DR..A(-SR)-7 Rotary Actuator



DR24A(-SR)-7 Rotary actuator for butterfly valves • Nominal torque 90Nm

- Nominal voltage AC/DC 24V
- Open-close Control: DR24A-7
- Modulating Control: DR24A-SR-7

DR230A-7 Rotary actuator for butterfly valves

- Nominal torque 90Nm
- Nominal voltage AC 100...240V
- Control Open-close

Technical data



Basc technical data	Nominal voltage frequency	50/60Hz
	Parallel operation	No
	Torque motor	Max. 90Nm (not constant)
	Manual override	Gear disengagement with push-button, can be locked
	Running time motor	150s / 90°
	Sound power level motor max.	45dB(A)
	Position indication	Yes
	Degree of protection IEC/EN	IP54
	EMC	CE according to 2004/108/EC
	Certification IEC/EN	Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14
	Mode of operation	Type 1
	Control pollution degree	3
	Ambient temperature	-3050°C
	Non-operating temperature	-4080°C
	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
	Connection flange	F07
	Weight	Approx. 3.6kg
DR24A-7	Nominal voltage	AC/DC 24V
	Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
	Power consumption in operation	4.5W
	Power consumption at rest	2W
	Power consumption for wire sizing	7VA
	Connection	Cable 1m, 3 x 0.75mm ²
	Protection class IEC/EN	III Safety extra-low voltage
	Rated current voltage	0.8kV
DR24A-SR-7	Nominal voltage	AC/DC 24V
	Nominal voltage range	AC 19.228.8V / DC 21.628.8V
	Power consumption in operation	7W
	Power consumption at rest	2W
	Power consumption for wire sizing	9VA
	Connection	Cable 1m, 4 x 0.75mm²
	Protection class IEC/EN	III Safety extra-low voltage
	Rated current voltage	0.8kV
DR230A-7	Nominal voltage	AC 100240V
	Nominal voltage range	AC 85265V
	Power consumption in operation	5W
	Power consumption at rest	2W
	Power consumption for wire sizing	9VA
	Connection	Cable 1m, 3 x 0.75mm ²
	Protection class IEC/EN	II totally insulated
	Rated current voltage	4kV



Safety notes



- This actuator 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.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- · The switch for changing the direction of rotation may not be adjusted.
- The angle of rotation is not permitted to be subjected to mechanical limitation. It is forbidden
 to alter the mechanical end stops.
- 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.
- For DR24A-7, 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.
- · For DR230A-7, caution: power supply voltage!

Product features

High functional reliability

The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Direct mounting

Simple direct mounting on the butterfly valves with ISO 5211-F07 mounting flange. The mounting orientation with reference to the butterfly valve can be selected in 90° (angle) steps.

Manual override

For DR24A-7, Manual operation is possible with the push-button (the gearing latch remains disengaged as long as the push-button is pressed or detented).

For DR24A-SR-7, manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked).

For DR230A-7, manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked).

Mode of operation

For DR24A-SR-7, the actuator is connected with a standard modulating signal of DC 0 ... 10V and travels to the position defined by the positioning signal. The measuring voltage U serves for the electrical display of the actuator position 0 ... 100% and as slave control signal for other actuators.

Accessories

Electrical accessories

Description	Type	
Auxiliary switch, add-on, 1 x SPDT	S1A	•
Auxiliary switch, add-on, 2 x SPDT	S2A	
Feedback potentiometer 140 Ohm, add-on	P140A	
Feedback potentiometer 200 Ohm, add-on	P200A	
Feedback potentiometer 500 Ohm, add-on	P500A	
Feedback potentiometer 1 kOhm, add-on	P1000A	
Feedback potentiometer 2.8 kOhm, add-on	P2800A	
Feedback potentiometer 5 kOhm, add-on	P5000A	
Feedback potentiometer 10 kOhm, add-on	P10000A	

Wiring diagram

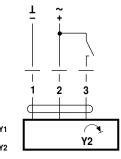


Notes

- · Connection via safety isolating transformer.
- Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.

DR24A-7

AC/DC 24V, open-close



Cable colours:

1 = black

2 = red

3 = white



Wiring diagram

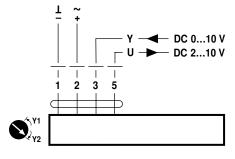


Notes

- Connection via safety isolating transformer.
- Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.

DR24A-SR-7

AC/DC 24V, modulating



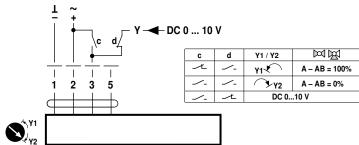
Cable colours:

1 = black

2 = red 3 = white

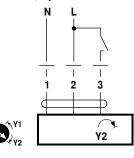
5 = orange

AC/DC 24V, modulating, override control



DR230A-7

AC 230V, open-close



Cable colours:

1 = blue

2 = brown

3 = white

Dimensions [mm]

