

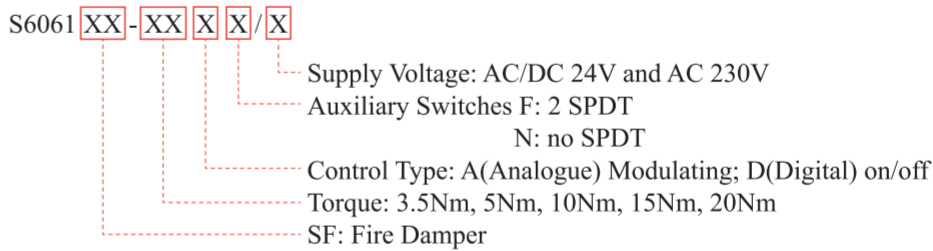
S6061SF Series spring Return Fire and Smoke Damper Actuators

This spring return fire and smoke damper actuator is designed for damper control within HVAC systems.

◆ Features

- Torque: 3.5Nm, 5Nm, 10Nm, 15Nm, 20Nm
- Nominal Voltage: AC/DC 24V and AC 230V
- Control Method: 2 point; 0-10V Analogue

◆ Order Code

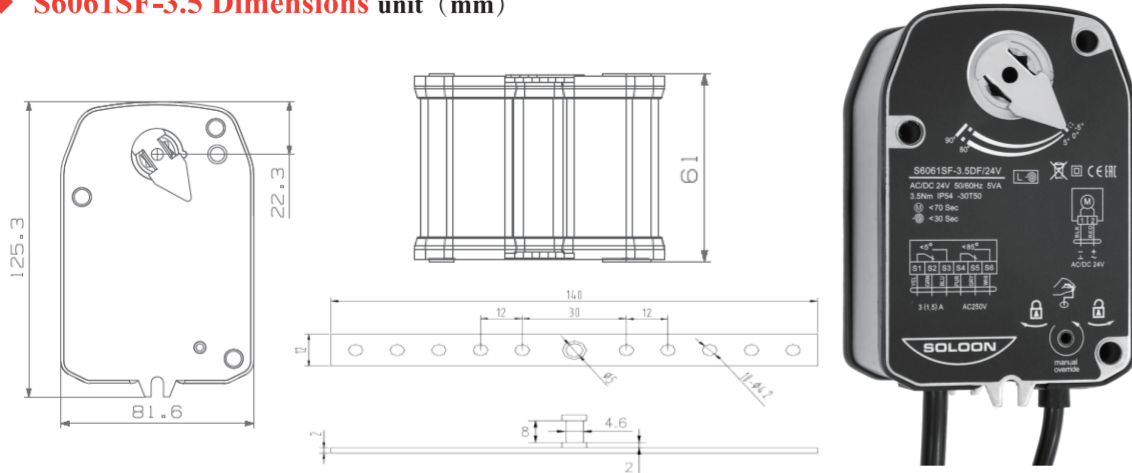


◆ S6061SF-3.5 Technical Specifications

Items	S6061SF-3.5DF/24V	S6061SF-3.5DF/230V	S6061SF-3.5AF/24V
Torque (Nm)	3.5Nm		
Damper Size (m ²)	0.8m ²		
Running Time (sec)	Motor < 70s; Spring Return < 30s		
Nominal Voltage (V)	AC/DC 24V; AC 230V 50/60Hz		
Supply Voltage Range	AC/DC 19.2-28.8V; AC 85-265V		
Power Consumption (on)	2.5W		
Power Consumption (off)	1.6W		
Reactive Power (VA)	5		
Weight (Kg)	1.2Kg		
Control Signal	2 point		0~10V
Rotation Angle	0~90°(Max 93°)		
Limited Angle	5~85°(by 5°)		
Positional Feedback	2 Auxiliary Switches		
Life Cycle	≥70000		
Sound Power Level	50dB and 62dB		
Electrical Protection Class	III	II	III
Ingress Protection	IP54		
Ambient Temperature	-30~+55 °C, The maximum safe ambient operating temperature is 75 °C		
Ambient Humidity	5~95% RH		
Storage Temperature	-40~+80°C		
Shaft Diameter	10*10mm/12*12mm square shaft		
Accessories	1m cable		
Compliance	CE, UKCA, UL, EAC, RoHS certificates		
72°C Thermal Sensor	S6061SF-3.5DFS/24V	S6061SF-3.5DFS/230V	

