

Technical data sheet

NRD24-SR-SI

RETRO

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

Electrical data	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 W
	Power consumption for wire sizing	2.5 VA
	Connection supply / control	Cable 1 m, 4 x 0.75 mm ²
	Parallel operation	Yes (note the performance data)
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	140 s / 5.5 mm
	Duty cycle value	75% (= active time 140 s / operating time 187 s)
	Sound power level, motor	35 dB(A)
	Position indication	Reversible scale plate
Safety data	Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)
	Degree of protection IEC/EN	IP40
	EMC	CE according to 2014/30/EU
	Mode of operation	Туре 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	Weight	0.48 kg

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.



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- 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 010 V and drives to the position defined by the positioning signal.	
Simple direct mounting	rect 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.	
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Parallel connection of other actuators possible. Observe the performance data.

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

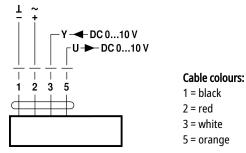
Electrical installation



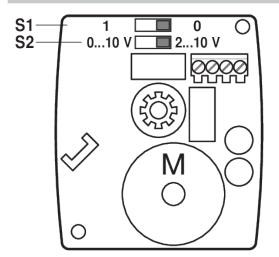
Supply from isolating transformer.

Wiring diagrams

AC/DC 24 V, modulating



Operating controls and indicators



S1				
0 *	~ •0	Y = 0%		
1	1	Y = 0%		
S2				
2 10 V *	$\begin{array}{c} 10 V \\ 2 \\ 0 \\ 2 \\ 10 V \end{array}$			
0 10 V	U5 10 V 4			

0

10V



Dimensional drawings

