

# Product datasheet

Specifications



## REVERSING CONTACTOR 575VAC 32A IEC

Local distributor code:

381823456

LC2D32BD

EAN Code: 3389110392784

### Main

|   |  |
|---|--|
| Range                                       | TeSys<br>TeSys Deca  |
| Product Name                                | TeSys D<br>TeSys Deca  |
| Product Or Component Type                   | Reversing contactor  |
| Device Short Name                           | LC2D   |
| Contactor Application                       | Motor control<br>Resistive load  |
| Utilisation Category                        | AC-1<br>AC-3<br>AC-3e  |
| Device Presentation                         | Preassembled with reversing power busbar   |
| Poles Description                           | 3P   |
| Power Pole Contact Composition              | 3 NO   |
| [Ue] Rated Operational Voltage              | Power circuit: <= 690 V AC 25...400 Hz<br>Power circuit: <= 300 V DC   |
| [Ie] Rated Operational Current              | 32 A (at <60 °C) at <= 440 V AC AC-3 for power circuit<br>50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit<br>32 A (at <60 °C) at <= 440 V AC AC-3e for power circuit  |
| Motor Power Kw                              | 7.5 kW at 220...230 V AC 50...60 Hz<br>15 kW at 380...400 V AC 50...60 Hz<br>15 kW at 415 V AC 50...60 Hz<br>15 kW at 440 V AC 50...60 Hz<br>18.5 kW at 500 V AC 50...60 Hz<br>18.5 kW at 660...690 V AC 50...60 Hz  |
| Motor Power Hp (UI / Csa)                   | 2 hp at 115 V AC 60 Hz for 1 phase motors<br>5 hp at 230/240 V AC 60 Hz for 1 phase motors<br>10 hp at 200/208 V AC 60 Hz for 3 phases motors<br>10 hp at 230/240 V AC 60 Hz for 3 phases motors<br>20 hp at 460/480 V AC 60 Hz for 3 phases motors<br>30 hp at 575/600 V AC 60 Hz for 3 phases motors |
| Control Circuit Type                        | DC standard  |
| [Uc] Control Circuit Voltage                | 24 V DC  |
| Auxiliary Contact Composition               | 1 NO + 1 NC  |
| [Uimp] Rated Impulse Withstand Voltage      | 6 kV conforming to IEC 60947   |
| Overvoltage Category                        | III  |
| [Ith] Conventional Free Air Thermal Current | 10 A (at 60 °C) for signalling circuit<br>50 A (at 60 °C) for power circuit  |
| Irms Rated Making Capacity                  | 140 A AC for signalling circuit conforming to IEC 60947-5-1<br>250 A DC for signalling circuit conforming to IEC 60947-5-1<br>550 A at 440 V for power circuit conforming to IEC 60947   |

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

|   |   |
|---|---|
| <b>Rated Breaking Capacity</b>                  | 550 A at 440 V for power circuit conforming to IEC 60947  |
| <b>[Icw] Rated Short-Time Withstand Current</b> | 60 A 40 °C - 10 min for power circuit<br>138 A 40 °C - 1 min for power circuit<br>260 A 40 °C - 10 s for power circuit<br>430 A 40 °C - 1 s for power circuit<br>100 A - 1 s for signalling circuit<br>120 A - 500 ms for signalling circuit<br>140 A - 100 ms for signalling circuit   |
| <b>Associated Fuse Rating</b>                   | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>63 A gG at <= 690 V coordination type 1 for power circuit<br>63 A gG at <= 690 V coordination type 2 for power circuit  |
| <b>Average Impedance</b>                        | 2 mOhm - lth 50 A 50 Hz for power circuit   |
| <b>[Ui] Rated Insulation Voltage</b>            | Power circuit: 690 V conforming to IEC 60947-4-1<br>Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<br>Signalling circuit: 690 V conforming to IEC 60947-1<br>Signalling circuit: 600 V CSA certified<br>Signalling circuit: 600 V UL certified   |
| <b>Electrical Durability</b>                    | 1.65 Mcycles 32 A AC-3 at Ue <= 440 V<br>1.4 Mcycles 50 A AC-1 at Ue <= 440 V<br>1.65 Mcycles 32 A AC-3e at Ue <= 440 V   |
| <b>Power Dissipation Per Pole</b>               | 2 W AC-3<br>5 W AC-1<br>2 W AC-3e   |
| <b>Front Cover</b>                              | With  |
| <b>Interlocking Type</b>                        | Mechanical  |
| <b>Mounting Support</b>                         | Rail<br>Plate   |
| <b>Standards</b>                                | CSA C22.2 No 14<br>EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1<br>UL 508<br>IEC 60335-1  |
| <b>Product Certifications</b>                   | UL<br>CSA<br>RINA<br>GOST<br>CCC<br>DNV<br>LROS (Lloyds register of shipping)<br>GL<br>BV<br>UKCA<br>CB   |
| <b>Connections - Terminals</b>                  | Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm²flexible without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²flexible with cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm²flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²solid<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm²solid<br>Power circuit: screw clamp terminals 1 cable(s) 2.5...10 mm²flexible without cable end<br>Power circuit: screw clamp terminals 2 cable(s) 2.5...10 mm²flexible without cable end<br>Power circuit: screw clamp terminals 1 cable(s) 1...10 mm²flexible with cable end<br>Power circuit: screw clamp terminals 2 cable(s) 1.5...6 mm²flexible with cable end<br>Power circuit: screw clamp terminals 1 cable(s) 1.5...10 mm²solid<br>Power circuit: screw clamp terminals 2 cable(s) 2.5...10 mm²solid |
| <b>Tightening Torque</b>                        | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2<br>Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver pozidriv No 2  |

|                          |  |
|--------------------------|--|
| Operating Time           | 53.55...72.45 ms closing<br>16...24 ms opening   |
| 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    | 30 Mcycles   |
| Maximum Operating Rate   | 3600 cyc/h 60 °C   |