S6061SF Series Spring Return Fire and Smoke Damper Actuators

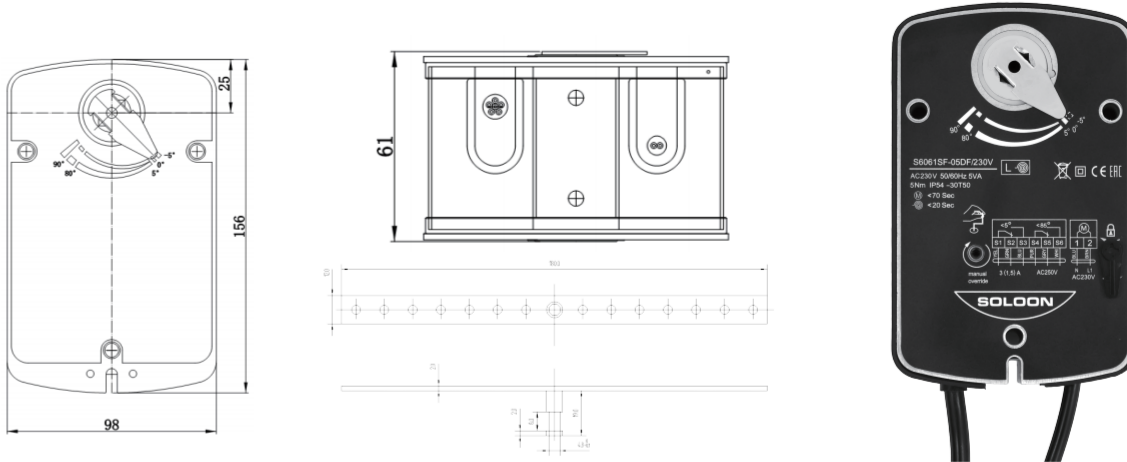
◆ S6061SF-3.5 Dimensions unit (mm)



◆ S6061SF-05 Technical Specifications

Items	S6061SF-05DF/24V	S6061SF-05DF/230V	S6061SF-05AF/24V
Torque (Nm)	5Nm		
Damper Size (m ²)	1m ²		
Running Time (sec)	Motor<70s, Spring Return<20s		Motor<120s; Spring Return<20s
Nominal Voltage (V)	AC/DC 24V; 50/60Hz	AC 230V; 50/60Hz	AC/DC 24V, 50/60Hz
Supply Voltage Range	AC/DC 19.2-28.8V	AC 85-265V	AC/DC 19.2-28.8V
Power Consumption (on)	5W		
Power Consumption (off)	2.5W		
Reactive Power (VA)	5		
Weight (Kg)	1.6Kg		
Control Signal	2 point		0~10V
Rotation Angle	0~90°(Max 93°)		
Limited Angle	5~85°(by 5°)		
Positional Feedback	2 Auxiliary Switches		1 Auxiliary Switch
Life Cycle	≥70000		
Sound Power Level	50dB and 62dB		
Electrical Protection Class	III	II	III
Ingress Protection	IP54		
Ambient Temperature	-30~+55 °C, The maximum safe ambient operating temperature is 75 °C		
Ambient Humidity	5~95% RH		
Storage Temperature	-40~+80°C		
Shaft Diameter	10*10mm/12*12mm square shaft		
Accessories	1m cable		
Compliance	CE, UKCA, UL, EAC, RoHS certificates		
72°C Thermal Sensor	S6061SF-05DFS/24V		S6061SF-05DFS/230V

◆ S6061SF-05 Dimensions unit (mm)

