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Hybrid motor starter - ELR H51-2.4-DIN-RAIL-SET - 2902953

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Complete package consisting of ELR H51-IESSC-24DC500AC-2 and EM-RD-ADAPTER for mounting on 35 mm DIN rails.

Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 701891

Technical data

Ambient conditions

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

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
Protective circuit	Protection against polarity reversal Parallel polarity protection diode
	Surge protection

Input data

Input name	Control input right/left
Rated actuating voltage U_c	24 V DC
Voltage range	19.2 V DC ... 30 V DC
Rated actuating current I_c	5 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

Output data load output

Output name	AC output
Rated operating voltage U_e	500 V AC

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Technical data

Output data load output

Operating voltage range	42 V AC ... 550 V AC
Mains frequency	50 Hz
	60 Hz
Load current range	180 mA ... 2.4 A (see to derating)
Trigger characteristic in acc. with IEC 60947	Class 10A
Cooling time	20 min. (for auto reset)
Leakage current	0 mA
Protective circuit	Surge protection Varistor
	Short-circuit protection Fuse

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)

General

Switching frequency	≤ 2 Hz (Load-dependent)
Mounting position	vertical (horizontal DIN rail, motor output below)
Assembly instructions	alignable, for spacing see derating
Operating mode	100% operating factor
Maximum power dissipation	4.1 W
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	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	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
Torque	0.5 Nm ... 0.6 Nm

Connection data, output side

Connection name	Load circuit
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3

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Connection data, output side

Conductor cross section solid	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
Torque	0.5 Nm ... 0.6 Nm

Standards/regulations

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

Insulation characteristics

Rated insulation voltage	500 V
Rated surge voltage	6 kV
Overvoltage category	III
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
	Safe isolation (EN 50178) at operating voltage ≤ 300 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

Approvals/conformities

Safety Integrity Level according to IEC 61508	SIL 3 (safe shutdown)
	SIL 2 (motor protection)
Category acc. to EN ISO 13849	3 (Safe shutdown)
Performance level according to ISO 13849	e (Safe shutdown)

UL data

SCCR	100 kA (480 V AC (fuse: 30 A class CC/30 A class J (high fault)))
	5 kA (480 V AC (fuse: 20 A RK5 (standard fault)))
FLA	2.4 A (480 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

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Technical data

Standards and Regulations

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

Articles in set

Hybrid motor starter - ELR H51-IESSC-24DC500AC-2 - 2902744



Short-circuit-proof hybrid motor starter for reversing 3~ AC motors up to 550 V AC, with 24 V DC input, 2.4 A output current, emergency stop function, and adjustable overload shutdown. Can only be used with EM-RD or EM-RI adapter.

Adapter - EM RD-ADAPTER - 2902747

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



Classifications

eCl@ss

eCl@ss 4.0	27142001
eCl@ss 4.1	27142001
eCl@ss 5.0	27142001
eCl@ss 5.1	27371601
eCl@ss 6.0	27371601
eCl@ss 7.0	27371601
eCl@ss 8.0	27370905

ETIM

ETIM 3.0	EC000035
ETIM 4.0	EC001437
ETIM 5.0	EC002055

UNSPSC

UNSPSC 6.01	30211915
UNSPSC 7.0901	39121514

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Classifications

UNSPSC

UNSPSC 11	39121514
UNSPSC 12.01	39121514
UNSPSC 13.2	39121514

Approvals

Approvals

Approvals


UL Listed / cUL Listed / EAC / cULus Listed


Ex Approvals

ATEX


Approvals submitted

Approval details

UL Listed 

cUL Listed 

EAC

cULus Listed 

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Product	Code	Reference	Product link
Complete package consisting of ELR H51-IESSC-24DC500AC-2 and EM-RD-ADAPTER for mounting on 35 mm DIN rails.	2902953	ELR H51-2.4-DIN-RAIL-SET	Buy on EAN