

# SRD02 ON/OFF TYPE DAMPER ACTUATOR (10, 15, 20, 30Nm)

## DESCRIPTION

SRD02 on/off type damper actuator uses bi-directional motor to control the damper. They are widely applied for damper controls of HVAC systems and water systems, and also used for controlling global valve.

## CHARACTERISTICS

### • HIGH DEPENDABLE PERFORMANCE

SRD02 on/off type damper actuator uses bi-directional magnetic clutch synchronous motor. It has overload protection function, and does not need limiter switch. The actuator will stop automatically, because the motor is clutched when it is operating to the end. And the damper actuator has a better precision adjustable mechanical limiter, and 1~2 auxiliary switches can be selected for optional.

Adjustable limiter with precision of 10°.

Optional overtime protection for longer motor life.

1 or 2 optional auxiliary switch(es), the function of which can be made by order. The operational angle of the damper actuator which has 2 limiters can be adjusted by setting the peak turnplate. The adjustable feedback position is larger than 60° on clockwise, and small than 30° on anti-clockwise. Please find the installation details at Fig.4. The default setting of one switch type is at 90°, and that of two switches type is at 0° and 90°.

The 24 volt DC self-setting function is only for 24 volt AC damper actuator. It can supply enough power to let the damper actuator go back to 0°, when power supply is suddenly cut off.

### • SIMPLE AND CONVENIENT FUNCTION TESTING

It is also convenient to test the function of damper operation: press the manual button on the actuator, the gears inside the actuator will break away. The damper can be operated manually when keep pressing the manual button. PLEASE DO NOT OPERATE WHEN POWER ON!

### • SIMPLE INSTALLATION

Fix the damper actuator on the damper shaft by universal holder. (Various special actuator holding bracket can be supplied according to customers' requirements.)

## MODEL SELECTION

SRD02 - XX XXX XXX

### PRODUCT CODE:

Damper actuator

### TORQUE CODE:

10: 10Nm  
15: 15Nm  
20: 20Nm  
30: 30Nm

### ADDITIONAL CODE:

T: With overtime protection  
FK1: With 1 position-feedback switch  
FK2: With 2 position-feedback switches  
LK2: With 2 limiters  
DR: 24 Vdc self-resetting (only for 24 Vac products)  
Omitted: Standard on/off type

### VOLTAGE:

024: 24 Vac  
110: 110 Vac  
120: 120 Vac  
220: 220 Vac  
230: 230 Vac

e.g. 1: Model name "SRD02-10024" means the standard 10Nm damper actuator of 24 volt AC.

e.g. 2: Model name "SRD02-15230FK2" means the 15Nm damper actuator of 230 volt AC, with 2 position-feedback switches.

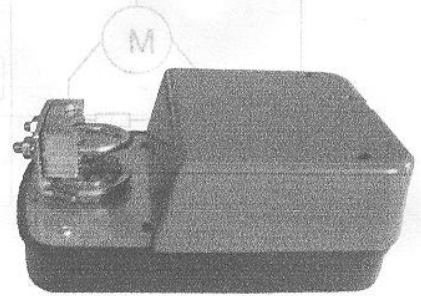
e.g. 3: Model name "SRD02-30110T" means the 30Nm damper actuator of 110 volt AC, with overtime protection.

## SPECIFICATIONS AND TECHNICAL DATA

MODEL	SRD02-10XXXXXX	SRD02-15XXXXXX	SRD02-20XXXXXX	SRD02-30XXXXXX
TORQUE	≥10Nm	≥15Nm	≥20Nm	≥30Nm
OPERATION TIME (50Hz/90°)	≈66s	≈90s	≈110s	≈143s
NET WEIGHT	1.3 kg		1.67 kg	
CABLE	0.5~1.5mm <sup>2</sup>			
ROTATE ANGLE	90° < Mechanical limitations ≤ 95°			
NOISE LEVEL	Maximum 45dB(A)			
IP CLASS	IP 42			
AMBIENT TEMP.	-5°C ~ +50°C			
STORAGE TEMP.	-30°C ~ +70°C			
USEFUL LIFE	>60000 cycles			

\* Power supply: rated voltage±10%

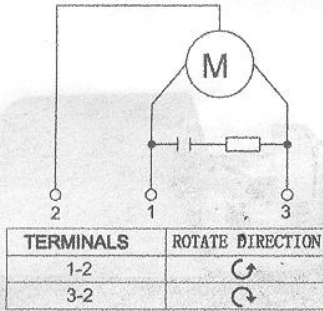
\* Power consumption: 4.5VA for 24, 110 and 120 Vac; 8.5VA for 220 and 230Vac.