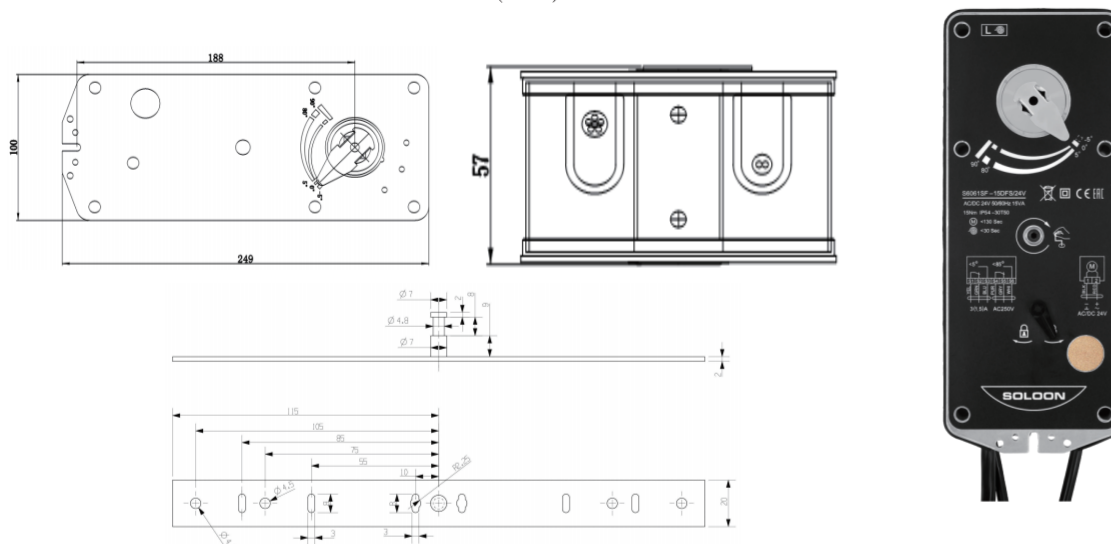


◆ S6061SF-10/15 Technical Specifications

Items	S6061SF-10DF/24V	S6061SF-10DF/230V	S6061SF-10AF/24V	S6061SF-15DF/24V	S6061SF-15DF/230V	S6061SF-15AF/24V
Torque (Nm)	10 Nm			15 Nm		
Damper Size (m ²)	2 m ²			3 m ²		
Running Time (sec)	Motor < 100s; S.R. < 30s		Motor < 120s; S.R. < 30s	Motor < 130s; S.R. < 30s		
Nominal Voltage (V)	AC/DC 24V; AC 230V 50/60Hz					
Supply Voltage Range	AC/DC 19.2-28.8V; AC 85-265V					
Power Consumption (on)	5W			6W		
Power Consumption (off)	2.5W			2.5W		
Reactive Power (VA)	10/15					
Weight (Kg)	2.6Kg					
Control Signal	2 point				0~10V	
Rotation Angle	0~90°(Max 93°)					
Limited Angle	5~85°(by 5°)					
Positional Feedback	2 Auxiliary Switches					
Life Cycle	≥70000					
Sound Power Level	50dB and 62dB					
Electrical Protection Class	III	II	III	III	II	III
Ingress Protection	IP54					
Ambient Temperature	-30~+55 °C, The maximum safe ambient operating temperature is 75 °C					
Ambient Humidity	5~95% RH					
Storage Temperature	-40~+80°C					
Shaft Diameter	10*10mm/12*12mm square shaft					
Accessories	1m cable					
Compliance	CE, UKCA, UL, EAC, RoHS certificates					
72°C Thermal Sensor	S6061SF-10/15DFS/24V			S6061SF-10/15DFS/230V		

