

ELR H5-SC- 24DC/500AC-9 - Hybrid motor starter



2900538

<https://www.phoenixcontact.com/au/products/2900538>

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.



Hybrid motor starter for reversing 3~ AC motors up to 500 V AC and 9 A output current, with 24 V DC control voltage, and screw connection.

Your advantages

- 22.5 mm wide
- Reduction in wiring
- Space saving
- Long service life
- 3-phase loop bridges
- Low-wear switching

Commercial data

Item number	2900538
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DK7424
Product key	DK7424
Catalog page	Page 29 (C-5-2019)
GTIN	4046356526104
Weight per piece (including packing)	210.07 g
Weight per piece (excluding packing)	173.51 g
Customs tariff number	85371098
Country of origin	DE

ELR H5-SC- 24DC/500AC-9 - Hybrid motor starter



2900538

<https://www.phoenixcontact.com/au/products/2900538>

Technical data

Product properties

Product type	Hybrid motor starters
Product family	CONTACTRON
Operating mode	100% operating factor

Electrical properties

Number of phases	3
Motor starter type	Reversing starter
Switching frequency	≤ 2 Hz (Load-dependent)
Maximum power dissipation for nominal condition	13.5 W
Switching frequency	≤ 2 Hz (Load-dependent)
Maximum power dissipation	14.6 W
Minimum power dissipation	1.1 W
Coordination type	1

Supply

Rated control circuit supply voltage U_S	24 V DC
Control supply voltage range	19.2 V DC ... 30 V DC
Rated control supply current I_S	40 mA
Protective circuit	Surge protection
	Reverse polarity protection

Insulation characteristics

Rated insulation voltage	500 V
Rated surge voltage	6 kV
Overvoltage category	III
Degree of pollution	2
Insulation characteristics between the control input and control supply voltage, and auxiliary circuit to the main circuit	Safe isolation (IEC 60947-1) at operating voltage ≤ 300 V AC
	Basic insulation (IEC 60947-1) at operating voltage 300 V AC ... 500 V AC
Isolation characteristics between the control input and control supply voltage to auxiliary circuit	Safe isolation (IEC 60947-1) in the auxiliary circuit ≤ 300 V AC

Input data

Control

Input name	Control input right/left
Rated actuating voltage U_C	24 V DC
Triggering voltage range	19.2 V DC ... 30 V DC
Rated actuating current I_C	5 mA (Input type 1)
Switching threshold	9.6 V ("0" signal)
	19.2 V ("1" signal)
Typical turn-off time	< 30 ms

ELR H5-SC- 24DC/500AC-9 - Hybrid motor starter



2900538

<https://www.phoenixcontact.com/au/products/2900538>

Protective circuit	Reverse polarity protection
--------------------	-----------------------------

Output data

AC output

Rated operating voltage U_e	500 V AC
Operating voltage range	42 V AC ... 550 V AC
Rated operating current I_e	9 A (AC-51)
	6.5 A (AC-53a)
Mains frequency	50/60 Hz
Load current range	0 A ... 9 A (see to derating)
Trigger characteristic in acc. with IEC 60947-4-2	-
Leakage current	0 mA
Protective circuit	Surge protection

Connection data

Control circuits

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 14
Tightening torque	0.5 Nm ... 0.6 Nm
	5 lb _F -in. ... 7 lb _F -in.

Load circuit

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 14
Tightening torque	0.5 Nm ... 0.6 Nm
	5 lb _F -in. ... 7 lb _F -in.

Signaling

Status display	LED (yellow)
Operating voltage display	Green LED

Dimensions

Width	22.5 mm
Height	107 mm
Depth	114 mm

ELR H5-SC- 24DC/500AC-9 - Hybrid motor starter



2900538

<https://www.phoenixcontact.com/au/products/2900538>

Material specifications

Flammability rating according to UL 94	V0 (Housing)
--	--------------

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C (observe derating)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m

Approvals

UKCA

Certificate	UKCA-compliant
-------------	----------------

UL approval

Certificate	NLDX.E228652
-------------	--------------

UL data

SCCR	100 kA (500 V AC (fuse: 30 A class CC/30 A class J (high fault)))
	5 kA (500 V AC (fuse: 20 A RK5 (standard fault)))
FLA	6.5 A (500 V AC)
Group installation	20 A (class RK5, SCCR 5kA, #24 - 14 AWG max. solid and stranded)
	30 A (class CC or J, SCCR 100kA, #24 - 14 AWG max. solid and stranded)
Category code	NLDX / NRNT

