

EF800 Series Spring Return Fire and Smoke Damper Actuators

Designed for damper control within HVAC systems.



Torque:

3.5Nm, 5Nm, 10Nm, 15Nm, 20Nm

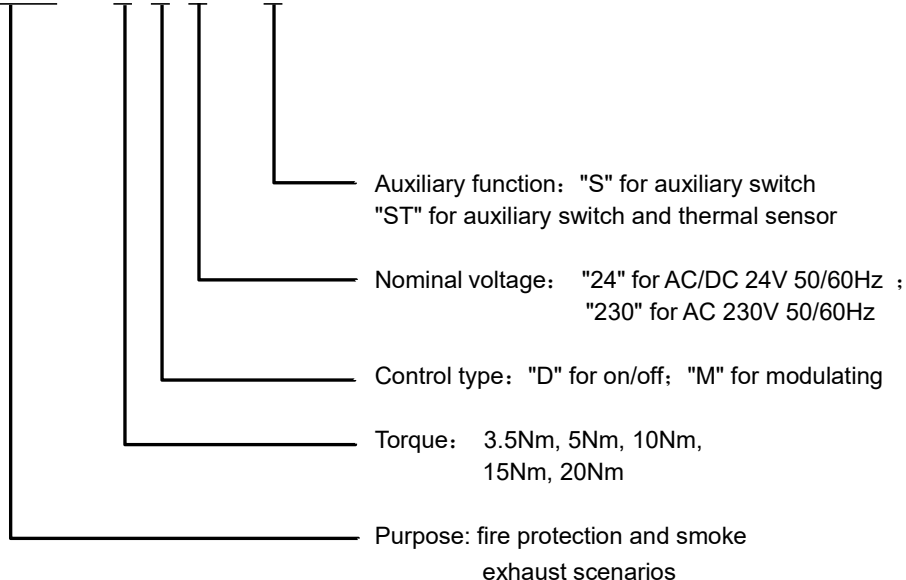
Nominal Voltage and Control Type:

AC/DC 24V or AC 230V 50/60Hz, 2-point, D

AC/DC 24V 50/60Hz, 0-10V, M

Product Code Description:

EF800 - X X X - X



EF800 Series Spring Return Fire and Smoke Damper Actuators

3.5Nm Model Selection



Model	Torque	Running Time	Nominal Voltage	Auxiliary Function
EF800-3.5D24-S	3.5Nm	Motor<70s; Spring Return<30s	AC/DC 24V	Auxiliary Switches
EF800-3.5D230-S			AC 230V	
EF800-3.5M24-S			AC/DC 24V	
EF800-3.5D24-ST			AC/DC 24V	Auxiliary Switches with Thermal Sensor
EF800-3.5D230-ST			AC 230V	

Technical Specifications

Model		EF800-3.5D24-ST	EF800-3.5D24-S	EF800-3.5D230-S	EF800-3.5D230-ST	EF800-3.5M24-S
Electrical Parameters						
Nominal Voltage		AC/DC 24V 50/60Hz		AC 230V 50/60Hz		AC/DC 24V 50/60Hz
Voltage Range		AC/DC 19.2-28.8V		AC 85-265V		AC/DC 19.2-28.8V
Power	running	2.5W				
Consumption	holding	1.6W				
Cable Specification		On/Off Type: 1m cable 2*0.75mm²; Modulating Type: 1m cable 4*0.5mm²; Feedback Signal: 1m cable 6*0.5mm²				
General Parameters						
Torque		3.5Nm				
Damper Size		0.8m²				
Running Time		motor<70s; spring return<30s				
Control Type		2-piont on/off			0-10V modulating	
Rotation Angle		0~90°（93°max.）				
Rotation Direction		selectable by L/R mounting				
Position Feedback		2 auxiliary switches				
Life Cycle		≥70000				
Noise Level		50dB and 62dB				
Working Environment						
Protection Class		II				
Protection Level		IP54				
Ambient Temperature		-30~+55℃.The maximum safe ambient operating temperature is 75℃				
Ambient Humidity		5~95%RH				
Storage Temperature		-40~+80℃				
Dimension/Weight/Other						
Square Shaft		12*12mm;square shaft adapter for 10*10mm				
Weight		1.2Kg				
Pollution Degree		II				
Motor Start Protection		Type 1 AA action				
Certificate		CE、UKCA、ROHS	CE、UL、UKCA、ROHS		CE、UKCA、ROHS	CE、UL、UKCA、ROHS
Impulse Voltage		2500V for auxiliary switches 330V for device power		2500V		2500V for auxiliary switches 330V for device power

