

Hybrid motor starter - ELR H5-SC-230AC/500AC-9 - 2900539

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Hybrid "2 in 1" motor starter for reversing 3~ AC motors with up to 550 V AC, with 230 V AC input, 9 A output current.

Illustration shows the 24 V design

Product Features

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



Key commercial data

| | |
|--------------------------------------|-----------|
| Packing unit | 1 pc |
| Weight per Piece (excluding packing) | 220.0 GRM |
| Custom tariff number | 85371099 |
| Country of origin | Germany |

Technical data

Input data

| | |
|---------------------------------------|---------------------|
| Input name | Device supply |
| Rated control supply voltage U_s | 230 V AC (50/60 Hz) |
| Voltage range with reference to U_s | 0.4 ... 1.1 |
| Rated control supply current I_s | 4 mA |
| Protective circuit | Surge protection |
| Typical response time | < 35 ms |
| Typical turn-off time | < 80 ms |
| Operating voltage display | Green LED |

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Input data

| | |
|-----------------------------------------|--------------------------|
| Status display | Yellow LED |
| Indication | Red LED |
| Input name | Control input right/left |
| Rated actuating voltage U_c | 230 V AC |
| Voltage range with reference to U_c | 0.4 ... 1.1 |
| Rated actuating current I_c | 7 mA |
| Switching threshold "0" signal, voltage | 44 V AC |
| Switching threshold "1" signal voltage | 85 V AC |

Output data load output

| | |
|-----------------------------------|-------------------------------|
| Nominal output voltage | 500 V AC |
| Nominal output voltage range | 42 V AC ... 550 V AC |
| Load current | max. 9 A (see derating curve) |
| Min. load current | 0 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 |
| Surge current | 100 A (t = 10 ms) |
| 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) |

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Output data reply output

| | |
|-----------------------------------------------|------------------------|
| | 20 W (at 48 V DC) |
| | 18 W (at 60 V DC) |
| | 23 W (at 110 V DC) |
| | 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) |

Connection data

| | |
|----------------------------------------|----------------------|
| Connection method | Screw connection |
| Conductor cross section solid min. | 0.14 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section stranded min. | 0.14 mm ² |
| Conductor cross section stranded max. | 2.5 mm ² |
| Conductor cross section AWG/kcmil min. | 26 |
| Conductor cross section AWG/kcmil max | 14 |

General

| | |
|---------------------------|-------------------------------------------------------|
| Test voltage input/output | 4 kV _{rms} |
| Mounting position | Vertical (horizontal DIN rail) |
| Assembly instructions | Can be aligned with spacing = 20 mm |
| Operating mode | 100% operating factor |
| Designation | Air and creepage distances between the power circuits |
| Standards/regulations | DIN EN 50178 |
| Insulation | sichere Trennung |
| Pollution degree | 2 |
| Surge voltage category | III |
| Designation | Standards/regulations |
| Standards/regulations | EN 60947 |

Dimensions

| | |
|--------|----------|
| Width | 22.5 mm |
| Height | 99 mm |
| Depth | 114.5 mm |

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Ambient conditions

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

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 | 27371601 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000066 |
| ETIM 3.0 | EC000066 |
| ETIM 4.0 | EC000066 |
| ETIM 5.0 | EC000066 |

UNSPSC

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

Approvals

Approvals

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UL Listed / cUL Listed / IECEx CB Scheme / UL Listed / cUL Listed / IECEx CB Scheme / cUL Listed / cULus Listed / cULus Listed / cULus Listed / null / null / null / null

Ex Approvals

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Approvals

Approvals submitted

Approval details


UL Listed 


cUL Listed 


IECEE CB Scheme 

UL Listed 

cUL Listed 

IECEE CB Scheme 

cUL Listed 

cULus Listed 

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Approvals

cULus Listed

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Accessories

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Loop bridge

Jumper - BRIDGE- 2 - 2900746



3-phase loop bridge for 2 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 0.3 m, with ferrules.

Jumper - BRIDGE- 3 - 2900747



3-phase loop bridge for 3 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 0.3 m, with ferrules.

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Jumper - BRIDGE- 4 - 2900748



3-phase loop bridge for 4 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 0.3 m, with ferrules.

Jumper - BRIDGE- 5 - 2900749



3-phase loop bridge for 5 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 0.3 m, with ferrules.

Jumper - BRIDGE- 6 - 2900750



3-phase loop bridge for 6 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 0.3 m, with ferrules.

Jumper - BRIDGE- 7 - 2900751



3-phase loop bridge for 7 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 0.3 m, with ferrules.

Jumper - BRIDGE- 8 - 2900752



3-phase loop bridge for 8 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 0.3 m, with ferrules.

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Accessories

Jumper - BRIDGE- 9 - 2900753



3-phase loop bridge for 9 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 0.3 m, with ferrules.

Jumper - BRIDGE-10 - 2900754



3-phase loop bridge for 10 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 0.3 m, with ferrules.

Jumper - BRIDGE- 2-3M - 2901543



3-phase loop bridge for 2 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 3 m, with ferrules included.

Jumper - BRIDGE- 3-3M - 2901656



3-phase loop bridge for 3 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 3 m, with ferrules included.

Jumper - BRIDGE- 4-3M - 2901659



3-phase loop bridge for 4 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 3 m, with ferrules included.

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Accessories

Jumper - BRIDGE- 5-3M - 2901545



3-phase loop bridge for 5 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 3 m, with ferrules included.

Jumper - BRIDGE- 6-3M - 2901697



3-phase loop bridge for 6 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 3 m, with ferrules included.

Jumper - BRIDGE- 7-3M - 2901698



3-phase loop bridge for 7 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 3 m, with ferrules included.

Jumper - BRIDGE- 8-3M - 2901700



3-phase loop bridge for 8 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 3 m, with ferrules included.

Jumper - BRIDGE- 9-3M - 2901701



3-phase loop bridge for 9 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 3 m, with ferrules included.

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Accessories

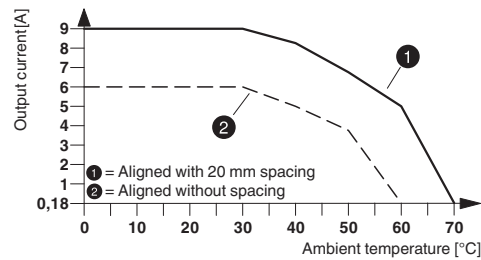
Jumper - BRIDGE-10-3M - 2901702



3-phase loop bridge for 10 CONTACTRON modules, with screw connection and 22.5 mm housing width, connecting cable: 3 m, with ferrules included.

Drawings

Diagram



Derating curve for ELR H3-SC-230AC/500AC-9
100% operating time