

## Reversing load relay - ELR W3/ 9-500 - 2964186

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Electronic reversing 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 figure shows the version ELR W 3/9-400

### Your advantages

- High switching frequency
- Noise and wear-free switching up to 500 V AC/9 A
- Protective circuit in input and output
- LEDs for forward and reverse running, operating voltage, and impermissible control



### Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4017918099398

### 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
Degree of protection	IP20

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## Technical data

### Input data

Input name	Control input right/left
Quiescent current	40 mA
Rated actuating voltage $U_C$	24 V DC
Triggering voltage range	19.2 V DC ... 30 V DC
Voltage range with reference to $U_C$	0.8 ... 1.25
Rated actuating current $I_C$	7.5 mA
Reaction time in normal load operation	50 ms
Switch-over frequency	< 10 Hz (At $\cos \phi > 0.5$ )
Protective circuit	Reverse polarity protection Polarity protection diode
	Surge protection
Operating voltage display	Green LED
Status display	Yellow LED
Indication	Red LED
Maximum reversing frequency	10 Hz
Switchover time $R_L/L_L$ (turn-on time)	20 ms

### Output data load output

Output name	AC output
Rated operating voltage $U_e$	500 V AC
Operating voltage range	110 V AC ... 550 V AC
Load current range	150 mA
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
Mounting position	Vertical (horizontal DIN rail)
Assembly instructions	Can be aligned with > 20 mm spacing
Operating mode	100% operating factor
Reversing frequency	$\leq 10$ Hz (At $\cos \phi = 0.5$ )

### 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>

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## Technical data

### Connection data

Conductor cross section AWG	24 ... 10
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### 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

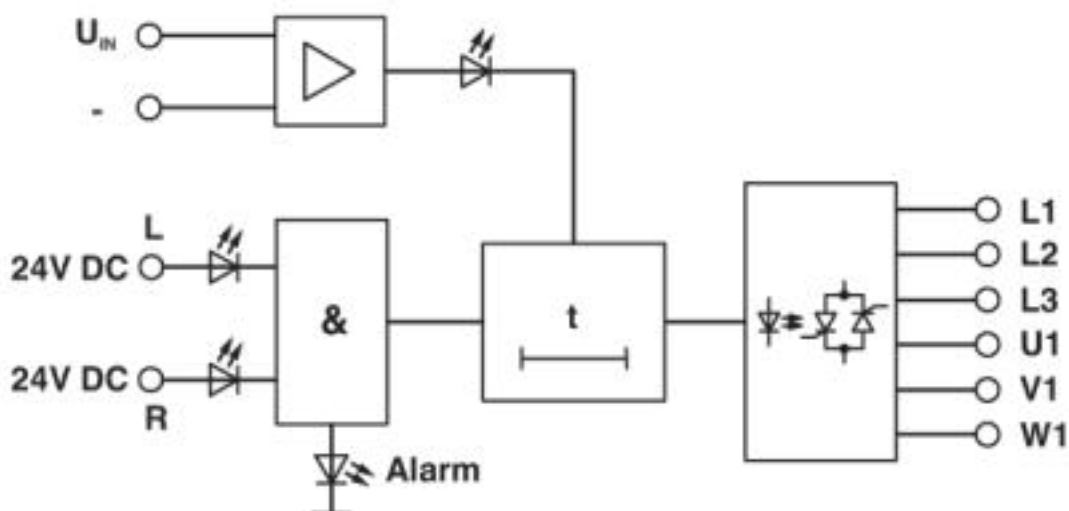
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	EN 50178
Designation	Power station requirements
	EMC regulations
Standards/regulations	EN 61000-6-2
	EN 61000-6-4

