

# Product data sheet

Specifications



IEC contactor, TeSys Deca Green, nonreversing, 9A, 5HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 48/130 VAC/VDC coil, open

LC1D09EHE

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

Price\*: 41.00 USD

## Main

|                                |   |
|--------------------------------|---|
| Range                          | TeSys<br>TeSys Deca   |
| Range Of Product               | TeSys Deca  |
| Product Or Component Type      | Contactors  |
| Device Short Name              | LC1D  |
| Contactors Application         | Resistive load<br>Motor control   |
| Utilisation Category           | AC-3<br>AC-1<br>AC-3e   |
| Poles Description              | 3P  |
| [Ue] Rated Operational Voltage | Power circuit <= 690 V AC 25...400 Hz   |
| [Ie] Rated Operational Current | 9 A (at <140 °F (60 °C)) at <= 440 V AC-3 for power circuit<br>25 A (at <140 °F (60 °C)) at <= 440 V AC-1 for power circuit<br>9 A (at <140 °F (60 °C)) at <= 440 V AC-3e for power circuit |
| [Uc] Control Circuit Voltage   | 48...130 V AC 50/60 Hz<br>48...130 V DC   |

## Complementary

|                            |  |
|----------------------------|--|
| Motor Power Kw             | 2.2 kW at 220...230 V AC 50 Hz (AC-3)<br>4 kW at 380...400 V AC 50 Hz (AC-3)<br>4 kW at 415 V AC 50 Hz (AC-3)<br>4 kW at 440 V AC 50 Hz (AC-3)<br>5.5 kW at 500 V AC 50 Hz (AC-3)<br>5.5 kW at 660...690 V AC 50 Hz (AC-3)<br>2.2 kW at 220...230 V AC 50 Hz (AC-3e)<br>4 kW at 380...400 V AC 50 Hz (AC-3e)<br>4 kW at 415 V AC 50 Hz (AC-3e)<br>4 kW at 440 V AC 50 Hz (AC-3e)<br>5.5 kW at 500 V AC 50 Hz (AC-3e)<br>5.5 kW at 660...690 V AC 50 Hz (AC-3e) |
| Maximum Horse Power Rating | 0.33 hp at 115 V AC 60 Hz for 1 phase motors<br>1 hp at 230/240 V AC 60 Hz for 1 phase motors<br>2 hp at 200/208 V AC 60 Hz for 3 phase motors<br>2 hp at 230/240 V AC 60 Hz for 3 phase motors<br>5 hp at 460/480 V AC 60 Hz for 3 phase motors<br>7.5 hp at 575/600 V AC 60 Hz for 3 phase motors  |
| Compatibility Code         | LC1D   |
| Pole Contact Composition   | 3 NO   |
| Protective Cover           | With   |

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

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|---|--|
| <b>[I<sub>th</sub>] Conventional Free Air Thermal Current</b> | 10 A (at 140 °F (60 °C)) for signalling circuit<br>25 A (at 140 °F (60 °C)) for power circuit  |
| <b>I<sub>rms</sub> Rated Making Capacity</b>                  | 250 A at 440 V for power circuit conforming to IEC 60947<br>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   |
| <b>Rated Breaking Capacity</b>                                | 250 A at 440 V for power circuit conforming to IEC 60947   |
| <b>[I<sub>cw</sub>] Rated Short-Time Withstand Current</b>    | 100 A - 1 s for signalling circuit<br>120 A - 500 ms for signalling circuit<br>140 A - 100 ms for signalling circuit<br>30 A 104 °F (40 °C) - 10 min for power circuit<br>61 A 104 °F (40 °C) - 1 min for power circuit<br>105 A 104 °F (40 °C) - 10 s for power circuit<br>210 A 104 °F (40 °C) - 1 s for power circuit |
| <b>Associated Fuse Rating</b>                                 | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>25 A gG at <= 690 V coordination type 1 for power circuit<br>20 A gG at <= 690 V coordination type 2 for power circuit   |
| <b>Average Impedance</b>                                      | 2.5 mOhm - I <sub>th</sub> 25 A 50 Hz for power circuit  |
| <b>Power Dissipation Per Pole</b>                             | 1.56 W AC-1<br>0.2 W AC-3<br>0.2 W AC-3e   |
| <b>[U<sub>i</sub>] Rated Insulation Voltage</b>               | Power circuit 690 V IEC 60947-4-1<br>Signalling circuit 690 V IEC 60947-1  |
| <b>Overvoltage Category</b>                                   | III  |
| <b>Pollution Degree</b>                                       | 3  |
| <b>[U<sub>imp</sub>] Rated Impulse Withstand Voltage</b>      | 6 kV IEC 60947   |
| <b>Safety Reliability Level</b>                               | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1   |
| <b>Mechanical Durability</b>                                  | 15 Mcycles   |
| <b>Electrical Durability</b>                                  | 2.4 Mcycles 8 A AC-3 <= 440 V<br>0.6 Mcycles 25 A AC-1 <= 440 V<br>2.4 Mcycles 8 A AC-3e <= 440 V  |
| <b>Control Circuit Type</b>                                   | AC/DC 50/60 Hz AC/DC electronic  |
| <b>Coil Technology</b>  | Built-in bidirectional peak limiting   |
| <b>Control Circuit Voltage Limits</b>                         | <= 0.1 U <sub>c</sub> -40...158 °F (-40...70 °C) drop-out AC/DC<br>0.85...1.1 U <sub>c</sub> -40...140 °F (-40...60 °C) operational AC/DC<br>1...1.1 U <sub>c</sub> 140...158 °F (60...70 °C) operational AC/DC  |
| <b>Inrush Power In Va</b>                                     | 25 VA 50/60 Hz (at 68 °F (20 °C))  |
| <b>Inrush Power In W</b>                                      | 24 W 68 °F (20 °C)   |
| <b>Hold-In Power Consumption In Va</b>                        | 1.3 VA 50/60 Hz (at 68 °F (20 °C))   |
| <b>Hold-In Power Consumption In W</b>                         | 0.8 W 68 °F (20 °C)  |
| <b>Heat Dissipation</b>                                       | 0.8 W at 50/60 Hz  |
| <b>Operating Time</b>   | 45...55 ms closing<br>20...90 ms opening   |
| <b>Maximum Operating Rate</b>                                 | 3600 cyc/h 140 °F (60 °C)  |

