



## DMSC-05 Series Spring Return

- **DMSC-05** Spring Return damper actuator Series are designed specifically for application into the HVAC market.
- High quality damper actuators are developed for use with air damper, butterfly valve, characterized ball valve and other devices that required a fail safe function. The actuator motorized the damper or other devices when power on and spring back to it original position when power is cut off.

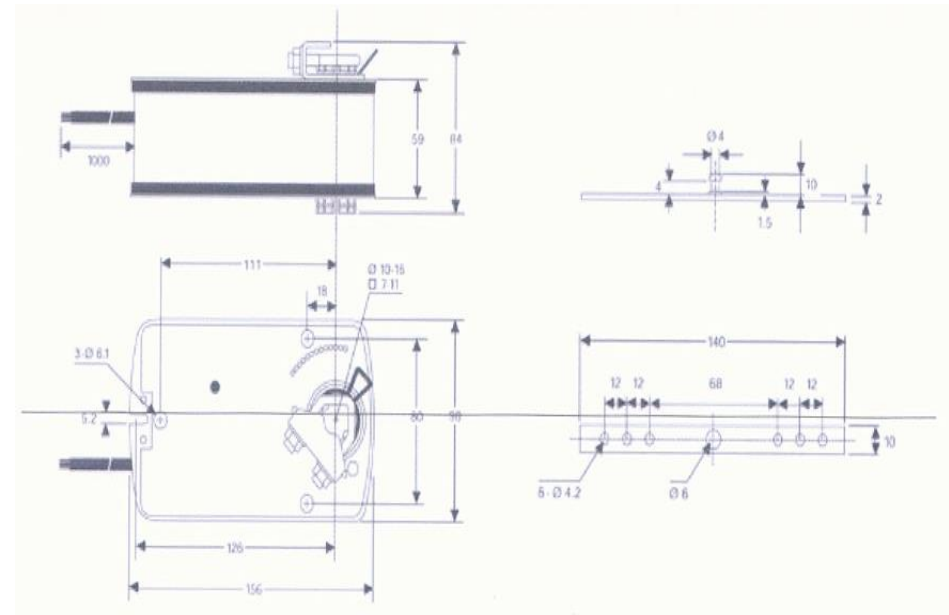
## Product Features

- 2 points on/off control
- Damper Size up to 1.0 m<sup>2</sup>
- Voltage AC/DC 24V and AC 230V available
- Universal Spindle Clamp for easy direct mounting
- Shaft dimension Ø10...16 mm / 7...11 mm square
- Minimum Shaft Length 40mm
- Anti-rotation bracket provided for stability
- Adjustable angle of rotation
- Selectable direction of rotation by reversing actuator
- 2 SPDT auxiliary switches when requested
- Energy saving at end stops
- Actuators with 1m cable connection
- Customised version available on request

## Model Selection Table

Torque	Running Time	Power Supply	Auxiliary Switches	Thermo sensor
5 Nm	50...70 sec Spring Back <20 se	AC/DC 24V	2×SPDT	NO yes
5 Nm	50...70 sec Spring Back <20 sec	AC 230V ±10%	2 x SPDT	No yes

## Actuator Dimensions (mm)



## Technical Specification

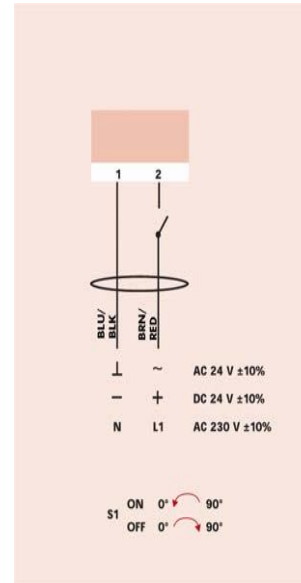
	DM-05 (S1)	DM-05 (S1)
Torque — Motor (Rated Voltage) — Spring		
Damper Size	1 m <sup>2</sup>	1 m <sup>2</sup>
Power Supply	AC/DC 24 V	AC 230V
Frequency	50...60Hz	50...60Hz
Power Consumption		
-Operating	7.2 W	4.2 W
-At the end stops	2.5 W	2.5 W
For wire sizing	10.0 VA	10.0 VA
Auxiliary Switches Rating (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	II (for 24 V and 230 V)	II (for 24 V and 230 V)
Controls Signal	2 Point On/Off	2 Point On/Off
Angle of Rotation	90° (95° mechanical)	90° (95° mechanical)
Angle of Rotation Limiting	5°...85° in 5° step	5°...85° in 5° step
Weight	1.8 Kg	1.9 Kg
Life Cycle	70,000 rotation	70,000 rotation
Sound Level	Below 45 dB	Below 45 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 and ISO 9000  
EN / EEC... Requirements

