

ELR W3- 24DC/500AC-16 - Solid-state reversing contactor



2297332

<https://www.phoenixcontact.com/us/products/2297332>

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 documentation. Our general terms of use for downloads are valid.



Three-phase solid-state reversing contactor with 24 V DC input, 16 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 locking and load wiring
- High switching frequency
- Integrated protection circuit

Commercial data

Item number	2297332
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C472
Product key	DK7223
GTIN	4046356175692
Weight per piece (including packing)	1,808.1 g
Weight per piece (excluding packing)	1,808.1 g
Customs tariff number	85364900
Country of origin	DE

ELR W3- 24DC/500AC-16 - Solid-state reversing contactor



2297332

<https://www.phoenixcontact.com/us/products/2297332>

Technical data

Product properties

Product type	Solid-state contactor
Operating mode	100% operating factor

Electrical properties

Number of phases	3
Switching frequency	max. 5 Hz
Test voltage (Input/output)	5 kV _{rms} (50 Hz, 60 s)
Switching frequency	max. 5 Hz
Reversing frequency	≤ 10 Hz

Insulation characteristics

Rated insulation voltage	500 V
Rated surge voltage	6 kV
Overvoltage category	III
Degree of pollution	2

Input data

Control

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 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
Error indication	Red LED
Status display	LED (yellow)

Output data

AC output

Rated operating voltage U_e	500 V AC
Operating voltage range	48 V AC ... 575 V AC
Rated operating current at AC-51	16 A
Rated operating current at AC-53a	12 A
Peak offstate voltage	1200 V
Mains frequency	40 Hz ... 100 Hz
Load current range	100 mA ... 16 A (see to derating)

ELR W3- 24DC/500AC-16 - Solid-state reversing contactor



2297332

<https://www.phoenixcontact.com/us/products/2297332>

Leakage current	6 mA
Residual voltage	< 1.5 V
Surge current	300 A (t = 10 ms)
Max. load value	580 A ² s
Protective circuit	RCV circuit
Surge voltage protection	> 575 V AC

Connection data

Control circuits

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm ² ... 4 mm ²
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 12

Load circuit

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M4
Conductor cross-section rigid	0.5 mm ² ... 16 mm ²
Conductor cross-section flexible	0.5 mm ² ... 16 mm ²
Conductor cross-section AWG	20 ... 6

Signaling

Status display	LED (yellow)
Error indication	Red LED

Dimensions

Width	147.5 mm
Height	99 mm
Depth	114.5 mm

Environmental and real-life conditions

Ambient conditions

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

Approvals

UL approval

Certificate	NMFT.E323771
-------------	--------------

UL data

ELR W3- 24DC/500AC-16 - Solid-state reversing contactor



2297332

<https://www.phoenixcontact.com/us/products/2297332>

SCCR	5 kA (50 A RK5 (standard fault) fuse)
------	---------------------------------------

Standards and regulations

Standards/regulations

Standards/regulations	DIN EN 50178
	EN 60947

Mounting

Mounting type	DIN rail mounting
Assembly note	can be aligned with spacing = 40 mm
Mounting position	Vertical (horizontal DIN rail)

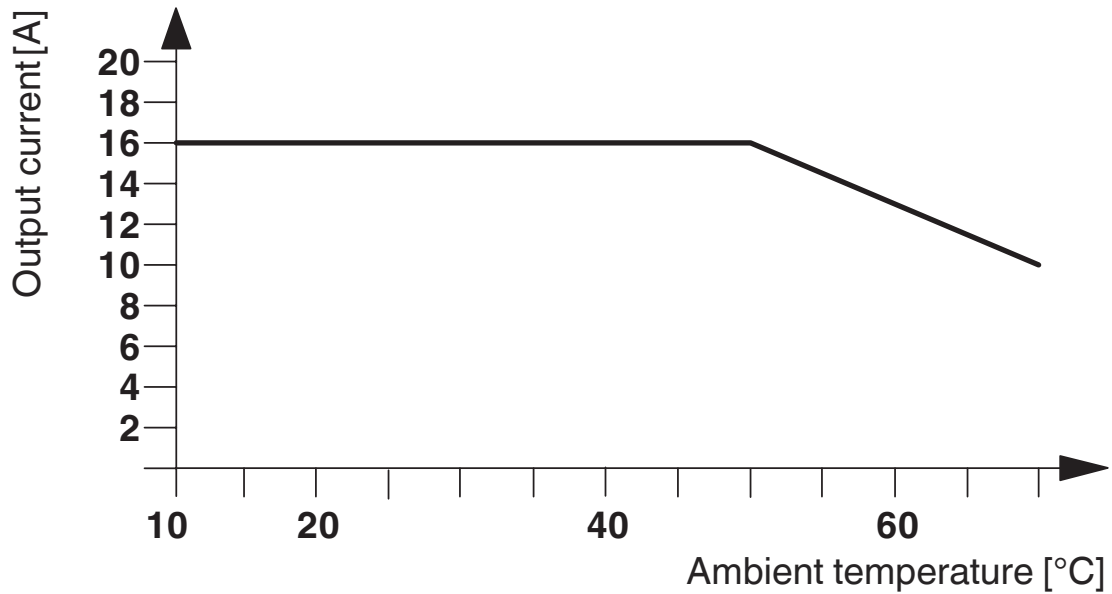
ELR W3- 24DC/500AC-16 - Solid-state reversing contactor

2297332

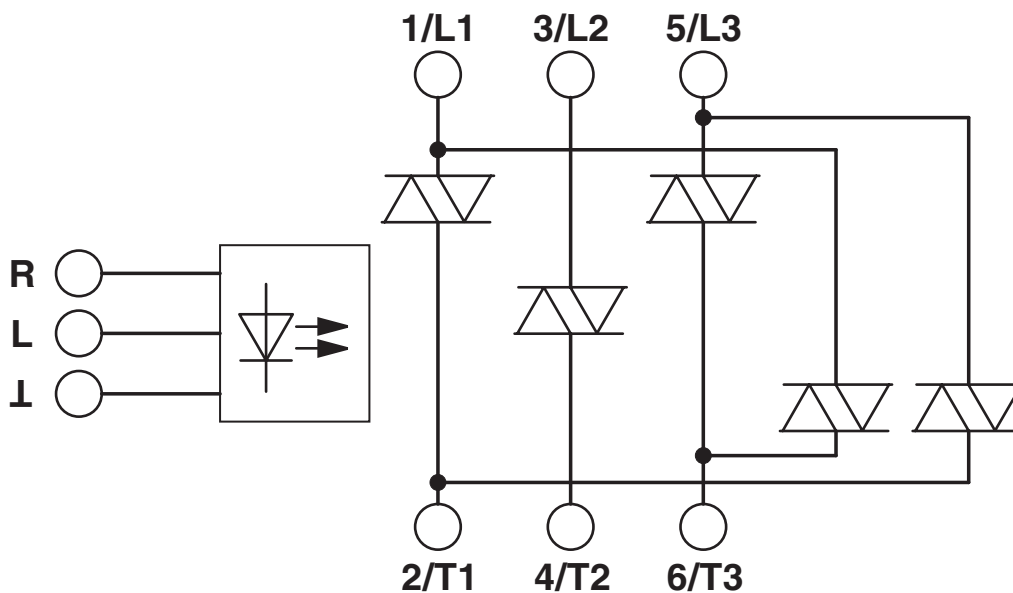
<https://www.phoenixcontact.com/us/products/2297332>

Drawings

Diagram



Block diagram



Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com