

Load relay - ELR 3/ 9-500 - 2941714

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 load relay, for direct driving of equipment in the 3-phase network, with light indicator and protection circuit, output: 110-550 V AC/3 x 9 A

The illustration shows the version ELR 3/9-400

Product Features

- Noise and wear-free switching up to 500 V AC/9 A
- High switching frequency
- Protective circuit in input and output
- Operating indicator



Key commercial data

package_quantity	1
GTIN	4017918104559

Technical data

Dimensions

Width	62 mm
Height	84 mm
Depth	110 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Degree of protection	IP20

Input data

Input name	Device supply
Protective circuit	Protection against polarity reversal Polarity protection diode
Protective circuit	Surge protection
Status display	Yellow LED
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

Load relay - ELR 3/ 9-500 - 2941714

Technical data

Input data

Typical input current at U_N	16 mA
Switching threshold "0" signal in reference to U_N	> 0.8
Switching threshold "1" signal in reference to U_N	< 0.3
Reaction time in normal load operation	20 ms
Transmission frequency	1 Hz (At $\cos \varphi = 0.5$)

Output data

Output name	AC output
Nominal output voltage	500 V AC
Nominal output voltage range	110 V AC ... 550 V AC
Periodic peak reverse voltage	1200 V
Mains frequency	50 Hz
Mains frequency	60 Hz
Load current	9 A (see derating curve)
Leakage current	typ. 7 mA
Residual voltage	typ. 1.5 V
Surge current	230 A ($t_p = 10$ ms, at 25 °C)
Type of protection	RC element
Protective circuit/component	RC element
Type of protection	Surge protection
Surge voltage protection	> 750 V

Connection data

Connection method	Screw connection
Stripping length	8 mm
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	6 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	4 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	10
Screw thread	M3

General

Test voltage input/output	2.5 kV
Mounting position	Vertical (horizontal DIN rail)
Assembly instructions	Can be aligned with > 20 mm spacing
Operating mode	100% operating factor
Name	Air and creepage distances between the power circuits
Standards/regulations	EN 50178
Standards/regulations	Basic insulation
Name	Power station requirements
Name	EMC regulations

Load relay - ELR 3/ 9-500 - 2941714

Technical data

General

Standards/regulations	EN 61000-6-2
Standards/regulations	EN 61000-6-4

classifications

eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371601
eCl@ss 5.1	27371601
eCl@ss 6.0	27371601
eCl@ss 7.0	27371601
eCl@ss 8.0	27371601

