

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

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://download.phoenixcontact.com>)



Electronic reversing load relay, for driving DC motors, with light indicator and protection circuit, output: 10-30 V DC/2 A

## Product Features

- 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

package_quantity	1
GTIN	4046356051309

## Technical data

Note:

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

### Dimensions

Width	6.2 mm
Height	80 mm
Depth	86 mm

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
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)
Typical input current at $U_N$	approx. 3 mA (Control input current $I_{ST}$ right/left)
Transmission frequency	300 Hz

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

## Technical data

### Input data

Protective circuit	Protection against polarity reversal Polarity protection diode
Protective circuit	Surge protection
Surge voltage protection	> 33 V DC
Typical response time	200 µs
Status display	Yellow LED
Switchover time R <sub>L</sub> /L <sub>L</sub> (turn-on time)	80 ms

### Output data

Output name	Output data
Nominal output voltage	24 V DC
Nominal output voltage range	10 V DC ... 30 V DC
Load current	2 A
Quiescent current	10 mA
Type of protection	Protection against polarity reversal
Protective circuit/component	Polarity protection diode
Type of protection	Surge protection
Surge voltage protection	> 33 V DC
Operating voltage display	Green LED
Output name	Motor switching output
Note	Short-circuit and overload protection
Continuous load current	2 A (see derating curve)
Short-circuit current	15 A (during braking)
Type of protection	Surge protection
Protective circuit/component	RC element
Surge voltage protection	> 33 V DC

### Connection data

Connection method	Screw connection
Stripping length	8 mm
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.14 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	14
Screw thread	M3

### General

Mounting position	Vertical (horizontal DIN rail)
Assembly instructions	In rows with zero spacing
Operating mode	100% operating factor
Inflammability class according to UL 94	V0
Name	Air and creepage distances between the power circuits

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

## Technical data

### General

Standards/regulations	IEC 60664
Standards/regulations	EN 50178
Standards/regulations	IEC 62103
Rated surge voltage / insulation	0.5 kV / basic insulation
Rated insulation voltage	50 V DC
Pollution degree	2
Surge voltage category	II

### PWM option

Max. clock frequency at the control inputs	1000 Hz
Pulse duty factor	0 % ... 100 %

## classifications

### eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371001
eCl@ss 7.0	27371001
eCl@ss 8.0	27371001

### ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 5.0	EC002055

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39121542

## approvals

GL /

### Approval details

GL
----

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

accessories

### Mounting rail

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



NS 35/ 7,5 PERF 2000MM - 0801733



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



NS 35/15 UNPERF 2000MM - 1201714



NS 35/15 CU UNPERF 2000MM - 1201895



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

### accessories

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



NS 35/15 AL UNPERF 2000MM - 1201756



NS 35/15 PERF 2000MM - 1201730



NS 35/ 7,5 UNPERF 2000MM - 0801681



### Power module

PLC-ESK GY - 2966508



### Partition plate

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

## accessories

PLC-ATP BK - 2966841



---

## Screwdriver tools

SZF 1-0,6X3,5 - 1204517



---

## Bridge

FBST 500-PLC RD - 2966786



---

FBST 500-PLC BU - 2966692



---

FBST 500-PLC GY - 2966838



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

### accessories

FBST 6-PLC RD - 2966236



FBST 6-PLC BU - 2966812



FBST 6-PLC GY - 2966825



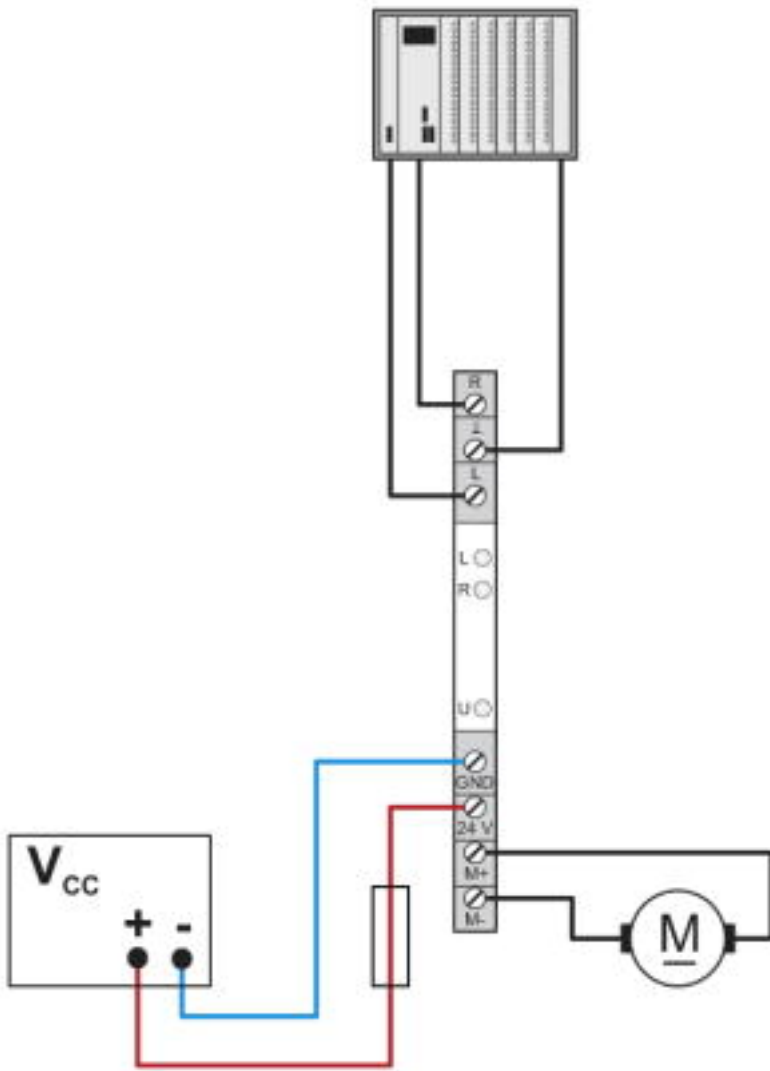
FBST 8-PLC GY - 2967688



### Drawings

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

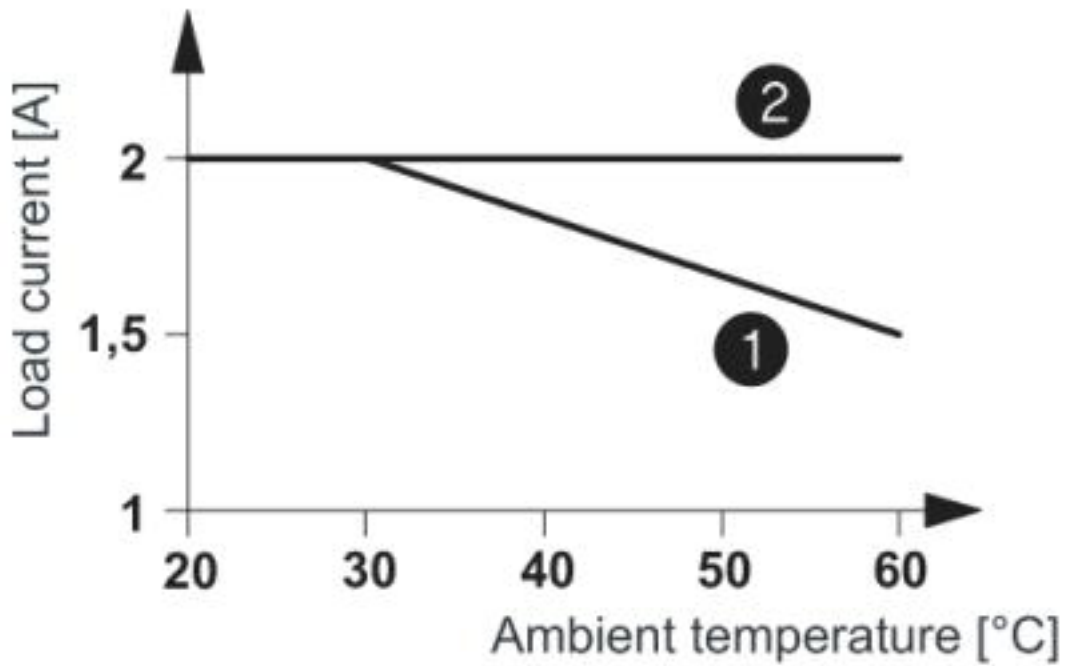
Application drawing





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

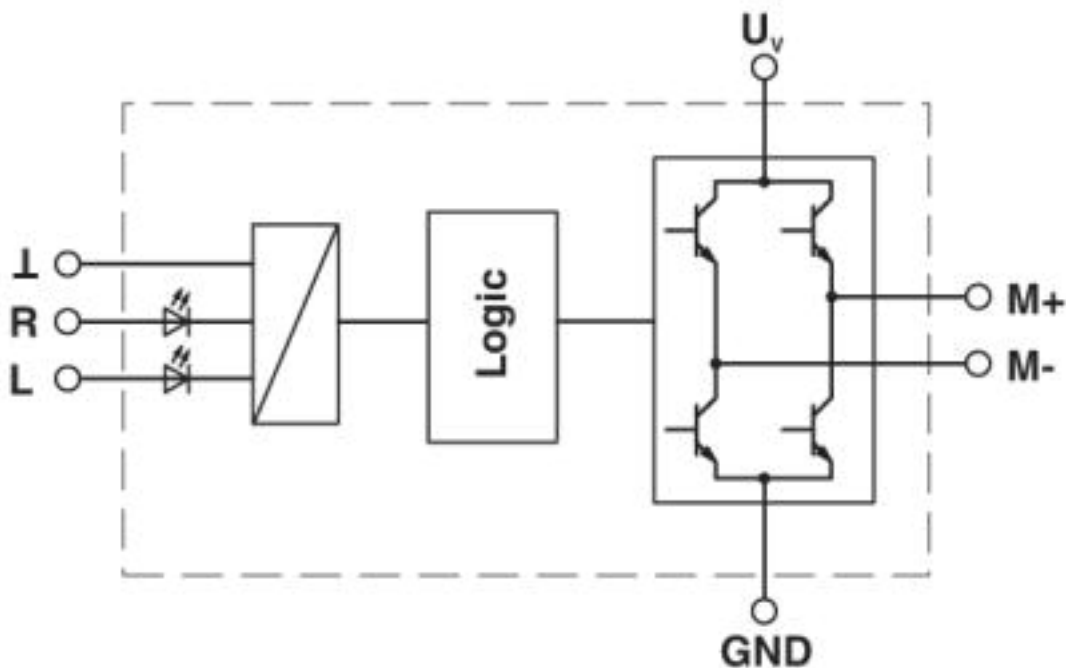
Diagram



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

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

Circuit diagram



© Phoenix Contact 2013 - all rights reserved  
<http://www.phoenixcontact.com>