

## Solid-state contactor - ELR 3- 24DC/500AC- 9 - 2297219

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

### Product Features

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



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	1000.0 g
Country of origin	Germany

### Technical data

#### Input data

Input name	Device supply
Protective circuit	Reverse polarity protection Suppressor diode
	Surge protection
Status display	Yellow LED
Indication	Red LED
Input name	Control input right/left
Rated actuating voltage $U_c$	24 V DC
Voltage range with reference to $U_c$	0.8 ... 1.25
Rated actuating current $I_c$	8.3 mA

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## Technical data

### Input data

Switching threshold	9.6 V ("0" signal)
	19.2 V ("1" signal)

### Output data load 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)
Protective circuit	RCV circuit

### Connection data, control circuit

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

### Connection data load circuit

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Conductor cross section AWG	24 ... 14

### General

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

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## Technical data

### General

Standards/regulations	DIN EN 50178
	EN 60947

### 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

### UL data

SCCR	5 kA (20 A RK5 (standard fault) fuse)
FLA	2 A (at 500 V, AC Resistance)
	2 A (at 500 V, AC General USE)
	2 A (at 500 V, AC Resistance Air Heating)

### Standards and Regulations

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

## 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
eCl@ss 9.0	27371601

### ETIM

ETIM 2.0	EC000066
ETIM 3.0	EC000066
ETIM 4.0	EC000066

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## Classifications

### ETIM

ETIM 5.0	EC002055
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### UNSPSC

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

## Approvals

### Approvals

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#### Approvals

UL Listed / cUL Listed / UL Listed / cUL Listed / EAC / EAC / cULus Listed

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#### Ex Approvals

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#### Approvals submitted

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### Approval details

UL Listed
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cUL Listed
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UL Listed
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## Approvals

cUL Listed

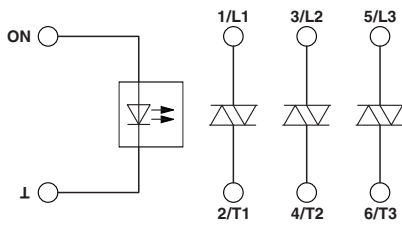
EAC

EAC

cULus Listed

## Drawings

Block diagram



Diagram

