

ELR 1- 24DC/600AC-50 - Solid-state contactor



2297170

<https://www.phoenixcontact.com/us/products/2297170>

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.



Single-phase solid-state contactor, input voltage: 24 V DC, output current: 50 A, zero voltage switch

Your advantages

- Wear and bounce-free
- High switching frequency
- 24 V DC and 230 V AC input voltage versions

Commercial data

Item number	2297170
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C471
Product key	DK7124
GTIN	4046356132046
Weight per piece (including packing)	413.9 g
Weight per piece (excluding packing)	413.8 g
Customs tariff number	85362010
Country of origin	MT

ELR 1- 24DC/600AC-50 - Solid-state contactor



2297170

<https://www.phoenixcontact.com/us/products/2297170>

Technical data

Product properties

Product type	Solid-state contactor
--------------	-----------------------

Electrical properties

Number of phases	1
Maximum power dissipation for nominal condition	82 W
Mains type	1-phase
Test voltage (Input/output)	4 kV _{rms} (50 Hz, 60 s)

Input data

Control

Input name	Control input
Rated actuating voltage U _C	24 V DC
Triggering voltage range	4 V DC ... 32 V DC
Rated actuating current I _C	approx. 12 mA
Switching threshold	≤ 1 V DC ("0" signal) ≥ 4 V DC ("1" signal)
Operating voltage display	Green LED
Transmission frequency	25 Hz

Output data

Load output

Operating voltage range	42 V AC ... 660 V AC
Rated operating current at AC-51	50 A
Rated operating current at AC-53a	30 A
Peak offstate voltage	1200 V
Mains frequency	45 Hz 65 Hz
Load current range	150 mA ... 50 A (see to derating)
Leakage current	< 3 mA (In off state)
Residual voltage	< 1.6 V
Surge current	1900 A (t = 10 ms)
Max. load value	18000 A ² s
Protective circuit	RCV circuit
Phase angle cos phi min	0.5

Connection data

Control circuits

Connection method	Screw connection
Stripping length	8 mm

ELR 1- 24DC/600AC-50 - Solid-state contactor



2297170

<https://www.phoenixcontact.com/us/products/2297170>

Screw thread	M3
Conductor cross-section rigid	0.5 mm ² ... 4 mm ²
Conductor cross-section flexible	0.5 mm ² ... 4 mm ²
Conductor cross-section AWG	20 ... 14

Load circuit

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M5
Conductor cross-section rigid	4 mm ² ... 25 mm ²
Conductor cross-section flexible	4 mm ² ... 25 mm ²
Conductor cross-section AWG	12 ... 3

Signaling

Operating voltage display	Green LED
---------------------------	-----------

Dimensions

Width	45 mm
Height	103 mm
Depth	103 mm

Material specifications

Color	green (RAL 6021)
-------	------------------

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-30 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C

Standards and regulations

Standards/regulations

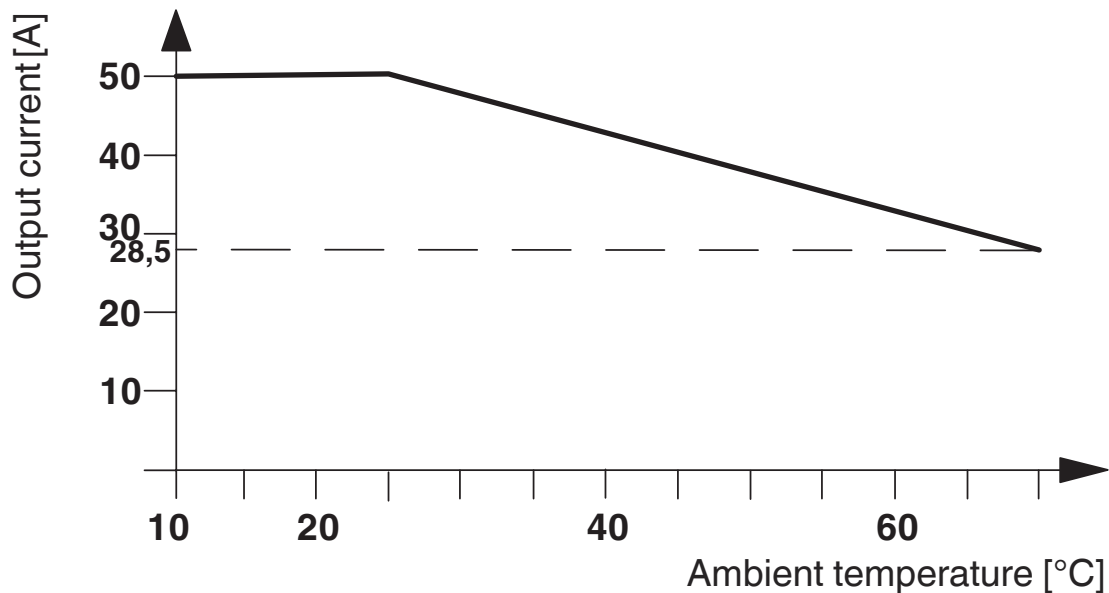
Standards/regulations	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
	EN 55011

Mounting

Mounting type	DIN rail mounting
Assembly note	can be aligned with ≥ 22.5 mm spacing
Mounting position	Vertical (horizontal DIN rail)

Drawings

Diagram



Block diagram

