

STANDARD

MODULATING Actuators

2.25

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.

Device properties

- DC0(2)...10V or 0(4)...20 mA 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

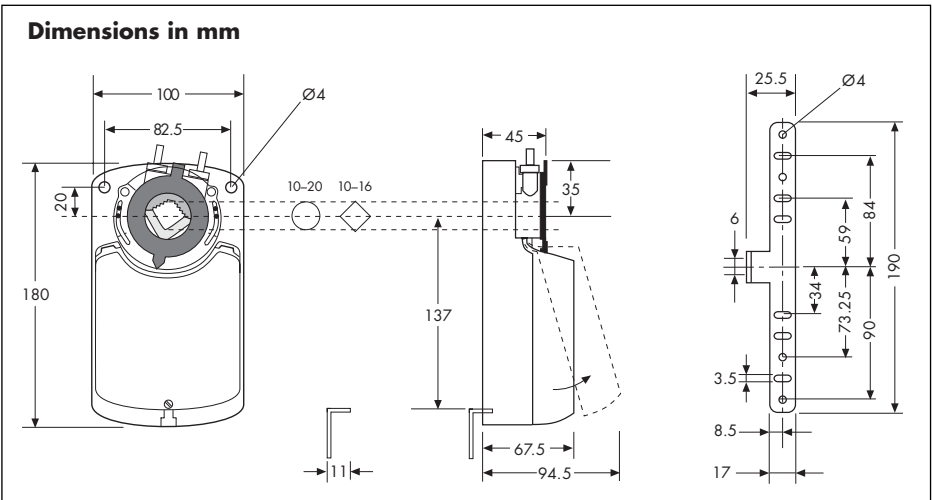
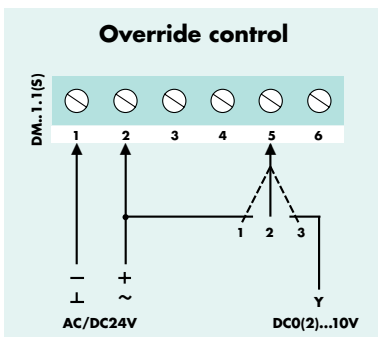
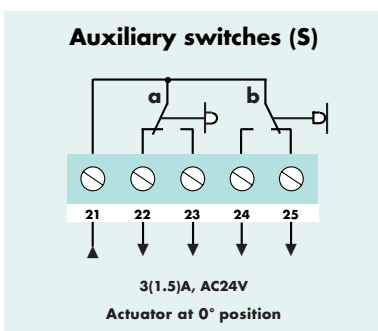
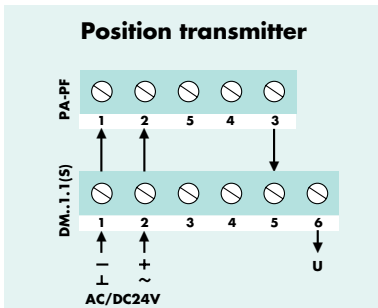
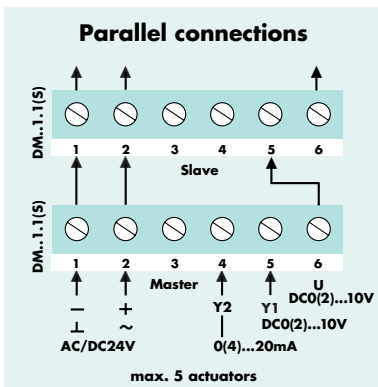
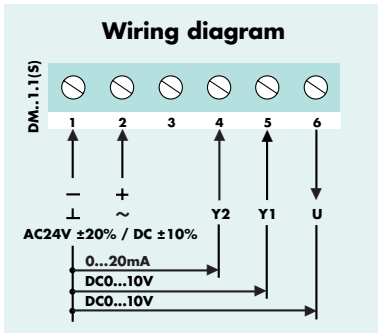
DM...1.1	AC/DC24V	
DM...1.1S	AC/DC24V	with 2 auxiliary switches
.....K		with 1 m halogen-free cable

Actuator		DMS1.1(S)	DM1.1(S)	DML1.1(S)
Torque		8 Nm	16 Nm	24
Damper area*		1.5 m ²	3.0 m ²	4.5
Running time		30...45 s	80...110 s	125...160
Supply voltage		AC/DC24V		
Frequency		50-60 Hz		
Power consumption				
- Running		4.0 W		
- At end position		0.6 W		
Dimensioning		7.5VA / 3A @ 2 ms		
Weight		1.1 kg		
Control signal	Y1	DC0(2)...10V		
Control signal	Y2	0(4)...20 mA		
Position signal	U	DC0(2)...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	

STANDARD

MODULATING Actuators

2.25



Setting the control signal

Control signal Y1	DC0(2)...10V	Micro-switch d
Input resistance	Ri 100 kΩ	DC0...10V 0...20mA
Control signal Y2	0(4)...20mA	Micro-switch c
Input resistance	Ri 500 Ω	DC0...10V 0...20mA
Position signal U	DC0(2)...10V	
Load resistance	> 50 kΩ	

Switching the microswitch **d1** to the ON position will change the control signal to DC2...10V and 4...20mA.

Position transmitter

The DM..1.1(S) can also be controlled using the JOVENTA Positioner (PA/PF) with control signal of DC0(2)...10V. For further information concerning the PA and PF positioner please refer to data sheet 6.20.

Caution: A maximum of 5 actuators can be controlled in parallel operation.

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.

Override control

The actuator DM..1.1(S) can be forced to override control when wired in accordance with the relevant diagram on the left.

Switch position:

- 1 = Actuator runs at 10 V
- 2 = Actuator runs at 0(2) V
- 3 = Automatic control

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