

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 550 V AC, with 24 V DC input, 9 A output current, adjustable overload shutdown, and push-in connection.

The figure shows the ELR H5-IES-PT- 24DC/500AC-9 version

Product Features



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	280.0 GRM
Custom tariff number	85371099
Country of origin	Germany

Technical data

Input data

Input name	Device supply
Rated control supply voltage U_S	24 V DC (According to IEC 60947-1)
Voltage range with reference to U_S	0.8 ... 1.25
Rated control supply current I_S	≤ 40 mA
Protective circuit	Protection against polarity reversal
	Surge protection
Operating voltage display	Green LED
Status display	Yellow LED
Indication	Red LED
Input name	Control input right/left
Typical input current at U_N	≤ 5 mA
Rated control supply current I_S	≤ 40 mA (According to IEC 60947-1)

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

Technical data

Input data

Rated actuating voltage U_C	24 V DC
Voltage range with reference to U_C	0.8 ... 1.25
Rated actuating current I_C	≤ 5 mA
Protective circuit	Protection against polarity reversal
Typical response time	< 35 ms
Typical turn-off time	< 40 ms

Output data load output

Rated operating voltage U_e	500 V AC
Operating voltage range	42 V AC ... 550 V AC
Load current	max. 9 A (see derating curve)
Min. load current	1.5 A
Rated operating current at AC-51	9 A
Rated operating current at AC-53a	6.5 A
Leakage current	0 mA
Residual voltage	< 0.5 V (at I_e)
Protective circuit	Surge protection

Output data reply output

Note	Confirmation 01: floating change-over contact, signal contact
Contact type	1 PDT
Contact material	AgSnO ₂ , hard gold-plated
Maximum switching voltage	30 V AC 36 V DC
Minimum switching voltage	100 mV AC/DC (at 10 mA)
Min. switching current	1 mA (at 24 V)
Maximum inrush current	50 mA
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Min. switching current	10 mA (at 12 V)
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	140 W (at 24 V DC) 20 W (at 48 V DC) 18 W (at 60 V DC) 23 W (at 110 V DC)

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

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Output data reply output

	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity according to IEC 60947-5-1	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

Measuring technology and signaling contact

Measuring via	Current transformer for line current on L1 and L3
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Connection data

Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14

General

Test voltage input/output	4 kV _{rms}
Mounting position	Vertical (horizontal DIN rail)
Assembly instructions	can be aligned with spacing: see derating
Operating mode	100% operating factor
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178
Insulation	Safe isolation (EN 50178) for mains voltage ≤ 500 V AC
	Safe isolation (IEC 60947-1) for mains voltage ≤ 300 V AC
	Basic insulation (IEC 60947-1) for mains voltage of 300 ... 500 V AC
Pollution degree	2
Surge voltage category	III
Designation	Standards/regulations
Standards/regulations	IEC 60947-1
	EN 60947-4-2

Dimensions

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

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Dimensions

Width	22.5 mm
Height	99 mm
Depth	114.5 mm

Ambient conditions

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

UL data

Short-circuit current rating (SCCR)	100 kA (500 V AC (30 A CC/30 A J (high fault) fuse))
	5 kA (500 V AC (20 A RK5 (standard fault) fuse))

Classifications

eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371601
eCl@ss 5.1	27371601
eCl@ss 6.0	27371601
eCl@ss 7.0	27371601
eCl@ss 8.0	27370905

ETIM

ETIM 3.0	EC000066
ETIM 4.0	EC000066
ETIM 5.0	EC001037

UNSPSC

UNSPSC 6.01	30211915
UNSPSC 7.0901	39121514
UNSPSC 11	39121514
UNSPSC 12.01	39121514
UNSPSC 13.2	39121514

Approvals

Approvals

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

Approvals

Approvals

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


Ex Approvals

Approvals submitted


Approval details


UL Listed 

cUL Listed 

IECEE CB Scheme 

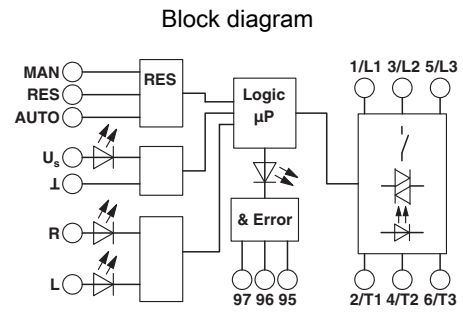
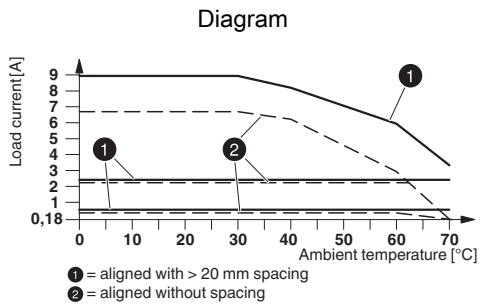
UL Listed 

cUL Listed 

cULus Listed 

Drawings

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



Derating diagram