

ELR 1-SC-24DC/600AC-20 - Solid-state contactor



1032919

<https://www.phoenixcontact.com/de/produkte/1032919>

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: 20 A, zero voltage switch

Commercial Data

Item number	1032919
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	G1 - Relais
Product Key	CK7122
Catalog Page	Page 48 (C-5-2019)
GTIN	4055626537726
Weight per Piece (including packing)	260,5 g
Weight per Piece (excluding packing)	255 g
Customs tariff number	85364190
Country of origin	MT

ELR 1-SC-24DC/600AC-20 - Solid-state contactor



1032919

<https://www.phoenixcontact.com/de/produkte/1032919>

Technical Data

Product properties

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

Electrical properties

Number of phases	1
Maximum power dissipation for nominal condition	20 W
Mains type	1-phase

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	20 A
Rated operating current at AC-53a	5 A ($T_A = 25$ °C) 5 A ($T_A = 40$ °C)
Peak offstate voltage	1200 V
Mains frequency	45 Hz 65 Hz
Load current range	150 mA ... 20 A (see to derating)
Leakage current	< 3 mA (In off state)
Residual voltage	< 1 V
Surge current	325 A ($t = 10$ ms)
Max. load value	525 A ² s
Protective circuit	Varistor
Phase angle $\cos \phi$ min	0.5

Connection data

Control circuits

Connection method	Screw connection
Stripping length	8 mm

ELR 1-SC-24DC/600AC-20 - Solid-state contactor



1032919

<https://www.phoenixcontact.com/de/produkte/1032919>

Screw thread	M3
Conductor cross section rigid	0.5 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.5 mm ² ... 2.5 mm ²
Conductor cross section AWG	18 ... 12

Load circuit

Connection method	Screw connection
Stripping length	12 mm
Screw thread	M4
Conductor cross section rigid	2.5 mm ² ... 6 mm ²
Conductor cross section flexible	1 mm ² ... 4 mm ²
Conductor cross section AWG	14 ... 10

Protective conductor connection

Connection method	Ring cable lug
Screw thread	M5
Tightening torque	1.5 Nm

Signaling

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

Dimensions

Width	18 mm
Height	110 mm
Depth	103 mm

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

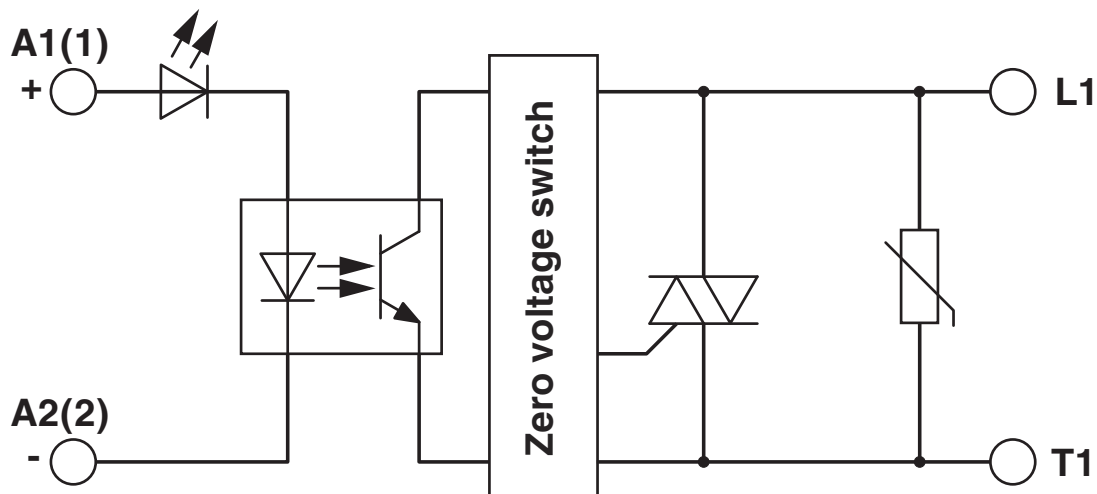
Standards/regulations	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 55011

Mounting

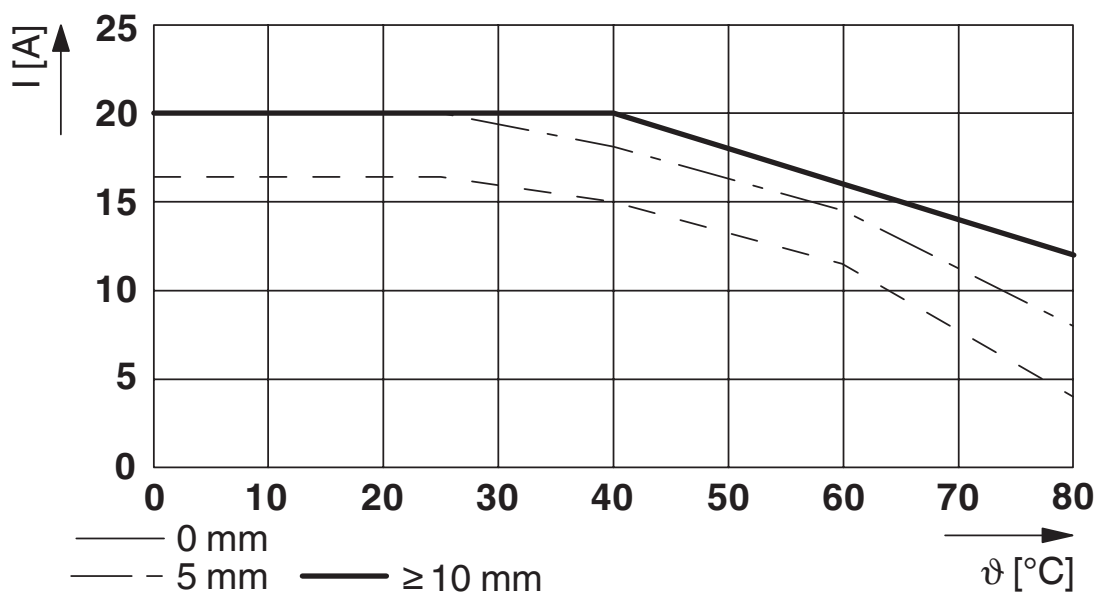
Mounting type	DIN rail mounting
Assembly instructions	Can be aligned with ≥ 22.5 mm spacing
Mounting position	Vertical (horizontal DIN rail)

Drawings

Block diagram



Diagram



ELR 1-SC-24DC/600AC-20 - Solid-state contactor



1032919

<https://www.phoenixcontact.com/de/produkte/1032919>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/de/produkte/1032919>



EAC

Approval ID: RU C-DE*.B.0080120



UL Listed

Approval ID: FILE E 323771



cUL Listed

Approval ID: FILE E 323771

cULus Listed

ELR 1-SC-24DC/600AC-20 - Solid-state contactor



1032919

<https://www.phoenixcontact.com/de/produkte/1032919>

Classifications

ECLASS

ECLASS-11.0	27371003
ECLASS-12.0	27371003
ECLASS-13.0	27371003

ETIM

ETIM 8.0	EC002055
----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

ELR 1-SC-24DC/600AC-20 - Solid-state contactor



1032919

<https://www.phoenixcontact.com/de/produkte/1032919>

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 25; For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"
------------	---

Phoenix Contact 2023 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT Deutschland GmbH
Flachsmarktstraße 8
D-32825 Blomberg
+49 52 35/3-1 20 00
info@phoenixcontact.de