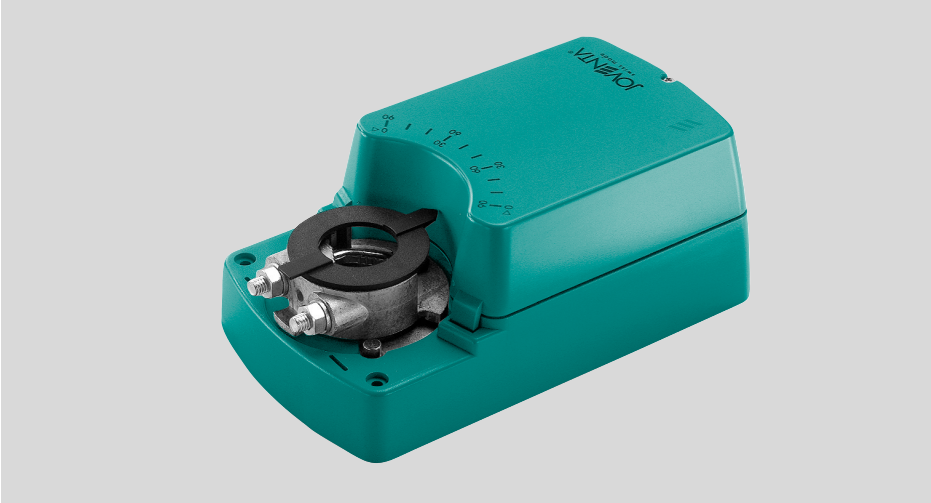
JOVENTA®
The Actuator Maker



S T A N D A R D

MODULATING Actuators 2.27

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.

Key features

- 0...20 V Phasecut or 0...135 Ω Potentiometer control
- Up to 5 actuators in parallel operation possible
- Plug-in terminal block connection
- Simple direct-mount with universal adapter on Ø 10 mm to 20 mm shaft or square shaft from 10 mm to 16 mm.
  48 mm minimum damper shaft length
- Selectable direction of rotation
- Limitation of rotation angle
- Manual release button
- 2 adjustable auxiliary switches
  See back page for settings
- Automatic shut-off at end position (overload switch)
- Energy saving at end positions
- Actuators available with 1 m halogen-free cable
- Customized versions available
- Devices meet CE requirements

Accessories

- ZK damper linkage selection
- ZKG ball joints

(see product sheet 6.10)

Nomenclature/Specification/Technical data

DM..1.3	AC/DC24V	
DM..1.3S	AC/DC24V	with 2 auxiliary switches
. . . . . K		with 1 m halogen-free cable

Actuator		**DMS1.3(S)**	**DM1.3(S)**	**DML1.3(S)**
Torque		8 Nm	16 Nm	24 Nm
Damper area*		1.5 m²	3.0 m²	4.5 m²
Running time		30...45 s	80...110 s	125...160 s
Supply voltage		AC/DC24V		
Frequency		50-60 Hz		
Power consumption				
- Running		4.0 W		
- At end position		0.8 W		
Dimensioning		7.5VA / 3.5A @ 2 ms		
Weight		1.1 kg		
Control signal	Y1	0...20 V Phs		
Control signal	Y2	135 Ω		
Position signal	U	DC0...10V		
Angle of rotation / working range		90° (93° mech.)		
Angle of rotation / limitation		5°...85° in 5° < steps		
Service lifetime		60,000 rotations		
Auxiliary switches		3(1.5)A, AC24V		
Setting range / adjustable		5°...85° < infinity		
Noise level		45 dB (A)		
Protection class		II		
Degree of protection		IP 54 (cable downwards)		
Cable aperture connection		M16 x 1.5		
Mode of action		Type 1		
Ambient conditions				
- Operating temperature		–20...+50°C / IEC 721-3-3		
- Storage temperature		–30...+60°C / IEC 721-3-2		
- Humidity		5...95% r.F.		
Service		Maintenance-free		
Standards		Mechanics	EN 60 529 / EN 60 730-2-14	
		Electronics	EN 60 730-2-14	
		EMC Emissions	EN 50 081-1:92 / IEC 61 000-6-3:96	
		EMC Immunity	EN 50 082-2:95 / IEC 61 000-6-2:99	

Subject to design modifications without notice.

