Hybrid motor starter - ELR H5-I-PT- 24DC/500AC-9 - 2903912

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Hybrid motor starter for reversing 3~ AC motors up to 500 V AC and 9 A output current, with 24 V DC control voltage, adjustable overload shutdown, and push-in connection.

Why buy this product

- 22.5 mm wide
- Reduction in wiring
- Space saving
- Long service life
- 3-phase loop bridges
- Adjustable current for bimetal function
- Low-wear switching

RoHS

Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 771351
GTIN	4046356771351

Technical data

Note

Type of note	Notes on operation
Note	If this device is to be used in combination with the CrossPowerSystem power distribution board, the device mount for the 16 A fuse (order designation: EM-CPS-DA-22,5F/16A; order number: 1002668) is required in order to attach the hybrid motor starter to the power distribution board.

Device 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

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Device supply

Type of protection	Surge protection
	Reverse polarity protection

Input data

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
Type of protection	Reverse polarity protection

Output data load output

Output name	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)
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
Type of protection	Surge protection

Output data reply output

Output name	Acknowledge output
Note	Confirmation: floating change-over contact, signal contact
Contact type	1 PDT
Switching capacity according to IEC 60947-5-1	3 A (230 V, AC15)
	2 A (24 V, DC13)

Overspeed tripping

Operate threshold	> 45 A
Response time	2 s

General

Switching frequency	≤ 2 Hz (Load-dependent)
Mounting position	vertical (horizontal DIN rail, motor output below)
Mounting type	DIN rail mounting
Assembly instructions	alignable, for spacing see derating
Operating mode	100% operating factor
Maximum power dissipation	7 W

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General

Minimum power dissipation	0.88 W
Operating voltage display	Green LED
Status display	Yellow LED
Indication	Red LED

Connection data, input side

Connection name	Control circuits
Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section solid	0.2 mm² ... 2.5 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 14

Connection data, output side

Connection name	Load circuit
Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section solid	0.2 mm² ... 2.5 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 14

Ambient conditions

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

Dimensions

Width	22.5 mm
Height	107.4 mm
Depth	113.7 mm

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

Insulation characteristics

Rated insulation voltage	500 V
Rated surge voltage	6 kV
Overvoltage category	III

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Insulation characteristics

Degree of pollution	2
Designation	Insulation characteristics between the control input and control supply voltage, and auxiliary circuit to the main circuit
Insulation	Safe isolation (IEC 60947-1) at operating voltage ≤ 300 V AC (e.g., 230/400 V AC, 277/480 V AC)
	Safe isolation (EN 50178) at operating voltage ≤ 300 V A (e.g., 230/400 V AC, 277/480 V AC)
	Basic isolation (IEC 60947-1) at operating voltage 300 ... 500 V AC
	Safe isolation (EN 50178) at operating voltage 300 ... 500 V AC
Designation	Isolation characteristics between the control input and control supply voltage to auxiliary circuit
Insulation	Safe isolation (IEC 60947-1) in the auxiliary circuit ≤ 300 V AC
	Safe isolation (EN 50178) in the auxiliary circuit ≤ 300 V AC

Standards and Regulations

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

Approvals/conformities

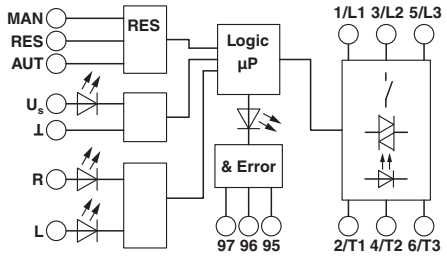
UL certificate	NLDX.E228652

Environmental Product Compliance

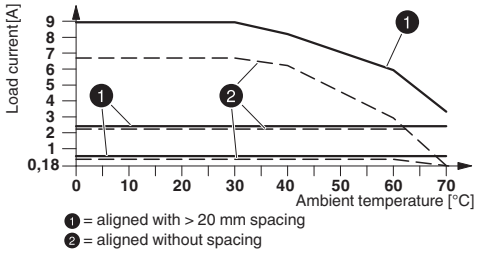
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

Block diagram



Diagram



Derating diagram

Approvals

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Approvals

Approvals

UL Listed / cUL Listed / IECEE CB Scheme / UL Listed / cUL Listed / EAC / CCC / cULus Listed

Ex Approvals

Approval details

UL Listed	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 228652
cUL Listed	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 228652
IECEE CB Scheme	http://www.iecee.org/	DE1-55728
UL Listed	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 323771
cUL Listed	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 323771
EAC		RU C-DE.A*30.B.01082
CCC		2016010304871315
cULus Listed		

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