EF800 Series Spring Return Fire and Smoke Damper Actuators

5Nm Model Selection

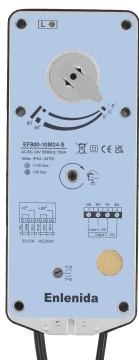


Model	Torque	Running Time	Nominal Voltage	Auxiliary Function
EF800-5D24-S	5Nm	Motor<70s; Spring Return<20s	AC/DC 24V	Auxiliary Switches
EF800-5D230-S			AC 230V	
EF800-5M24-S		Motor<120s; Spring Return<20s	AC/DC 24V	
EF800-5D24-ST			AC/DC 24V	Auxiliary Switches with Thermal Sensor
EF800-5D230-ST		Motor<70s; Spring Return<20s	AC 230V	

Technical Specifications

Model		EF800-5D24-ST	EF800-5D24-S	EF800-5D230-S	EF800-5D230-ST	EF800-5M24-S
Electrical Parameters						
Nominal Voltage		AC/DC 24V 50/60Hz		AC 230V 50/60Hz		AC/DC 24V 50/60Hz
Voltage Range		AC/DC 19.2-28.8V		AC 85-265V		AC/DC 19.2-28.8V
Power	running	5W				
Consumption	holding	2.5W				
Cable Specification		On/Off Type: 1m cable 2*0.75mm²; Modulating Type: 1m cable 4*0.5mm²; Feedback Signal: 1m cable 6*0.5mm²				
General Parameters						
Torque		5Nm				
Damper Size		1m²				
Running Time		motor<70s; spring return<20s				motor<120s; spring return<20s
Control Type		2-piont on/off				0-10V modulating
Rotation Angle		0~90°（93°max.）				
Rotation Direction		selectable by L/R mounting				
Position Feedback		2 auxiliary switches				1 auxiliary switch
Life Cycle		≥70000				
Noise Level		50dB and 62dB				
Working Environment						
Protection Class		II				
Protection Level		IP54				
Ambient Temperature		-30~+55℃.The maximum safe ambient operating temperature is 75℃				
Ambient Humidity		5~95%RH				
Storage Temperature		-40~+80℃				
Dimension/Weight/Other						
Square Shaft		12*12mm;square shaft adapter for 10*10mm				
Weight		1.6Kg				
Pollution Degree		II				
Motor Start Protection		Type 1 AA action				
Certificate		CE、UKCA、RoHS	CE、UL、UKCA、RoHS		CE、UKCA、RoHS	CE、UL、UKCA、RoHS
Impulse Voltage		2500V for auxiliary switches 330V for device power		2500V		2500V for auxiliary switches 330V for device power

EF800 Series Spring Return Fire and Smoke Damper Actuators



10Nm Model Selection

Model	Torque	Running Time	Nominal Voltage	Auxiliary Function
EF800-10D24-S	10Nm	Motor<100s; Spring Return<30s	AC/DC 24V	Auxiliary Switches
EF800-10D230-S			AC 230V	
EF800-10M24-S		Motor<120s; Spring Return<30s	AC/DC 24V	
EF800-10D24-ST		Motor<100s; Spring Return<30s	AC/DC 24V	Auxiliary Switches with Thermal Sensor
EF800-10D230-ST			AC 230V	

Technical Specifications

Model		EF800-10D24-ST	EF800-10D24-S	EF800-10D230-S	EF800-10D230-ST	EF800-10M24-S
Electrical Parameters						
Nominal Voltage		AC/DC 24V 50/60Hz		AC 230V 50/60Hz		AC/DC 24V 50/60Hz
Voltage Range		AC/DC 19.2-28.8V		AC 85-265V		AC/DC 19.2-28.8V
Power	running	5W				
Consumption	holding	2.5W				
Cable Specification		On/Off Type: 1m cable 2*0.75mm²; Modulating Type: 1m cable 4*0.5mm²; Feedback Signal: 1m cable 6*0.5mm²				
General Parameters						
Torque		10Nm				
Damper Size		2m²				
Running Time		motor<100s; spring return<30s				motor<120s; spring return<30s
Control Type		2-piont on/off				0-10V modulating
Rotation Angle		0~90°（93°max.）				
Rotation Direction		selectable by L/R mounting				
Position Feedback		2 auxiliary switches				
Life Cycle		≥70000				
Noise Level		50dB and 62dB				
Working Environment						
Protection Class		II				
Protection Level		IP54				
Ambient Temperature		-30~+55℃.The maximum safe ambient operating temperature is 75℃				
Ambient Humidity		5~95%RH				
Storage Temperature		-40~+80℃				
Dimension/Weight/Other						
Square Shaft		12*12mm;square shaft adapter for 10*10mm				
Weight		2.6Kg				
Pollution Degree		II				
Motor Start Protection		Type 1 AA action				
Certificate		CE、UKCA、RoHS	CE、UL、UKCA、RoHS		CE、UKCA、RoHS	CE、UL、UKCA、RoHS
Impulse Voltage		2500V for auxiliary switches 330V for device power		2500V		2500V for auxiliary switches 330V for device power

