# Product data sheet

Specifications



() Discontinued

# TeSys F - star delta starter - 3 x 3P (3 NO) - 225 A - 220/230 V AC coil

LC3F225M7A64

() Discontinued on: Oct 10, 2020

## Main

| Mann                                      |  |
|---|--|
| Range                                     | TeSys  |
| Product Name                              | TeSys F  |
| Product Or Component Type                 | Star delta starter   |
| Device Short Name                         | LC3F   |
| 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: <= 1000 V AC 16 Hz 2/3200 Hz  |
| [le] Rated Operational Current            | 225 A (at <55 °C) at <= 440 V AC AC-3 for power circuit  |
| Motor Power Kw                            | 100 kW at 220/230 V AC 50/60 Hz<br>200 kW at 380/400 V AC 50/60 Hz<br>200 kW at 415 V AC 50/60 Hz<br>220 kW at 440 V AC 50/60 Hz   |
| Control Circuit Type                      | AC at 50/60 Hz   |
| [Uc] Control Circuit Voltage              | 220/230 V AC 50/60 Hz  |
| Auxiliary Contact Composition             | 1 NC for KM1 star contactor<br>1 NO for KM1 star contactor<br>2 NC for KM2 line contactor<br>1 NO for KM2 line contactor<br>1 NC for KM3 delta contactor<br>2 NO for KM3 delta contactor |
| [Uimp] Rated Impulse Withstand<br>Voltage | 8 kV   |
| [Ui] Rated Insulation Voltage             | 1000 V conforming to IEC 60947-4-1<br>1500 V conforming to VDE 0110 group C  |
| Interlocking Type                         | Mechanical   |
| Mounting Support                          | Plate  |
| Standards                                 | EN 60947-1<br>EN 60947-4-1<br>IEC 60947-1<br>IEC 60947-4-1<br>JIS C8201-4-1  |

CCC RINA UL ABS CSA CB RMRoS LROS (Lloyds register of shipping) DNV

# Complementary

| e emprementar y                                |   |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|
| [Ith] Conventional Free Air<br>Thermal Current | 315 A 40 °C   |  |  |  |  |  |  |
| Irms Rated Making Capacity                     | 2250 A conforming to IEC 60947-4-1  |  |  |  |  |  |  |
| Rated Breaking Capacity                        | 1800 A conforming to IEC 60947-4-1  |  |  |  |  |  |  |
| [Icw] Rated Short-Time Withstand<br>Current    | 1800 A 40 °C - 10 s<br>1000 A 40 °C - 30 s<br>850 A 40 °C - 1 min<br>560 A 40 °C - 3 min<br>440 A 40 °C - 10 min  |  |  |  |  |  |  |
| Associated Fuse Rating                         | 315 A gG at <= 440 V<br>250 A aM at <= 440 V  |  |  |  |  |  |  |
| Connections - Terminals                        | Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible with cable<br>end<br>Control circuit: screw clamp terminals 2 12.5 mm <sup>2</sup> - cable stiffness: flexible with<br>cable end<br>Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible without<br>cable end<br>Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: flexible without<br>cable end<br>Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: solid without<br>cable end<br>Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: solid without<br>cable end<br>Control circuit: screw clamp terminals 2 14 mm <sup>2</sup> - cable stiffness: solid without<br>cable end<br>Power circuit: bar 2 - busbar cross section: 32 x 4 mm<br>Power circuit: lugs-ring terminals 1 185 mm <sup>2</sup><br>Power circuit: lugs-ring terminals 1 185 mm <sup>2</sup> |  |  |  |  |  |  |
| Connections Bolt Diameter                      | Power circuit: connector 1 185 mm <sup>2</sup><br>M10   |  |  |  |  |  |  |
| Tightening Torque                              | Control circuit: 1.2 N.m<br>Power circuit: 35 N.m   |  |  |  |  |  |  |
| Operating Time                                 | 2035 ms closing<br>715 ms opening   |  |  |  |  |  |  |
| Mechanical Durability                          | 10 Mcycles  |  |  |  |  |  |  |
| Maximum Operating Rate                         | 2400 cyc/h 55 °C  |  |  |  |  |  |  |
| Starting Time                                  | 30 s  |  |  |  |  |  |  |
| Control Circuit Voltage Limits                 | Operational: 0.851.1 Uc at 50/60 Hz (at <55 °C)<br>Drop-out: 0.350.55 Uc at 50/60 Hz (at <55 °C)  |  |  |  |  |  |  |
| Inrush Power In Va                             | 805 VA 50 Hz cos phi 0.3 (at 20 °C)<br>970 VA 60 Hz cos phi 0.3 (at 20 °C)  |  |  |  |  |  |  |
| Hold-In Power Consumption In Va                | 55 VA 50 Hz cos phi 0.3 (at 20 °C)<br>66 VA 60 Hz cos phi 0.3 (at 20 °C)  |  |  |  |  |  |  |
| Heat Dissipation                               | 1824 W  |  |  |  |  |  |  |
| Width  | 525 mm  |  |  |  |  |  |  |
| Height   | 110 mm  |  |  |  |  |  |  |
| Depth  | 235 mm  |  |  |  |  |  |  |
| Net Weight                                     | 16.625 kg   |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |

# Environment

| Ip Degree Of Protection                  | IP20 front face with shrouds conforming to IEC 60529<br>IP20 front face with shrouds conforming to VDE 0106   |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|
| Protective Treatment                     | ТН  |  |  |  |  |  |  |  |
| Ambient Air Temperature For<br>Storage   | -6080 °C  |  |  |  |  |  |  |  |
| Ambient Air Temperature For<br>Operation | -555 °C<br>-4070 °C at Uc   |  |  |  |  |  |  |  |
| Operating Altitude                       | 3000 m without derating   |  |  |  |  |  |  |  |
| Mechanical Robustness                    | Vibrations contactor open: 2 Gn, 5300 Hz<br>Shocks contactor closed: 15 Gn for 11 ms<br>Vibrations contactor closed: 5 Gn, 5300 Hz<br>Shocks contactor open: 7 Gn for 11 ms |  |  |  |  |  |  |  |

## **Packing Units**

| Unit Type Of Package 1       | PCE   |
|------------------------------|-------|
| Number Of Units In Package 1 | 1     |
| Package 1 Height             | 30 cm |
| Package 1 Width              | 56 cm |
| Package 1 Length             | 57 cm |
| Package 1 Weight             | 22 kg |

## **Contractual warranty**

Warranty

18 months

## Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

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

Learn more about Green Premium >

Guide to assess a product's sustainability >



Eq

Transparency RoHS/REACh

### Well-being performance



#### **Certifications & Standards**

| Eu Rohs Directive         | Compliant  |  |  |  |  |  |  |  |
|---------------------------|--|--|--|--|--|--|--|--|
|                           | EU RoHS Declaration  |  |  |  |  |  |  |  |
| China Rohs Regulation     | China RoHS declaration   |  |  |  |  |  |  |  |
|                           | Product out of China RoHS scope. Substance declaration for your information  |  |  |  |  |  |  |  |
| Environmental Disclosure  | Product Environmental Profile  |  |  |  |  |  |  |  |
| Weee                      | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins  |  |  |  |  |  |  |  |
| Circularity Profile       | End of Life Information  |  |  |  |  |  |  |  |
| California Proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead<br>compounds, which is known to the State of California to cause cancer and birth<br>defects or other reproductive harm. For more information go to<br>www.P65Warnings.ca.gov |  |  |  |  |  |  |  |

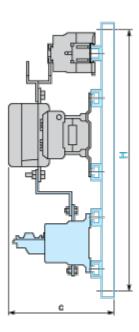
# Product data sheet

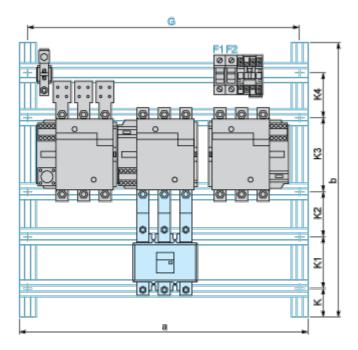
**Dimensions Drawings** 

**Dimensions and Drawings** 

#### **Chassis mounted starters**

Pre-assembled: LC3 F185 to LC3 F400 For customer assembly: 2 x LC1 F••• and 1 x LC1 D150 or 3 x LC1 F•••





|   | а   | b   | с   | G   | Н   | К   | K1  | K2 | K3  | K4 |
|---|-----|-----|-----|-----|-----|-----|-----|----|-----|----|
| LC3 F185 or 2 x LC1 F••• + 1 x LC1 D with components F185 | 565 | 675 | 235 | 525 | 625 | 160 | 110 | 80 | 110 | 80 |
| LC3 F225 or 3 x LC1 F••• with components F225             | 565 | 675 | 235 | 525 | 625 | 160 | 110 | 80 | 110 | 80 |

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|  | а   | b   | с   | G   | Н   | К   | K1  | K2  | K3  | K4  |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| LC3 F265 or 3 x LC1 F●●● with<br>components F265 | 665 | 775 | 266 | 625 | 725 | 165 | 110 | 100 | 110 | 110 |
| LC3 F330 or 3 x LC1 F●●● with<br>components F330 | 765 | 975 | 276 | 725 | 825 | 195 | 140 | 100 | 110 | 180 |
| LC3 F400 or 3 x LC1 F••• with<br>components F400 | 765 | 975 | 276 | 725 | 925 | 195 | 140 | 100 | 180 | 110 |

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Motor Starter BOM Motor Starter BOM