

Globe valve actuator for 2-way and 3-way globe valves

- Actuating force 1000 N
- Nominal voltage AC 230 V
- Control Open-close, 3-point
- Nominal stroke 20 mm



Technical data

Electrical data	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 85...265 V
	Power consumption in operation	2 W
	Power consumption in rest position	1 W
	Power consumption for wire sizing	4.5 VA
	Connection supply / control	Terminals with cable 1 m, 3 x 0.75 mm ² (Terminal 4 mm ²)
	Parallel operation	Yes (note the performance data)
Functional data	Actuating force motor	1000 N
	Manual override	Gear disengagement with push-button, can be locked
	Nominal stroke	20 mm
	Actuating time	150 s / 20 mm
	Sound power level motor	45 dB(A)
	Position indication	Mechanically, 5...20 mm stroke
Safety	Protection class IEC/EN	II Protective insulated
	Degree of protection IEC/EN	IP54
	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
	Mode of operation	Type 1
	Rated impulse voltage supply / control	4 kV
	Control pollution degree	3
	Ambient temperature	0...50°C
	Non-operating temperature	-40...80°C
Weight	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
	Weight approx.	1.4 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.
- 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 motion and so the closing point may be adjusted only by authorised specialists. The direction of motion is critical, particularly in connection with frost protection circuits.
- 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 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

Simple direct mounting	Simple direct mounting on the globe valve by means of form-fit hollow clamping jaws. The actuator can be rotated by 360° on the valve neck.
Manual override	Manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked). The stroke can be adjusted by using a hexagon socket screw key (4 mm), which is inserted into the top of the actuator. The stroke spindle extends when the key is rotated clockwise.
High functional reliability	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.
Combination valve/actuator	Refer to the valve documentation for suitable valves, their permitted medium temperatures and closing pressures.
Position indication	The stroke is indicated mechanically on the bracket with tabs. The stroke range adjusts itself automatically during operation.
Home position	Factory setting: Actuator spindle is retracted. When valve-actuator combinations are shipped, the direction of motion is set in accordance with the closing point of the valve.
Direction of rotation switch	When actuated, the direction of stroke switch changes the running direction in normal operation.

Accessories

	Description	Type
Electrical accessories	Auxiliary switch, 2 x SPDT, add-on, grey	S2A-H

Electrical installation

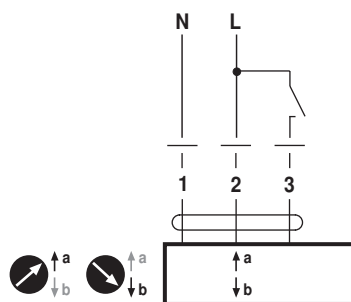


Notes

- Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.
- Direction of stroke switch factory setting: Actuator spindle retracted.

Wiring diagrams

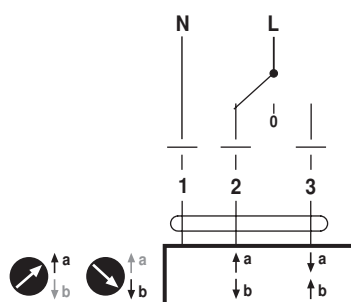
AC 230 V, open-close (one-wire)



Cable colours:

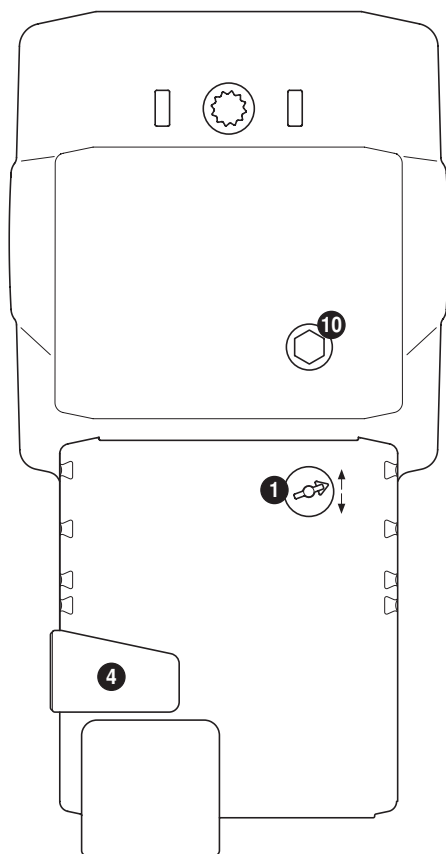
- 1 = blue
- 2 = brown
- 3 = white

AC 230 V, 3-point



Cable colours:

