

# Product datasheet

Specifications



Contactor, TeSys Deca, 4P(4NO),  
AC-1, <=440V, 125A, 110V AC  
50/60Hz coil, screw clamp terminal

LC1D80004F7

## Main

|                                |                                                                                                                                                                                                                                        |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                          | TeSys                                                                                                                                                                                                                                  |
| Range of product               | TeSys Deca                                                                                                                                                                                                                             |
| Product or component type      | Contactor                                                                                                                                                                                                                              |
| Device short name              | LC1D                                                                                                                                                                                                                                   |
| contactor application          | Resistive load                                                                                                                                                                                                                         |
| Utilisation category           | AC-1<br>AC-3<br>AC-3e<br>AC-4                                                                                                                                                                                                          |
| poles description              | 4P                                                                                                                                                                                                                                     |
| [Ue] rated operational voltage | Power circuit: <= 300 V DC 25...400 Hz<br>Power circuit: <= 690 V AC                                                                                                                                                                   |
| [Ie] rated operational current | 125 A (at <60 °C) at <= 440 V AC AC-1 for power circuit<br>80 A (at <60 °C) at <= 440 V AC AC-3 for power circuit<br>80 A (at <60 °C) at <= 440 V AC AC-3e for power circuit<br>55 A (at <60 °C) at <= 400 V AC AC-4 for power circuit |
| [Uc] control circuit voltage   | 110 V AC 50/60 Hz                                                                                                                                                                                                                      |

## Complementary

|                                             |                                                                                                                                                                            |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor power kW                              | 22 kW at 220...230 V AC 50/60 Hz<br>37 kW at 380...400 V AC 50/60 Hz<br>45 kW at 660...690 V AC 50/60 Hz<br>55 kW at 500 V AC 50/60 Hz<br>45 kW at 415...440 V AC 50/60 Hz |
| Compatibility code                          | LC1D                                                                                                                                                                       |
| Pole contact composition                    | 4 NO                                                                                                                                                                       |
| Protective cover                            | Without                                                                                                                                                                    |
| [Ith] conventional free air thermal current | 125 A (at 60 °C) for power circuit                                                                                                                                         |
| Irms rated making capacity                  | 1100 A at 440 V for power circuit conforming to IEC 60947                                                                                                                  |
| Rated breaking capacity                     | 1100 A at 440 V for power circuit conforming to IEC 60947                                                                                                                  |
| [Icw] rated short-time withstand current    | 640 A 40 °C - 10 s for power circuit<br>990 A 40 °C - 1 s for power circuit<br>135 A 40 °C - 10 min for power circuit<br>320 A 40 °C - 1 min for power circuit             |
| Associated fuse rating                      | 200 A gG at <= 690 V coordination type 1 for power circuit<br>160 A gG at <= 690 V coordination type 2 for power circuit                                                   |
| Average impedance                           | 0.8 mOhm - Ith 125 A 50 Hz for power circuit                                                                                                                               |
| Power dissipation per pole                  | 12.5 W AC-1                                                                                                                                                                |

Excluding VAT, FCA Jabal Ali & are subject to change – check with your local distributor.

