



**STANDARD**

**MODULATING Actuators**

**2.29**

**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(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..2.5	AC230V	
DM..2.5S	AC230V	with 2 auxiliary switches
.....K		with 1 m halogen-free cable

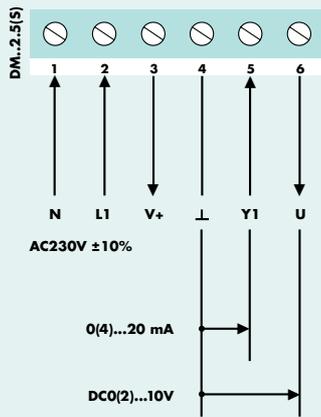
Actuator	Type	DMS2.5(S)	DM2.5(S)	DML2.5(S)
Torque		8 Nm	16 Nm	24 Nm
Damper area*		1.5 m <sup>2</sup>	3.0 m <sup>2</sup>	4.5 m <sup>2</sup>
Running time		30...45 s	80...110 s	125...160 s
Supply voltage		AC230V		
Frequency		50-60 Hz		
Power consumption				
- Running		5.5 W		
- At end position		0.6 W		
Dimensioning		6.0VA / 0.1A @ 2 ms		
Weight		1.2 kg		
Control signal	Y1	0(4)...20mA		
Control signal	Y2	None		
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

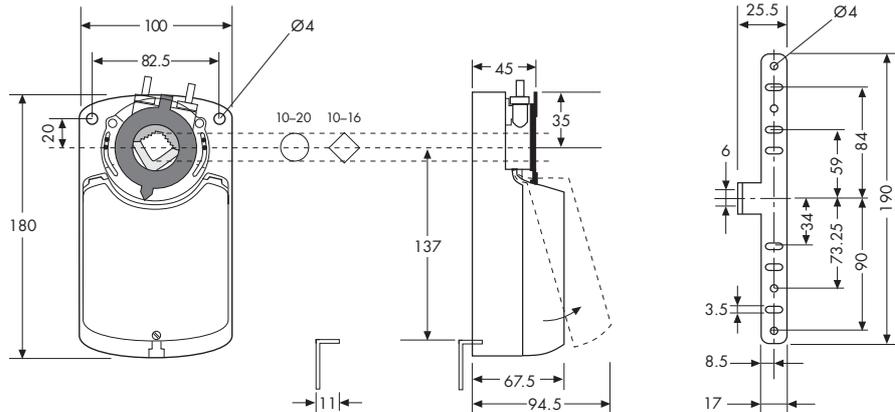
## MODULATING Actuators

## 2.29

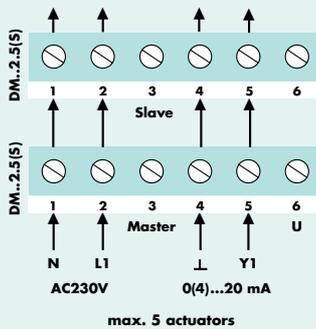
### Wiring diagram



### Dimensions in mm



### Parallel connections



### Setting the control signal

Control signal Y1 0(4)...20 mA  
 Input resistance Ri 100 kΩ  
 Position signal U DC0(2)...10V  
 Load resistance > 50 kΩ

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

Micro-switch **d**  
 0...20 mA

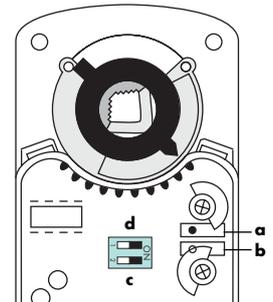


4...20 mA

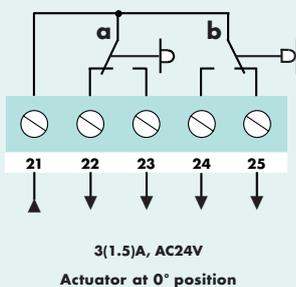


### Changing the direction of rotation

Micro-switch **c**



### Auxiliary switches (S)

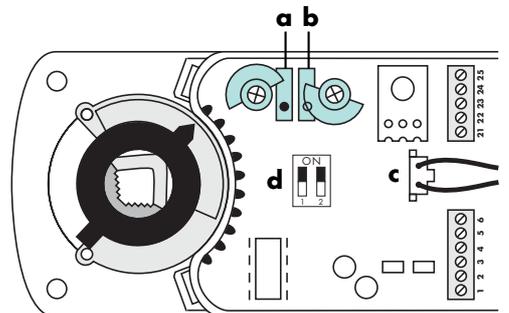


### Setting the auxiliary switches

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.

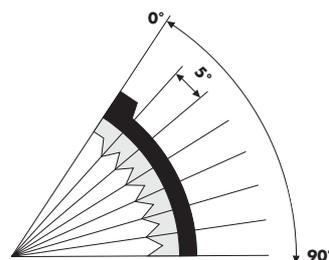


### Angle of rotation

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