EF800 Series Spring Return Fire and Smoke Damper Actuators



15Nm Model Selection

Model	Torque	Running Time	Nominal Voltage	Auxiliary Function
EF800-15D24-S	15Nm	Motor<130s; Spring Return<30s	AC/DC 24V	Auxiliary Switches
EF800-15D230-S			AC 230V	
EF800-15M24-S			AC/DC 24V	
EF800-15D24-ST			AC/DC 24V	Auxiliary Switches with Thermal Sensor
EF800-15D230-ST			AC 230V	

Technical Specifications

Model		EF800-15D24-ST	EF800-15D24-S	EF800-15D230-S	EF800-15D230-ST	EF800-15M24-S
Electrical Parameters						
Nominal Voltage		AC/DC 24V 50/60Hz		AC 230V 50/60Hz		AC/DC 24V 50/60Hz
Voltage Range		AC/DC 19.2-28.8V		AC 85-265V		AC/DC 19.2-28.8V
Power	running	6W				
Consumption	holding	2.5W				
Cable Specification		On/Off Type: 1m cable 2*0.75mm²; Modulating Type: 1m cable 4*0.5mm²; Feedback Signal: 1m cable 6*0.5mm²				
General Parameters						
Torque		15Nm				
Damper Size		3m²				
Running Time		motor<130s; spring return<30s				
Control Type		2-piont on/off				0-10V modulating
Rotation Angle		0~90°（93°max.）				
Rotation Direction		selectable by L/R mounting				
Position Feedback		2 auxiliary switches				
Life Cycle		≥70000				
Noise Level		50dB and 62dB				
Working Environment						
Protection Class		II				
Protection Level		IP54				
Ambient Temperature		-30~+55℃.The maximum safe ambient operating temperature is 75℃				
Ambient Humidity		5~95%RH				
Storage Temperature		-40~+80℃				
Dimension/Weight/Other						
Square Shaft		12*12mm;square shaft adapter for 10*10mm				
Weight		2.6Kg				
Pollution Degree		II				
Motor Start Protection		Type 1 AA action				
Certificate		CE、UKCA、RoHS	CE、UL、UKCA、RoHS		CE、UKCA、RoHS	CE、UL、UKCA、RoHS
Impulse Voltage		2500V for auxiliary switches 330V for device power		2500V		2500V for auxiliary switches 330V for device power