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

Operating controls and indicators

1 Direction of stroke switch

Switch over: Direction of stroke changes

4 Gear disengagement button

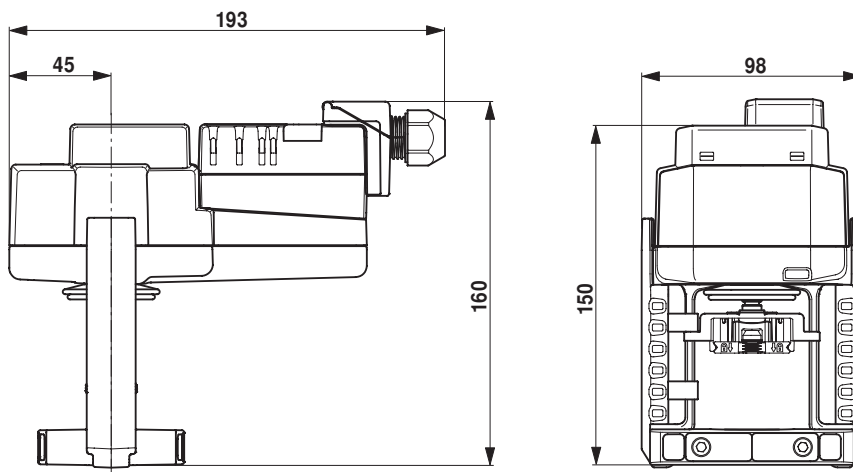
Press button: Gear disengages, motor stops, manual override possible

Release button: Gear engages, followed by standard mode

10 Manual override

Clockwise: Actuator spindle extends

Counterclockwise: Actuator spindle retracts


Dimensions [mm]
Dimensional drawings

Further documentation

- Overview Valve-actuator combinations
- Data sheets for globe valves
- Installation instructions for actuators and/or globe valves
- Notes for project planning 2-way and 3-way globe valves
- General notes for project planning

Globe valve actuator for 2-way and 3-way globe valves

- Actuating force 1000 N
- Nominal voltage AC/DC 24V
- Control: Open-close, 3-point
- Nominal stroke 20 mm



Technical data

Electrical data	Nominal voltage	AC/DC 24V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8V / DC 21.6...28.8V
	Power consumption in operation	1.5 W
	Power consumption in rest position	0.5 W
	Power consumption for wire sizing	3 VA
	Connection supply / control	Terminals 4 mm ² and cable 1 m, 3 x 0.75 mm ²
	Parallel operation	Yes
Functional data	Actuating force	1000 N
	Manual override	Gear disengagement with push-button, can be locked
	Nominal stroke	20 mm
	Actuating time	150 s / 20 mm
	Sound power level motor max.	45 dB (A)
	Position indication	Mechanical 5 ... 20 mm stroke
Safety	Protection class IEC/EN	III Safety extra-low voltage
	Degree of protection IEC/EN	IP54
	EMC	CE in accordance with 2004/108/EC
	Certification IEC/EN	Certified to: IEC/EN 60730-1 and IEC/EN 60730-2-14
	Mode of operation	Type 1
	Rated impulse voltage supply / control	0.8 kV
	Control pollution degree	3
	Ambient temperature	0°C ... 50°C
	Non-operating temperature	-40°C ... 80°C
	Ambient humidity	95% r.h., non-condensing
Weight	Maintenance	Maintenance-free
	Weight approx.	1.320 kg

Safety notes



- This actuator has been designed for application 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 with during installation.
- The switch for changing the direction of motion/the closing point may be adjusted only by authorised personnel. The direction of stroke is critical, particularly in connection with frost protection circuits.
- 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 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

