

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



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

## Commercial data

Item number	2980539
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	CK7621
Catalog page	Page 423 (C-5-2019)
GTIN	4046356051309
Weight per piece (including packing)	59.9 g
Weight per piece (excluding packing)	46.9 g
Customs tariff number	85364190
Country of origin	DE

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## Technical data

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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### Product properties

Product type	Solid-state contactor
Product family	PLC-INTERFACE
Operating mode	100% operating factor

#### Insulation characteristics

Insulation	Basic insulation
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#### Insulation characteristics: Air clearances and creepage distances between the power circuits

Insulation	Basic insulation
Overvoltage category	II
Pollution degree	2

### Electrical properties

Number of phases	1
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#### Air clearances and creepage distances between the power circuits

Rated insulation voltage	50 V
Rated surge voltage	0.5 kV

#### Supply

Input name	Device supply
Rated control circuit supply voltage $U_S$	24 V DC
Control supply voltage range	19.2 V DC ... 28.8 V DC

### Input data

#### Control

Input name	Control input right/left
Rated actuating voltage $U_C$	24 V DC
Triggering voltage range	19.2 V DC ... 28.8 V DC
Rated actuating current $I_C$	$\approx 1$ mA
Typical response time	200 $\mu$ s
Protective circuit	Reverse polarity protection Surge protection
Surge voltage protection	> 33 V DC
Transmission frequency	300 Hz
Switchover time $R_L/L_L$ (turn-on time)	80 ms

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## Output data

### DC output

Note	Protect the supply voltage at the output using a suitable fuse.
Rated operating voltage $U_e$	24 V DC
Operating voltage range	10 V DC ... 30 V DC
Rated operating current (Load output)	2 A
Load current	2 A
Quiescent current	10 mA
Protective circuit	Reverse polarity protection; Polarity protection diode (No continuous protection against polarity reversal)
	Surge protection
Surge voltage protection	> 33 V DC

### Motor switching output

Note	Short-circuit and overload protection
Continuous load current	2 A (see derating curve)
Short-circuit current	15 A (during braking)
Protective circuit	Surge protection
	RC element
Surge voltage protection	> 33 V DC

## Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	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>
	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule)
	2x 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule)
Conductor cross section AWG	26 ... 14
Tightening torque	0.45 Nm ... 0.55 Nm (Usually these terminal blocks must be supported during conductor connection (held by one hand, supported on the housing))

## Signaling

Status display	Yellow LED
Operating voltage display	Green LED

## Dimensions

Width	6.5 mm
Height	80 mm
Depth	95 mm

## Material specifications

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Color	gray (RAL 7042)
Flammability rating according to UL 94	V0

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

## Approvals

### UKCA

Certificate	UKCA-compliant
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### CE

Certificate	CE-compliant
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### Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

## Standards and regulations

### Air clearances and creepage distances between the power circuits

Standards/regulations	IEC 60664
	EN 50178

## Mounting

Mounting type	DIN rail mounting
Assembly instructions	in rows with zero spacing
Mounting position	Vertical (horizontal DIN rail)

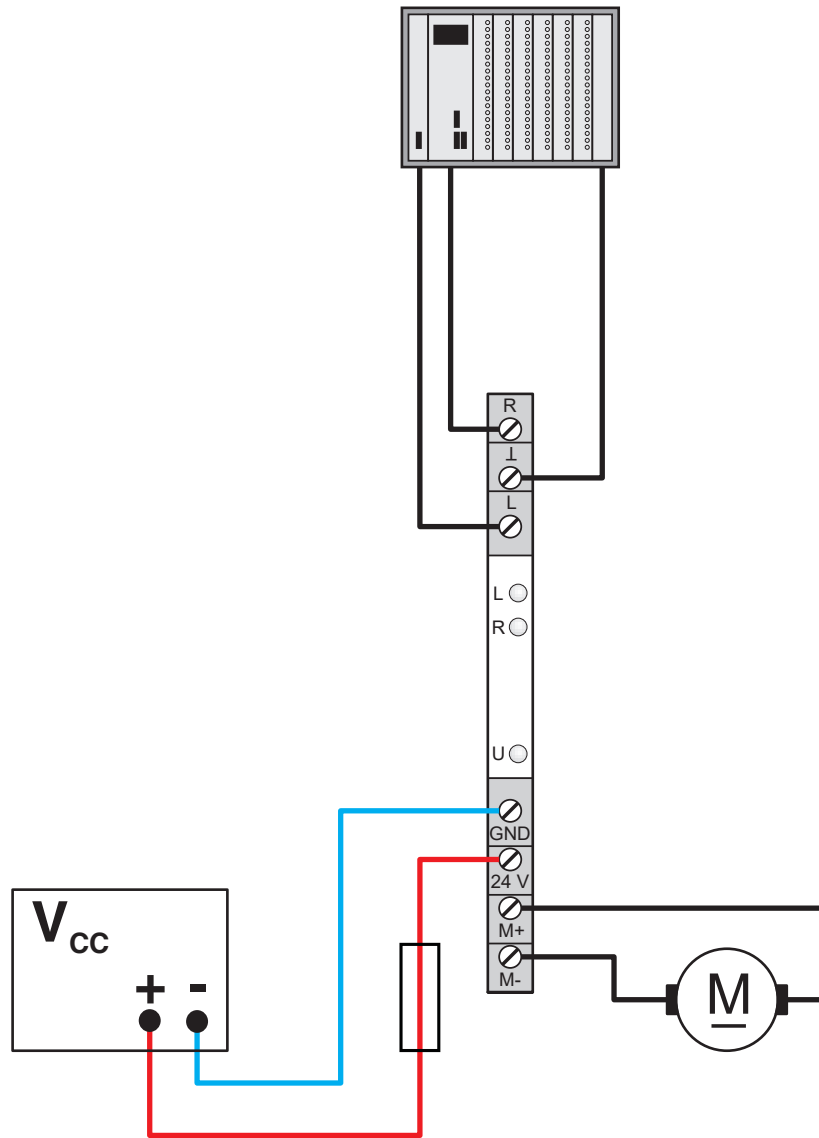
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## Drawings

