

## Load relay - ELR 3/ 9-400 - 2941701

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Electronic load relay, for direct driving of equipment in the 3-phase network, with light indicator and protection circuit, output: 110-440 V AC/3 x 9 A

### Why buy this product

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



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 101046
Weight per Piece (excluding packing)	623.12 g
Custom tariff number	85364900
Country of origin	Germany

### 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
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## Technical data

### Input data

Protective circuit	Protection against polarity reversal Polarity protection diode
	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
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 $\cos \phi = 0.5$ )

### Output data

Output name	AC output
Nominal output voltage	400 V AC
Nominal output voltage range	110 V AC ... 440 V AC
Periodic peak reverse voltage	800 V
Mains frequency	50 Hz
	60 Hz
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 <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	10
Screw thread	M3

### General

Test voltage input/output	2.5 kV
Switching frequency	max. 10 Hz (At $\cos \phi = 0.5$ )
Mounting position	Vertical (horizontal DIN rail)

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## Technical data

### General

Assembly instructions	Can be aligned with > 20 mm spacing
Operating mode	100% operating factor
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	EN 50178
	Basic insulation
Designation	Power station requirements
	EMC regulations
Standards/regulations	EN 61000-6-2
	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	27371014

### 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

### Approvals

Approvals

EAC / EAC

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## Approvals

Ex Approvals

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Approvals submitted

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Approval details

EAC

EAC

## Drawings