Direct mounting	Simple direct mounting on the globe valve by means of form-fit hollow clamping jaws. The actuator can be rotated by 360° on the valve neck.
Manual override	Manual control with pushbutton possible - temporary, permanently. The gear is disengaged and the actuator decoupled for as long as the button is pressed / latched. The stroke can be adjusted by using a hexagon socket screw key (4 mm), which is inserted into the top of the actuator. The stroke spindle extends when the key is rotated clockwise.
High functional reliability	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.
Combination valve/actuator	Refer to the valve documentation for suitable valves, their permitted medium temperatures and closing pressures.
Position indication	The stroke is indicated mechanically on the bracket with tabs. The stroke range adjusts itself automatically during operation.
Home position	Setting ex-works: Actuator spindle is retracted. When valve-actuator combinations are shipped, the direction of motion is set in accordance with the closing point of the valve.
Direction of stroke switch	When actuated, the direction of stroke switch changes the running direction in normal operation.

Accessories

	Description	Type
Electrical accessories	Auxiliary switch	S2A-H

Electrical installation

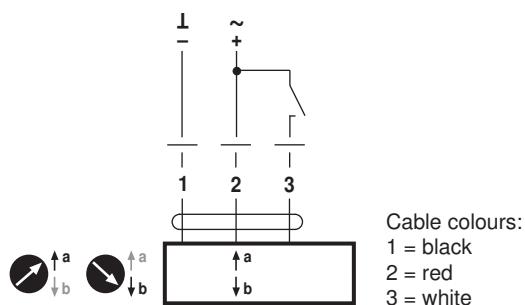


Notes

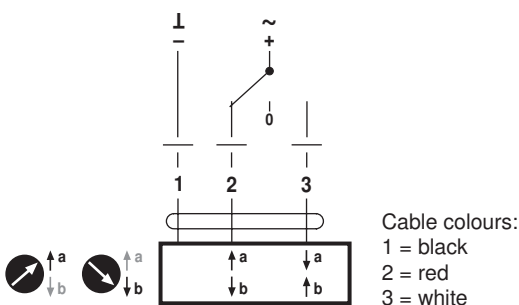
- Connection via safety isolating transformer.
- Parallel connection of other actuators possible.
- Direction of stroke switch factory setting: Actuator spindle retracted.

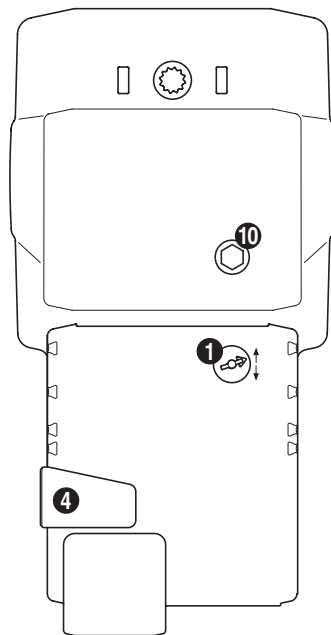
Wiring diagrams

AC/DC 24 V, open-close (one-wire)