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

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Ui] rated insulation voltage          | Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<br>Power circuit: 1000 V conforming to IEC 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Overvoltage category                   | III                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pollution degree                       | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| [Uimp] rated impulse withstand voltage | 8 kV conforming to IEC 60947                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Safety reliability level               | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Mechanical durability                  | 4 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Electrical durability                  | 0.8 Mcycles 125 A AC-1 at Ue <= 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Control circuit type                   | AC at 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Coil technology                        | Without built-in suppressor module                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Control circuit voltage limits         | 0.85...1.1 Uc (-40...55 °C):operational AC 60 Hz<br>0.3...0.6 Uc (-40...70 °C):drop-out AC 50/60 Hz<br>0.8...1.1 Uc (-40...55 °C):operational AC 50 Hz<br>1...1.1 Uc (55...70 °C):operational AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Inrush power in VA                     | 245 VA 60 Hz cos phi 0.75 (at 20 °C)<br>245 VA 50 Hz cos phi 0.75 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Hold-in power consumption in VA        | 26 VA 60 Hz cos phi 0.3 (at 20 °C)<br>26 VA 50 Hz cos phi 0.3 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Heat dissipation                       | 6...10 W at 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Operating time                         | 20...35 ms closing<br>6...20 ms opening                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Maximum operating rate                 | 3600 cyc/h 60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Maximum operating rate                 | 3600 cyc/h at 60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Connections - terminals                | Control circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1...2.5 mm² - cable stiffness: flexible with cable end<br>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 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: connector 1 4...50 mm² - cable stiffness: flexible without cable end<br>Power circuit: connector 2 4...25 mm² - cable stiffness: flexible without cable end<br>Power circuit: connector 1 4...50 mm² - cable stiffness: flexible with cable end<br>Power circuit: connector 2 4...16 mm² - cable stiffness: flexible with cable end<br>Power circuit: connector 1 4...50 mm² - cable stiffness: solid without cable end<br>Power circuit: connector 2 4...25 mm² - cable stiffness: solid without 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 connector - with screwdriver flat Ø 6 to Ø 8 mm<br>Power circuit: 12 N.m - on connector hexagonal screw head 4 mm<br>Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Mounting support                       | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## Environment

|                                                       |                                                                                                                                                                                       |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                                             | EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1<br>CSA C22.2 No 14<br>UL 60947-4-1<br>IEC 60335-2-40:Annex JJ<br>UL 60335-2-40:Annex JJ<br>IEC 60335-1:Clause 30.2     |
| Product certifications                                | CCC<br>UL<br>CB Scheme<br>CSA<br>CE<br>UKCA<br>Marine<br>EAC                                                                                                                          |
| IP degree of protection                               | IP20 front face conforming to IEC 60529                                                                                                                                               |
| Protective treatment                                  | TH conforming to IEC 60068-2-30                                                                                                                                                       |
| Climatic withstand                                    | conforming to IACS E10 exposure to damp heat                                                                                                                                          |
| Permissible ambient air temperature around the device | -40...60 °C<br>60...70 °C with derating                                                                                                                                               |
| Operating altitude                                    | 0...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) |
| Height                                                | 127 mm                                                                                                                                                                                |
| Width                                                 | 96 mm                                                                                                                                                                                 |
| Depth                                                 | 125 mm                                                                                                                                                                                |
| Net weight                                            | 1.76 kg                                                                                                                                                                               |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 15.400 cm |
| Package 1 Width              | 10.700 cm |
| Package 1 Length             | 13.500 cm |
| Package 1 Weight             | 1.688 kg  |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 5         |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 8.730 kg  |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Sustainability



**Green Premium™ label** is Schneider Electric’s commitment to delivering products with best-in-class 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.

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[Guide to assess a product’s sustainability >](#)



Sustainable Packaging   Transparency   RoHS/REACH

Resource performance

 Sustainable Packaging

Well-being performance

 Reach Free Of Svhc

 Toxic Heavy Metal Free

 Mercury Free

 Rohs Exemption Information   [Yes](#)

 Pvc Free

Certifications & Standards

|                          |                                                                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Reach Regulation         | <a href="#">REACH Declaration</a>                                                                                           |
| Eu Rohs Directive        | Compliant<br><a href="#">EU RoHS Declaration</a>                                                                            |
| China Rohs Regulation    | <a href="#">China RoHS declaration</a><br>Pro-active China RoHS declaration (out of China RoHS legal scope)                 |
| Environmental Disclosure | <a href="#">Product Environmental Profile</a>                                                                               |
| Weee                     | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Circularity Profile      | No need of specific recycling operations                                                                                    |