S6061SF Series Spring Return Fire and Smoke Damper Actuators

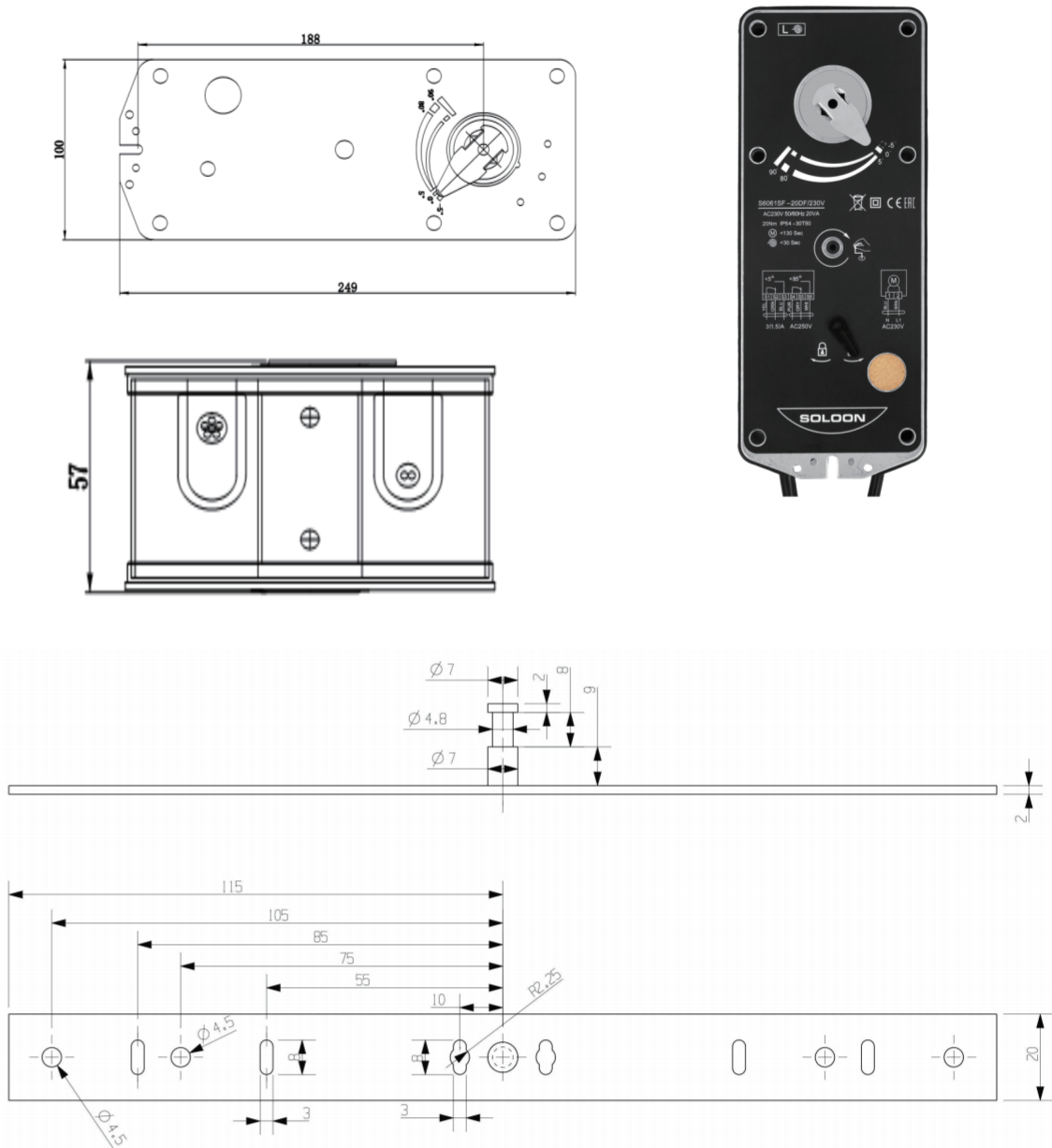
◆ S6061SF-10/15 Dimensions unit (mm)



◆ S6061SF-20 Technical Specifications

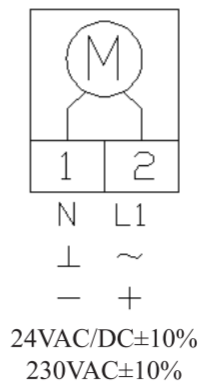
Items	S6061SF-20DF/24V	S6061SF-20DF/230V	S6061SF-20AF/24V
Torque (Nm)	20Nm		
Damper Size (m ²)	4m ²		
Running Time (sec)	Motor < 130s; Spring Return < 30s		
Nominal Voltage (V)	AC/DC 24V; AC 230V 50/60Hz		
Supply Voltage Range	AC/DC 19.2-28.8V	AC 85-265V	AC/DC 19.2-28.8V
Power Consumption (on)	7W		
Power Consumption (off)	2.5W		
Reactive Power (VA)	20		
Weight (Kg)	2.6Kg		
Control Signal	2 point		0~10V
Rotation Angle	0~90°(Max 93°)		
Limited Angle	5~85° (by 5°)		
Positional Feedback	2 Auxiliary Switches		
Life Cycle	≥70000		
Sound Power Level	50dB and 62dB		
Electrical Protection Class	III	II	III
Ingress Protection	IP54		
Ambient Temperature	-30~+55 °C, The maximum safe ambient operating temperature is 75 °C		
Ambient Humidity	5~95% RH		
Storage Temperature	-40~+80°C		
Shaft Diameter	10*10mm/12*12mm square shaft		
Accessories	1m cable		
Compliance	CE, UKCA, UL, EAC, RoHS certificates		
72°C Thermal Sensor	S6061SF-20DFS/24V	S6061SF-20DFS/230V	

◆ S6061SF-20 Dimensions unit (mm)

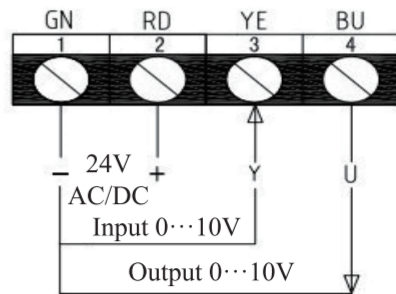


◆ S6061SF Wiring Diagrams

S6061SF-D type

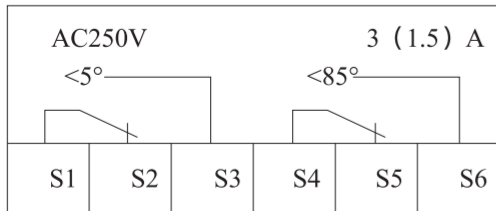


S6061SF-A type

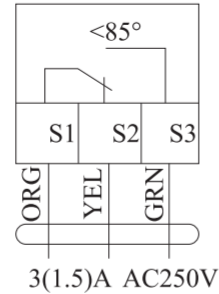


S6061SF Series Spring Return Fire and Smoke Damper Actuators

◆ S6061SF Auxiliary Switch Diagram



◆ S6061SF-05A



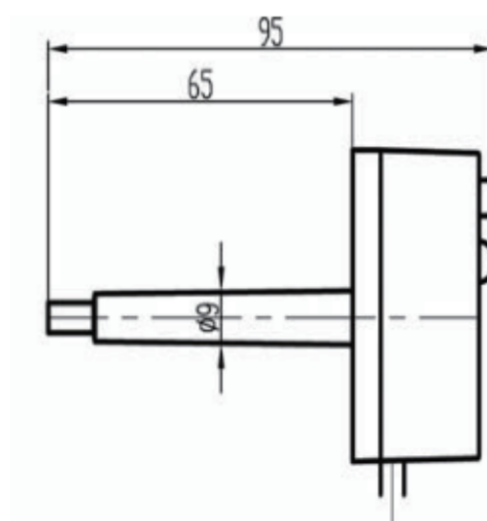
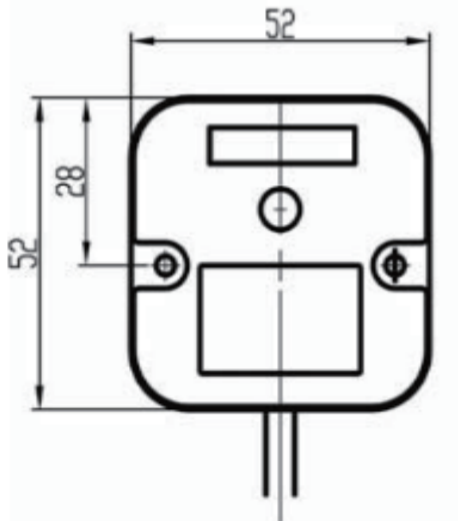
◆ Notice: Manual Override Instructions

Insert the allen key into the hexagonal hole, and rotate the handle evenly and slowly clockwise (or counterclockwise) in the direction shown on the product surface. The output shaft also rotates clockwise (or counterclockwise) at this time. When the output shaft rotates to the required position, manually turn the allen key 90° in the direction shown on the product surface (the manual lock function should not be applied when the gearbox is rotating rapidly under the action of the volute spring, which will cause the fast-rotating stop block to collide with the brake spring, resulting in the loss of the manual locking function). At this time, the output shaft is locked. When you need to unlock, turn the lock key clockwise (or counterclockwise).

[Note:] Do not perform manual operation when the actuator rebounds at high speed, as it may cause manual locking failure and damage to parts.

◆ Specification of 72°C Thermal Sensor

Includes: ambient (TS1) and air outlet (TS2) thermal sensors;
 When the ambient temperature exceeds 72°C , TS1 will be disconnected;
 When the duct temperature exceeds 72°C , TS2 will be disconnected.



1. The installation must be carried out by personnel who have received relevant training or relevant work experience. During the installation process, be careful not to operate with power on, and install the actuator according to the regulations.
2. The device contains electrical and electronic accessories, so it is prohibited to dispose of it as ordinary garbage after the product is scrapped. The disposal method should comply with the regulations and requirements of the local government.