

**DMS2.2(S) / DM2.2(S) / DML2.2(S) / DMG2.2(S)**  
Proportional Actuators AC 230 V

**Application**

The **JOVENTA STANDARD** electric damper actuator series is designed to operate air dampers in ventilation and air conditioning systems.

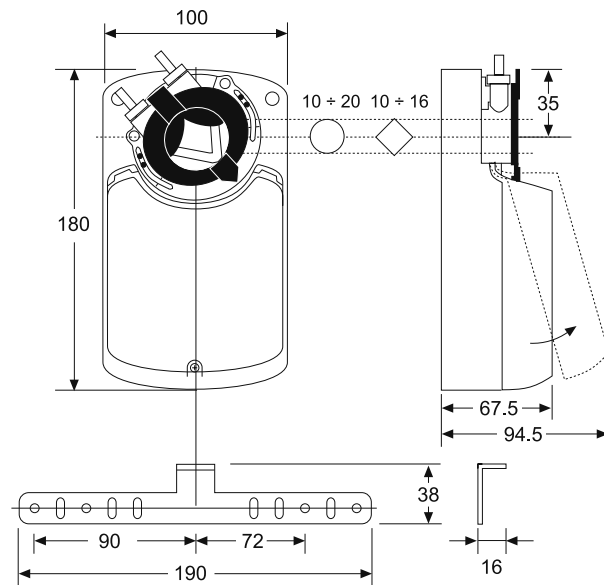
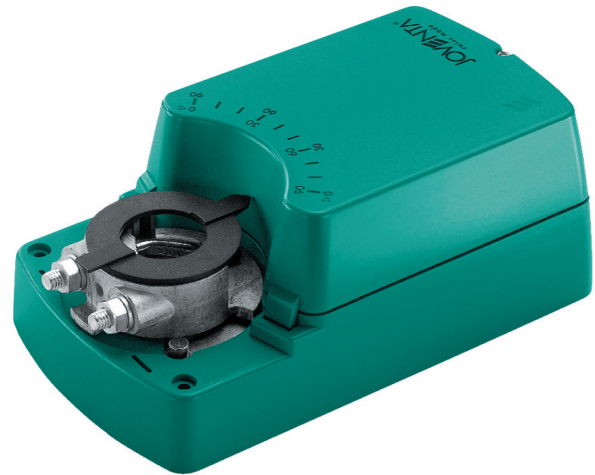
The compact design and universal adapter fitted with limitation of rotation angle make this JOVENTA actuator highly versatile.

**Features**

- DC 0(2)...10 V control signal
- Load independent
- Up to 5 actuators in parallel operation possible
- Plug-in terminal block connection
- Simple direct-mount with universal adapter on 10...20 mm Ø round-axis or 10...16 mm square shaft
- 48 mm minimum damper shaft length
- Selectable direction of rotation
- Limitation of rotation angle
- Manual release button
- 2 adjustable auxiliary switches
- Automatic shut-off at end position (overload switch)
- Actuators available with 1 m cable

**Accessories**

- ZK Damper linkage selection
- ZKG Ball joints



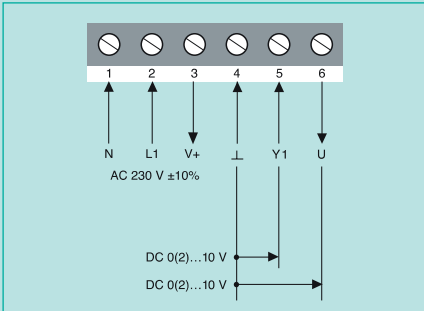
Dimensions in mm

**Ordering Codes**

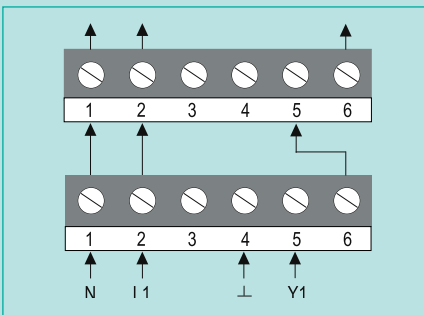
Codes	Descriptions
DMx2.2	AC 230 V
DMx2.2S	AC 230 V, with 2 auxiliary switches

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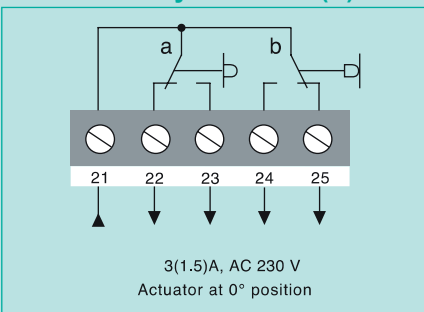
**Wiring Diagram**