AC/DC 24 V, 3-point



Operating controls and indicators

(1) Direction of stroke switch

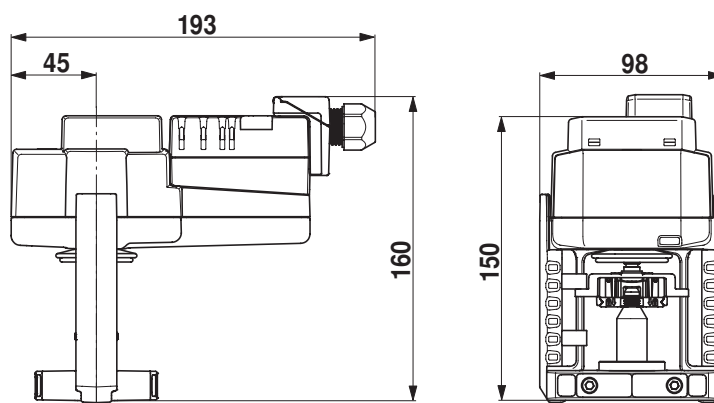
Switching: Direction of stroke changes

(4) Gear disengagement button

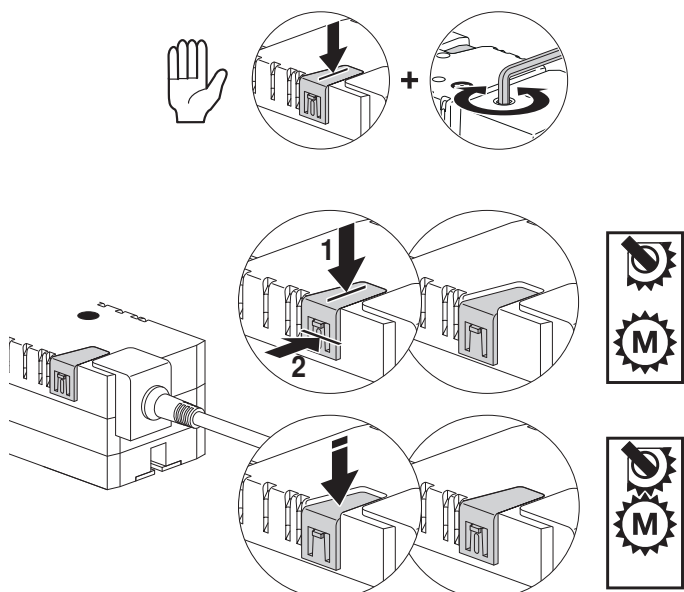