Application drawing

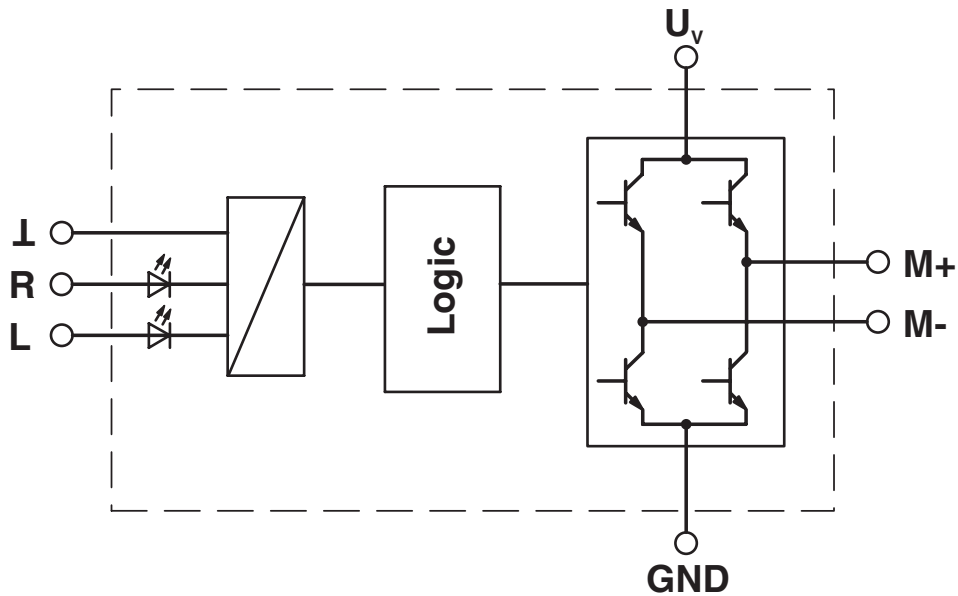


# PLC-SC-ELR W1/ 2-24DC - Reversing load relay

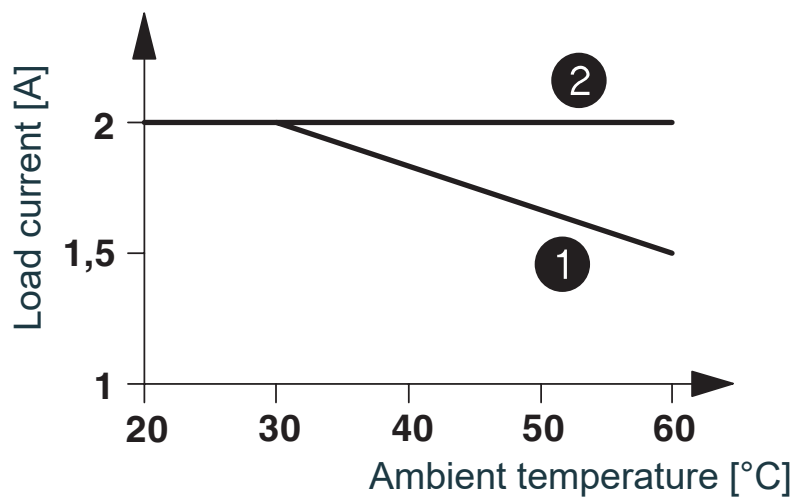
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Circuit diagram



Diagram



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

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/2980539>



**EAC**

Approval ID: TR\_TS\_D\_00573\_c

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## Classifications

### ECLASS

ECLASS-11.0	27371018
ECLASS-13.0	27371018
ECLASS-12.0	27371018

### ETIM

ETIM 9.0	EC002552
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### UNSPSC

UNSPSC 21.0	39122300
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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