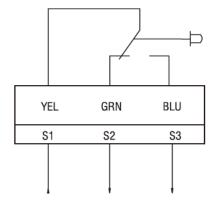
# **Dimensions (mm)**

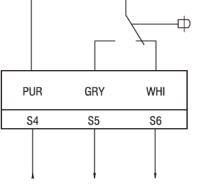


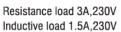
# Wiring Diagram

Actuator

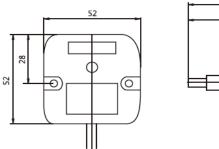


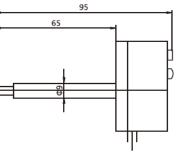






Auxiliary switch





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### 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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