

## Technical data sheet

# 341-230D-03-S2

## Spring return

### Description

**Spring-return Actuator for adjusting and regulating dampers and valves in air conditioning and ventilation.**

- Torque Motor            **3 Nm**
- Torque Spring         **3 Nm**
- Nominal Voltage      **230 VAC/DC**
- Control                **2- Point**
- Auxiliary switch       **2x interdependent adjustable**
- Valve size             **up to approx 0,6 m²**
- Damper shaft          **Clamp**  
**∅ 13 mm/ Ø 16,5 mm**



### Technical data

<b>Electrical data</b>	Nominal voltage	230 VAC (50/60Hz), 230 VDC
	Nominal voltage range	85...265 VAC
	Power consumption motor (motion)	4,5 W
	Power consumption standby (end position)	1,5 W
	Wire sizing	9 VA
	Control	2 Point
	Position feedback	-
	Auxiliary switch	2 x SPDT (Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	0°...30° ~ 65°...95°
	Connection Motor	Cable 1000 mm, 2 x 0,75 mm² (halogen free)
<b>Functional data</b>	Connection Auxiliary switch	Cable 1000 mm, 6 x 0,75 mm² (halogen free)
	Connection GUAC	-
	Torque Motor	>3 Nm
	Torque Spring	>3 Nm
	Synchronised speed	-
	Direction of rotation	selected by mounting
	Manual override	Manual operation
	Angle of rotation	0°...max.+95° Can be limited with adjustable mechanical end stop min 40°
	Running time Motor	<40 s / 90°
	Running time Spring	<20 s / 90°
	Sound power level Motor	<45 dB(A)
	Sound power level Spring	<65 dB(A)
	Damper coupling	Clamp ∅ 13 mm/ Ø 16,5 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	II (double insulation)
	Degree of protection	IP54
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1.AA B (EN60730-1)
	Rated impulse voltage	4 kV (EN60730-1)
	Control pollution degree	3 (EN60730-1)
	Ambient temperature normal operation	-30°C...+50°C
	Storage temperature	-30°C...+80°C
<b>Dimensions/ Weight</b>	Ambient humidity	5...95% r.F., not condensing (EN 60730-1)
	Maintenance	maintenance-free
	Dimensions	145 x 75 x 70 mm
	Weight	ca. 1.200g

## Operating mode / Properties

## Operating mode

Through connecting the power supply to BU+BN (1+2), the actuator moves to position 1 while the pre-tensioned spring is wound up the same time. If the power supply is interrupted the actuator is moving back to position 0 by the spring power. The actuator is still maintaining the minimum torque at the damper spindle.

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

## Signaling

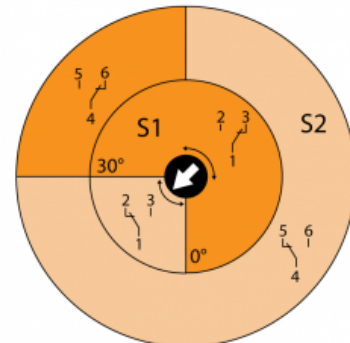
The two integrated auxiliary switches are interdependent adjustable (S1: 0°...30° ~ S2: 65°...95°). These are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

## Direct mounting

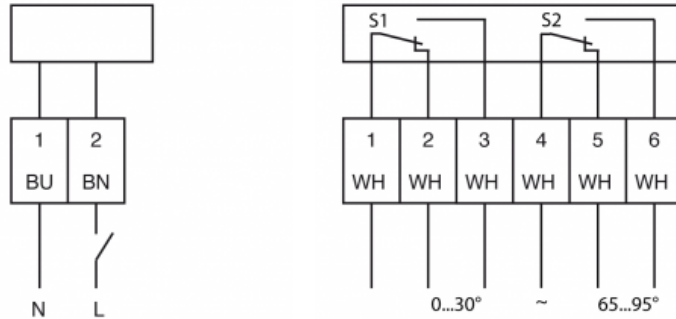
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

## Manual override

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



## Connection / Safety remarks

**Safety remarks**

- Attention mains voltage
- The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
- In 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

