

# Reversing load relay - PLC-SC-ELR W1/ 2-24DC - 2980539

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PLC-INTERFACE as an electronic reversing load relay, consisting of PLC-BSC.../21 basic terminal block with screw connection and integrated circuit, for driving DC motors, with LED and protective circuit, output: 10 ... 30 V DC/2 A

## Your advantages

- Wear-free reversing
- Short-circuit, surge, and overload-proof output
- Screw or spring-cage connection
- Braking by controlling both inputs
- Integrated locking circuit and load wiring



## Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356051309
Weight per Piece (excluding packing)	46.900 g
Custom tariff number	85364190
Country of origin	Germany

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

Width	6.5 mm
Height	80 mm
Depth	86 mm

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
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## Technical data

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	IP20

### Input data

Input name	Device supply
Nominal input voltage $U_N$	24 V DC $\pm 20$ % (Control voltage $U_{ST}$ right/left)
Input voltage range	19.2 V DC ... 28.8 V DC
Typical input current at $U_N$	approx. 3 mA (Control input current $I_{ST}$ right/left)
Rated control circuit supply voltage $U_S$	24 V DC
Control supply voltage range	19.2 V DC ... 28.8 V DC
Transmission frequency	300 Hz
Protective circuit	Reverse polarity protection Polarity protection diode
	Surge protection
Surge voltage protection	> 33 V DC
Typical response time	200 $\mu$ s
Status display	Yellow LED
Switchover time $R_L/L_L$ (turn-on time)	80 ms
Input name	Control input right/left
Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	0.8 ... 1.2
Input voltage range	19.2 V DC ... 28.8 V DC

### Output data load output

Output name	DC output
Note	Protect the supply voltage at the output using a suitable fuse.
Nominal output voltage	24 V DC
Operating voltage range	10 V DC ... 30 V DC
Nominal output voltage range	10 V DC ... 30 V DC
Type of protection	Reverse polarity protection
Protective circuit/component	Polarity protection diode
Note on protection circuit	No continuous protection against polarity reversal
Type of protection	Surge protection

### General

Mounting position	Vertical (horizontal DIN rail)
Assembly instructions	In rows with zero spacing
Operating mode	100% operating factor

### Connection data

Connection name	Control circuits
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3

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## Technical data

### Connection data

Conductor cross section solid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	26 ... 14

### Connection data 2

Connection name	Load circuit
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	26 ... 14

### Standards and Regulations

Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	IEC 60664
	EN 50178
Rated insulation voltage	50 V
Rated surge voltage	0.5 kV
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	II

### Conformance/approvals

Designation	CE
Identification	CE-compliant

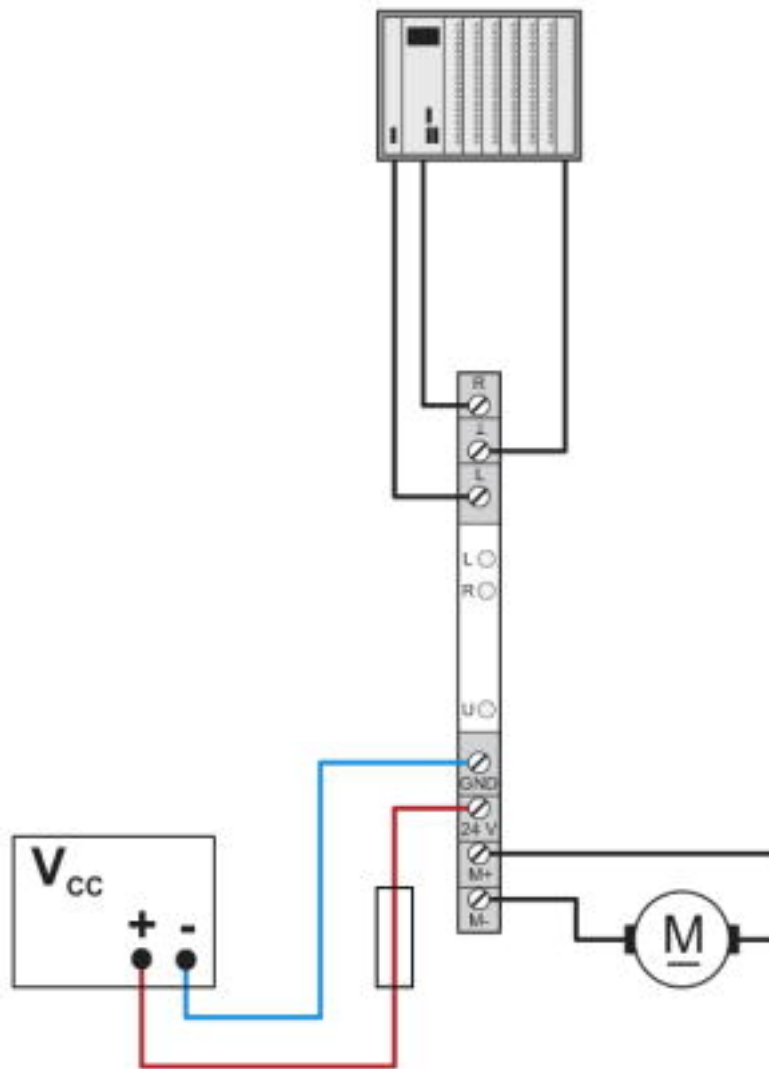
### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

