# Product data sheet

Specifications





IEC contactor, TeSys Deca, nonreversing, 9A, 5HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 110VDC coil, open style

LC1D09FD

Product availability: Non-Stock - Not normally stocked in distribution facility

#### Price\*: 119.00 USD

#### Main

| Range Of Product               | TeSys Deca   |
|--------------------------------|--|
| Product Or Component Type      | Contactor  |
| Device Short Name              | LC1D   |
| Contactor Application          | Resistive load<br>Motor control  |
| Utilisation Category           | AC-4<br>AC-3<br>AC-1<br>AC-3e  |
| Poles Description              | 3P   |
| [Ue] Rated Operational Voltage | Power circuit <= 690 V AC 25400 Hz<br>Power circuit <= 300 V DC  |
| [le] Rated Operational Current | 9 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit<br>25 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit<br>9 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit |
| [Uc] Control Circuit Voltage   | 110 V DC   |

## Complementary

| C 50/60 Hz (AC-3)<br>50/60 Hz (AC-3)<br>50/60 Hz (AC-3)<br>50 Hz (AC-3)<br>C 50/60 Hz (AC-3) |
|--|
| 50/60 Hz (AC-3)<br>60 Hz (AC-3)  |
| 60 Hz (AC-3)   |
|  |
|  |
| C 30/00 T12 (AC-3)   |
| 60 Hz (AC-4)   |
| C 50/60 Hz (AC-3e)   |
| 50/60 Hz (AC-3e)   |
| 50/60 Hz (AC-3e)   |
| 60 Hz (AC-3e)  |
| C 50/60 Hz (AC-3e)   |
| 0/60 Hz for 1 phase motors   |
| 0/60 Hz for 3 phase motors   |
| 0/60 Hz for 3 phase motors   |
| 0/60 Hz for 3 phase motors   |
| 50/60 Hz for 3 phase motors  |
| 60 Hz for 1 phase motors   |
|  |
|  |
|  |
| for power circuit  |
|  |
|  |

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

| Irms Rated Making Capacity                  | 250 A at 440 V for power circuit conforming to IEC 60947                                     |
|---|--|
|   | 140 A AC for signalling circuit conforming to IEC 60947-5-1                                  |
|   | 250 A DC for signalling circuit conforming to IEC 60947-5-1                                  |
| Rated Breaking Capacity                     | 250 A at 440 V for power circuit conforming to IEC 60947                                     |
|   |  |
| [Icw] Rated Short-Time Withstand<br>Current | 105 A 104 °F (40 °C) - 10 s for power circuit  |
| ourient                                     | 210 A 104 °F (40 °C) - 1 s for power circuit   |
|   | $30 \text{ A} 104 ^{\circ}\text{F} (40 ^{\circ}\text{C}) - 10 \text{ min for power circuit}$ |
|   | 61 A 104 °F (40 °C) - 1 min for power circuit  |
|   | 100 A - 1 s for signalling circuit   |
|   | 120 A - 500 ms for signalling circuit<br>140 A - 100 ms for signalling circuit               |
|   |  |
| Associated Fuse Rating                      | 10 A gG for signalling circuit conforming to IEC 60947-5-1                                   |
|   | 25 A gG at <= 690 V coordination type 1 for power circuit                                    |
|   | 20 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  |
| ·   | 0.2 W AC-3   |
|   | 0.2 W AC-3e  |
| [11] Potod Inculation Voltage               |  |
| [Ui] Rated Insulation Voltage               | Power circuit 690 V IEC 60947-4-1  |
|   | 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  |
| Overvoltage Category                        | III  |
| Pollution Degree                            | 3  |
| [Uimp] Rated Impulse Withstand<br>Voltage   | 6 kV IEC 60947   |
|   | P104 - 1260062 surles contests with naminal load EN//60 12040 1                              |
| Safety Reliability Level                    | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1                             |
|   | B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1                         |
| Mechanical Durability                       | 30 Mcycles   |
| Electrical Durability                       | 0.6 Mcycles 25 A AC-1 <= 440 V   |
| 5   | 2 Mcycles 9 A AC-3 <= 440 V  |
|   | 2 Mcycles 9 A AC-3e <= 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  |
|   | 0.71.25 Uc -40140 °F (-4060 °C) operational DC   |
|   | 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                              | 63 ±15 % ms closing  |
|   | 20 ±20 % ms opening  |
|   |  |
| Time Constant                               | 28 ms  |
| Maximum Operating Rate                      | 3600 cyc/h 140 °F (60 °C)  |
|   |  |

| Connections - Terminals       | Power circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness:                              |
|-------------------------------|---|
|                               | flexible without cable end  |
|                               | Power circuit: screw clamp terminals 2 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness:                              |
|                               | flexible without cable end  |
|                               | Power circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness:                              |
|                               | flexible with cable end   |
|                               | Power circuit: screw clamp terminals 2 0.000.00 in <sup>2</sup> (12.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end    |
|                               | Power circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness:                              |
|                               | solid without cable end   |
|                               | Power circuit: screw clamp terminals 2 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness:                              |
|                               | solid without cable end   |
|                               | Control circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness: flexible without cable end |
|                               | Control circuit: screw clamp terminals 2 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness: flexible without cable end |
|                               | Control circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness: flexible with cable end    |
|                               | Control circuit: screw clamp terminals 2 0.000.00 in <sup>2</sup> (12.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end  |
|                               | Control circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness:                            |
|                               | solid without cable end   |
|                               | Control circuit: screw clamp terminals 2 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness:                            |
|                               | solid without cable end   |
| Tightening Torque             | 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 flat Ø 6 mm  |
|                               | Control 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   |
| 5 51                          | Mirror contact 1 NC IEC 60947-4-1   |
| Signalling Circuit Frequency  | 25400 Hz  |
| Minimum Switching Voltage     | 17 V for signalling circuit   |
| 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              | Dista   |
| Mounting Support              | Plate   |
|                               | Rail  |

