

## Technical data sheet

## 361-230-10-S2

### Spring return actuator

## Description

Spring return actuator for adjusting dampers in HVAC installations

- Running time motor 75 s / 90°
- Running time spring 20 s / 90°
- Torque motor 10 Nm
- Torque spring 10 Nm
- Nominal voltage 230 VAC/DC
- Control 2-point
- Auxiliary switch 2x freely adjustable
- Damper size up to approx. 2 m<sup>2</sup>
- Shaft coupling clamp
- Ø 9-18 mm / Ø 9-26 mm



## Technical data

Electrical data	Nominal voltage	230 VAC/DC, 50/60 Hz
Nominal voltage range	85...265 VAC/DC	
Power consumption motor (motion)	5,5 W	
Power consumption standby (end position)	1,5 W	
Wire sizing	11,5 VA	
Control	2-point	
Feedback signal	-	
Auxiliary switch	2 x SPDT (Ag)	
Contact load	5 (2,5) A, 250 VAC	
Switching point	0°...95°	
Connection motor	cable 1000 mm, 2 x 0,75 mm <sup>2</sup> (halogen free)	
Connection feedback potentiometer	-	
Connection auxiliary switch	cable 1000 mm, 6 x 0,75 mm <sup>2</sup> (halogen free)	
Connection GUAC	-	

Functional data	Torque motor	10 Nm

## Technical data

Functional data		
Torque spring	10 Nm	
Damper size	up to approx. 2 m <sup>2</sup>	
Synchronized speed	±5%	
Direction of rotation	selected by mounting	
Manual override	manual operation	
Angle of rotation	0°...max. 95° can be limited with adjustable mechanical end stops	
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	clamp ⌀ 9-18 mm / Ø 9-26 mm	
Position indication	mechanical with pointer	
Service life	> 60 000 cycles (0°...95°...0°)	
Safety		
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	
Storage temperature	-30°C...+80°C	
Ambient humidity	5...95% r.H., non condensing (EN 60730-1)	
Maintenance	maintenance free	
Dimensions / Weight		
Dimensions	193 x 96 x 60 mm	
Weight	1700 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 clamp, protection against rotating with enclosed anti-rotation lock or rather at intended attachment points.

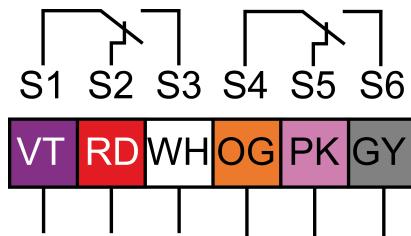
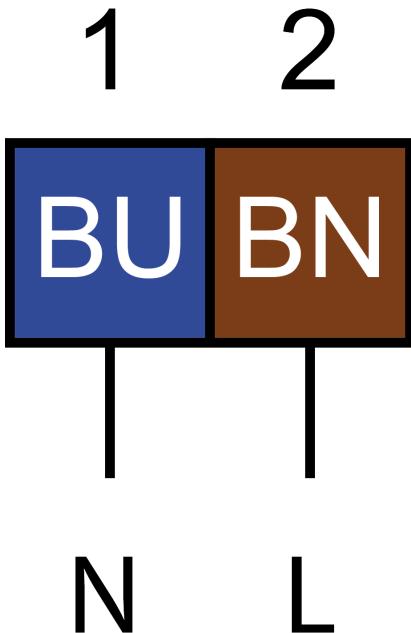
### Manual override

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 freely adjustable in the angle of 0 - 95°. There are activated corresponding to the adjusted angle. 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.

## Technical Drawing

