

Rotary actuator in connection with a mounting kit for the motorisation of the most common mixing valves in HVAC systems

- Torque motor 10 Nm
- Nominal voltage AC 230 V
- Control 3-point
- with integrated auxiliary switch
- Running time motor 140 s



Picture may differ from product

## Technical data

<b>Electrical data</b>	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 198...264 V
	Power consumption in operation	3.5 W
	Power consumption for wire sizing	3.5 VA
	Auxiliary switch	1x SPDT, 0...100%
	Switching capacity auxiliary switch	6 A (2 A inductive), AC 250 V (II, reinforced insulation)
	Switching points auxiliary switch	Switching point adjustable 0...100%
	Connection supply / control	Cable 1 m, 3x 0.75 mm <sup>2</sup>
	Connection auxiliary switch	Cable 1 m, 3x 0.75 mm <sup>2</sup>
	Parallel operation	No
<b>Functional data</b>	Torque motor	10 Nm
	Direction of motion motor	clockwise rotation
	Manual override	temporary and permanent gear train disengagement with rotary knob on the housing
	Angle of rotation	90°
	Running time motor	140 s / 90°
	Sound power level, motor	37 dB(A)
	Duty cycle value	75% (= active time 140 s / operating time 187 s)
	Position indication	Reversible scale plate
<b>Safety data</b>	Protection class IEC/EN	II, reinforced insulation
	Protection class auxiliary switch IEC/EN	II, reinforced insulation
	Degree of protection IEC/EN	IP40
	EMC	CE according to 2014/30/EU
	Low voltage directive	CE according to 2014/35/EU
	Type of action	Type 1.B
	Rated impulse voltage supply / control	4 kV
	Rated impulse voltage auxiliary switch	4 kV
	Pollution degree	3
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	0...50°C [32...122°F]
	Storage temperature	-30...80°C [-22...176°F]

## Technical data

<b>Safety data</b>	Servicing	maintenance-free
<b>Weight</b>	Weight	0.53 kg
<b>Housing colours</b>	Housing cover	orange
	Housing base	orange

## Safety notes



- This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- The actuator is to be protected against moisture. It is not suitable for outdoor applications.
- To calculate the torque required, the specifications supplied by the mixing valve manufacturer must be observed.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.
- The installer must check for correct principle of operation after installation.
- The device does not contain any parts that can be replaced or repaired by the user.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.
- Caution: Mains voltage!

## Product features

<b>Operating mode</b>	The actuator is activated with a 3-point signal.
<b>Simple direct mounting</b>	Simple direct mounting with only one screw. The stud bolt included in delivery serves as an anti-rotation mechanism. The mounting orientation can be freely selected in steps of 90°.
<b>Manual override</b>	Manual override with lever possible. Temporary gear train disengagement by pushing the rotary knob. Permanent disengagement by pushing and simultaneous rotating the rotary knob clockwise 90°.
<b>High functional reliability</b>	The actuator switches off automatically when the end stops are reached.

## Accessories

Mechanical accessories	Description	Type
	Mounting kit for LK mixing valve	MS-NRA
	Mounting kit for Barberi mixing valves	MS-NRB
	Mounting kit for Honeywell/Centra DR..MA mixing valves	MS-NRC
	Mounting kit for Honeywell/Centra DRU.. mixing valves	MS-NRC1
	Mounting kit for mixing valves with 12 mm round shaft	MS-NRE
	Mounting kit for ESBE mixing valves VRG/VRB/VRH	MS-NRE6
	Mounting kit for Hora mixing valves	MS-NRH
	Mounting kit for Siemens/Landis&Stäfa mixing valves VCI/VBG/VBF	MS-NRL
	Mounting kit for Lazzari mixing valves	MS-NRLA
	Mounting kit for Lovato mixing valves	MS-NRLO
	Mounting kit for Satchwell MB mixing valves	MS-NRS
	Mounting kit for Satchwell MBF mixing valves	MS-NRSF

## Electrical installation

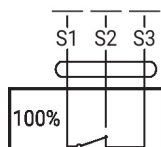
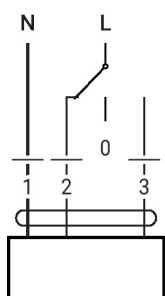


**Caution: Mains voltage!**

## Electrical installation

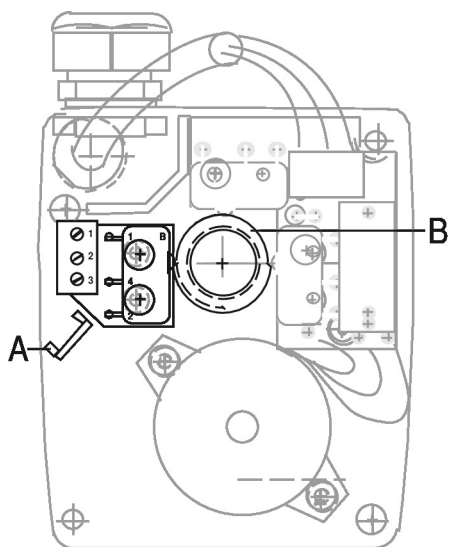
AC 230 V, 3-point

Auxiliary switch



1	2	3	
			stop

## Operating controls and indicators



## Auxiliary switch settings


**Note:** Perform settings on the actuator only in deenergised state.

For the auxiliary switch position settings, carry out points ① to ④ successively.

## ① Remove housing cover

Dismounting the housing cover: Loosen the central screw at the black lever and remove the two Phillips screws of the housing cover.

## ② Gear train disengagement

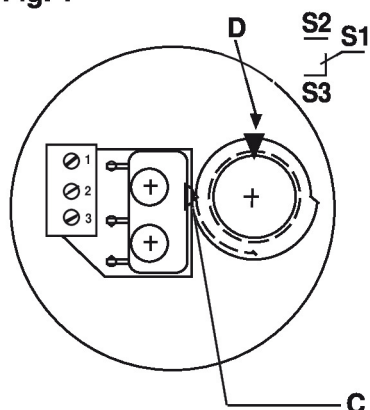
Press gear train disengagement (A) down and rotate the actuator using the manual adjustment handle in the desired control position of the auxiliary switch.

## ③ Cam ring

Insert cam ring (B) in accordance with Fig. 1 in such a way that the switching point (C) just actuates the switch. Connection S1 – S2 is switched (arrow marking (D) is then at the top).

## ④ Mount housing cover

Fig. 1



## Dimensions