EF800 Series Spring Return Fire and Smoke Damper Actuators



20Nm Model Selection

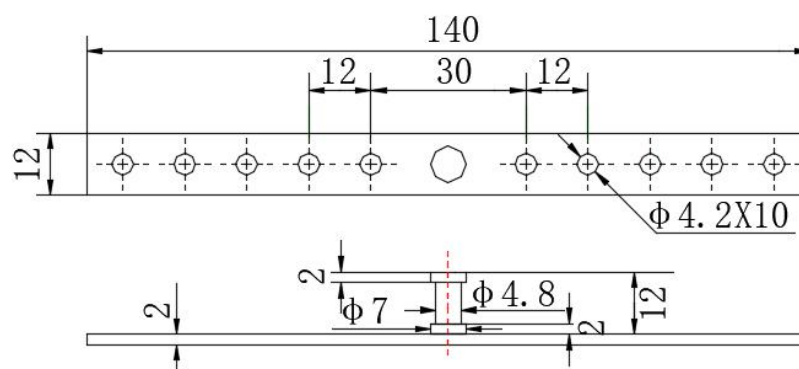
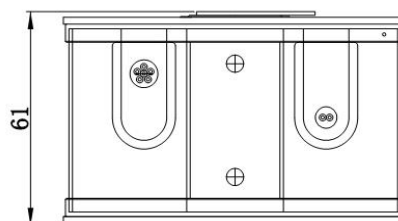
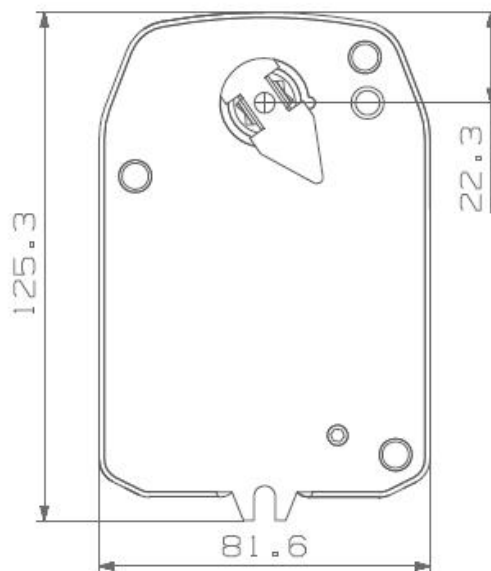
Model	Torque	Running Time	Nominal Voltage	Auxiliary Function
EF800-20D24-S	20Nm	Motor<130s; Spring Return<30s	AC/DC 24V	Auxiliary Switches
EF800-20D230-S			AC 230V	
EF800-20M24-S			AC/DC 24V	
EF800-20D24-ST			AC/DC 24V	Auxiliary Switches with Thermal Sensor
EF800-20D230-ST			AC 230V	

Technical Specifications

Model		EF800-20D24-ST	EF800-20D24-S	EF800-20D230-S	EF800-20D230-ST	EF800-20M24-S
Electrical Parameters						
Nominal Voltage		AC/DC 24V 50/60Hz		AC 230V 50/60Hz		AC/DC 24V 50/60Hz
Voltage Range		AC/DC 19.2-28.8V		AC 85-265V		AC/DC 19.2-28.8V
Power	running	7W				
Consumption	holding	2.5W				
Cable Specification		On/Off Type: 1m cable 2*0.75mm²; Modulating Type: 1m cable 4*0.5mm²; Feedback Signal: 1m cable 6*0.5mm²				
General Parameters						
Torque		20Nm				
Damper Size		4m²				
Running Time		motor<130s; spring return<30s				
Control Type		2-piont on/off				0-10V modulating
Rotation Angle		0~90°（93°max.）				
Rotation Direction		selectable by L/R mounting				
Position Feedback		2 auxiliary switches				
Life Cycle		≥70000				
Noise Level		50dB and 62dB				
Working Environment						
Protection Class		II				
Protection Level		IP54				
Ambient Temperature		-30~+55℃.The maximum safe ambient operating temperature is 75℃				
Ambient Humidity		5~95%RH				
Storage Temperature		-40~+80℃				
Dimension/Weight/Other						
Square Shaft		12*12mm;square shaft adapter for 10*10mm				
Weight		2.6Kg				
Pollution Degree		II				
Motor Start Protection		Type 1 AA action				
Certificate		CE、UKCA、RoHS	CE、UL、UKCA、RoHS		CE、UKCA、RoHS	CE、UL、UKCA、RoHS
Impulse Voltage		2500V for auxiliary switches 330V for device power		2500V		2500V for auxiliary switches 330V for device power

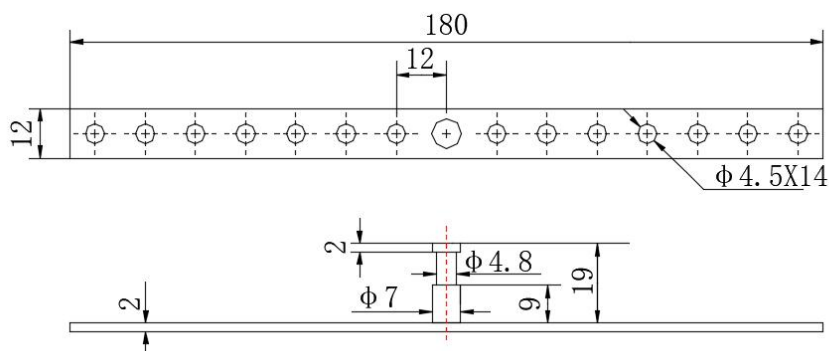
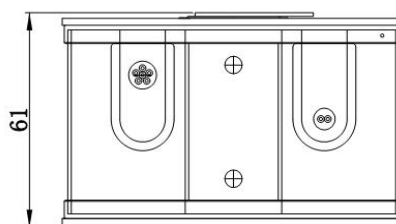
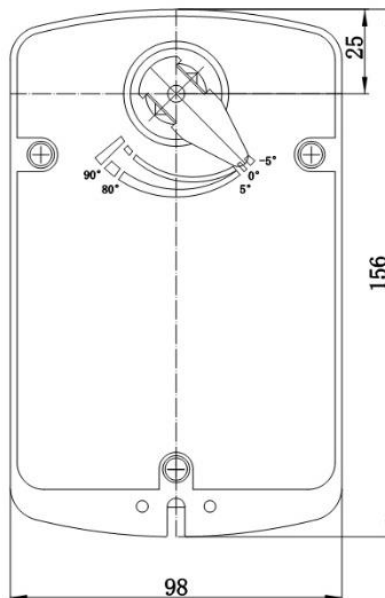
EF800 Series Spring Return Fire and Smoke Damper Actuators

