

## Solid-state contactor - ELR 2+1- 24DC/500AC-37 - 2297277

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Three-phase solid-state contactor with 24 V DC input, 37 A output current, zero voltage switch, optionally with thermal fuse

### Your advantages

- ✓ 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
GTIN	 4 046356 175630
GTIN	4046356175630

### Technical data

#### Dimensions

Width	147.5 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
Rated actuating voltage $U_c$	24 V DC

# Solid-state contactor - ELR 2+1- 24DC/500AC-37 - 2297277

## Technical data

### Input data

Triggering voltage range	19.2 V DC ... 30 V DC
Voltage range with reference to $U_C$	0.8 ... 1.25
Rated actuating current $I_C$	8.3 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	200 mA ... 37 A (see to derating)
Rated operating current at AC-51	37 A
Rated operating current at AC-53a	25 A
Leakage current	6 mA
Residual voltage	< 1.5 V
Surge current	1300 A (t = 10 ms)
Type of protection	RCV circuit

### 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 = 40 mm
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> ... 4 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 ... 12
Torque	0.5 Nm ... 0.6 Nm 5 lb <sub>f</sub> -in. ... 7 lb <sub>f</sub> -in.

### Connection data 2

Connection name	Load circuit
Connection method	Screw connection

## Solid-state contactor - ELR 2+1- 24DC/500AC-37 - 2297277

### Technical data

#### Connection data 2

Stripping length	8 mm
Screw thread	M4
Conductor cross section solid	0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Conductor cross section flexible	0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Conductor cross section AWG	20 ... 6
Torque	15 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
	NRNT.E172140

#### UL data

SCCR	5 kA (50 A RK5 (standard fault) fuse)
FLA	16 A (at 500 V, AC Resistance)
	16 A (at 500 V, AC General USE)
	16 A (at 500 V, AC Resistance Air Heating)

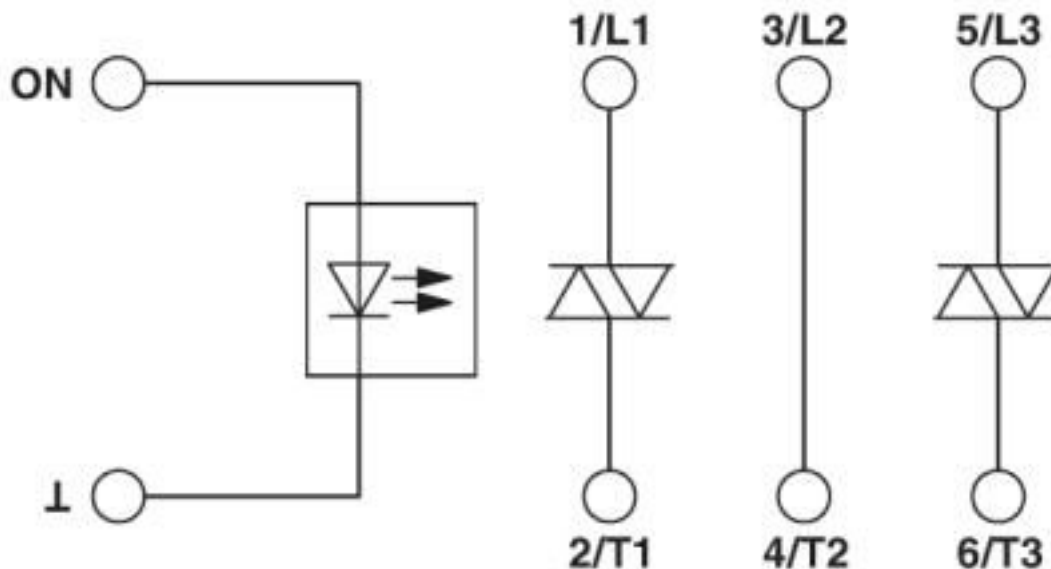
#### Environmental Product Compliance

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"