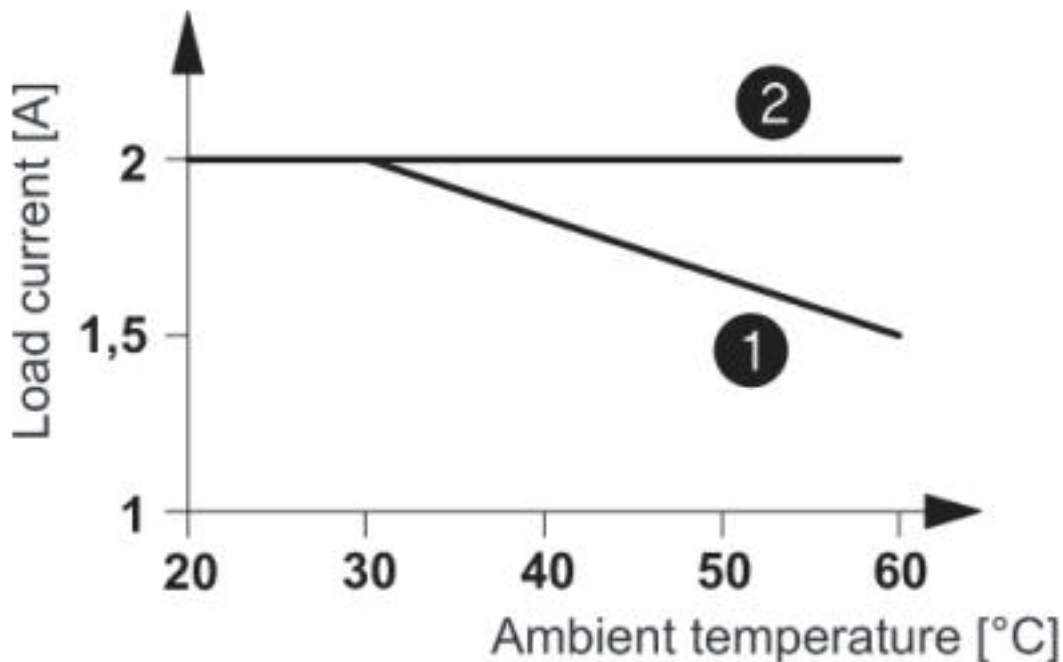
# Reversing load relay - PLC-SC-ELR W1/ 2-24DC - 2980539

