

ELR H51-IES-24DC500AC-9-IOL - Hybrid motor starter



1151610

<https://www.phoenixcontact.com/in/products/1151610>

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; functions: start motor, reverse motor, motor protection, emergency stop, network capable, short-circuit protection; input: 24 V DC; output: 3~, 500 V AC, 9 A; connection method: screw and Push-in connection; connection to the IO-Link system

Commercial data

Item number	1151610
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	*****
Product key	DK7457
GTIN	4063151149291
Weight per piece (including packing)	488.35 g
Weight per piece (excluding packing)	329.3 g
Customs tariff number	85371098
Country of origin	DE

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)
Switching frequency	≤ 2 Hz (Load-dependent)
Maximum power dissipation	7 W
Minimum power dissipation	0.88 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	65 mA
Protective circuit	Surge protection
	Reverse polarity protection; Parallel polarity protection diode

Supply: IO-Link

Nominal voltage for I/O supply	24 V DC (This supply voltage is provided via the IO-Link interface of the IO-Link master.)
Current consumption	typ. 65 mA ±15 % (24 V DC)
	max. 150 mA
Protective circuit	Reverse polarity protection
	Short-circuit protection
	Overload protection

Insulation characteristics

Rated insulation voltage	550 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)
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
	Safe isolation (EN 50178) in the auxiliary circuit ≤ 300 V AC

Emergency tripping

Operate threshold	> 60 A
Response time	< 0.5 s

ELR H51-IES-24DC500AC-9-IOL - Hybrid motor starter



1151610

<https://www.phoenixcontact.com/in/products/1151610>

Input data

Control

Input name	Enable input
Rated actuating voltage U_C	24 V DC
Triggering voltage range	19.2 V DC ... 30 V DC
Rated actuating current I_C	7 mA
Switching threshold	9.6 V ("0" signal)
	19.2 V ("1" signal)
Switching level	< 5 V DC (For EMERGENCY STOP)
Typical turn-off time	< 30 ms

IO-Link

Number of ports	1
Connection method	COMBICON
Connection technology	3-conductor
Specification	V1.1.1
Reverse polarity protection	yes
Cycle Time	30 ms
Amount of process data	8 Byte (Input data)
	2 Byte (Output data)

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)
	7 A (AC-53a)
Mains frequency	50/60 Hz
Load current range	1.5 A ... 9 A (see to derating)
Trigger characteristic in acc. with IEC 60947-4-2	Class 10A
Cooling time	20 min (for auto reset)
Leakage current	0 mA
Protective circuit	Surge protection; Varistor

Connection data

Control circuits

Connection method	Push-in connection
Stripping length	10 mm
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

Load circuit

ELR H51-IES-24DC500AC-9-IOL - Hybrid motor starter



1151610

<https://www.phoenixcontact.com/in/products/1151610>

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.2 mm² ... 2.5 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
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
Error indication	Red LED

Dimensions

Width	22.5 mm
Height	160 mm
Depth	114.5 mm

Material specifications

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

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-5 °C ... 55 °C (observe derating)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m

Approvals

UKCA

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

Standards and regulations

Standards/regulations

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

Mounting

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

ELR H51-IES-24DC500AC-9-IOL - Hybrid motor starter



1151610

<https://www.phoenixcontact.com/in/products/1151610>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/in/products/1151610>



UL Listed

Approval ID: FILE E 172140



cUL Listed

Approval ID: FILE E 172140



cUL Listed

Approval ID: E228652



UL Listed

Approval ID: E228652

ELR H51-IES-24DC500AC-9-IOL - Hybrid motor starter



1151610

<https://www.phoenixcontact.com/in/products/1151610>

Classifications

ECLASS

ECLASS-11.0	27370905
ECLASS-13.0	27370905
ECLASS-12.0	27370905

ETIM

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

UNSPSC

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

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	1c694950-e2ac-4db7-8a37-46ee37e46878

ELR H51-IES-24DC500AC-9-IOL - Hybrid motor starter



1151610

<https://www.phoenixcontact.com/in/products/1151610>

Mandatory accessories

EM RD-ADAPTER - Adapter

2902747

<https://www.phoenixcontact.com/in/products/2902747>

Adapter for mounting short circuit-proof hybrid motor starters of type ELR-H51 ... on 35 mm DIN rails.



IOL MA8 PN DI8 - Communication module

1072838

<https://www.phoenixcontact.com/in/products/1072838>



Eight-channel IO-Link master provides convenient configuration of IO-Link devices using web-based management. Supports connectivity to PROFINET IO, MODBUS, and OPC UA. Features eight auxiliary digital inputs, redundant input power supply connections, plug-in push-in terminals.

ELR H51-IES-24DC500AC-9-IOL - Hybrid motor starter



1151610

<https://www.phoenixcontact.com/in/products/1151610>

IOL MA8 EIP DI8 - Communication module

1072839

<https://www.phoenixcontact.com/in/products/1072839>



Eight-channel IO-Link master provides convenient configuration of IO-Link devices using web-based management. Supports connectivity to EtherNet/IP, MODBUS, and OPC UA. Features eight auxiliary digital inputs, redundant input power supply connections, plug-in push-in terminals.

IOL-CONF - Configuration and diagnostic software

1083065

<https://www.phoenixcontact.com/in/products/1083065>



IOL-CONF is a browser-based configuration software tool for the easy startup of IO-Link masters and IO-Link devices

Accessories

ELR H51-IES-24DC500AC-9-IOL - Hybrid motor starter



1151610

<https://www.phoenixcontact.com/in/products/1151610>

EBP 2- 5 - Insertion bridge

1733169

<https://www.phoenixcontact.com/in/products/1733169>

Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch



FUSE-10X38-30A-MR - Fuse

2903119

<https://www.phoenixcontact.com/in/products/2903119>

Fuse, number: 10 Pcs., fuse type: Fuse (CC), nominal current: 30 A, tripping characteristic: fast-blow (F)



ELR H51-IES-24DC500AC-9-IOL - Hybrid motor starter



1151610

<https://www.phoenixcontact.com/in/products/1151610>

FUSE-10X38-20A-GR - Fuse

2903384

<https://www.phoenixcontact.com/in/products/2903384>



Fuse, number: 10 Pcs., fuse type: Fuse (CC), nominal current: 20 A, tripping characteristic: super-fast blow (gR)

FUSE-10X38-16A-GR - Fuse

2903126

<https://www.phoenixcontact.com/in/products/2903126>



Fuse, number: 10 Pcs., fuse type: Fuse (CC), nominal current: 16 A, tripping characteristic: super-fast blow (gR)

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.

A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420

info@phoenixcontact.co.in