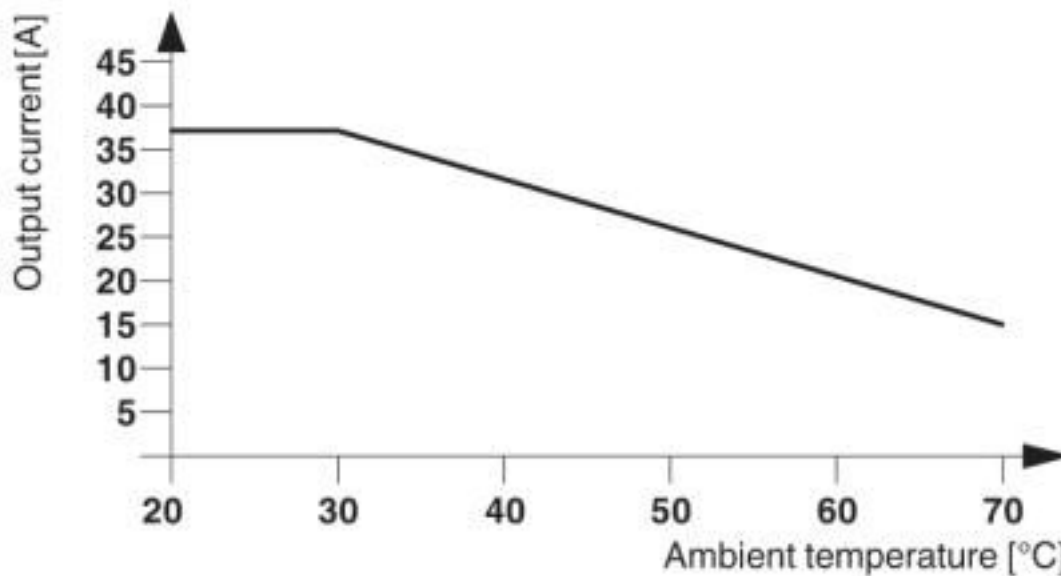
### Drawings

# Solid-state contactor - ELR 2+1- 24DC/500AC-37 - 2297277

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
eCl@ss 6.0	27371000

## Solid-state contactor - ELR 2+1- 24DC/500AC-37 - 2297277

### Classifications

#### eCl@ss

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

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Solid State Relays - Industrial Mount](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[D2440-C](#) [H10CA4890](#) [D4875C](#) [1395831-1](#) [1616010-6](#) [BR312BY](#) [A-1326](#) [H10CA4850](#) [H12CA4890VL](#) [RA2410-D06](#) [RA2410HA06T](#)  
[D1202F](#) [D53TP50-10](#) [W230E-1-12](#) [W230T-3-12](#) [1-1617030-3](#) [1-1617033-7](#) [MS2-D2420](#) [MS2-D2430](#) [A-1440](#) [RJ1P60V50E](#) [HS501DR-](#)  
[D2425](#) [RN1F48I50](#) [70.362.1028.0](#) [7-1393030-8](#) [Z5.509.0828.0](#) [G3DZ-4B](#) [DC24](#) [G3DZ-F4B](#) [DC12](#) [2912138](#) [SSRDAC10](#) [SSR-10048RD1](#)  
[RV8S-L-A240-D24](#) [RV8S-L-A240-D6](#) [RV8S-S-A240-D6](#) [RV8S-S-A240Z-D24](#) [RV8S-S-D24-A240](#) [RV8S-S-D48-A120](#) [RN1F12V50](#)  
[RJ1P60I30E](#) [RJ1P60V30E](#) [SO967860](#) [SMT8628521](#) [SO869970](#) [SOD867180](#) [SAL961360](#) [SO867970](#) [SOB863860](#) [SOB867640](#) [G3PH-](#)  
[5150B](#) [DC5-24](#) [G3PH-2075B](#) [DC5-24](#)