# Product data sheet

Specification





IEC contactor, TeSys Deca, nonreversing, 25A resistive, 4 pole, 4 NO, 24VDC coil, open style

LC1DT25BD

Product availability: Stock - Normally stocked in distribution

Price\*: 166.00 USD

### Main

| Range  | TeSys<br>TeSys Deca  |  |
|--|--|--|
| 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   |  |
| Power circuit <= 690 V AC 25400 Hz Power circuit <= 300 V DC |  |  |
| [le] rated operational current                               | perational current 25 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit |  |
| [Uc] control circuit voltage                                 | 24 V DC  |  |

### Complementary

| Compatibility code                          | LC1D  |
|---|---|
| Pole contact composition                    | 4 NO  |
| Protective cover                            | With  |
| [lth] conventional free air thermal current | 10 A (at 140 °F (60 °C)) for signalling circuit<br>25 A (at 140 °F (60 °C)) for power circuit   |
| Irms rated making capacity                  | 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 250 A at 440 V for power circuit conforming to IEC 60947  |
| Rated breaking capacity                     | 250 A at 440 V for power circuit conforming to IEC 60947  |
| [Icw] rated short-time withstand current    | 30 A 104 °F (40 °C) - 10 min for power circuit 61 A 104 °F (40 °C) - 1 min for power circuit 105 A 104 °F (40 °C) - 10 s for power circuit 210 A 104 °F (40 °C) - 1 s for power circuit 210 A 104 °F (40 °C) - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit |
| Associated fuse rating                      | 10 A gG for signalling circuit conforming to IEC 60947-5-1 40 A gG at <= 690 V coordination type 1 for power circuit 25 A gG at <= 690 V coordination type 2 for power circuit  |
| Average impedance                           | 2.5 mOhm - Ith 25 A 50 Hz for power circuit   |
| Power dissipation per pole                  | 1.56 W AC-1   |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| [Ui] rated insulation voltage          | Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL  |
|--|---|
|  | Power circuit 690 V IEC 60947-4-1   |
| Overvoltage category                   | III   |
| Pollution degree                       | 3   |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947  |
| Safety reliability level               | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1  |
| Mechanical durability                  | 30 Mcycles  |
| Electrical durability                  | 0.8 Mcycles 25 A AC-1 <= 440 V  |
| Control circuit type                   | DC standard   |
| Coil technology                        | Built-in bidirectional peak limiting diode suppressor   |
| Control circuit voltage limits         | 0.10.25 Uc -40158 °F (-4070 °C) drop-out DC<br>0.71.25 Uc -40140 °F (-4060 °C) operational DC<br>11.25 Uc 140158 °F (6070 °C) operational DC  |
| Inrush power in W                      | 5.4 W 68 °F (20 °C))  |
| Hold-in power consumption in W         | 5.4 W 68 °F (20 °C)   |
| Operating time                         | 20 ±20 % ms opening<br>63 ±15 % ms closing  |
| Time constant                          | 28 ms   |
| Maximum operating rate                 | 3600 cyc/h 140 °F (60 °C)   |
| Connections - terminals                | Control circuit: screw clamp terminals 2 0.0020.004 in² (12.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.0020.006 in² (14 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.0020.006 in² (14 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.0020.006 in² (14 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.0020.006 in² (14 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.0020.006 in² (14 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 0.0020.006 in² (14 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.0020.006 in² (14 mm²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.0020.006 in² (14 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.0020.006 in² (14 mm²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.0020.006 in² (14 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.0020.006 in² (14 mm²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.0020.006 in² (14 mm²) - cable stiffness: solid without cable end |
| Tightening torque                      | Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2   |
| Auxiliary contact composition          | 1 NO + 1 NC   |
| Auxiliary contacts type                | Mechanically linked 1 NO + 1 NC IEC 60947-5-1<br>Mirror contact 1 NC IEC 60947-4-1  |
|  |   |

| Minimum switching current | 5 mA for signalling circuit  |  |
|---------------------------|--|--|
| Insulation resistance     | > 10 MOhm for signalling circuit   |  |
| Non-overlap time          | 1.5 ms on de-energisation between NC and NO contact     1.5 ms on energisation between NC and NO contact |  |
| Mounting Support          | Rail<br>Plate  |  |

## **Environment**

| LIMITOTITIETT   |   |
|---|---|
| Standards   | 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  |
| Product Certifications                                | DNV GL CCC LROS (Lloyds register of shipping) RINA BV GOST UL CSA CB  |
| IP degree of protection                               | IP20 front face IEC 60529   |
| Protective treatment                                  | THIEC 60068-2-30  |
| Climatic withstand                                    | IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat   |
| Permissible ambient air temperature around the device | -40140 °F (-4060 °C)<br>140158 °F (6070 °C) with derating   |
| Operating altitude                                    | 09842.52 ft (03000 m)   |
| Fire resistance                                       | 1562 °F (850 °C) IEC 60695-2-1  |
| Flame retardance                                      | V1 conforming to UL 94  |
| Mechanical robustness                                 | Vibrations contactor open 2 Gn, 5300 Hz) Vibrations contactor closed 4 Gn, 5300 Hz) Shocks contactor closed 15 Gn for 11 ms) Shocks contactor open 10 Gn for 11 ms) |
| Height  | 3.3 in (85 mm)  |
| Width   | 1.8 in (45 mm)  |
| Depth   | 3.9 in (99 mm)  |
| Net Weight  | 0.805 lb(US) (0.365 kg)   |

# Ordering and shipping details

| Category          | US10I1222355  |  |
|-------------------|---------------|--|
| Discount Schedule | 0112          |  |
| GTIN              | 3389110247794 |  |
| Returnability     | Yes           |  |
| Country of origin | SG            |  |

## **Packing Units**

| Unit Type of Package 1 | PCE |  |  |
|------------------------|-----|--|--|
|                        |     |  |  |

| 1                                |  |
|----------------------------------|--|
| 2.165 in (5.500 cm)              |  |
| 3.740 in (9.500 cm)              |  |
| 4.724 in (12.000 cm)             |  |
| 19.612 oz (556.000 g)            |  |
| S02                              |  |
| 16                               |  |
| 5.906 in (15.000 cm)             |  |
| 11.811 in (30.000 cm)            |  |
| 15.748 in (40.000 cm)            |  |
| 20.580 lb(US) (9.335 kg)         |  |
| P06                              |  |
| 256                              |  |
| 29.528 in (75.000 cm)            |  |
| ge 3 Width 23.622 in (60.000 cm) |  |
| 31.496 in (80.000 cm)            |  |
| 342.819 lb(US) (155.500 kg)      |  |
|                                  |  |

## **Contractual warranty**

Warranty 18 months



**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 >





Transparency RoHS/REACh

### Well-being performance

|          | Mercury Free               |     |
|----------|----------------------------|-----|
| <b>⊘</b> | Rohs Exemption Information | Yes |
| <b>Ø</b> | Pvc Free                   |     |

#### **Certifications & Standards**

| Reach Regulation          | REACh Declaration   |  |
|---------------------------|---|--|
| Eu Rohs Directive         | Compliant with Exemptions   |  |
| China Rohs Regulation     | China RoHS declaration  Product out of China RoHS scope. Substance declaration for your information.  |  |
| Environmental Disclosure  | Product Environmental Profile   |  |
| Circularity Profile       | End of Life Information   |  |
| California Proposition 65 | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov |  |