

SRD03 INTELLIGENT DAMPER ACTUATOR

(2, 4, 6, 8, 10 Nm)

DESCRIPTION

SRD03 intelligent damper actuator is an electromechanical product, which uses bi-directional AC synchron motor. It is compact, small volume, smart design, and has high IP class and various torques. The actuator will automatically adjust and record stroke. SRD03 intelligent damper actuator is widely used for damper control in air-conditioning system, and angular travel control and zone valve control in water circuit.



CHARACTERISTICS

- VARIOUS TORQUES

— 2, 4, 6, 8, 10 Nm

- HIGH DEPENDABLE PERFORMANCE

— Adjustable limiter

— Hall switch sensor

— With overtime protection function, the actuator can stop automatically at the end of stroke without limit switch.

- SELF-ADJUSTING FUNCTION, AUTOMATIC RECORD STROKE DATA

- WORKING STATUS FAST SHIFT

- ACCEPT 0(2)~10VDC OR 0(4)~20mA DC INPUT SIGNAL, PROPORTIONAL CONTROL

- 0~10 VDC FEEDBACK SIGNAL

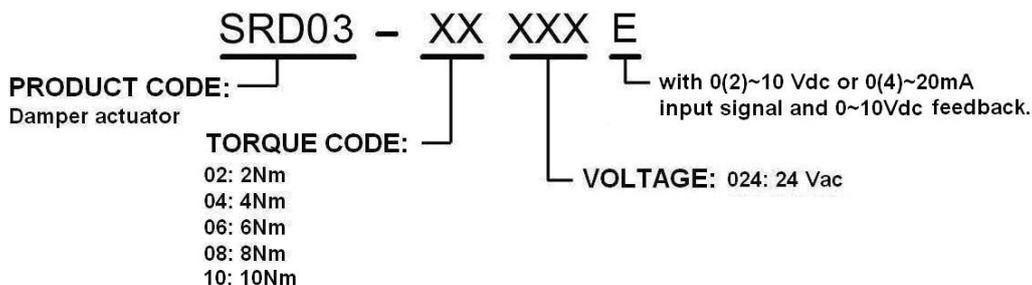
- SIMPLE AND CONVENIENT FUNCTION TESTING

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

- SIMPLE INSTALLATION

Square shaft type: Fix with square damper shaft. Damper shaft dimensions: Ø10~16 □8~11.

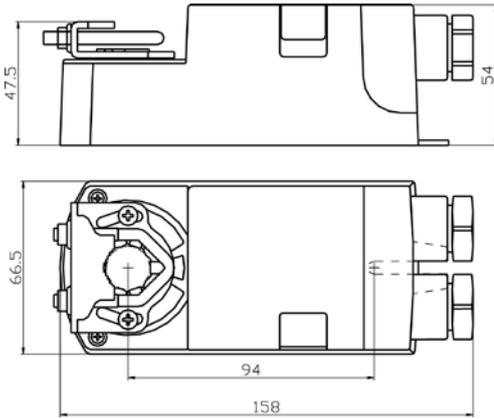
MODEL SELECTION



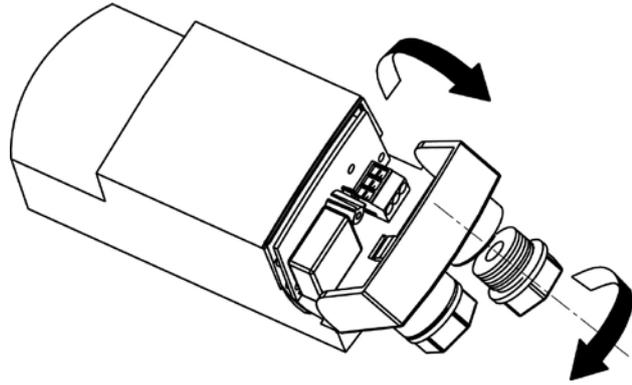
SPECIFICATIONS AND TECHNICAL DATA

MODEL	SRD03-02024E	SRD03-04024E	SRD03-06024E	SRD03-08024E	SRD03-10024E
TORQUE	≥2Nm	≥4Nm	≥6Nm	≥8Nm	≥10Nm
OPERATION TIME (50Hz, 90°)	≈108s				
POWER SUPPLY	24Vac±10%; 4VA				
CONTROL SIGNAL	0-10Vdc; 2-10Vdc; 0-20mA dc or 4-20mA dc				
CABLE	0.5~1.5mm ²				
ROTATE ANGLE	90° < Mechanical limitation ≤ 95°				
NOISE LEVEL	Maximum 45dB(A)				
POSITION INDICATION	0~10Vdc position feedback signal output				
IP CLASS	IP 54				
AMBIENT TEMP.	-5 °C~+50 °C				
STORAGE TEMP.	-30°C ~ +70 °C				
USEFUL LIFE	>60000 cycles				

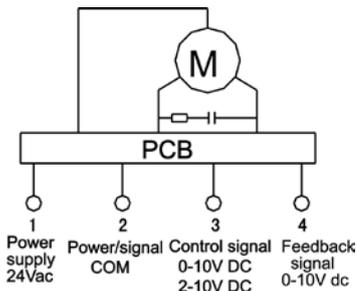
DIMENSIONS (mm)



DISASSAMBLING WIRING TERMINAL

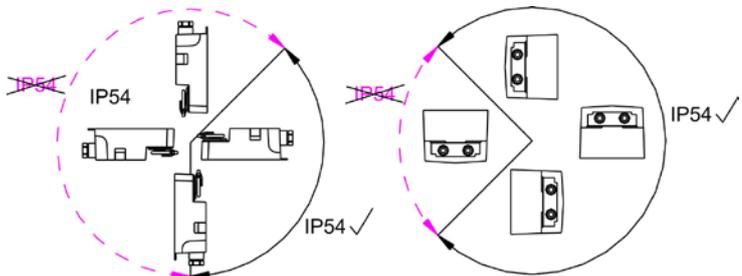


WIRING DIAGRAM



INPUT CONTROL SIGNAL		ROTATE DIRECTION
DA	RA	
INCREASING	DECREASING	↻
DECREASING	INCREASING	↺

INSTALLATION POSITION & IP CLASS



PCB SETTING

- Study status:** After power is on, set JP1 switch as request (refer to the following list). First, switch "4" of JP1 to position ON, then press SW1 STUDY/REPOSITION button, buzzer will sound every 5 seconds, and the actuator is running clockwise (opening) until gears are blocked (has reached the maximum stroke). Then the actuator will go back until gears are blocked again (has been at 0° position). Buzzer will make a long sound to indicate the study status is over. MCU will keep the data in memory even power is off.

Then switch "4" of JP1 back to position OFF to transform to running status. If this step is missed, the actuator will operate as usual, but it will go through the study status every time when power is on.

- Running status:** The actuator will reposition (search 0° position) every time when power is on. It will close the valve at first, and then the buzzer will make a long sound to indicate the actuator is ready for control signal.
- Working status shift:** If user needs to shift to other working status, make sure the JP1 has been set correctly, then press SW1 STUDY/REPOSITION button. Don't need to cut off power.

JP1 SWITCH SETTING:					DEFAULT SETTING	
CONTROL SIGNAL STATUS SWITCH	0~10V DC	2~10V DC	0~20mAV DC	4~20mAV DC		
RUNNING STATUS	DA	OFF ON 1 2 3 4				
	RA	OFF ON 1 2 3 4				
STUDY STATUS	DA	OFF ON 1 2 3 4				
	RA	OFF ON 1 2 3 4				

NOTICE: We strongly recommend that JP1 switch should be set on running status in normal use.

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