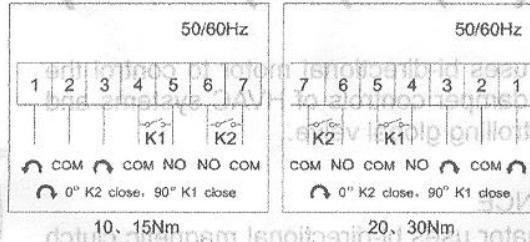


## WIRING DIAGRAM

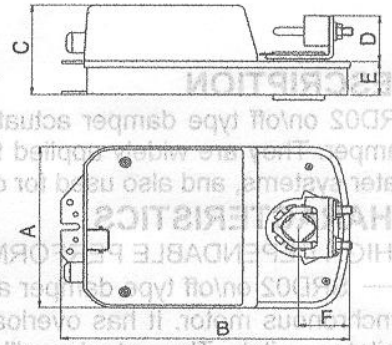
(Normal Model)



(Model with auxiliary switch)

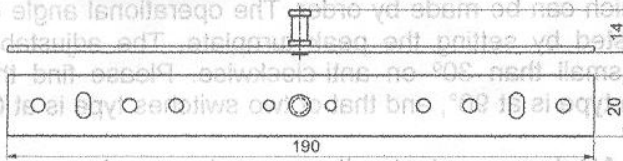


## DIMENSIONS



Note: Damper shaft dimension:  $\varnothing 10\sim 18$   $\square 8\sim 13$

## STANDARD SETTING BRACKET



MODEL	DIMENSIONS (mm)					
	A	B	C	D	E	F
SRD02-10XXXXXX	108	174	70	39	26	31
SRD02-15XXXXXX	108	174	70	39	26	31
SRD02-20XXXXXX	124	196	69	39	26	35
SRD02-30XXXXXX	124	196	69	39	26	35

## PEAK TURNPLATE ADJUSTING

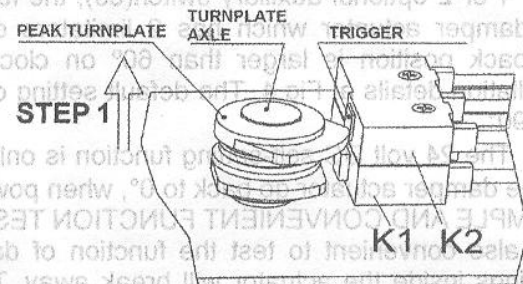


Fig.4

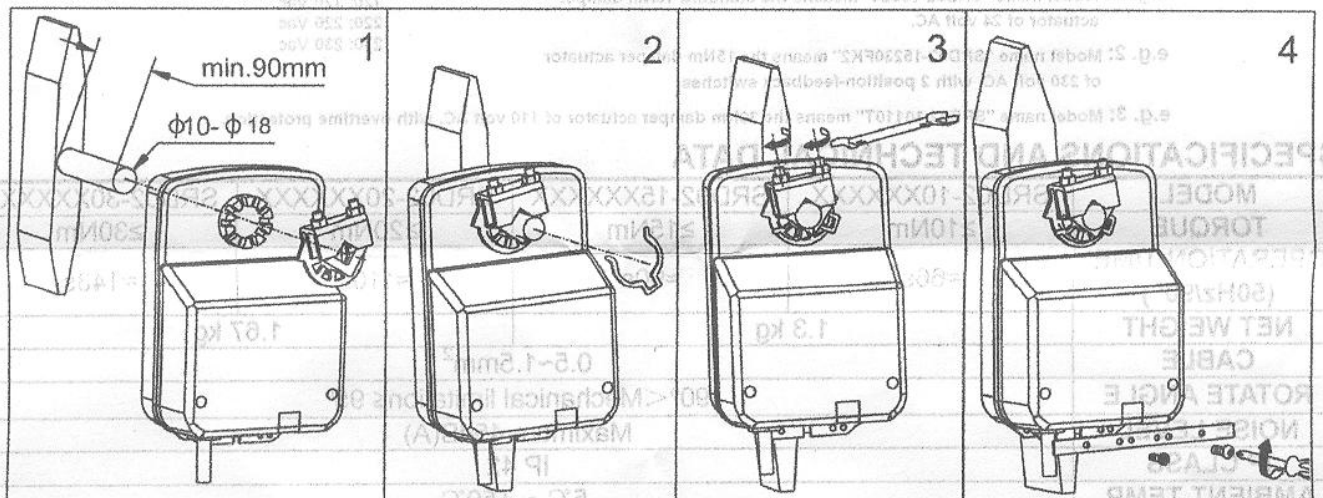
### TESTING STEPS:

1. Take the peak turnplate out.
2. Turn the axle to the needed position, then put the peak turnplate back, make sure the peak is just against the trigger. (As Fig.4)



**DO NOT OPERATE WHEN POWER IS ON!**

## INSTALLATION DIAGRAM



\* The accessories include 2 limitative baffles, 2 baffle setscrews (M3×6), and 1 actuator setting gasket.