Technical data sheet

NRYD24-SR-SI

RETRO FIT

Modulating short-stroke actuator for the motorisation of Siemens short-stroke globe valves in HVAC systems

- Actuating force 500 N
- Nominal voltage AC/DC 24 V
- Control modulating 0...10 V
- Stroke 5.5 mm



Technical data

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| Nominal voltage | AC/DC 24 V | |
|-----------------------------------|-------------------------------------|--|
| Nominal voltage frequency | 50/60 Hz | |
| Nominal voltage range | AC 19.228.8 V / DC 21.628.8 V | |
| Power consumption in operation | 1.5 W | |
| Power consumption for wire sizing | 3 VA | |
| Connection supply / control | Cable 1 m, 4 x 0.75 mm ² | |
| Parallel operation | Yes (note the performance data) | |
| Actuating force motor | 500 N | |
| | | |

Functional data

| Actuating force motor | 500 N |
|----------------------------|---|
| Operating range Y | 010 V |
| Input Impedance | 100 kΩ |
| Operating range Y variable | 210 V |
| Position feedback U | 010 V |
| Position feedback U note | Max. 1 mA |
| Position accuracy | ±5% |
| Manual override | temporary and permanent gear disengagement with |
| | rotary knob on the housing |
| Stroke | 5.5 mm |
| Actuator-valve interface | G 3/4" |
| Running time motor | 35 s / 5.5 mm |
| Duty cycle value | 75% (= active time 35 s / operating time 47 s) |
| Sound power level, motor | 45 dB(A) |
| Position indication | Reversible scale plate |
| Protection class IEC/EN | III Safety Extra-Low Voltage (SELV) |

Safety data

| 1 osition malcation | Reversible scale place | |
|--|--|--|
| Protection class IEC/EN | III Safety Extra-Low Voltage (SELV) IP40 | |
| Degree of protection IEC/EN | | |
| EMC | CE according to 2014/30/EU | |
| Mode of operation | Type 1 | |
| Rated impulse voltage supply / control | 0.8 kV | |
| Control pollution degree | 3 | |
| Ambient temperature | 050°C | |
| Storage temperature | -3080°C | |
| Ambient humidity | Max. 95% r.H., non-condensing | |
| Servicing | maintenance-free | |
| Weight | 0.51 kg | |

Safety notes



Weight

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.



- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The actuator is to be protected against moisture. It is not suitable for outdoor applications.
- 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.

Product features

Mode of operation The actuator is connected with a standard modulating signal of 0...10 V and drives to the position defined

by the positioning signal.

Simple direct mounting Straightforward direct mounting on the valve with one knurled nut.

Manual override Manual override with lever possible. Temporary gear disengagement by pushing the rotary knob.

Permanent disengagement by pushing and simultaneous rotating the rotary knob clockwise 90°.

High functional reliability The actuator is overload protected and automatically stops when the end stop is reached.

Electrical installation



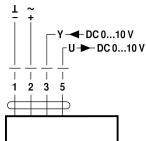
Supply from isolating transformer.

Parallel connection of other actuators possible. Observe the performance data.

The actuator is activated with a standard modulating signal 0...10 V.

Wiring diagrams

AC/DC 24 V, modulating



Cable colours:

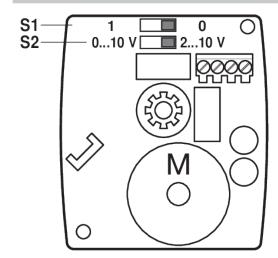
1 = black

2 = red

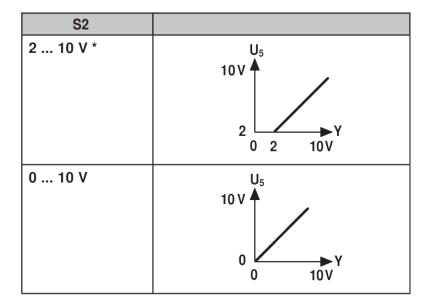
3 = white

5 = orange

Operating controls and indicators



| S1 | | |
|-----|------------|--------|
| 0 * | 1 0 | Y = 0% |
| 1 | 14 | Y = 0% |





Dimensions

Dimensional drawings

