ELR 3-SC-24DC/600AC-20 - Solid-state contactor

1812693

https://www.phoenixcontact.com/pc/products/1812693

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3-phase solid-state contactor, input voltage: 24 V DC, output current: 20 A, zero-voltage switch

Commercial data

Item number	1812693
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DK6841
GTIN	4067923440302
Weight per piece (including packing)	589.4 g
Weight per piece (excluding packing)	590 g
Customs tariff number	85364190
Country of origin	MT

Technical data

Electrical properties

Maximum power dissipation for nominal condition	60 W
Mains type	3-phase
Test voltage	4 kV

Insulation characteristics

Rated insulation voltage	600 V
Rated surge voltage	6 kV
Overvoltage category	III
Degree of pollution	2

Input data

Control

Input name	Control input
Rated actuating voltage U_C	24 V DC
Triggering voltage range	5 V DC ... 32 V DC
Rated actuating current I_C	29 mA
Switching threshold	≤ 1 V DC (“0” signal)
	≥ 4.8 V DC (“1” signal)
Protective circuit	Reverse polarity protection
	Surge protection
Operating voltage display	Green LED

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	10 A (T_A = 40 °C)
Mains frequency	45 Hz ... 65 Hz
Load current range	250 mA ... 20 A (see to derating)
Leakage current	5 mA (In off state)
Surge current	600 A (t = 10 ms)
Max. load value	1800 A^2s
Protective circuit	Varistor
Phase angle cos phi min	0.5

Connection data

Control circuits

Connection method	Screw connection
Stripping length	8 mm

Screw thread	M3
Conductor cross-section rigid	0.5 mm² ... 2.5 mm²
Conductor cross-section flexible	0.5 mm² ... 2.5 mm²
Conductor cross-section AWG	18 ... 12
Tightening torque	0.5 Nm ... 0.6 Nm
	4.4 lb_f-in. ... 5.3 lb_f-in.

Load circuit

Connection method	Screw connection
Stripping length	12 mm
Screw thread	M4
Conductor cross-section rigid	2.5 mm² ... 6 mm²
Conductor cross-section flexible	1 mm² ... 4 mm²
Conductor cross-section AWG	14 ... 10
Tightening torque	1.5 Nm ... 2 Nm
	13.3 lb_f-in. ... 17.7 lb_f-in.

Protective conductor connection

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

Dimensions

Width	54 mm
Height	110 mm
Depth	102.5 mm

Material specifications

Color	gray (RAL 7042)

Environmental and real-life conditions

Ambient conditions

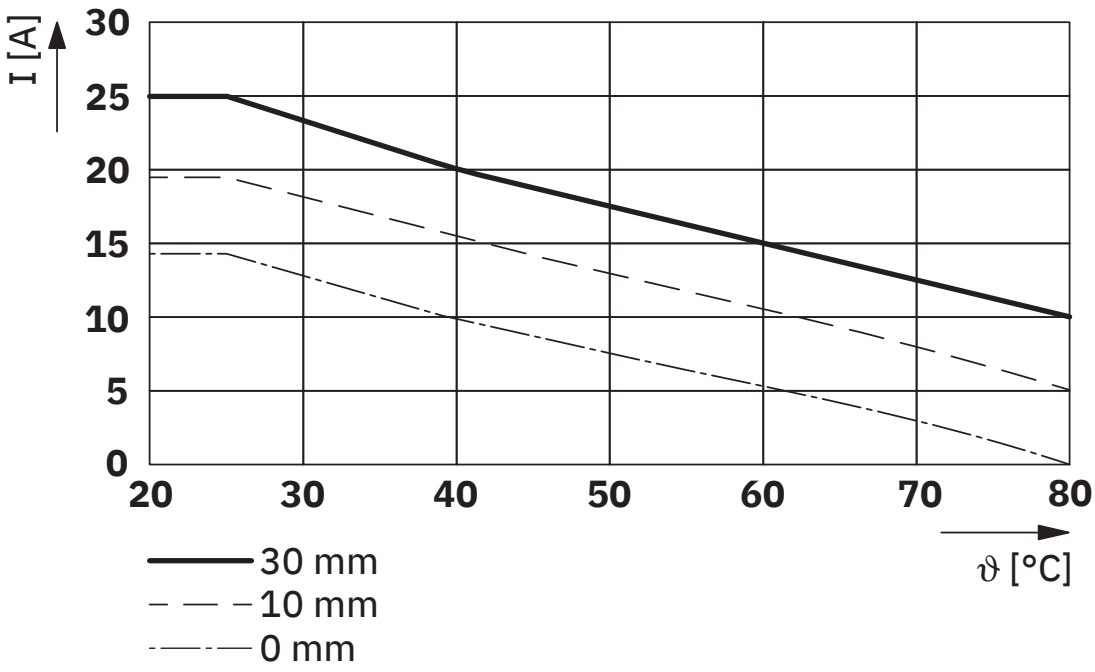
Degree of protection	IP20

Mounting

Mounting type	DIN rail mounting
Assembly note	See derating curve
Mounting position	Vertical (horizontal DIN rail)

Drawings

Diagram



Approvals

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cULus Listed
Approval ID: E323771

Classifications

ECLASS

ECLASS-13.0	27371003
ECLASS-15.0	27371003

ETIM

ETIM 10.0	EC000066

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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