

2905147

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Networkable hybrid motor starter for reversing 3~ AC motors up to 500 V AC, output current: 9 A, adjustable overload shutdown, and Push-in connection, DIN rail connector provided.

## Your advantages

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

### Commercial data

| Item number                          | 2905147       |
|--------------------------------------|---------------|
| Packing unit                         | 1 pc          |
| Sales key                            | C474          |
| Product key                          | DK7444        |
| GTIN                                 | 4046356919562 |
| Weight per piece (including packing) | 290 g         |
| Weight per piece (excluding packing) | 282.7 g       |
| Customs tariff number                | 85371098      |
| Country of origin                    | DE            |



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## 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) |
| Maximum power dissipation for nominal condition | 12 W                    |
| 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 <sub>S</sub> | 24 V DC   |
|---|---|
| Control supply voltage range                        | 19.2 V DC 30 V DC   |
| Rated control supply current I <sub>S</sub>         | 60 mA   |
| Protective circuit                                  | Surge protection  |
|   | Reverse polarity protection: Parallel polarity protection diode |

#### 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 |

#### Emergency tripping

| Operate threshold | > 60 A  |
|-------------------|---------|
| Response time     | < 0.5 s |

## Output data

#### AC output

| Rated operating voltage U <sub>e</sub> | 500 V AC         |
|--|------------------|
| Operating voltage range                | 42 V AC 550 V AC |
| Rated operating current I <sub>e</sub> | 9 A (AC-51)      |
|  | 7 A (AC-53a)     |
| Mains frequency                        | 50/60 Hz         |



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| 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 mm² 2.5 mm²    |
| Conductor cross-section flexible | 0.2 mm² 2.5 mm²    |
| Conductor cross-section AWG      | 24 14              |

#### Load circuit

| Connection method                | Push-in connection |
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| Stripping length                 | 10 mm              |
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| Conductor cross-section flexible | 0.2 mm² 2.5 mm²    |
| Conductor cross-section AWG      | 24 14              |

## Signaling

| Status display            | LED (yellow) |
|---------------------------|--------------|
| Operating voltage display | Green LED    |
| Error indication          | Red LED      |

## Dimensions

| Width  | 22.5 mm  |
|--------|----------|
| Height | 107.5 mm |
| Depth  | 114 mm   |

## Material specifications

#### Environmental and real-life conditions

#### Ambient conditions

| Degree of protection                    | IP20                           |
|---|--------------------------------|
| Ambient temperature (operation)         | -5 °C 60 °C (observe derating) |
| Ambient temperature (storage/transport) | -40 °C 80 °C                   |
| Altitude                                | ≤ 2000 m                       |

## Approvals

#### UKCA

| Certificate | UKCA-compliant |
|-------------|----------------|
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#### UL approval

| Certificate        | NLDX.E228652  |
|--------------------|---|
|                    | NRNT.E172140  |
| JL 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                | 7.6 A (480 V AC)  |
| Group installation | 20 A (class RK5, SCCR 5kA (480 V AC), #24 - 14 AWG max. solid and stranded)       |
|                    | 30 A (class CC or J, SCCR 100kA (480 V AC), #24 - 14 AWG max, solid and stranded) |
| Category code      | NLDX / NRNT   |
| Horsepower ratings | 2 hp (208 V AC)   |
|                    | 2 hp (230 V AC)   |
|                    | 2 hp (240 V AC)   |
|                    | 5 hp (480 V AC)   |

## Standards and regulations

### Standards/regulations

| Standards/regulations | IEC 60947-1  |
|-----------------------|--------------|
|                       | EN 60947-4-2 |

## Mounting

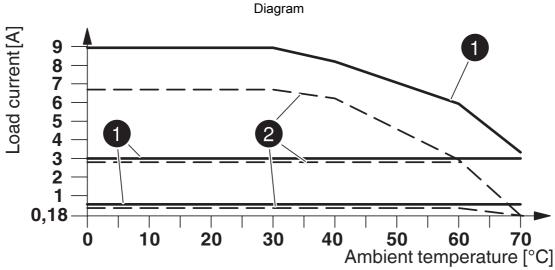
| Mounting type     | DIN rail mounting                                  |
|-------------------|--|
| Assembly note     | alignable, for spacing see derating                |
| Mounting position | vertical (horizontal DIN rail, motor output below) |



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## **Drawings**

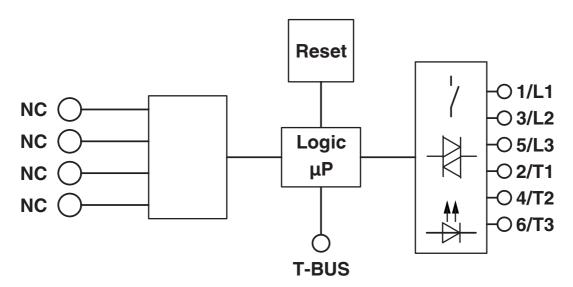


1 = aligned with > 20 mm spacing

2 = aligned without spacing

Derating diagram

Block diagram





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## Classifications

| <b>ECLASS</b> |
|---------------|
|---------------|

|        | ECLASS-13.0 | 27370905 |
|--------|-------------|----------|
| ETIM   |             |          |
|        | ETIM 9.0    | EC001037 |
| UNSPSC |             |          |
|        | UNSPSC 21.0 | 25173900 |



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## 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                                    | a8208c9e-6ea6-4693-a571-ad906335752b  |
|   |   |

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