

Technical data sheet

3-point rotary actuator with emergency control function for ball valves •

- Nominal torque 5 Nm
- Nominal voltage AC 230 V
- Control 3-point .
- Deenergised open (NO)



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	5 W
	Power consumption in rest position	3 W
	Power consumption for wire sizing	16 VA
	Connection supply / control	Cable 1 m, 4 x 0.75 mm ²
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	Min. 5 Nm
	Torque spring return	Min. 5 Nm
	Direction of rotation motor	Y=0 (0V = A-AB = 0%)
	Direction of rotation spring-return	Deenergised NO, valve open (A - AB = 100%)
	Manual override	No
	Angle of rotation	90°
	Running time motor	35 s / 90°
	Running time emergency setting position	<20 s / 90°
	Sound power level motor max.	45 dB(A)
	Position indication	Mechanical
	Service life	Min. 60,000 emergency positions
Safety	Protection class IEC/EN	Il Protective insulated
	Protection class UL	II Protective insulated
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2, UL Enclosure Type 2
	EMC	CE according to 2004/108/EC
	Low voltage directive	CE according to 2006/95/EC
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	Certification UL	cULus according to UL 60730-1A, UL 60730-2-
		14 and CAN/CSA E60730-1:02
	Mode of operation	Туре 1.АА
	Rated impulse voltage supply / control	4 kV
	Control pollution degree	3
	Ambient temperature	-3050°C
	Non-operating temperature	-4080°C
	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
Weight	Weight approx.	2.1 kg

Safety notes



- This device has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Caution: Power supply voltage!
- Only authorised specialists may carry out installation. All applicable legal or • institutional installation regulations must be complied during installation.
- The device may only be opened at the manufacturer's site. It does not contain any • parts that can be replaced or repaired by the user.
- · The cables must not be removed from the device.

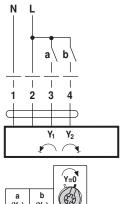
NRFD230A-3-0	Rotary spring-return actuator, 3-point, AC 230 V, 5 Nm
Safety notes	
	 The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.
Product features	
Mode of operation	The actuator moves the valve to the operating position at the same time as tensioning the return spring. The valve is turned back to the emergency position by spring force when the supply voltage is interrupted.
Direct mounting	Simple direct mounting on the ball valve with only one screw. The mounting orientation in relation to the ball valve can be selected in 90° steps.
High functional reliability	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.
Adjustable angle of rotation	Adjustable angle of rotation with mechanical end stop.

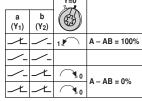
\land	Notes	Caution: Power supply voltage! Parallel connection of other actuators possible. Observe the performance data
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Wiring diagrams

Electrical installation

AC 230 V, 3-point





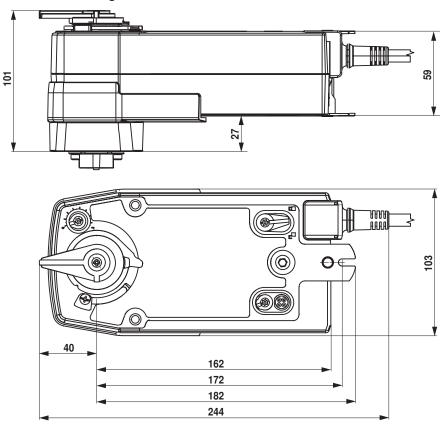
Cable colours:

- 1 = blue
- 2 = brown
- 3 = white 4 = white



Dimensions [mm]





Further documentation

- Overview Valve-actuator combinations
- Data sheets for ball valves
- · Installation instructions for actuators and/or ball valves
- General notes for project planning