



## SILENCE

## 2- and 3-POINT Actuators

## 2.11

### Application

The JOVENTA **SILENCE** electric damper-actuator series have been developed to operate small and medium 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

- 2- or 3-point control
- Load-independent running time
- Up to 5 actuators in parallel operation possible
- Plug-in terminal block connection
- Simple direct mounting with universal adapter for fitting to Ø 6-mm to 16-mm shaft or with Z01DN adapter kit for 8, 10, 11 and 12 mm square shaft. 45-mm min 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

### Nomenclature/Specification/Technical data

|         |          |                             |
|---------|----------|-----------------------------|
| DAN1.N  | AC/DC24V |                             |
| DAN1.SN | AC/DC24V | with 2 auxiliary switches   |
| DAN2.N  | AC230V   |                             |
| DAN2.SN | AC230V   | with 2 auxiliary switches   |
| ..... K |          | with 1 m halogen-free cable |

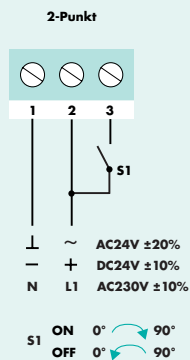
| Actuator                          | DAN1.(S)N                 | DAN2.(S)N                          |
|-----------------------------------|---------------------------|------------------------------------|
| Torque                            | 4 Nm                      | 4 Nm                               |
| Damper area*                      | 0.8 m <sup>2</sup>        | 0.8 m <sup>2</sup>                 |
| Running time                      | 35 s                      | 35 s                               |
| Supply voltage                    | AC/DC24V                  | AC230V                             |
| Frequency                         | 50-60 Hz                  | 50-60 Hz                           |
| Power consumption                 |                           |                                    |
| - operating                       | 2.5 W                     | 4.0 W                              |
| - At end position                 | 0.75 W                    | 3.0 W                              |
| Dimensioning                      | 4.1VA/2A@2ms              | 5.0VA/0.1A@2ms                     |
| Weight                            | 0.9 kg                    | 0.9 kg                             |
| Control signal                    | 2-point and 3-point       |                                    |
| Position signal                   | None                      |                                    |
| Angle of rotation / working range | 90° (93° mech.)           |                                    |
| Angle of rotation / limitation    | 0°...30° and 90°...60°    |                                    |
| Service lifetime                  | 60,000 rotations          |                                    |
| Auxiliary switches                | 3(1.5)A, AC230V           |                                    |
| Setting range / adjustable        | 5°...85° < infinity       |                                    |
| Noise level                       | 40 dB (A)                 |                                    |
| Protection class                  | II                        |                                    |
| Degree of protection              | IP 50                     |                                    |
| 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 |

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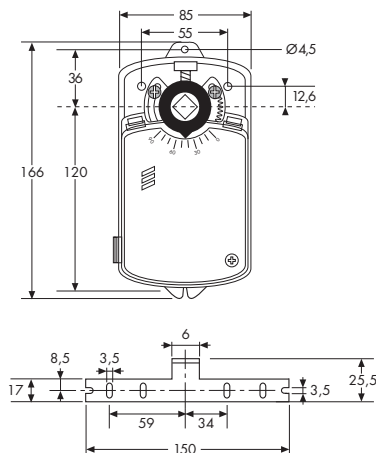
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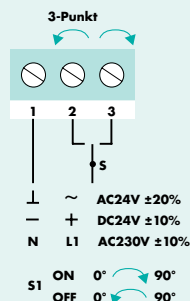
### Wiring diagram DAN..N



### Dimensions in mm



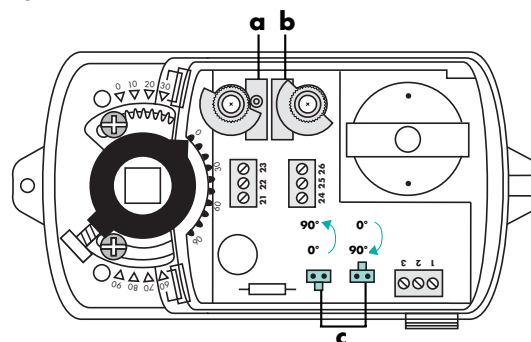
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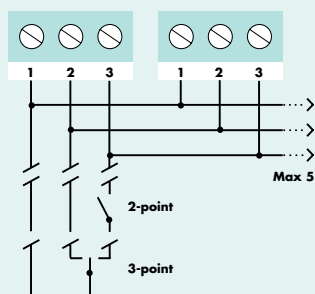
### Changing the direction of rotation

The direction of rotation can be changed by reversing plug **c**

**Factory setting:**  
**Clockwise rotation.**



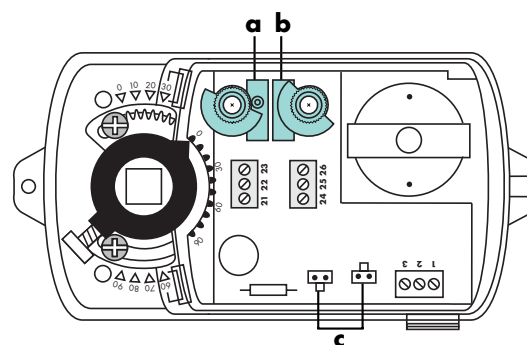
### Parallel connections



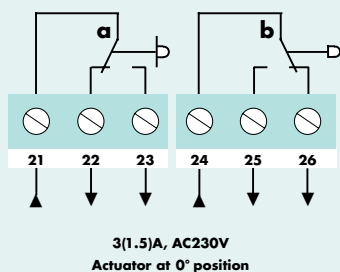
### Setting the auxiliary switches

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.



### Auxiliary switches (S)



### Limitation of rotation angle

The angle of rotation/working range of 90° can be reduced by up to 30° from each end position by means of screw 1 and 2.