ETIM

ETIM 2.0	EC000066
ETIM 3.0	EC000066
ETIM 4.0	EC000066
ETIM 5.0	EC002055

UNSPSC

UNSPSC 6.01	30211915
UNSPSC 7.0901	39121514
UNSPSC 11	39121514
UNSPSC 12.01	39121514
UNSPSC 13.2	39121514

approvals

GOST /

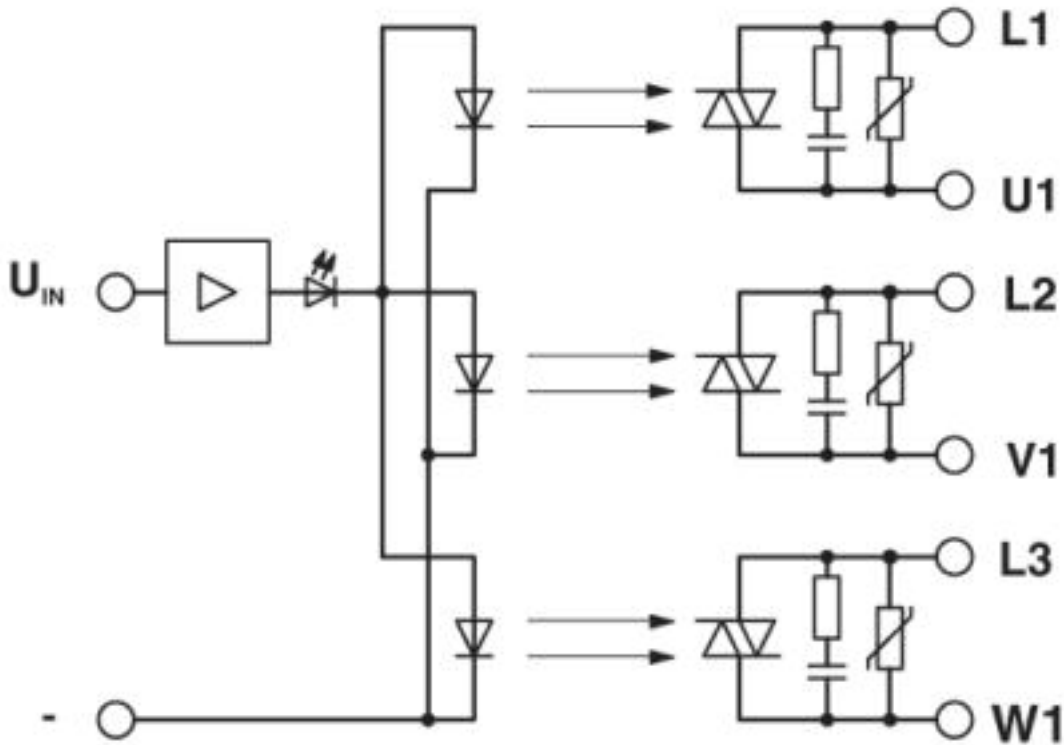
Approval details



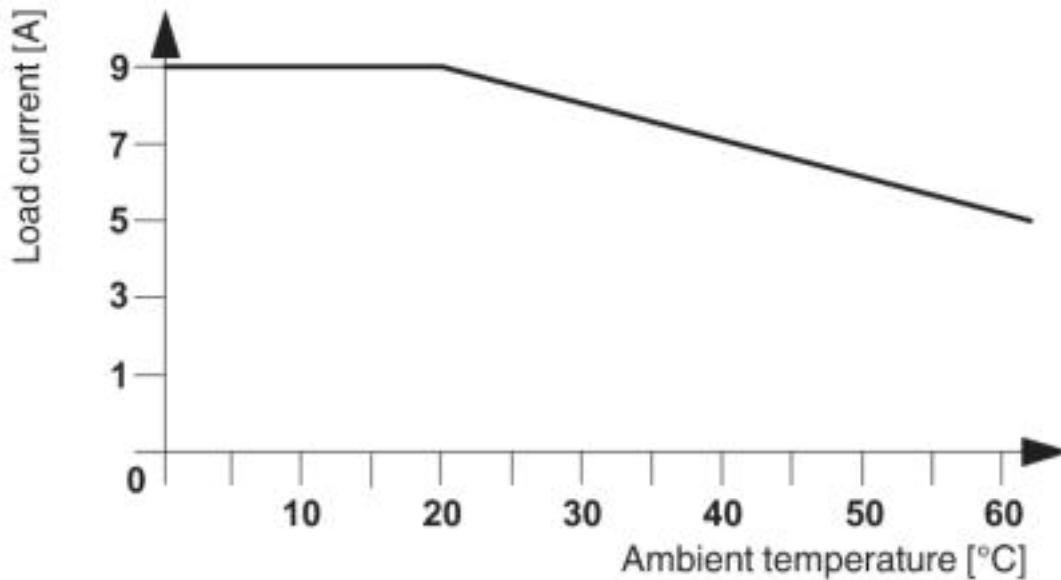
Drawings

Load relay - ELR 3/ 9-500 - 2941714

Block diagram

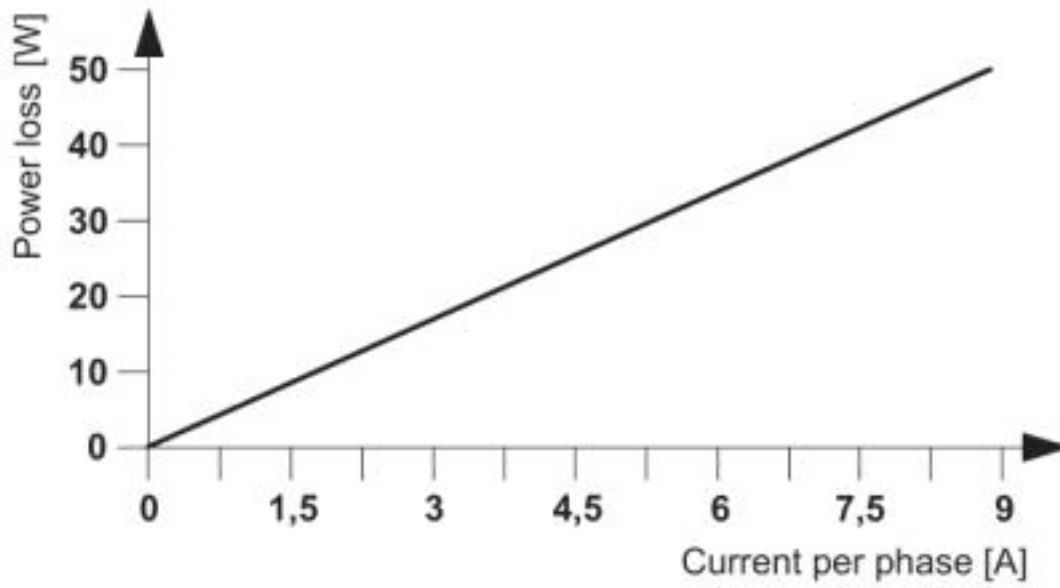


Diagram



Load relay - ELR 3/ 9-500 - 2941714

Diagram



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