EF800-S3.5 Shape and Mounting Dimensions (mm)



EF800 Series Spring Return Fire and Smoke Damper Actuators

EF800-S5 Shape and Mounting Dimensions (mm)

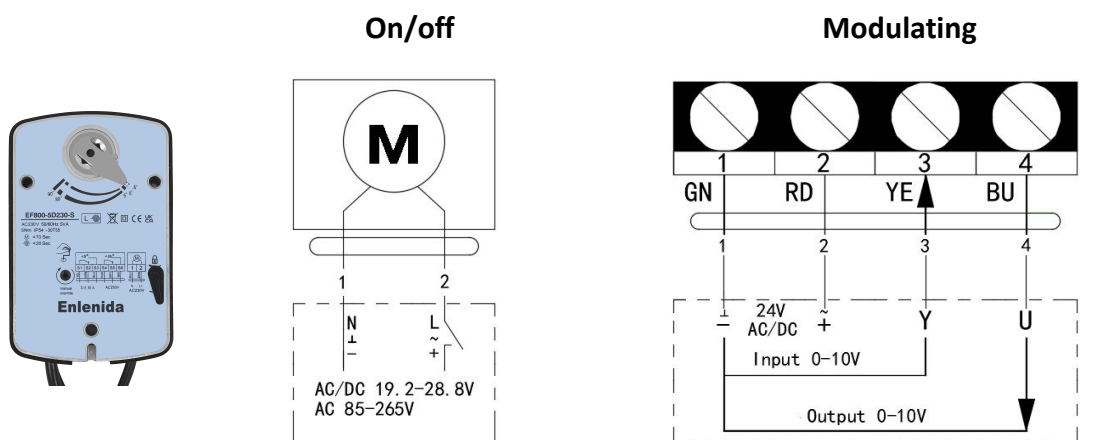


EF800-S10/15/20 Shape and Mounting Dimensions (mm)

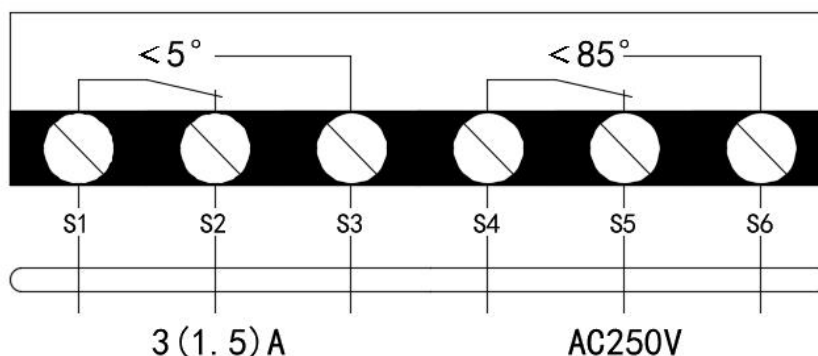


EF800 Series Spring Return Fire and Smoke Damper Actuators

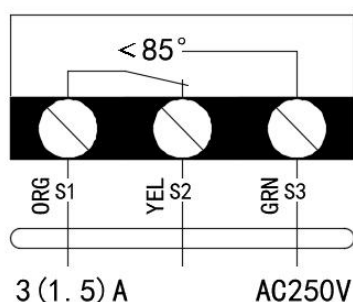
Wiring Diagram



Auxiliary Switch



EF800-5M24-S Auxiliary Switch



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.