

Technical data sheet

### 340-230-05-S2/ST01/8Fx Spring return actuator for fire and smoke protection

Description

Spring return actuator for adjusting fire and smoke protection dampers in HVAC installations

- Running time motor 75 s / 90°
- Running time spring 20 s / 90°
- Torque motor 7 Nm
- Torque spring 5 Nm
- Nominal voltage 230 VAC/DC
- Control 2-point
- Auxiliary switch 2x fixed, not adjustable
- Connector COMES, BKN, BKE, RBFU
- Shaft coupling form fit 8 mm (8F 8)  
form fit 10 mm (8F10)  
form fit 12 mm (8F12)



Technical data

|                        |                                          |                                                                                   |
|------------------------|------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Electrical data</b> | Nominal voltage                          | 230 VAC/DC, 50/60 Hz                                                              |
|                        | Voltage range                            | 85...265 VAC/DC                                                                   |
|                        | Power consumption motor (motion)         | 5,5 W                                                                             |
|                        | Power consumption standby (end position) | 1,5 W                                                                             |
|                        | Wire sizing                              | 9,5 VA                                                                            |
|                        | Wire sizing note                         |                                                                                   |
|                        | Control                                  | 2-point                                                                           |
|                        | Feedback signal                          | -                                                                                 |
|                        | Auxiliary switch                         | 2 x SPDT (AgAu)                                                                   |
|                        | Contact load                             | 1 mA...5 (2,5) A, 5 VDC...250 VAC                                                 |
|                        | Switching point                          | 5° / 80°                                                                          |
|                        | Connection motor                         | cable 1000 mm, 2 x 0,75 mm <sup>2</sup> (halogen free) connector Tyco no 172166-1 |
|                        | Connection auxiliary switch              | cable 1000 mm, 6 x 0,75 mm <sup>2</sup> (halogen free) connector Tyco no 172168-1 |
|                        | Connection GUAC                          | -                                                                                 |

## Technical data

|                            |                                        |                                                                  |
|----------------------------|----------------------------------------|------------------------------------------------------------------|
| <b>Functional data</b>     | Torque motor                           | 7 Nm                                                             |
|                            | Torque spring                          | 5 Nm                                                             |
|                            | Synchronized speed                     | ±5%                                                              |
|                            | Direction of rotation                  | selected by mounting                                             |
|                            | Manual override                        | manual operation                                                 |
|                            | Angle of rotation                      | -5°...max. +90°                                                  |
|                            | Running time motor                     | 75 s / 90°                                                       |
|                            | Running time spring                    | 20 s / 90°                                                       |
|                            | Sound power level motor                | < 45 dB(A)                                                       |
|                            | Sound power level spring               | < 65 dB(A)                                                       |
|                            | Shaft coupling                         | form fit 8 mm (8F 8) form fit 10 mm (8F10) form fit 12 mm (8F12) |
|                            | Position indication                    | mechanical with pointer                                          |
|                            | Service life                           | > 60 000 cycles (-5°...+90°...-5°)                               |
|                            | Thermal tripping device                | -                                                                |
|                            | Temperature TF1                        | -                                                                |
|                            | Temperature TF2                        | -                                                                |
| <b>Safety</b>              | Protection class                       | II (double insulation)                                           |
|                            | Degree of protection                   | IP 54                                                            |
|                            | EMC                                    | CE (2014/30/EU)                                                  |
|                            | LVD                                    | CE (2014/35/EU)                                                  |
|                            | RoHS                                   | CE (2011/65/EU - 2015/863/EU - 2017/2102/EU)                     |
|                            | Mode of operation                      | Typ 1 (EN 60730-1)                                               |
|                            | Rated impulse voltage supply / control | 4 kV (EN 60730-1)                                                |
|                            | Control pollution degree               | 3 (EN 60730-1)                                                   |
|                            | Ambient temperature normal operation   | -30°C...+50°C                                                    |
|                            | Ambient temperature safety operation   | -                                                                |
|                            | Storage temperature                    | -30°C...+50°C                                                    |
|                            | Ambient humidity                       | 5...95% r.H., non condensing (EN 60730-1)                        |
| Maintenance                | maintenance free                       |                                                                  |
| <b>Dimensions / Weight</b> | Dimensions                             | 145 x 75 x 70 mm                                                 |
|                            | Weight                                 | 1500 g                                                           |

## Functionality / Properties

### Operating mode

Connect power supply to wire 1+2, actuator drives to position 1 while the pre-tensioned spring is wound up the same time. If the power supply is interrupted, actuator drives back to position 0 by spring power. The actuator is still maintaining the minimum torque at the damper spindle.

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 form fit, protection against rotating with enclosed anti-rotation lock or rather at intended attachment points.

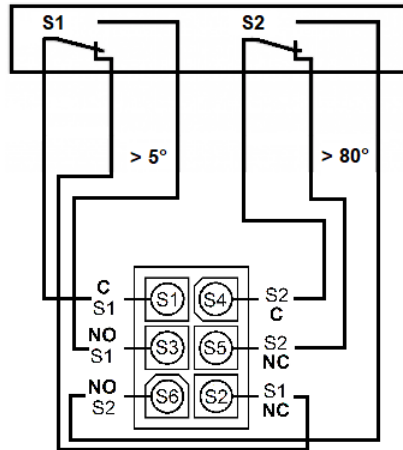
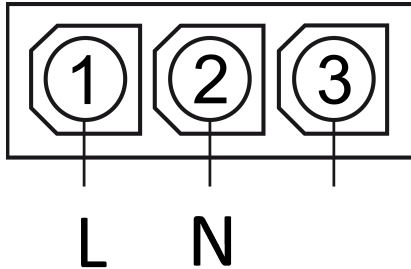
### Manual override

The actuator can only be operated manually while the power supply is off. The supplied lever is used to open and lock the damper position. The lock stays until the power supply is switched on again.

### Signaling

The two integrated auxiliary switches are activated at the fixed switching positions ( $> 5^\circ$  and  $> 80^\circ$ ). The damper position can be checked by the mechanical pointer.

## Connector / Security Note



### Safety remarks

- Caution: power supply voltage!
- 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.
- 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.
- The device is adapted and mounted to the fire and smoke damper by the damper manufacturer. For this reason, the device is only supplied direct to safety damper manufacturer. the manufacturer then bears full responsibility for the proper functioning of the damper.

Technical Drawing

