

# Product datasheet

Specifications



## Star delta starter, TeSys Deca, 3 x 3P (3 NO) - 80 A - 400 V AC coil

LC3D80V7A64

⚠ Discontinued on: 1 Aug 2022

⚠ Discontinued

### Main

|                                        |                                                                                                                                                                                                                                                                           |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 25...400 Hz                                                                                                                                                                                                                                    |
| [Ie] 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           | 400 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<br>Power circuit: 600 V UL certified<br>Signalling circuit: 600 V CSA certified<br>Signalling circuit: 600 V UL certified<br>Power circuit: 1000 V conforming to IEC 60947-4-1<br>Signalling circuit: 1000 V conforming to IEC 60947-1 |
| Electrical durability                  | 10 Mcycles 80 A AC-3 at Ue <= 440 V                                                                                                                                                                                                                                       |
| Interlocking type                      | Mechanical                                                                                                                                                                                                                                                                |
| Mounting support                       | Plate                                                                                                                                                                                                                                                                     |
| Standards                              | CSA C22.2 No 14<br>IEC 60947-5-1<br>IEC 60947-4-1<br>EN 60947-4-1<br>EN 60947-5-1<br>UL 508                                                                                                                                                                               |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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

## Complementary

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connections - terminals         | Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 1 4...50 mm² - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 2 4...25 mm² - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 1 4...50 mm² - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 2 4...16 mm² - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 1 4...50 mm² - cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 2 4...25 mm² - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 1 1...2.5 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<br>Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Power circuit: 12 N.m - on screw clamp terminals - with screwdriver flat Ø 6...8 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: 0.3...0.6 Uc at 50/60 Hz (at <55 °C)<br>Operational: 0.8...1.1 Uc at 50 Hz (at <55 °C)<br>Operational: 0.85...1.1 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                | 4...5 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    | 25...400 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<br>1.5 ms on energisation between NC and NO contact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Width                           | 311 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Height                          | 143 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Depth                           | 183 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

|            |        |
|------------|--------|
| Net weight | 5.4 kg |
|------------|--------|

## Environment

|                                       |                                                                                                                                                                                   |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Insulation resistance                 | > 10 MOhm for signalling circuit                                                                                                                                                  |
| IP degree of protection               | IP20 front face conforming to IEC 60529                                                                                                                                           |
| Protective treatment                  | TH conforming to IEC 60068-2-30                                                                                                                                                   |
| Pollution degree                      | 3                                                                                                                                                                                 |
| Ambient air temperature for storage   | -60...80 °C                                                                                                                                                                       |
| Ambient air temperature for operation | -40...60 °C<br>60...70 °C with derating                                                                                                                                           |
| Operating altitude                    | 3000 m                                                                                                                                                                            |
| Fire resistance                       | 850 °C conforming to IEC 60695-2-1                                                                                                                                                |
| Flame retardance                      | V1 conforming to UL 94                                                                                                                                                            |
| Mechanical robustness                 | Vibrations contactor open: 2 Gn, 5...300 Hz<br>Shocks contactor open: 8 Gn for 11 ms<br>Vibrations contactor closed: 3 Gn, 5...300 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             | 27 cm    |
| Package 1 Width              | 26 cm    |
| Package 1 Length             | 38 cm    |
| Package 1 Weight             | 6.455 kg |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



### Environmental footprint

Environmental Disclosure

[Product Environmental Profile](#)

## Use Better



### Materials and Substances

EU RoHS Directive

[Compliant](#)

PVC free

Yes

## Use Longer



### Lifetime extension

Repair

No

## Use Again



### Repack and remanufacture

End of life manual availability

[End of Life Information](#)

WEEE Label



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins