

# Solid-state reversing contactor - ELR W3- 24DC/500AC- 9 - 2297316

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Three-phase solid-state reversing contactor with 24 V DC input, 9 A output current, zero voltage switch, optionally with thermal fuse

## Your advantages

- Optional thermal fuse
- Stable and short switching times
- Long service life
- Noise and wear-free switching
- Integrated protection circuit
- Integrated locking and load wiring
- High switching frequency



## Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356175678

## Technical data

### Dimensions

Width	67.5 mm
Height	99 mm
Depth	114.5 mm

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 70 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Degree of protection	IP20

### Input data

Input name	Control input right/left
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## Technical data

### Input data

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 $I_C$	12.7 mA
Switching threshold	9.6 V ("0" signal)
	19.2 V ("1" signal)
Protective circuit	Reverse polarity protection Suppressor diode
	Surge protection
Status display	Yellow LED
Indication	Red LED

### Output data load output

Output name	AC output
Rated operating voltage $U_e$	500 V AC
Operating voltage range	48 V AC ... 575 V AC
Load current range	100 mA ... 9 A (see to derating)
Rated operating current at AC-51	9 A
Rated operating current at AC-53a	9 A
Leakage current	6 mA
Residual voltage	< 1.5 V
Surge current	300 A (t = 10 ms)
Type of protection	RCV circuit

### General

Test voltage input/output	5 kV <sub>rms</sub>
Switching frequency	max. 5 Hz
Mounting position	Vertical (horizontal DIN rail)
Assembly instructions	Can be aligned with spacing = 20 mm
Operating mode	100% operating factor
Reversing frequency	≤ 10 Hz

### 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> ... 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
Torque	0.5 Nm ... 0.6 Nm
	5 lb <sub>f</sub> -in. ... 7 lb <sub>f</sub> -in.

### 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> ... 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
Torque	0.5 Nm ... 0.6 Nm
	5 lb <sub>f</sub> -in. ... 7 lb <sub>f</sub> -in.

### Standards and Regulations

Designation	Standards/regulations
Standards/regulations	DIN EN 50178
	EN 60947

### Conformance/approvals

Designation	UL approval
Certificate	NMFT.E323771

### UL data

SCCR	5 kA (20 A RK5 (standard fault) fuse)
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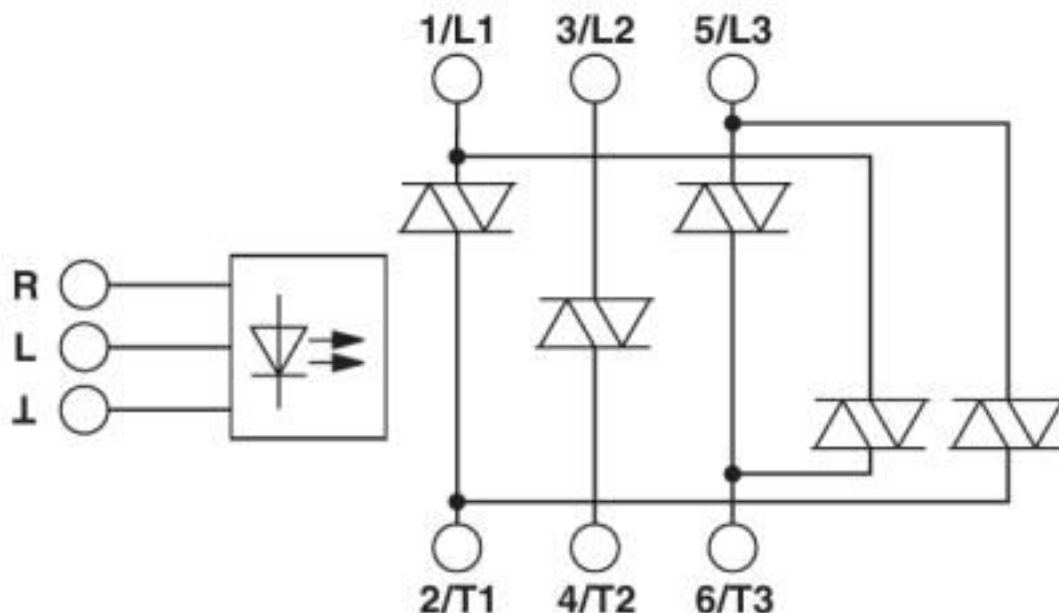
### Environmental Product Compliance

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

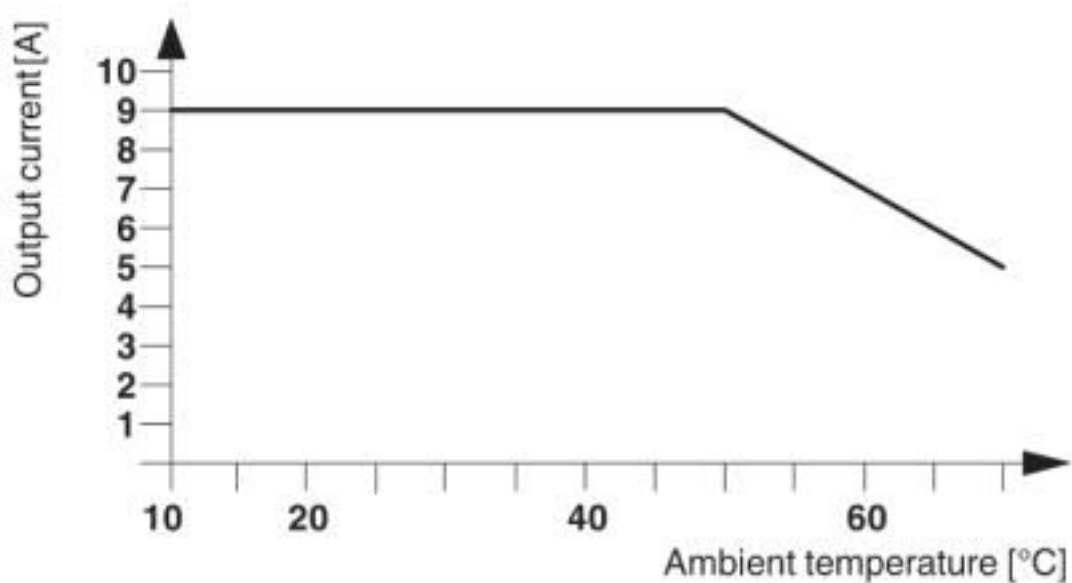
## Drawings

# Solid-state reversing contactor - ELR W3- 24DC/500AC- 9 - 2297316

Block diagram



Diagram



## Classifications

eCl@ss

eCl@ss 10.0.1	27371014
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371000
eCl@ss 5.1	27371000

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## Classifications

### eCl@ss

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
UNSPSC 18.0	39122333
UNSPSC 19.0	39122333
UNSPSC 20.0	39122333
UNSPSC 21.0	39122333

## Approvals

### Approvals

#### Approvals

DNV GL / UL Listed / cUL Listed / EAC / cULus Listed

#### Ex Approvals

### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAA00000AF
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UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 323771
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cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 323771
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EAC		RU*C- DE.*08.B.00520*
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cULus Listed	
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## Accessories

### Accessories

#### Device marking

Plastic label - US-EMLP (15X5) - 0828790



Plastic label, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 189

Plastic label - UC-EMLP (15X5) - 0819301



Plastic label, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: adhesive, lettering field size: 15 x 5 mm, Number of individual labels: 10

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