

Technical data sheet

**225S-024T-05**  
**Rotary actuator**

Description

Rotary actuator for adjusting dampers in HVAC installations

- Running time 20...35 s / 90°
- Torque 5 Nm
- Nominal voltage 24 VAC/DC
- Control 2-/3-point
- Damper size up to approx. 1 m<sup>2</sup>
- Shaft coupling clamp  
∅ 8-12 mm / Ø 8-16 mm



Technical data

|                        |  |  |
|------------------------|--|--|
| <b>Electrical data</b> | Nominal voltage                          | 24 VAC/DC, 50/60 Hz                              |
|                        | Nominal voltage range                    | 19...29 VAC/DC                                   |
|                        | Power consumption motor (motion)         | 2,0 W  |
|                        | Power consumption standby (end position) | 1,0 W  |
|                        | Wire sizing                              | 3,5 VA   |
|                        | Control                                  | 2-/3-point                                       |
|                        | Feedback signal                          | -  |
|                        | Auxiliary switch                         | -  |
|                        | Contact load                             | -  |
|                        | Switching point                          | -  |
|                        | Connection motor                         | screw terminals, 3-pin 0,5...1,5 mm <sup>2</sup> |
|                        | Connection feedback potentiometer        | -  |
|                        | Connection auxiliary switch              | -  |
|                        | Connection GUAC                          | -  |
| <b>Functional data</b> | Torque                                   | 5 Nm   |

## Technical data

|                            |  |   |
|----------------------------|--|---|
| <b>Functional data</b>     | Damper size                            | up to approx. 1 m <sup>2</sup>                                    |
|                            | Synchronized speed                     | -   |
|                            | Direction of rotation                  | selected by switch  |
|                            | Manual override                        | gearing latch disengaged with pushbutton, self-resetting          |
|                            | Angle of rotation                      | 0°...max. 95° can be limited with adjustable mechanical end stops |
|                            | Running time                           | 20...35 s / 90° (load-dependent)                                  |
|                            | Sound power level                      | < 45 dB(A)  |
|                            | Shaft coupling                         | clamp $\varnothing$ 8-12 mm / $\varnothing$ 8-16 mm               |
|                            | Position indication                    | mechanical with pointer   |
|                            | Service life                           | > 60 000 cycles (0°...95°...0°)                                   |
| <b>Safety</b>              | Protection class                       | III (safety extra-low voltage)                                    |
|                            | Degree of protection                   | IP 52 (cable port downwards)                                      |
|                            | Cable mounting type                    |   |
|                            | EMC                                    | CE (2014/30/EU)   |
|                            | LVD                                    | CE (2006/95/EG)   |
|                            | RoHS                                   | CE (2011/65/EU - 2015/863/EU - 2017/2102/EU)                      |
|                            | Mode of operation                      | Typ 1 (EN 60730-1)  |
|                            | Rated impulse voltage supply / control | 0,8 kV (EN 60730-1)   |
|                            | Control pollution degree               | 3 (EN 60730-1)  |
|                            | Ambient temperature normal operation   | -30°C...+50°C   |
|                            | Storage temperature                    | -30°C...+80°C   |
|                            | Ambient humidity                       | 5...95% r.H., non condensing (EN 60730-1)                         |
|                            | Maintenance                            | maintenance free  |
| <b>Dimensions / Weight</b> | Dimensions                             | 145 x 70 x 61 mm  |
|                            | Weight                                 | 450 g   |

## Functionality / Properties

### Operating mode

2 point:

Connect power supply to terminal 1+2, actuator drives to position 1. Is also terminal 3 connected to the power supply, actuator drives to position 0.

3 point:

Connect power supply to terminal 1+2, actuator drives to position 1. Is terminal 1+3 connected to the power supply, actuator drives to position 0.

The actuator is overload-proof, requires no limit switches and automatically stops, when the end stop is reached.

### Direct mounting

Simple direct mounting on the damper shaft with a clamp, protection against rotating with enclosed anti-rotation lock or rather at intended attachment points.

### Manual override

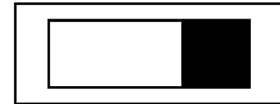
Manual override with self-resetting pushbutton possible (the gear is disengaged as long as the button is pressed).

### Mode switch

DIP switch under the case cover

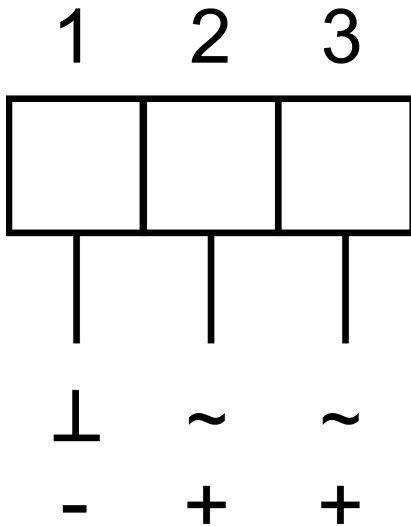
R / CW: rotary direction right / clockwise

L / CWW: rotary direction left / counter clockwise



L / CCW

R / CW

**Connector / Security Note**

**Safety remarks**

- Connect via safety isolation transformer!
- The device is not allowed to be used outside the specified field of application, especially in airplanes.
- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
- The device may only be opened at the manufacturer's site.
- Cables must not be removed from the device.
- The cable of this actuator cannot be replaced. If the cable is damaged, the actuator should be scrapped.
- The device is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.
- When calculating the required torque, the specifications supplied by the damper manufacturer's (cross-section, design, installation site), and the air flow conditions must be observed.

Technical Drawing

