

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



1032920

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

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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

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Technical data

Product properties

Product type	Solid-state contactor
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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
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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
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Dimensions

Width	18 mm
Height	110 mm
Depth	103 mm

Material specifications

Color	gray (RAL 7042)
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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

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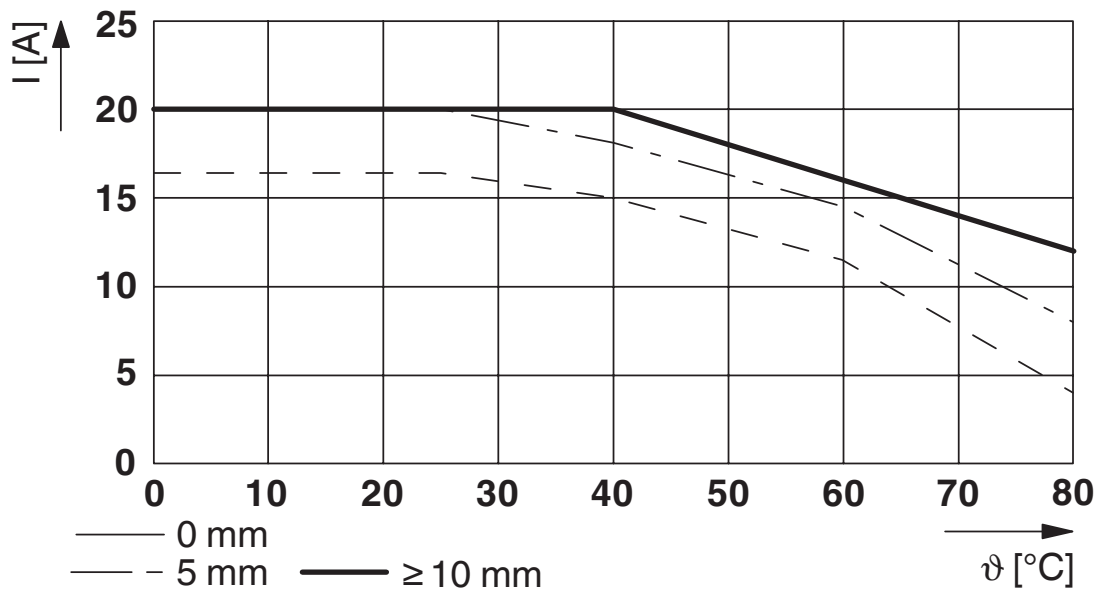
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Mounting

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



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Approvals

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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

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Classifications

ECLASS

ECLASS-13.0	27371003
ECLASS-15.0	27371003

ETIM

ETIM 10.0	EC000066
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UNSPSC

UNSPSC 21.0	39122300
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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)
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EF3.1 Climate Change

CO2e kg	4.531 kg CO2e
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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com