

Solid-state contactor - ELR 3- 24DC/500AC- 2 - 2297196

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, 2 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
- ✓ Integrated protection circuit
- ✓ High switching frequency



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 172851
GTIN	4046356172851
Weight per Piece (excluding packing)	420.000 g
Custom tariff number	85364190
Country of origin	Germany

Technical data

Dimensions

Width	40 mm
Height	99 mm
Depth	114.5 mm

Ambient conditions

Solid-state contactor - ELR 3- 24DC/500AC- 2 - 2297196

Technical data

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
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	100 mA ... 2 A (see to derating)
Rated operating current at AC-51	2 A
Rated operating current at AC-53a	2 A
Leakage current	6 mA
Residual voltage	< 1.5 V
Surge current	200 A ($t = 10$ ms)
Type of protection	RCV circuit

General

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

Connection data

Connection name	Control circuits
Connection method	Screw connection

Solid-state contactor - ELR 3- 24DC/500AC- 2 - 2297196

Technical data

Connection data

Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.2 mm² ... 2.5 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 14
Torque	0.5 Nm ... 0.6 Nm
	5 lb _f -in. ... 7 lb _f -in.

Connection data 2

Connection name	Load circuit
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.2 mm² ... 2.5 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 14
Torque	0.5 Nm ... 0.6 Nm
	5 lb _f -in. ... 7 lb _f -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 (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)

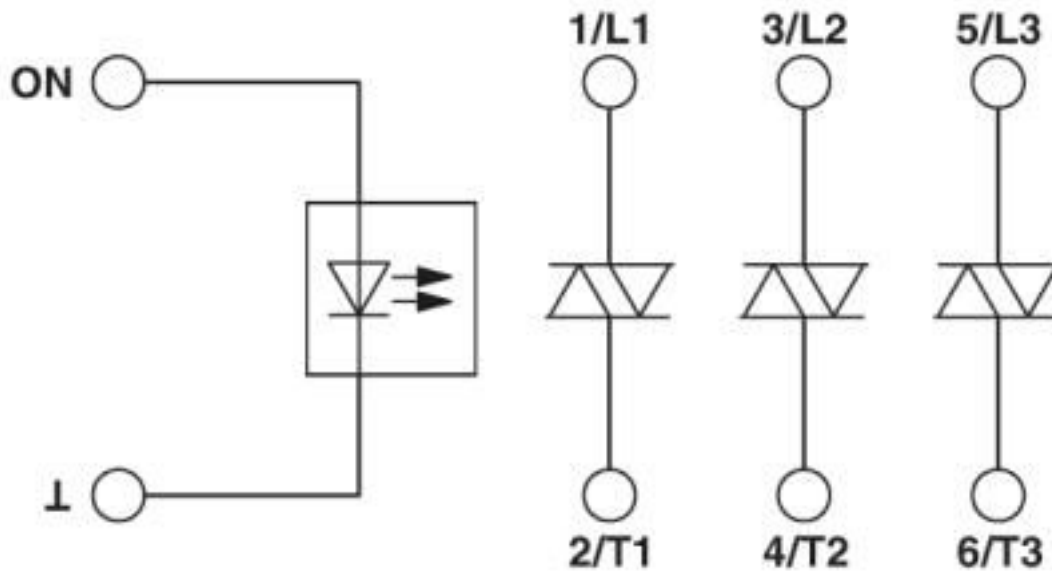
Environmental Product Compliance

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"

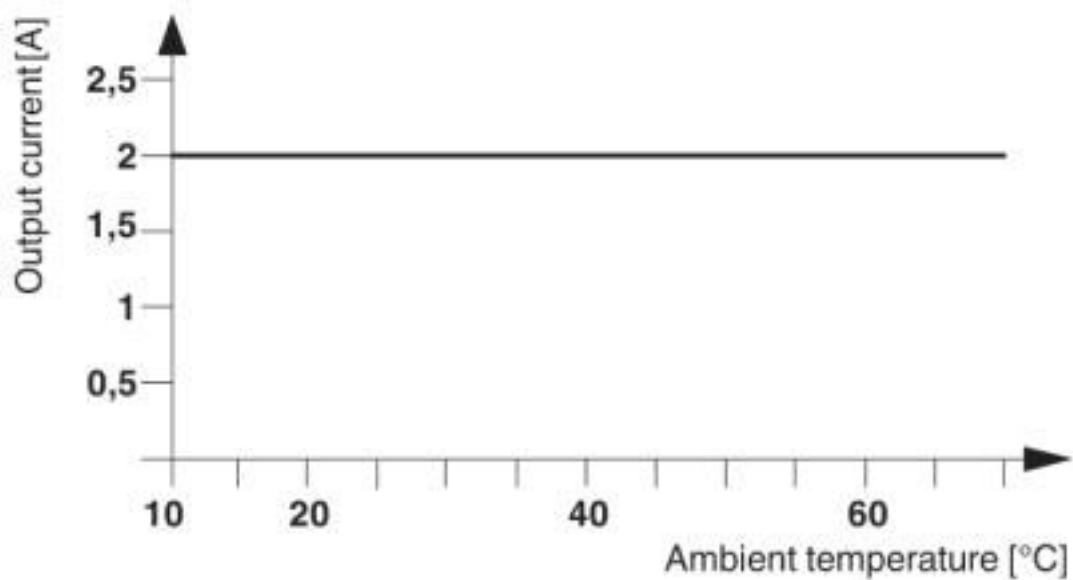
Solid-state contactor - ELR 3- 24DC/500AC- 2 - 2297196

Drawings

Block diagram



Diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27371014
---------------	----------

Solid-state contactor - ELR 3- 24DC/500AC- 2 - 2297196

Classifications

eCl@ss

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
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

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

Solid-state contactor - ELR 3- 24DC/500AC- 2 - 2297196

Accessories

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

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