Application drawing



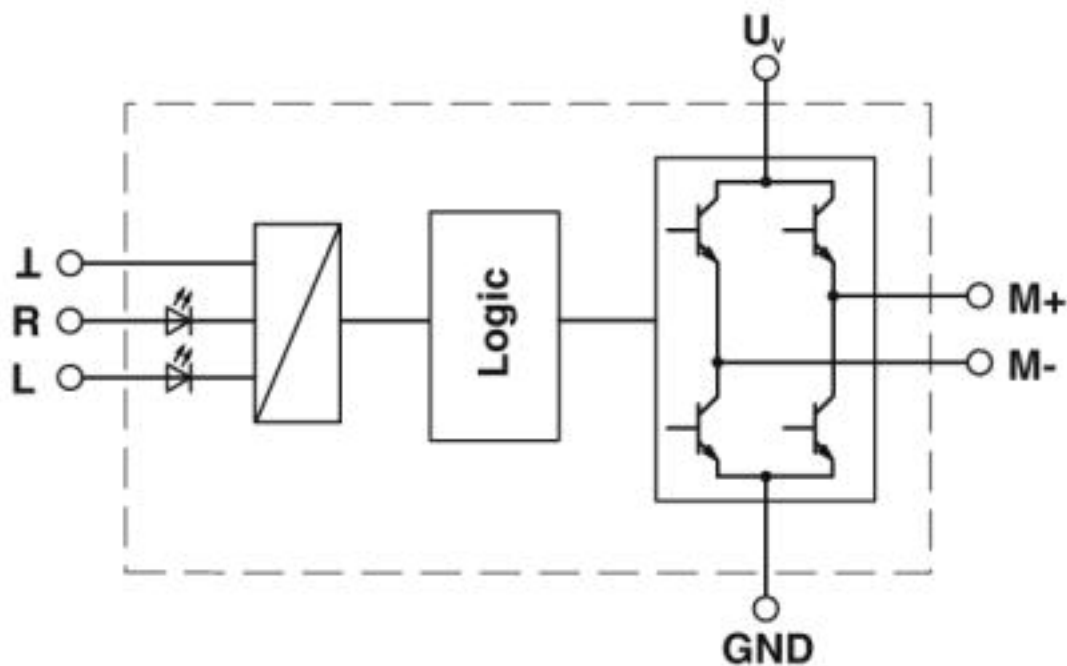
# Reversing load relay - PLC-SC-ELR W1/ 2-24DC - 2980539

Diagram



- ① In rows with zero spacing
- ② stand-alone device

Circuit diagram



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## Classifications

### eCl@ss

eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371000
eCl@ss 5.1	27371000
eCl@ss 6.0	27371000
eCl@ss 7.0	27371014
eCl@ss 8.0	27371014
eCl@ss 9.0	27371014

### ETIM

ETIM 4.0	EC002055
ETIM 5.0	EC002055
ETIM 6.0	EC002055
ETIM 7.0	EC002055

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39121542
UNSPSC 18.0	39122333
UNSPSC 19.0	39122333
UNSPSC 20.0	39122333
UNSPSC 21.0	39122333

## Approvals

### Approvals

Approvals

EAC

Ex Approvals

### Approval details

EAC		TR_TS_D_00573_c
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## Reversing load relay - PLC-SC-ELR W1/ 2-24DC - 2980539

### Accessories

#### Accessories

#### Bridge

Continuous plug-in bridge - FBST 500-PLC RD - 2966786



Continuous plug-in bridge, length: 500 mm, color: red

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Continuous plug-in bridge - FBST 500-PLC BU - 2966692



Continuous plug-in bridge, length: 500 mm, color: blue

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Continuous plug-in bridge - FBST 500-PLC GY - 2966838



Continuous plug-in bridge, length: 500 mm, color: gray

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Single plug-in bridge - FBST 6-PLC RD - 2966236



Single plug-in bridge, length: 6 mm, number of positions: 2, color: red

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Single plug-in bridge - FBST 6-PLC BU - 2966812



Single plug-in bridge, length: 6 mm, number of positions: 2, color: blue

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## Reversing load relay - PLC-SC-ELR W1/ 2-24DC - 2980539

### Accessories

Single plug-in bridge - FBST 6-PLC GY - 2966825



Single plug-in bridge, length: 6 mm, number of positions: 2, color: gray

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Single plug-in bridge - FBST 8-PLC GY - 2967688



Single plug-in bridge, length: 8 mm, number of positions: 2, color: gray

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### DIN rail

DIN rail, unperforated - NS 35/ 7,5 V2A UNPERF 2000MM - 0801377



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Stainless steel V2A, uncoated, length: 2000 mm, color: silver

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DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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## Reversing load relay - PLC-SC-ELR W1/ 2-24DC - 2980539

### Accessories

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, unperforated, Standard profile 2.3 mm, width: 35 mm, height: 15 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

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DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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## Reversing load relay - PLC-SC-ELR W1/ 2-24DC - 2980539

### Accessories

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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### Partition plate

Separating plate - PLC-ATP BK - 2966841



Separating plate, 2 mm thick, required at the start and end of a PLC terminal strip. Furthermore, it is used for: visual separation of groups, safe isolation of different voltages of neighboring PLC relays in acc. with DIN VDE 0106-101, isolation

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### Power module

Power terminal block - PLC-ESK GY - 2966508



Power terminal block, for the input of up to four potentials, for mounting on NS 35/7.5

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### Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip