

# CM 90-ELR-W3/5-R - Reversing load relay



2940113

<https://www.phoenixcontact.com/us/products/2940113>

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 documentation. Our general terms of use for downloads are valid.



Electronic reversing load relay, for direct driving of 3-phase equipment in the 3-phase network, with light indicator and protection circuit, output: 400 V AC/ 3 x 5 A

## Commercial data

Item number	2940113
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	DK7222
GTIN	4017918079871
Weight per piece (including packing)	662.9 g
Weight per piece (excluding packing)	622.9 g
Customs tariff number	85364900
Country of origin	DE

# CM 90-ELR-W3/5-R - Reversing load relay



2940113

<https://www.phoenixcontact.com/us/products/2940113>

## Technical data

### Product properties

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

### Electrical properties

Number of phases	3
Mains type	3-phase
Test voltage (Input/output)	3.5 kV AC (50 Hz, 60 s)

### Supply

Input name	Device supply
Nominal supply voltage	24 V DC
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection
Switch-over frequency	2.5 Hz (RL / LL)

### Input data

#### Control

Input name	Control input right/left
------------	--------------------------

### Output data

#### AC output

Nominal output voltage	400 V AC +10 % -20 %
Nominal output voltage range	320 V AC ... 440 V AC
Peak offstate voltage	1000 V
Mains frequency	50 Hz 60 Hz
Continuous load current	3x 5 A (see derating curve)
Load current range	150 mA
Leakage current	7 mA
Residual voltage	1.7 V
Surge current	230 A (t = 10 ms)
Protective circuit	RCV circuit
Surge voltage protection	750 V

#### Reply output: Alarm Contact

Nominal output voltage	24 V DC +25 % -20 %
Continuous load current	100 mA
Protective circuit	Decoupling diode Free running; Freewheeling diode
Status display	LED

# CM 90-ELR-W3/5-R - Reversing load relay



2940113

<https://www.phoenixcontact.com/us/products/2940113>

Reply output: "right / left"

Number of outputs	2
Nominal output voltage	24 V DC +25 % -20 %
Continuous load current	100 mA
Protective circuit	Decoupling diode Free running; Freewheeling diode
Status display	LED

## Connection data

Control circuits

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 14

Load circuit

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 14

## Dimensions

Width	90 mm
Height	75 mm
Depth	116 mm

## Material specifications

Color	green (RAL 6021)
-------	------------------

## Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

## Standards and regulations

Standards/regulations	IEC 60664
	IEC 60664A
	DIN VDE 0110
	DIN VDE 0106-101

# CM 90-ELR-W3/5-R - Reversing load relay



2940113

<https://www.phoenixcontact.com/us/products/2940113>

	DIN VDE 0160 (in relevant parts)
	IEC 801-5

## Mounting

Assembly note	can be aligned with spacing = 20 mm
Mounting position	Vertical (horizontal DIN rail)

# CM 90-ELR-W3/5-R - Reversing load relay

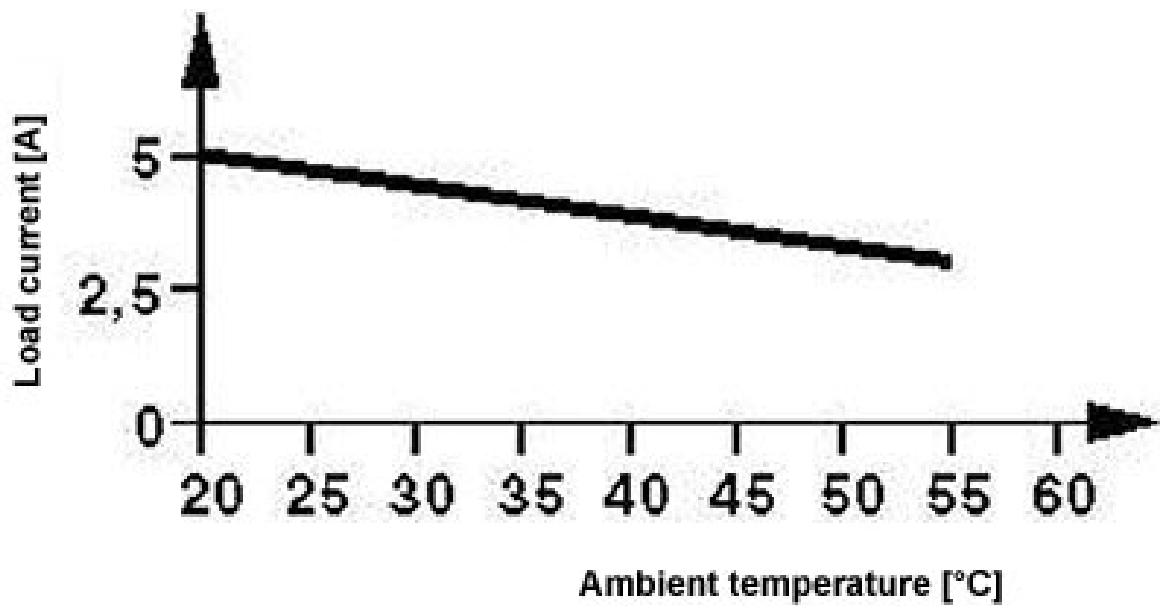


2940113

<https://www.phoenixcontact.com/us/products/2940113>

## Drawings

### Diagram

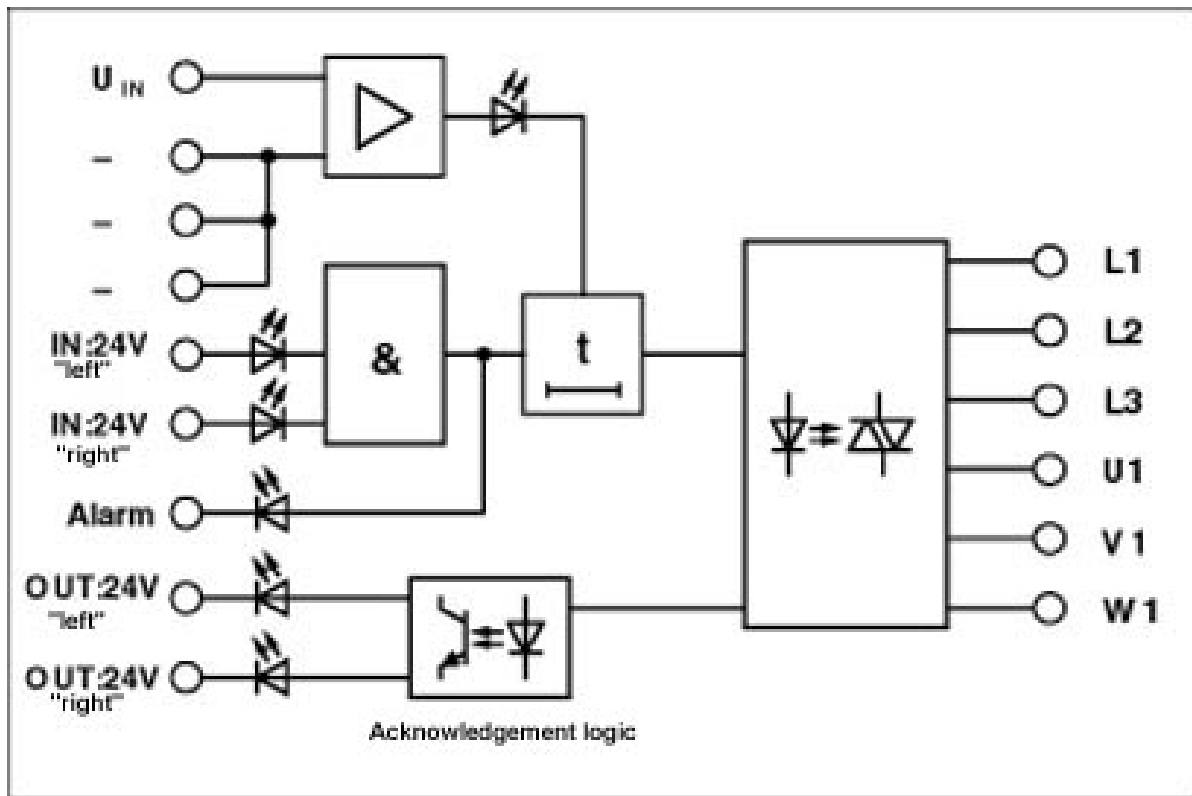


# CM 90-ELR-W3/5-R - Reversing load relay

2940113

<https://www.phoenixcontact.com/us/products/2940113>

Circuit diagram



# CM 90-ELR-W3/5-R - Reversing load relay



2940113

<https://www.phoenixcontact.com/us/products/2940113>

## Environmental product compliance

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)