

ELR 1-SC-230AC/600AC-20 - Solid-state contactor



1032920

<https://www.phoenixcontact.com/us/products/1032920>

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: 230 V AC, output current: 20 A, zero voltage switch

Commercial data

Item number	1032920
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C471
Product key	DK6831
GTIN	4055626537849
Weight per piece (including packing)	263.6 g
Weight per piece (excluding packing)	258.3 g
Customs tariff number	85364900
Country of origin	MT

ELR 1-SC-230AC/600AC-20 - Solid-state contactor



1032920

<https://www.phoenixcontact.com/us/products/1032920>

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	230 V AC
Triggering voltage range	24 V AC ... 275 V AC
	24 V DC ... 190 V DC
Rated actuating current I_C	approx. 17 mA
Switching threshold	≤ 5 V AC/DC ("0" signal)
	≥ 20 V AC/DC ("1" signal)
Operating voltage display	Green LED
Transmission frequency	6 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
-------------------	------------------

ELR 1-SC-230AC/600AC-20 - Solid-state contactor



1032920

<https://www.phoenixcontact.com/us/products/1032920>

Stripping length	8 mm
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
Tightening torque	0.5 Nm ... 0.6 Nm

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
Tightening torque	1.5 Nm ... 2 Nm

Protective conductor connection

Connection method	Ring cable lug
Screw thread	M4
Tightening torque	1 Nm ... 1.5 Nm

Signaling

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

Dimensions

Width	18 mm
Height	110 mm
Depth	103 mm

Material specifications

Color	gray (RAL 7042)
-------	-----------------

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

ELR 1-SC-230AC/600AC-20 - Solid-state contactor



1032920

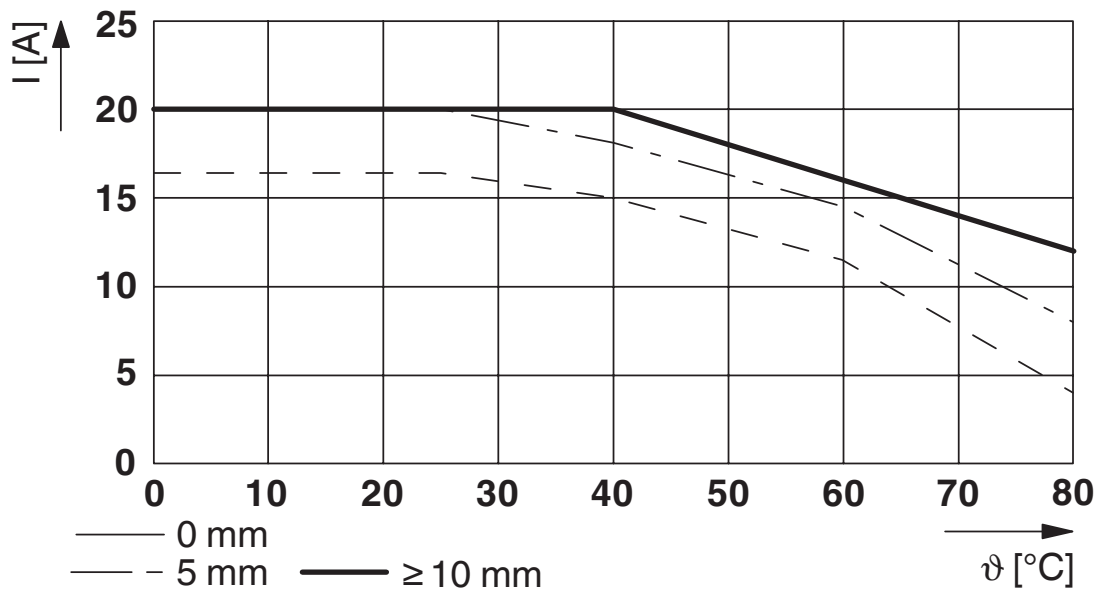
<https://www.phoenixcontact.com/us/products/1032920>

Mounting

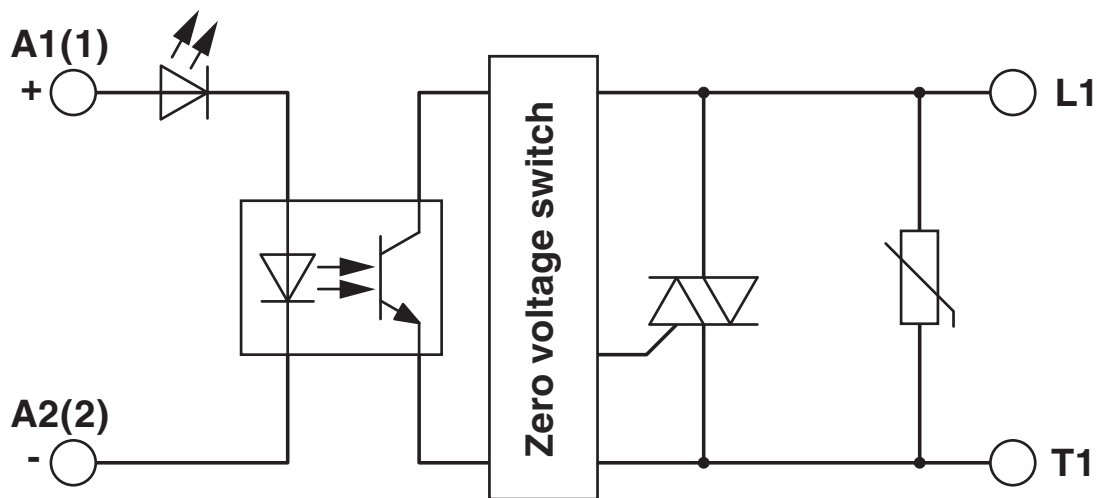
Mounting type	DIN rail mounting
Assembly note	can be aligned with ≥ 22.5 mm spacing
Mounting position	Vertical (horizontal DIN rail)

Drawings

Diagram



Block diagram



ELR 1-SC-230AC/600AC-20 - Solid-state contactor



1032920

<https://www.phoenixcontact.com/us/products/1032920>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1032920>



EAC

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



UL Listed

Approval ID: FILE E 323771



cUL Listed

Approval ID: FILE E 323771



cULus Listed

Approval ID: E323771

ELR 1-SC-230AC/600AC-20 - Solid-state contactor



1032920

<https://www.phoenixcontact.com/us/products/1032920>

Classifications

ECLASS

ECLASS-13.0	27371003
ECLASS-15.0	27371003

ETIM

ETIM 10.0	EC000066
-----------	----------

UNSPSC

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

ELR 1-SC-230AC/600AC-20 - Solid-state contactor



1032920

<https://www.phoenixcontact.com/us/products/1032920>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-25
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
-------------------------------------	----------------------

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