

## 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

### Your advantages

- 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
GTIN	4017918101046
Weight per Piece (excluding packing)	0.745 kg
Custom tariff number	85364900
Country of origin	Germany

### Technical data

#### Note

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

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## Technical data

### Ambient conditions

Degree of protection	IP20
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### Input data

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
Voltage range with reference to $U_C$	0.8 ... 1.2
Rated actuating current $I_C$	16 mA
Reaction time in normal load operation	20 ms
Transmission frequency	1 Hz (At $\cos \phi = 0.5$ )
Protective circuit	Reverse polarity protection Polarity protection diode
	Surge protection
Status display	Yellow LED

### Output data load output

Output name	AC output
Rated operating voltage $U_e$	400 V AC
Operating voltage range	110 V AC ... 440 V AC
Load current range	150 mA ... 9 A (see to derating)
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

### General

Test voltage input/output	2.5 kV
Switching frequency	max. 10 Hz (At $\cos \phi = 0.5$ )
Mounting position	Vertical (horizontal DIN rail)
Assembly instructions	Can be aligned with > 20 mm spacing
Operating mode	100% operating factor

### Connection data

Connection name	Control circuits
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.2 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG	24 ... 10

### Connection data 2

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## Technical data

### Connection data 2

Connection name	Load circuit
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.2 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG	24 ... 10

### Standards and Regulations

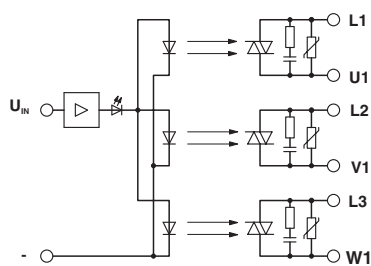
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	EN 50178
Insulation	Basic insulation
Designation	Power station requirements
	EMC regulations
Standards/regulations	EN 61000-6-2
	EN 61000-6-4

### Environmental Product Compliance

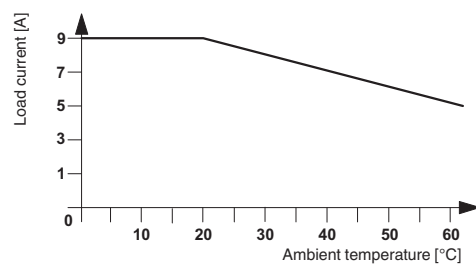
REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

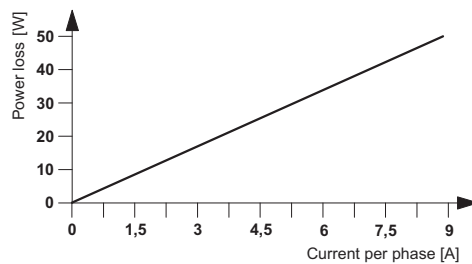
Block diagram



Diagram



Diagram



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## Classifications

### eCl@ss

eCl@ss 5.1	27371000
eCl@ss 6.0	27371000
eCl@ss 7.0	27371014
eCl@ss 8.0	27371014
eCl@ss 9.0	27371014

### ETIM

ETIM 4.0	EC002055
ETIM 5.0	EC002055
ETIM 6.0	EC002055
ETIM 7.0	EC002055

### UNSPSC

UNSPSC 6.01	30211915
UNSPSC 7.0901	39121514
UNSPSC 11	39121514
UNSPSC 12.01	39121514
UNSPSC 13.2	39121529

## Approvals

### Approvals

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### Approvals


EAC

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### Ex Approvals

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### Approval details

EAC		TR_TS_D_00573_c
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