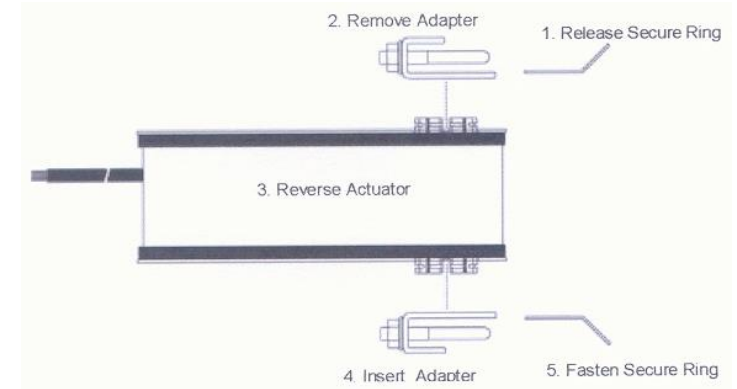
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Wiring Diagram S6061-05

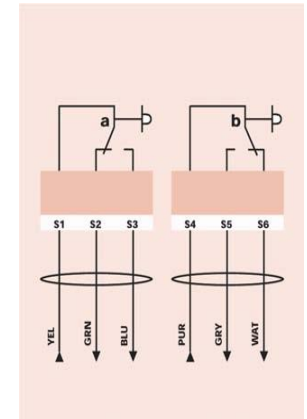
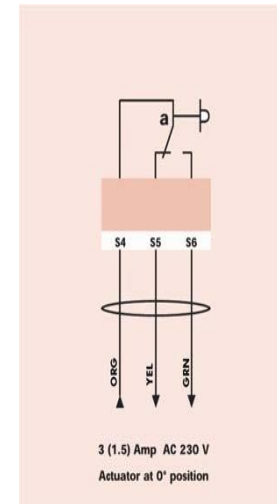


Auxiliary Switches S6061...05 (S1)

## Changing Direction of Rotation DMSC-05 (S1)



**!** 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 3 mm contact gap)



Angle of Rotation Limiting 5° to 85° adjustment

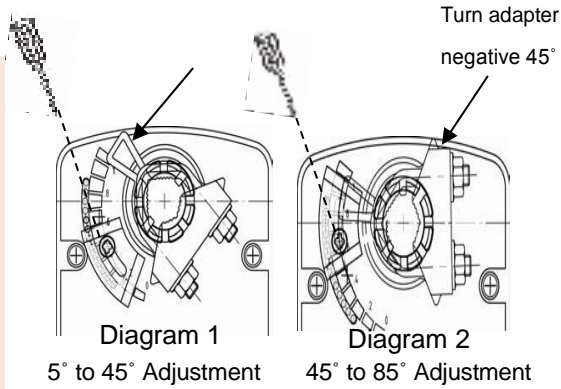
Angle of Rotation Limiting

**For 5° to 45° Adjustment (Diagram 1)**

1. Loosen Screw of the mechanical limiter plate.
2. Move the limiter plate to the appropriate position.
3. Tighten the screw .

**For 45° to 85° Adjustment (Diagram 2)**

1. Release the secure ring of the adapter.
2. Remove the adapter and turn negative 45° as shown.
3. Insert adapter and secure the adapter ring.
4. Loosen Screw of the mechanical limiter plate
5. Move the limiter plate to the appropriate position
6. Tighten the screw



**Auxiliary Switches adjustment DMSC-05 (S1)**

**Auxiliary Switches**

Auxiliary are fixed at 5° for switch (a) and 80° for switch (b)

Auxiliary Switches are Non adjustable.

**EM—Customized Version**

offer actuators in customized version on request in your own brand name.

