

## Technical data sheet

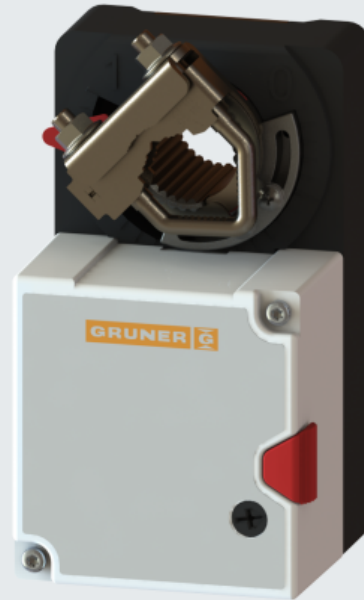
# 227-024-10

## Rotary drive without spring return

### Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in HVAC installations.

- Torque Motor            10 Nm
- Nominal Voltage       24 VAC/DC
- Control                 2/3 Point
- Damper size            up to approx. 2 m<sup>2</sup>
- Damper coupling       Clamp  
                                 $\varnothing$  8-15 mm /  $\varnothing$  8-20 mm



### Technical data

|                        |  |  |
|------------------------|--|--|
| <b>Electrical data</b> | Nominal voltage                          | 24 VAC/DC  |
|                        | 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  |
|                        | Position feedback                        | -  |
|                        | Auxiliary switch                         | -  |
|                        | Contact load                             | -  |
|                        | Switching point                          | -  |
|                        | Connection Motor                         | Cable 1000 mm,<br>3 x 0,75 mm <sup>2</sup> (halogen free)                        |
|                        | Connection Auxiliary switch              | -  |
|                        | Connection Position feedback             | -  |
|                        | Connection GUAC                          | -  |
| <b>Functional data</b> | Torque Motor                             | > 10 Nm  |
|                        | Synchronised speed                       | ±5%  |
|                        | Direction of rotation                    | selected by switch   |
|                        | Manual override                          | Gearing latch disengaged with<br>pushbutton, self-resetting                      |
|                        | Angle of rotation                        | 0°... max. 95°<br>can be limited with adjustable mechanical<br>end stop min 20°. |
|                        | Running time Motor                       | 150 s / 90°  |
|                        | Sound power level Motor                  | < 35 dB(A)   |
|                        | Damper coupling                          | Clamp<br>$\varnothing$ 8-15 mm / $\varnothing$ 8-20 mm                           |
|                        | Position indication                      | mechanical with pointer  |

## Technical data

|                           |                                      |  |
|---------------------------|--------------------------------------|--|
| <b>Functional data</b>    | Service life                         | > 60'000 cycles (0° - 95° - 0°)              |
| <b>Safety</b>             | Protection class                     | III (safety extra-low voltage)               |
|                           | Degree of protection                 | IP54 (Cable downwards)                       |
|                           | EMC                                  | CE (2004/108/EG)                             |
|                           | LVD                                  | CE (2006/95/EG)                              |
|                           | RoHS                                 | CE (2011/65/EU)                              |
|                           | Mode of operation                    | Typ 1 (EN 60730-1)                           |
|                           | Rated impulse voltage                | 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                                |
| <b>Dimensions/ Weight</b> | Ambient humidity                     | 5...95% r.F.,<br>non condensing (EN 60730-1) |
|                           | Maintenance                          | maintenance free                             |
|                           | Dimensions                           | 115 x 65 x 61 mm                             |
|                           | Weight                               | ca. 530 g                                    |

## Operating mode / Properties

### Operating mode

#### 2 point:

Applying the power supply to BU+BN (1+2), rotation direction switch on position "R" the actuator moves to position 1. If BK (1+2+3) is also connected to the power supply the actuator moves to position 0.

#### 3 point:

Applying the power supply to BU+BN (1+2), rotation direction switch on position "R" the actuator moves to position 1. When the power supply is interrupted the actuator remains in its current position. If BU+BK (1+3) are connected to the power supply the actuator moves to position 0.

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

### Direct mounting

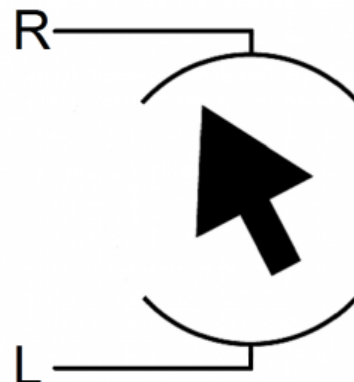
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

### Manual override

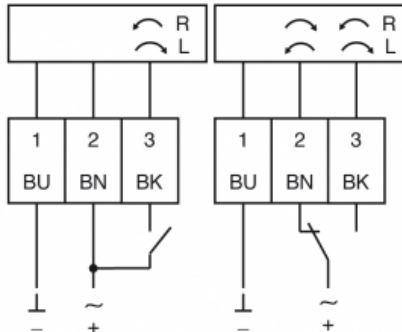
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

### Rotary direction switch

R= clockwise  
L= counter clockwise



## Connection / Safety remarks


**Safety remarks**

- Connect via safety isolation transformer
- The actuator 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.
- When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
- The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

## Technical drawing

