

# Star delta starter, TeSys Deca, 3 x 3P (3 NO) - 80 A - 380 V AC coil

LC3D80Q7

! Discontinued on: 23 Jan 2021

#### (!) Discontinued

#### Main

| Walli                                  |  |
|--|--|
| Range                                  | TeSys  |
| Product Name                           | TeSys D  |
| Product Or Component Type              | Star delta starter   |
| Device Short Name                      | LC3D   |
| Contactor Application                  | Motor control  |
| Utilisation Category                   | AC-3   |
| Device Presentation                    | Pre-wired  |
| Poles Description                      | 3 x 3P   |
| Power Pole Contact Composition         | 3 x 3 NO   |
| [Ue] Rated Operational Voltage         | Power circuit: <= 690 V AC 25400 Hz  |
| [le] Rated Operational Current         | 80 A (at <60 °C) at <= 440 V AC AC-3 for power circuit   |
| Motor Power Kw                         | 37 kW at 220/230 V AC 50/60 Hz<br>75 kW at 380/400 V AC 50/60 Hz<br>75 kW at 415 V AC 50/60 Hz<br>75 kW at 440 V AC 50/60 Hz   |
| Control Circuit Type                   | AC at 50/60 Hz   |
| [Uc] Control Circuit Voltage           | 380 V AC 50/60 Hz  |
| Auxiliary Contact Composition          | 1 NC for KM2 line contactor<br>1 NO for KM3 delta contactor  |
| [Uimp] Rated Impulse Withstand Voltage | 8 kV conforming to IEC 60947   |
| Overvoltage Category                   | III  |
| [Ui] Rated Insulation Voltage          | Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 1000 V conforming to IEC 60947-1 |
| Electrical Durability                  | 10 Mcycles 80 A AC-3 at Ue <= 440 V  |
| Mounting Support                       | Plate  |
| Standards                              | IEC 60947-4-1<br>IEC 60947-5-1<br>EN 60947-5-1<br>EN 60947-4-1<br>CSA C22.2 No 14<br>UL 508  |

| <b>Product Certifications</b> | BV                                 |
|-------------------------------|------------------------------------|
|                               | LROS (Lloyds register of shipping) |
|                               | GL                                 |
|                               | CSA                                |
|                               | DNV                                |
|                               | RINA                               |
|                               | CCC                                |
|                               | GOST                               |
|                               | UL                                 |

# Complementary

| Complementary                   |   |
|---------------------------------|---|
| Connections - Terminals         | Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end   |
|                                 | Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end   |
|                                 | Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end  |
|                                 | Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end  |
|                                 | Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable end  |
|                                 | Power circuit: screw clamp terminals 1 450 mm² - cable stiffness: flexible without cable end  |
|                                 | Power circuit: screw clamp terminals 2 425 mm² - cable stiffness: flexible without cable end  |
|                                 | Power circuit: screw clamp terminals 1 450 mm² - cable stiffness: flexible with cable end   |
|                                 | Power circuit: screw clamp terminals 2 416 mm² - cable stiffness: flexible with cable end   |
|                                 | Power circuit: screw clamp terminals 1 450 mm² - cable stiffness: solid without cable end   |
|                                 | Power circuit: screw clamp terminals 2 425 mm² - cable stiffness: solid without cable end   |
|                                 | Control circuit: screw clamp terminals 1 12.5 mm² - cable stiffness: flexible with cable end  |
| Tightening Torque               | Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on screw clamp terminals - with screwdriver flat Ø 68 mm |
| Mechanical Durability           | 4 Mcycles   |
| Maximum Operating Rate          | 30 cyc/h 60 °C  |
| Starting Time                   | 30 s  |
| Coil Technology                 | Without built-in suppressor module  |
| Control Circuit Voltage Limits  | Drop-out: 0.30.6 Uc at 50/60 Hz (at <55 °C) Operational: 0.81.1 Uc at 50 Hz (at <55 °C) Operational: 0.851.1 Uc at 60 Hz (at <55 °C)  |
| Inrush Power In Va              | 140 VA 60 Hz cos phi 0.75 (at 20 °C)<br>160 VA 50 Hz cos phi 0.75 (at 20 °C)  |
| Hold-In Power Consumption In Va | 13 VA 60 Hz cos phi 0.3 (at 20 °C)<br>15 VA 50 Hz cos phi 0.3 (at 20 °C)  |
| Heat Dissipation                | 45 W at 50/60 Hz  |
| Auxiliary Contacts Type         | Mechanically linked conforming to IEC 60947-5-1 3 x 1 NO + 1 NC<br>Mirror contact conforming to IEC 60947-4-1 3 x 1 NC  |
| Signalling Circuit Frequency    | 25400 Hz  |
| Minimum Switching Current       | 5 mA for signalling circuit   |
| Minimum Switching Voltage       | 17 V for signalling circuit   |
| Non-Overlap Time                | 1.5 ms on de-energisation between NC and NO contact     1.5 ms on energisation between NC and NO contact  |
| Width                           | 311 mm  |
| Height                          | 143 mm  |
| Depth                           | 183 mm  |
|                                 |   |

Net Weight 5.2 kg

#### **Environment**

| Insulation Resistance                 | > 10 MOhm for signalling circuit  |  |
|---------------------------------------|---|--|
| Ip Degree Of Protection               | IP2X front face conforming to IEC 60529   |  |
| Protective Treatment                  | TH conforming to IEC 60068-2-30   |  |
| Pollution Degree                      | 3   |  |
| Ambient Air Temperature For Storage   | -6080 °C  |  |
| Ambient Air Temperature For Operation | -4060 °C<br>6070 °C with derating   |  |
| Operating Altitude                    | 3000 m  |  |
| Fire Resistance                       | 850 °C conforming to IEC 60695-2-1  |  |
| Flame Retardance                      | rdance V1 conforming to UL 94   |  |
| Mechanical Robustness                 | Vibrations contactor open: 2 Gn, 5300 Hz<br>Shocks contactor open: 8 Gn for 11 ms<br>Vibrations contactor closed: 3 Gn, 5300 Hz<br>Shocks contactor closed: 10 Gn for 11 ms |  |

# **Packing Units**

| Unit Type Of Package 1       | PCE      |
|------------------------------|----------|
| Number Of Units In Package 1 | 1        |
| Package 1 Height             | 28.5 cm  |
| Package 1 Width              | 23 cm    |
| Package 1 Length             | 41 cm    |
| Package 1 Weight             | 6.285 kg |

## **Contractual warranty**

Warranty 18 months

## Sustainability

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**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Guide to assess a product's sustainability >

## Well-being performance

| <b>Ø</b> | Reach Free Of Svhc         |   |
|----------|----------------------------|---|
| <b>②</b> | Toxic Heavy Metal Free     |   |
| <b>⊘</b> | Mercury Free               |   |
| <b>②</b> | Rohs Exemption Information | Yes   |
| <b>②</b> | Pvc Free                   |   |
|          |                            |   |
| Eu F     | Rohs Directive             | Compliant   |
|          |                            | EU RoHS Declaration   |
| Chin     | na Rohs Regulation         | China RoHS declaration  |
|          |                            | Pro-active China RoHS declaration (out of China RoHS legal scope)   |
| Wee      | e                          | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |