



4005-N Series Fire Smoke Damper Actuator

1. General Information

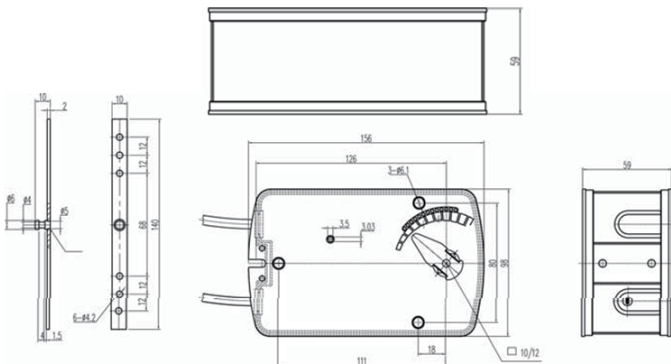
- Pric 4005-N Series Fire Smoke damper actuator Series are designed specifically for Fire and Smoke application.
- PHC high quality damper actuators are developed for use with fire and smoke damper. The actuator motorized the damper or other devices when power on and spring back to its original position when power is cut off or trip by the thermal sensor.
- For the operation of air dampers that perform safety functions(e.g. frost and smoke protection, hygiene, etc.). The actuator moves the damper to its normal working position while tensioning power supply is interrupted, the damper back to its safe osition.



2. Product Features

- 2 points on/off control
- Damper Size up to 1.0 m²
- Voltage AC/DC 24V and AC 230V available
- Shaft dimension Form Fit 12mm square
- Adapter supplied for Form Fit 8 or 10 mm square
- Manual Over ride by crank handle when required
- Anti-rotation bracket provided for stability
- Selectable direction of rotation by reversing actuator
- 2 SPDT Fixed auxiliary switches as Standard
- Energy saving at end stops
- Actuators with 1m cable connection
- Thermal Sensor when requested
- Customized version available on request

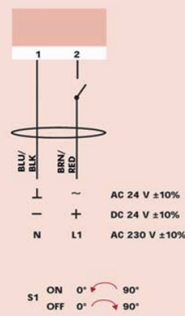
3. Actuator Dimensions (mm)



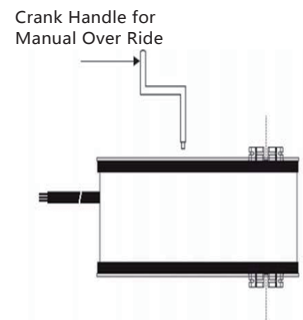
4. Technical Specification

	4005-N (24V AC/DC)	4005-N (230V AC)
Torque — Motor (Rated Voltage) — Spring	Min. 5 Nm Min. 5 Nm	Min. 5 Nm Min. 5 Nm
Damper Size	1 m ²	1 m ²
Power Supply	AC/DC 24 V	AC 230V
Frequency	50...60Hz	50...60Hz
Consumption Operating	6 W	6W
Consumption At the end stops	2.5 W	2.5 W
For wire sizing	7.0 VA	7.0 VA
Auxiliary Switches Rating (Amp and Voltage)	3 (1.5) A / 230 V (for 24 V and 230 V)	3 (1.5) A / 230 V (for 24 V and 230 V)
Protection Class	III (Safety Low Voltage)	II (Completely Insulation)
Controls Signal	2 Point On/Off	2 Point On/Off
Angle of Rotation	90° (95° mechanical)	90° (95° mechanical)
Thermal Temperature Trip	>72° Celsius	>72° Celsius
Weight	1.8 Kg	1.9 Kg
Life Cycle	60,000 rotation	60,000 rotation
Sound Level	Below 62 dB	Below 62 dB
IP Protection	IP54	IP54
Ambient Temperature	-20°...50° as per IEC 721-3-3	-20°...50° as per IEC 721-3-3
Ambient Humidity	5...95% RH	5...95% RH
Inventory Temperature	+70° as per 721-3-2	+70° as per 721-3-2
Maintenance	Maintenance free	Maintenance free
Certification	CE	CE

Wiring Diagram

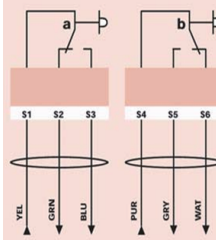


Changing Direction of Rotation



- ⚠ AC/DC 24V: Connect via safety isolating transformer.
- ⚠ AC 230V: To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductors (with a least a 3mm contact gap)

Auxiliary Switches



Auxiliary Switches

Auxiliary are fixed at 5° for switch (a) and 85° for switch (b)
Auxiliary Switches are Non adjustable.

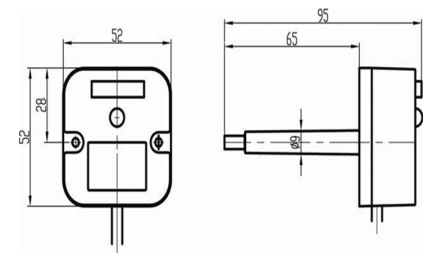
Thermal Sensor

Thermal Sensor consist of both Ambient (TS1) and Duct sensor (TS2).

TS1 will trip open when the ambient temperature rise above 72°.

TS2 will trip open when the duct temperature rise above 72°.

Thermal Sensor



5. 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 °C, 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 / Mounting Instruction