### 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"

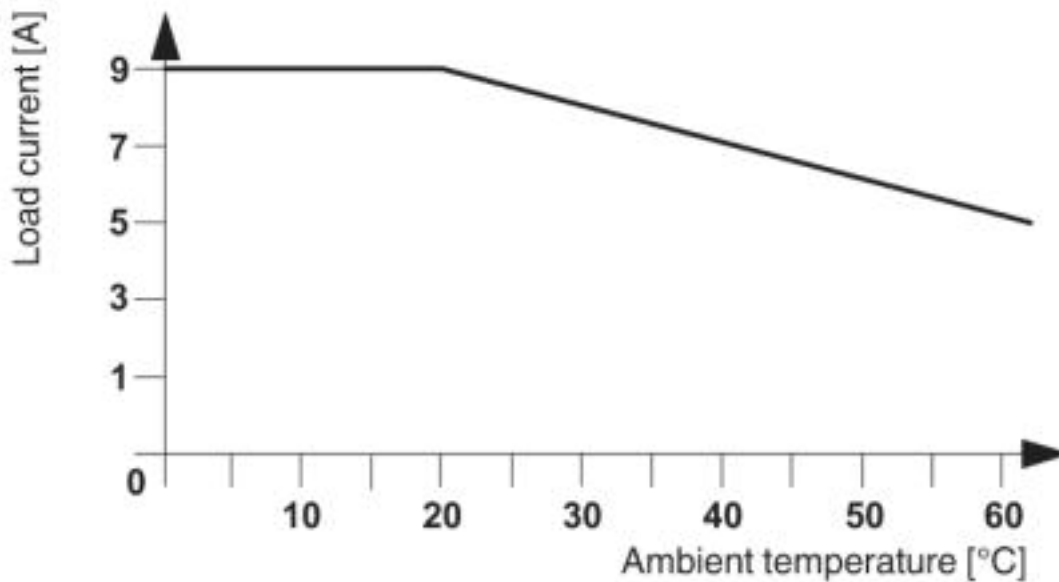
## Drawings

Block diagram

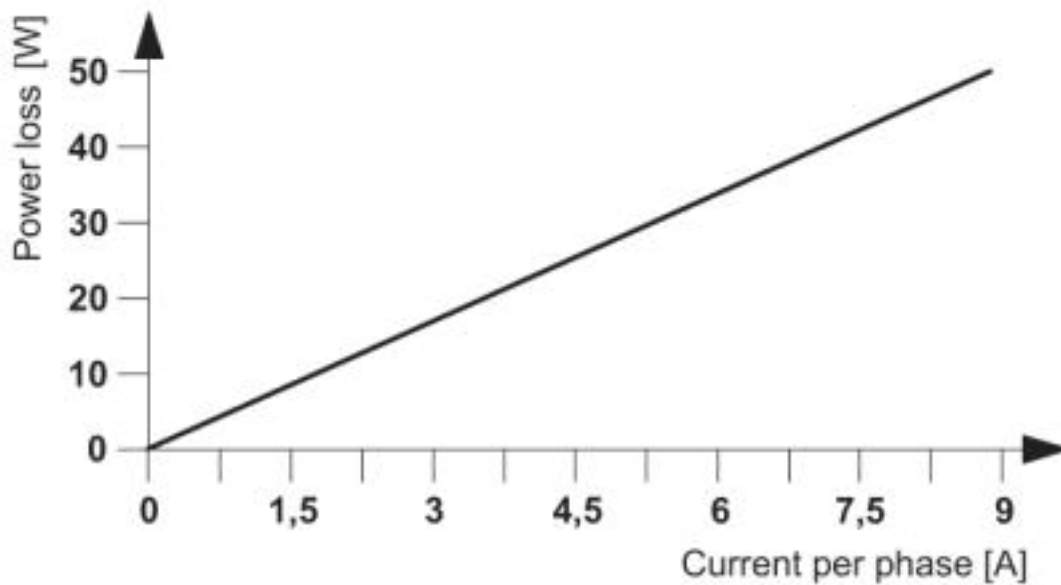


# Reversing load relay - ELR W3/ 9-500 - 2964186

Diagram



Diagram



Approvals

Approvals

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Approvals

EAC

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## Reversing load relay - ELR W3/ 9-500 - 2964186

### Approvals

Ex Approvals

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#### Approval details

EAC



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