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

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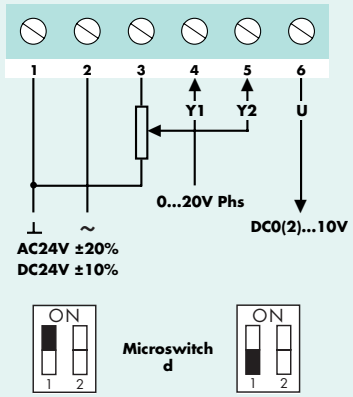
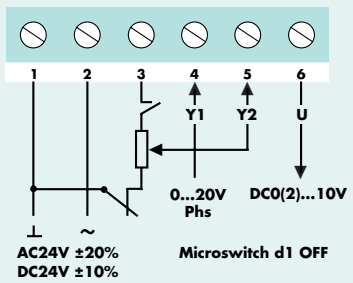
Wiring diagram

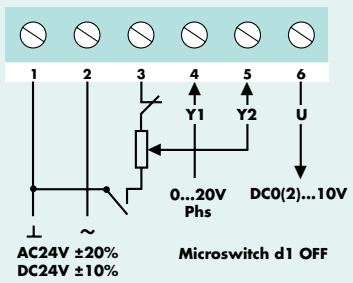


Y1 = 0...20V Phs, U = DC2...10V, Ri = 8k Ω
Y2 = 135 Ω, U = DC0...10V, Ri = 500 Ω

Override control

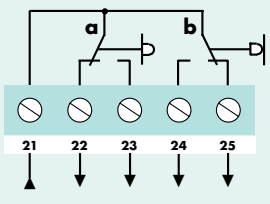


Actuator runs at 0 Ω



Actuator runs at 135 Ω

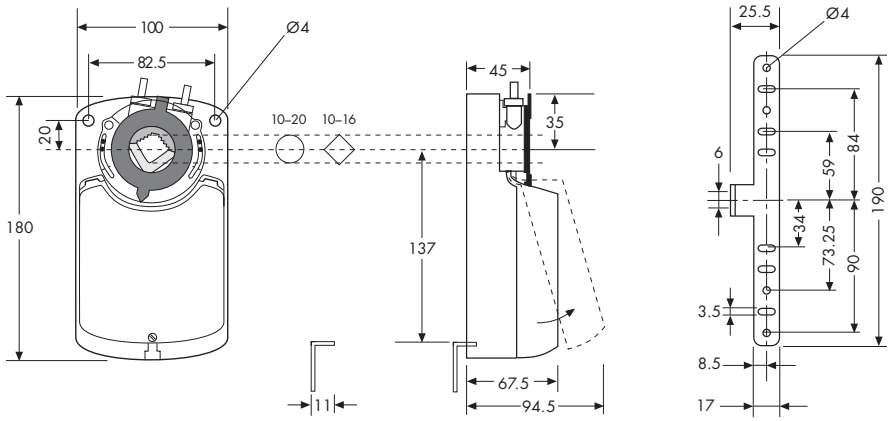
Auxiliary switches (S)



3(1.5)A, AC24V
Actuator at 0° position

For details of installation and commissioning see Manual 2.27

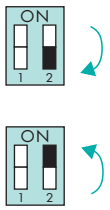
Dimensions in mm



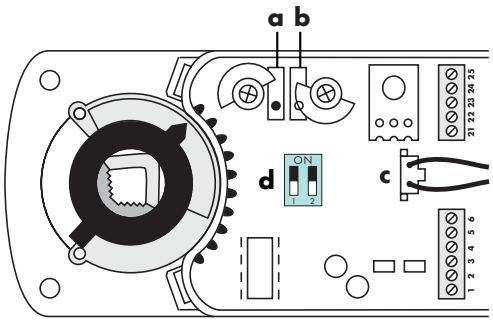
Changing direction of rotation

In order to reverse the direction of rotation, move microswitch **d2** to the ON position. The action of the output signal will also be changed in the process.

Microswitch **d**



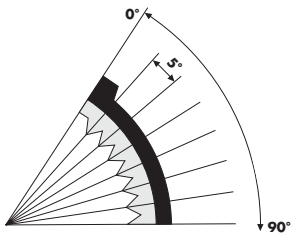
Plug (c) must never be reversed. The motor will not function correctly if (c) is reversed.



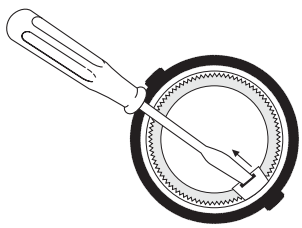
Rotation angle

The limitation or rotation angle can be set in 5° steps by moving the adapter.
The adapter can be removed simply by pressing the adapter clip on the underside of the actuator.

Limitation of rotation angle



Adapter release

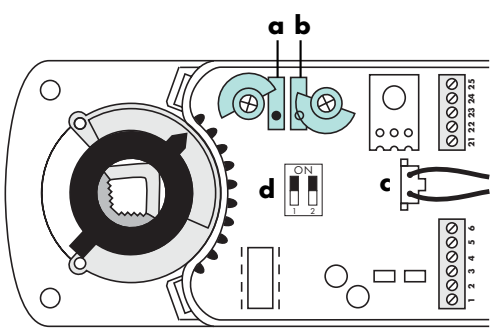


Setting the auxiliary switches

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.



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