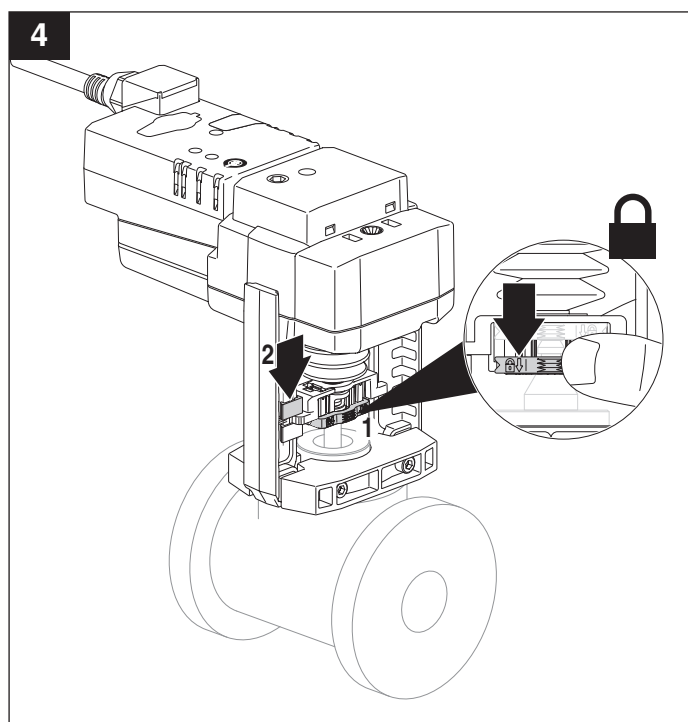
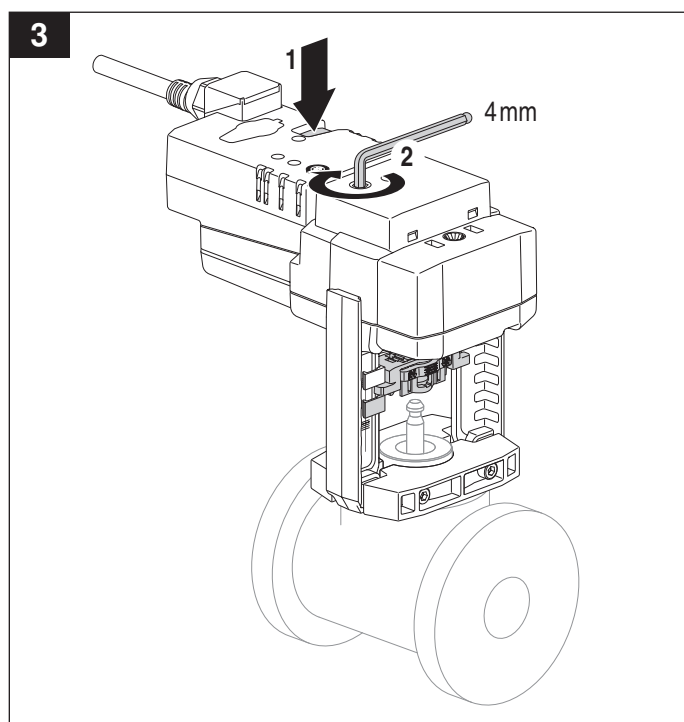
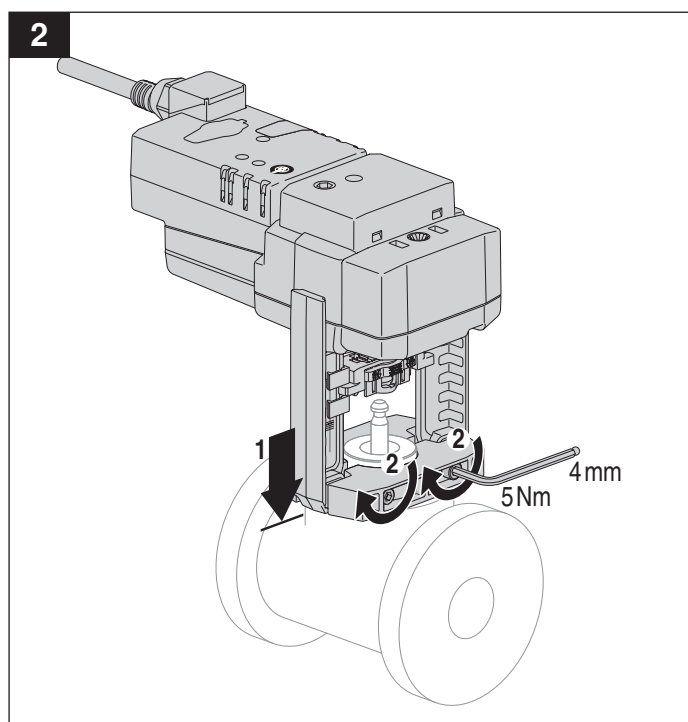
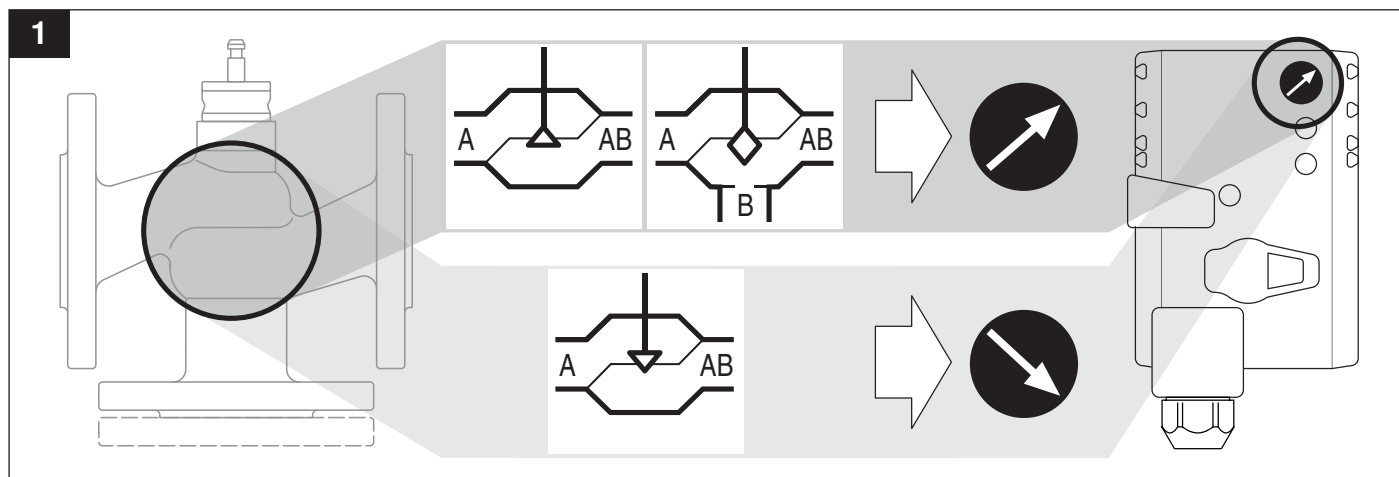
Press button: Gear disengages, motor stops, manual override possible
Release button: Gear engages, standard mode

