

**Technical data sheet** 



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



## **Technical data**

| Electrical data | Nominal voltage                          | AC 230 V   |
|-----------------|--|--|
|                 | Nominal voltage frequency                | 50/60 Hz   |
|                 | Nominal voltage range                    | AC 198264 V  |
|                 | Power consumption in operation           | 3.5 W  |
|                 | Power consumption for wire sizing        | 3.5 VA   |
|                 | Auxiliary switch                         | 1 x SPDT, 0100%  |
|                 | Switching capacity auxiliary switch      | 6 A (2 A inductive), AC 250 V (II, reinforced insulation)                              |
|                 | Switching points auxiliary switch        | Switching point adjustable 0100%   |
|                 | Connection supply / control              | Cable 1 m, 3 x 0.75 mm <sup>2</sup>  |
|                 | Connection auxiliary switch              | Cable 1 m, 3 x 0.75 mm <sup>2</sup>  |
|                 | Parallel operation                       | No   |
| Functional data | Torque motor                             | 10 Nm  |
|                 | Direction of motion motor                | clockwise rotation   |
|                 | Manual override                          | temporary and permanent gear train<br>disengagement with rotary knob on the<br>housing |
|                 | Angle of rotation                        | 90°  |
|                 | Running time motor                       | 140 s / 90°  |
|                 | Duty cycle value                         | 75% (= active time 140 s / operating time 187 s)                                       |
|                 | Sound power level, motor                 | 37 dB(A)   |
|                 | Position indication                      | Reversible scale plate   |
| Safety data     | 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                      | 050°C [32122°F]  |
|                 | Storage temperature                      | -3080°C [-22176°F]   |
|                 | Servicing                                | maintenance-free   |
| Weight          | Weight                                   | 0.58 kg  |
| Housing colours | Housing cover                            | orange   |
|                 | Housing base                             | orange   |



| <ul> <li>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 is in any other airborne means of transport.</li> <li>The actuator is to be protected against moisture. It is not suitable for outdoor applications.</li> <li>To calculate the torque required, the specifications supplied by the mixing valve manufacture must be observed.</li> <li>Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.</li> <li>The correct functioning of the strain relief for the cable in the actuator housing is to be checked.</li> <li>The installer must check for correct principle of operation after installation.</li> <li>The device does not contain any parts that can be replaced or repaired by the user.</li> <li>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.</li> <li>Caution: Power supply voltage!</li> </ul> |   |  |  |
|---|---|--|--|
| Product features  |   |  |  |
| Mode of operation   | The actuator is activated with a 3-point signal.  |  |  |
| Simple direct mounting  | Simple direct mounting with only one screw. The stud bolt included in delivery serves as an anti-<br>rotation device. The mounting position can be freely selected in steps of 90°.   |  |  |
| Manual override   | 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°.   |  |  |
| High functional reliability   | The actuator switches off automatically when the end stops are reached.   |  |  |
| Accessories   |   |  |  |
| Mechanical accessories  | Description   | Туре   |  |
|   | Mounting kit for LK mixing valve<br>Mounting kit for Barberi mixing valves<br>Mounting kit for Honeywell/Centra DRMA mixing valves<br>Mounting kit for Honeywell/Centra DRU mixing valves<br>Mounting kit for mixing valves with 12 mm round shaft<br>Mounting kit for ESBE mixing valves VRG/VRB/VRH<br>Mounting kit for Hora mixing valves<br>Mounting kit for Siemens/Landis&Stäfa mixing valves VCI/VBG/VBF<br>Mounting kit for Lazzari mixing valves<br>Mounting kit for Lovato mixing valves<br>Mounting kit for Satchwell MB mixing valves | MS-NRA<br>MS-NRB<br>MS-NRC<br>MS-NRE<br>MS-NRE6<br>MS-NRH<br>MS-NRL<br>MS-NRLA<br>MS-NRLA<br>MS-NRLO<br>MS-NRS |  |
|   | Mounting kit for Satchwell MBF mixing valves  | MS-NRSF  |  |

## **Electrical installation**

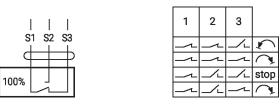


Caution: Power supply voltage!



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Auxiliary switch



## Operating controls and indicators