Standards and regulations

Standards/regulations

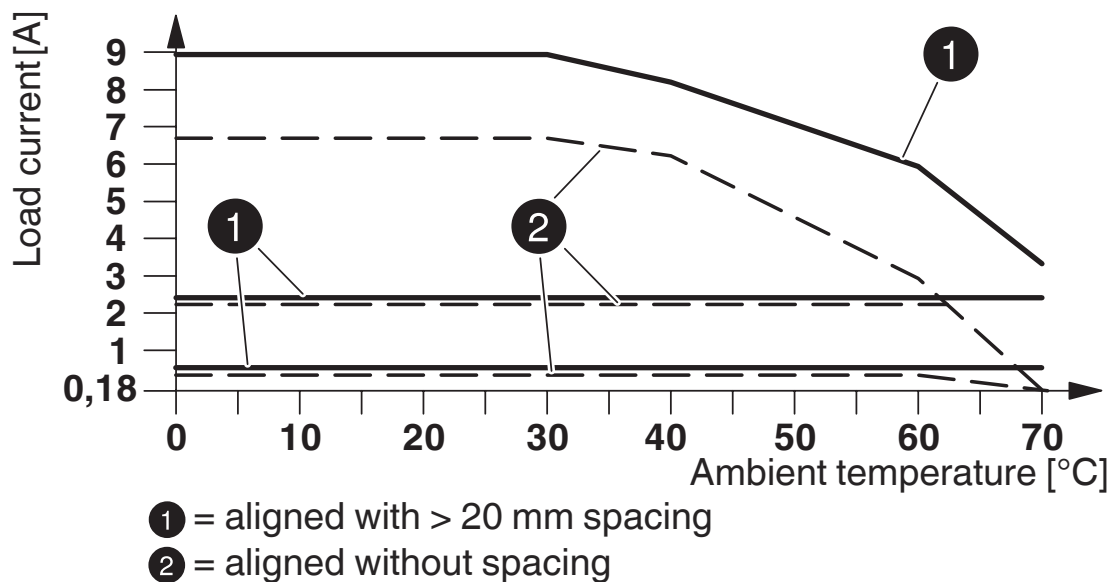
Standards/regulations	IEC 60947-1
	IEC 60947-4-2
	IEC 61508
	ISO 13849

Mounting

Mounting type	DIN rail mounting
Assembly note	alignable, for spacing see derating
Mounting position	vertical (horizontal DIN rail, motor output below)

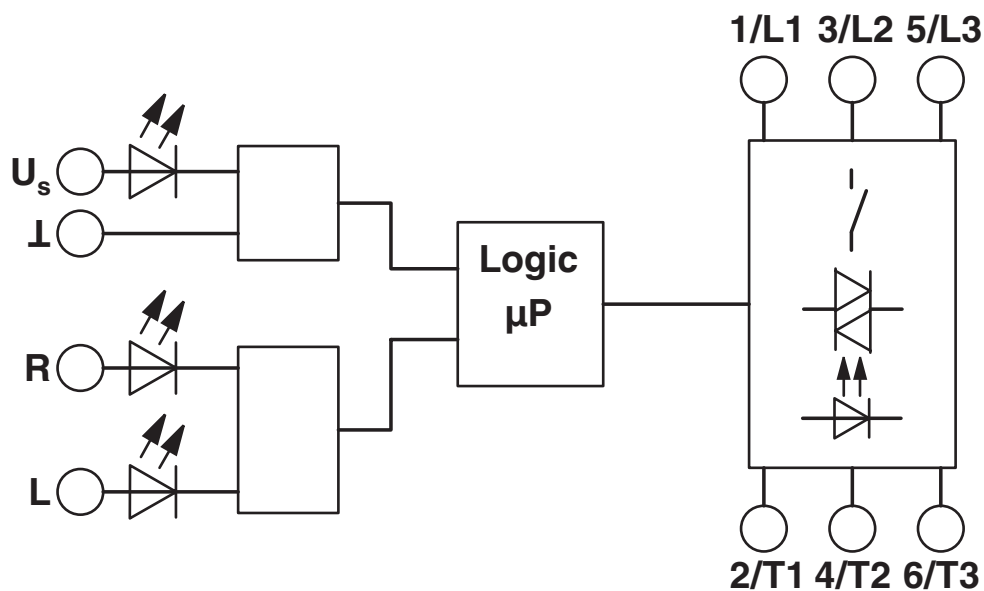
Drawings

Diagram



Derating diagram

Block diagram



ELR H5-SC- 24DC/500AC-9 - Hybrid motor starter



2900538

<https://www.phoenixcontact.com/au/products/2900538>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/au/products/2900538>

	IECEE CB Scheme Approval ID: DE1-55728
	EAC Approval ID: RU*C-DE.*08.B.00520*
	UL Listed Approval ID: FILE E 323771
	CCC Approval ID: 2016010304871315
	cUL Listed Approval ID: FILE E 323771
	cUL Listed Approval ID: E228652
	UL Listed Approval ID: E228652
	CCC Approval ID: 2024010304672817

ELR H5-SC- 24DC/500AC-9 - Hybrid motor starter



2900538

<https://www.phoenixcontact.com/au/products/2900538>

Classifications

ECLASS

ECLASS-13.0	27370905
-------------	----------

ETIM

ETIM 9.0	EC001037
----------	----------

UNSPSC

UNSPSC 21.0	25173900
-------------	----------

ELR H5-SC- 24DC/500AC-9 - Hybrid motor starter



2900538

<https://www.phoenixcontact.com/au/products/2900538>

Environmental product compliance

EU RoHS

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

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	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)
SCIP	b3e12b02-db4a-4133-b4ea-beac536046cb

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT PTY Ltd

Unit 7, 2-8 South Street

Rydalmere NSW 2116

1300 786 411

customerservice@phoenixcontact.com.au