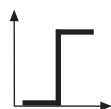
(10) Manual override

Clockwise: Actuator spindle extends
Counterclockwise: Actuator spindle retracts

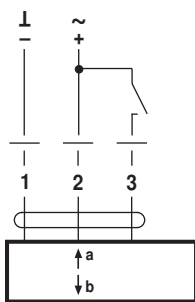

Dimensions [mm]
Dimensional drawings

Further documentation

- Data sheets for globe valves
- Installation instructions for actuators and/or globe valves, respectively
- Notes for project planning for 2-way and 3-way globe valves (hydraulic characteristic curves and circuits, design and dimension, installation instructions, etc.)
- Overview "Valve-actuator combinations"



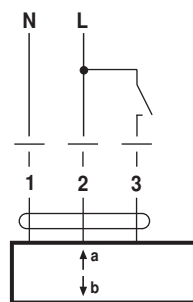


AC 24 V / DC 24 V

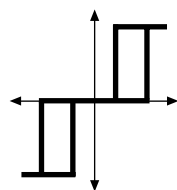


LV(C)24A
NV(C)24A
SV(C)24A

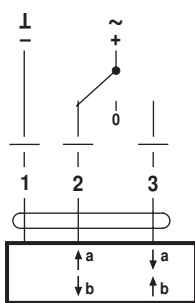
AC 230 V



LV(C)230A
NV(C)230A
SV(C)230A

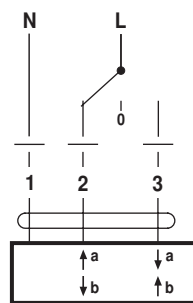


AC 24 V / DC 24 V



LV(C)24A
NV(C)24A
SV(C)24A

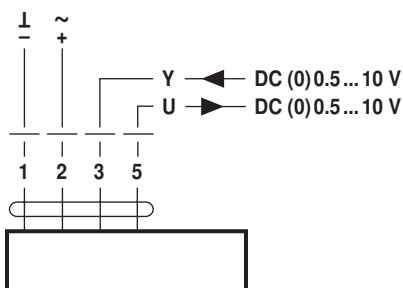
AC 230 V



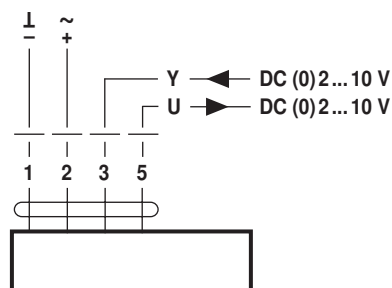
LV(C)230A
NV(C)230A
SV(C)230A



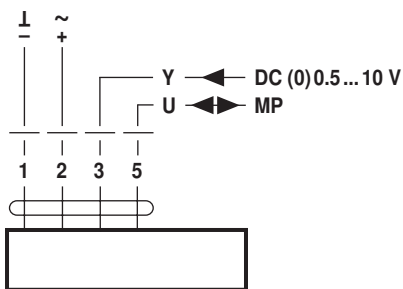
AC 24 V / DC 24 V



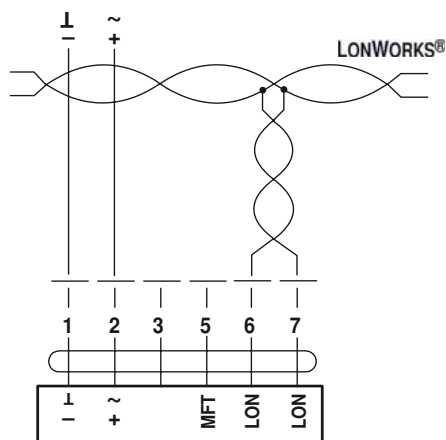
LV(C)24A-SZ LV(C)24A-MF
NV(C)24A-SZ NV(C)24A-MF
SV(C)24A-SZ SV(C)24A-MF



LV(C)24A-SR
NV(C)24A-SR
SV(C)24A-SR



LV(C)24A-MP
NV(C)24A-MP
SV(C)24A-MP



LV24ALON
NV24ALON

