



# ANDAR

# **MODULATING Actuators**

# **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**

- DC0(2)...10V 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

DM2.2	AC230V
DM2.2S	AC230V with 2 auxiliary switches
K	with 1 m halogen-free cable

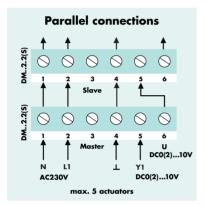
Actuator		DMS2.2(S)	DM2.2(S)	DML2.2(S)		
Torque		8 Nm	16 Nm	24 Nm		
Damper area*		1.5 m <sup>2</sup>	3.0 m <sup>2</sup>	4.5 m <sup>2</sup>		
Running time		3045 s	80110 s	125160 s		
Supply voltage		AC230V	'	'		
Frequency		50-60 Hz	50-60 Hz			
Power consumption						
- Running		5.5 W				
- At end position		0.6 W				
Dimensioning	Dimensioning		6.0VA / 0.1A @ 2 ms			
Weight		1.2 kg				
Control signal	Y1	DC0(2)10V				
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° <	5°85° in 5° < steps			
Service lifetime		60,000 rotations	60,000 rotations			
Auxiliary switches		3(1.5)A, AC24V	3(1.5)A, AC24V			
Setting range / adjustable		5°85° < infinity				
Noise level		45 d B (A)				
Protection class		II				
Degree of protection		IP 54 (cable dov	IP 54 (cable downwards)			
Cable aperture connection	n	M16 x 1.5	M16 x 1.5			
Mode of action		Type 1				
Ambient conditions						
- Operating temperature		−20+50°C / I	–20+50°C / IEC 721-3-3			
- Storage temperature		−30+60°C / I	−30+60°C / IEC 721-3-2			
- Humidity		595% r.F.	595% r.F.			
Service		Maintenance-fre	Maintenance-free			
Standards		Mechanics	EN 60 529 / EI	EN 60 529 / EN 60 730-2-14		
		Electronics	EN 60 730-2-14	1		
		EMC Emissions	EN 50 081-1:92	2 / IEC 61 000-6-3:96		
		EMC Immunity	EN 50 082-2:9	5 / IEC 61 000-6-2:99		

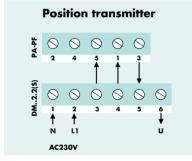
<sup>\*</sup> Caution: Please note damper manufacturer's information concerning the open/close torque.

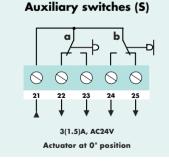


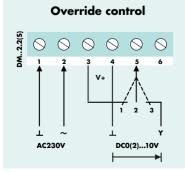
# STANDARD

# Wiring diagram ST N L1 V+ L Y1 U AC230V ±10% DC0(2)...10V





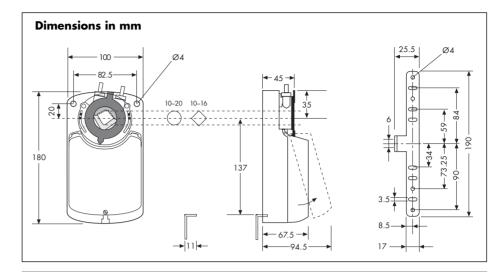




For details of installation and commissioning see Manual 2.26

# **MODULATING Actuators**

2.26



Micro-

switch d

# Setting the control signal

Control signal Y1 Input resistance

Position signal U

Load resistance

DC0(2)...10V Ri 100 kΩ

DC0(2)...10V > 50 kΩ

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

# Changing the direction of rotation

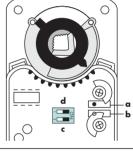
Microswitch **c** 

DC0...10V

DC2...10V







# **Position transmitter**

The DM..2.2(S) can also be controlled using the JOVENTA Positioner (PA/PF) with control signal of DCO(2)...10V. For further information concerning the PA and PF positioner please refer to data sheet 6.20.

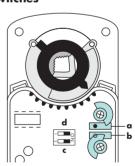
Caution: A maximum of 5 actuators can be controlled in parallel operation.

# 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..2.2(S) can be forced to override control when wired in accordance with the relevant diagram on the left.

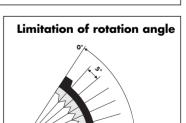
Switch position:

- 1 = Actuator runs at 10V
- 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.



### Adapter release