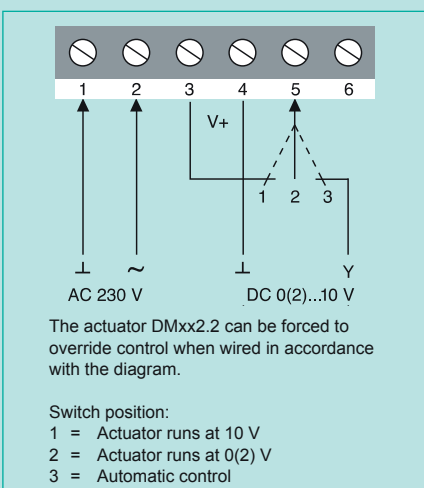
**Parallel Connections**



**Auxiliary Switches (S)**



**Override Control**



**Setting the control Signal**

Control signal Y1    DC 0...10 V  
Input resistance    Ri 100 kΩ

Position signal U    DC 0...10 V  
Load resistance    > 50 kΩ

By switching microswitch **d** to ON position, the control signal Y1 or Y2 will be adapted to the chosen angle of rotation.

By switching microswitch **c** the direction of rotation can be changed

Microswitch **d**  
Self-adapting

Microswitch **c**

Deactivated



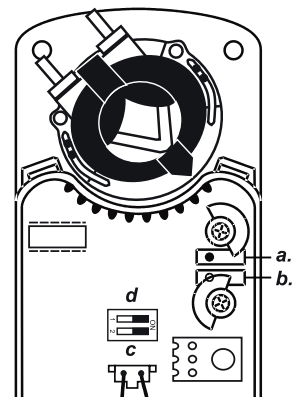
Activated



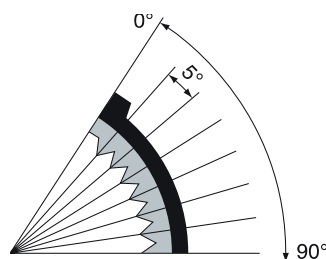
**Settings the auxiliary switches**

Factory setting  
Switch **a** at 10°  
Switch **b** at 80°

The switching position can be manually changed to any required position by turning the ratchet

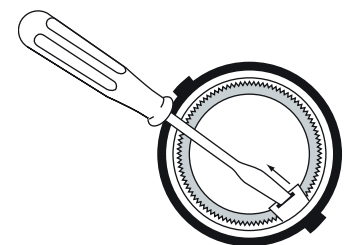


**Limitation of Rotation Angle**




The limitation of rotation angle can be set in 5° steps by moving the adapter.

**Adapter release**



The adapter can be removed simply by pressing the adapter clip on the underside of the actuator

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**Technical Specifications**

Actuator	DMS2.2(S)	DM2.2(S)	DML2.2(S)	DMG2.2(S)
Torque	8 Nm	16 Nm	24 Nm	32 Nm
Damper area*	1.5 m <sup>2</sup>	3.0 m <sup>2</sup>	4.5 m <sup>2</sup>	6.0 m <sup>2</sup>
Running Time OPEN	30 s	80 s	125 s	140 s
	Independent of load, at nominal conditions and room temperature			
Supply Voltage	AC 230 V ±15%			
Frequency	50-60 Hz			
Power Consumption				
- Operating	5.5 W			
- At end position	0.6 W			
For wire sizing	6.0 VA / 0.1 A @ 2 ms			
Control Signal Y1	DC 0(2)... 10 V			
Input resistance Y1	Ri 100 Ω			
Position signal U	DC 0...10 V			
Load resistance	> 50 kΩ			
Angle of rotation				
- Working range	90° (93°mech.)			
- Limitation	5°...85° in 5° steps			
Auxiliary Switches	3(1.5) A, AC 230 V			
Cable	1.0 m halogen-free			
- Motor	6-Wire 1-2-3-4-5-6			
- Switches	5-Wire 21-22-23-24-25			
Life time	60.000 rotations			
Noise level	45 dB (A)			
Protection Class	II			
Degree of Protection	IP 54			
Mode of Action	Type 1			
Ambient conditions				
- Operating temperature	-20...+50 °C			
- Storage temperature	-30...+60 °C			
- Humidity	5...95% r.F. no condensed			
Weight	1.2 Kg			
Service	Maintenance-free			
 Compliance	Johnson Controls, Inc., declares that these products are in compliance with the essential requirements and other relevant provisions of the EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EC.			

\*Caution: Please note damper manufacturer's information concerning the open/close torque.

**Building Efficiency**

Headquarters: Milwaukee, Wisconsin, USA  
 Branch Offices: Principal Cities World-wide

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