## Environment

| 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  | UL<br>GL<br>DNV<br>CCC<br>CSA<br>LROS (Lloyds register of shipping)<br>RINA<br>GOST<br>BV<br>UKCA          |
| Ip Degree Of Protection | IP20 front face IEC 60529  |
| Protective Treatment    | THIEC 60068-2-30   |
| Climatic Withstand      | IACS E10 exposure to damp heat<br>IEC 60947-1 Annex Q category D exposure to damp heat                     |

| Permissible Ambient Air       | -40140 °F (-4060 °C)                       |
|-------------------------------|--|
| Temperature Around The Device | 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 open 10 Gn for 11 ms)     |
|                               | Shocks contactor closed 15 Gn for 11 ms)   |
| Height                        | 3.03 in (77 mm)                            |
| Width                         | 1.77 in (45 mm)                            |
| Depth                         | 3.74 in (95 mm)                            |
| Net Weight                    | 1.06 lb(US) (0.48 kg)                      |

# Ordering and shipping details

| Category          | US10I1222355  |
|-------------------|---------------|
| Discount Schedule | 0 12          |
| Gtin              | 3389110353181 |
| Returnability     | No            |
| Country Of Origin | ID            |

## **Packing Units**

| Number Of Units In Package 11Package 1 Height1.97 in (5.000 cm)Package 1 Width3.62 in (9.200 cm)Package 1 Length4.37 in (11.100 cm)Package 1 Weight18.17 oz (515.000 g)Unit Type Of Package 2S02Number Of Units In Package 215Package 2 Height5.91 in (15.000 cm)Package 2 Width11.81 in (30.000 cm)Package 2 Length15.75 in (40.000 cm)                                       |                              |                         |
|--|------------------------------|-------------------------|
| Package 1 Height   1.97 in (5.000 cm)     Package 1 Width   3.62 in (9.200 cm)     Package 1 Length   4.37 in (11.100 cm)     Package 1 Weight   18.17 oz (515.000 g)     Unit Type Of Package 2   S02     Number Of Units In Package 2   15     Package 2 Height   5.91 in (15.000 cm)     Package 2 Width   11.81 in (30.000 cm)     Package 2 Length   15.75 in (40.000 cm) | Unit Type Of Package 1       | PCE                     |
| Package 1 Width3.62 in (9.200 cm)Package 1 Length4.37 in (11.100 cm)Package 1 Weight18.17 oz (515.000 g)Unit Type Of Package 2S02Number Of Units In Package 215Package 2 Height5.91 in (15.000 cm)Package 2 Width11.81 in (30.000 cm)Package 2 Length15.75 in (40.000 cm)  | Number Of Units In Package 1 | 1                       |
| Package 1 Length     4.37 in (11.100 cm)       Package 1 Weight     18.17 oz (515.000 g)       Unit Type Of Package 2     S02       Number Of Units In Package 2     15       Package 2 Height     5.91 in (15.000 cm)       Package 2 Width     11.81 in (30.000 cm)       Package 2 Length     15.75 in (40.000 cm)  | Package 1 Height             | 1.97 in (5.000 cm)      |
| Package 1 Weight18.17 oz (515.000 g)Unit Type Of Package 2S02Number Of Units In Package 215Package 2 Height5.91 in (15.000 cm)Package 2 Width11.81 in (30.000 cm)Package 2 Length15.75 in (40.000 cm)  | Package 1 Width              | 3.62 in (9.200 cm)      |
| Unit Type Of Package 2   S02     Number Of Units In Package 2   15     Package 2 Height   5.91 in (15.000 cm)     Package 2 Width   11.81 in (30.000 cm)     Package 2 Length   15.75 in (40.000 cm)   | Package 1 Length             | 4.37 in (11.100 cm)     |
| Number Of Units In Package 2     15       Package 2 Height     5.91 in (15.000 cm)       Package 2 Width     11.81 in (30.000 cm)       Package 2 Length     15.75 in (40.000 cm)  | Package 1 Weight             | 18.17 oz (515.000 g)    |
| Package 2 Height     5.91 in (15.000 cm)       Package 2 Width     11.81 in (30.000 cm)       Package 2 Length     15.75 in (40.000 cm)  | Unit Type Of Package 2       | S02                     |
| Package 2 Width     11.81 in (30.000 cm)       Package 2 Length     15.75 in (40.000 cm)   | Number Of Units In Package 2 | 15                      |
| Package 2 Length     15.75 in (40.000 cm)  | Package 2 Height             | 5.91 in (15.000 cm)     |
|  | Package 2 Width              | 11.81 in (30.000 cm)    |
| Package 2 Weight     17.75 lb(US) (8.049 kg)   | Package 2 Length             | 15.75 in (40.000 cm)    |
|  | Package 2 Weight             | 17.75 lb(US) (8.049 kg) |

## **Contractual warranty**

Warranty

18 months

## Sustainability Screen

**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.

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Guide to assess a product's sustainability >



Transparency RoHS/REACh

#### Well-being performance

Mercury Free
Rohs Exemption Information Yes
Pvc Free

#### **Certifications & Standards**

| Reach Regulation          | REACh Declaration   |
|---------------------------|---|
| Eu Rohs Directive         | Compliant with Exemptions   |
| China Rohs Regulation     | China RoHS declaration<br>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 |