## Complementary

|                                |  |
|--------------------------------|--|
| Coil Technology                | Built-in bidirectional peak limiting diode suppressor  |
| Control Circuit Voltage Limits | 0.1...0.25 Uc (-40...70 °C):drop-out DC<br>0.7...1.25 Uc (-40...60 °C):operational DC<br>1...1.25 Uc (60...70 °C):operational DC |
| Time Constant                  | 28 ms  |
| Inrush Power In W              | 5.4 W (at 20 °C)   |
| Hold-In Power Consumption In W | 5.4 W at 20 °C   |
| Auxiliary Contacts Type        | type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1<br>type mirror contact 1 NC conforming to IEC 60947-4-1         |
| 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                          |
| Insulation Resistance          | > 10 MOhm for signalling circuit   |

## Environment

|                                       |   |
|---------------------------------------|---|
| Ip Degree Of Protection               | IP20 front face conforming to IEC 60529   |
| Climatic Withstand                    | conforming to IACS E10<br>conforming to IEC 60947-1 Annex Q category D  |
| Protective Treatment                  | TH conforming to IEC 60068-2-30   |
| Pollution Degree                      | 3   |
| Ambient Air Temperature For Operation | -40...60 °C<br>60...70 °C with derating   |
| Ambient Air Temperature For Storage   | -60...80 °C   |
| 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>Vibrations contactor closed: 4 Gn, 5...300 Hz<br>Shocks contactor closed: 15 Gn for 11 ms<br>Shocks contactor open: 8 Gn for 11 ms |
| Height                                | 85 mm   |
| Width                                 | 90 mm   |
| Depth                                 | 101 mm  |
| Net Weight                            | 1.127 kg  |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type Of Package 1       | PCE      |
| Number Of Units In Package 1 | 1        |
| Package 1 Height             | 11.0 cm  |
| Package 1 Width              | 12.3 cm  |
| Package 1 Length             | 15.0 cm  |
| Package 1 Weight             | 1.275 kg |
| Unit Type Of Package 2       | S02      |
| Number Of Units In Package 2 | 5        |
| Package 2 Height             | 15.0 cm  |
| Package 2 Width              | 30.0 cm  |
| Package 2 Length             | 40.0 cm  |
| Package 2 Weight             | 6.67 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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Transparency   RoHS/REACH

## Well-being performance

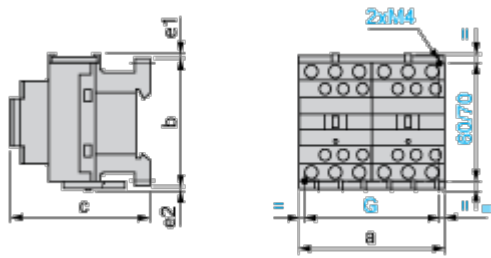
|   |                            |     |
|---|----------------------------|-----|
| ✓ | Mercury Free               |     |
| ✓ | Rohs Exemption Information | Yes |
| ✓ | Pvc Free                   |     |

## Certifications & Standards

|                          |   |
|--------------------------|---|
| Reach Regulation         | <a href="#">REACH Declaration</a>   |
| Eu Rohs Directive        | Compliant with Exemptions   |
| China Rohs Regulation    | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information |
| Environmental Disclosure | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile      | <a href="#">End of Life Information</a>   |

Dimensions Drawings

Dimensions



| LC2 or 2 x LC1                               | a  | b  | c <sup>(1)</sup> | e1 | e2  | G  |
|--|----|----|------------------|----|-----|----|
| D09 to D18 (AC)                              | 90 | 77 | 86               | 4  | 1.5 | 80 |
| D093 to D123 (AC)                            | 90 | 99 | 86               | –  | –   | 80 |
| D09 to D18 (DC)                              | 90 | 77 | 95               | 4  | 1.5 | 80 |
| D093 to D123 (DC)                            | 90 | 99 | 95               | –  | –   | 80 |
| D25 to D38 (AC)                              | 90 | 85 | 92               | 9  | 5   | 80 |
| D183 to D383 (AC)                            | 90 | 99 | 92               | –  | –   | 80 |
| D25 to D32 (DC)                              | 90 | 85 | 101              | 9  | 5   | 80 |
| D183 to D383 (DC)                            | 90 | 99 | 101              | –  | –   | 80 |
| e1 and e2: including cabling.                |    |    |                  |    |     |    |
| (1) With safety cover, without add-on block. |    |    |                  |    |     |    |

Connections and Schema

Wiring