|                                |   |
|--------------------------------|---|
| <b>Connections - Terminals</b> | <p>Control circuit: screw clamp terminals 1 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 2 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 1 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible with cable end</p> <p>Control circuit: screw clamp terminals 2 0.00...0.00 in<sup>2</sup> (1...2.5 mm<sup>2</sup>) - cable stiffness: flexible with cable end</p> <p>Control circuit: screw clamp terminals 1 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: solid</p> <p>Control circuit: screw clamp terminals 2 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: solid</p> <p>Power circuit: screw clamp terminals 1 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Power circuit: screw clamp terminals 2 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Power circuit: screw clamp terminals 1 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible with cable end</p> <p>Power circuit: screw clamp terminals 2 0.00...0.00 in<sup>2</sup> (1...2.5 mm<sup>2</sup>) - cable stiffness: flexible with cable end</p> <p>Power circuit: screw clamp terminals 1 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: solid</p> <p>Power circuit: screw clamp terminals 2 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: solid</p> |
|--------------------------------|---|

|                          |   |
|--------------------------|---|
| <b>Tightening Torque</b> | <p>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm</p> <p>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2</p> <p>Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm</p> <p>Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2</p> <p>Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2</p> <p>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2</p> |
|--------------------------|---|

|                                      |   |
|--------------------------------------|---|
| <b>Auxiliary Contact Composition</b> | 1 NO + 1 NC   |
| <b>Auxiliary Contacts Type</b>       | Mechanically linked 1 NO + 1 NC IEC 60947-5-1<br>Mirror contact 1 NC IEC 60947-4-1                      |
| <b>Signalling Circuit Frequency</b>  | 25...400 Hz   |
| <b>Minimum Switching Voltage</b>     | 17 V for signalling circuit   |
| <b>Minimum Switching Current</b>     | 5 mA for signalling circuit   |
| <b>Insulation Resistance</b>         | > 10 MOhm for signalling circuit  |
| <b>Non-Overlap Time</b>              | 1.5 ms on de-energisation between NC and NO contact<br>1.5 ms on energisation between NC and NO contact |
| <b>Mounting Support</b>              | Plate<br>Rail   |

## Environment

|  |  |
|--|--|
| <b>Standards</b>   | <p>EN/IEC 60947-4-1</p> <p>EN/IEC 60947-5-1</p> <p>UL 60947-4-1</p> <p>CSA C22.2 No 60947-4-1</p> <p>IEC 60335-1</p>     |
| <b>Product Certifications</b>                                | <p>CCC</p> <p>CSA</p> <p>EAC</p> <p>UL</p> <p>KC</p> <p>DNV-GL</p> <p>LROS (Lloyds register of shipping)</p> <p>UKCA</p> |
| <b>Ip Degree Of Protection</b>                               | IP20 front face IEC 60529  |
| <b>Climatic Withstand</b>                                    | <p>IACS E10 exposure to damp heat</p> <p>IEC 60947-1 Annex Q category D exposure to damp heat</p>                        |
| <b>Permissible Ambient Air Temperature Around The Device</b> | <p>-40...140 °F (-40...60 °C)</p> <p>140...158 °F (60...70 °C) with derating</p>   |
| <b>Operating Altitude</b>                                    | 0...9842.52 ft (0...3000 m)  |

|                              |  |
|------------------------------|--|
| <b>Fire Resistance</b>       | 1562 °F (850 °C) IEC 60695-2-1   |
| <b>Flame Retardance</b>      | V1 conforming to UL 94   |
| <b>Mechanical Robustness</b> | Vibrations contactor open 2 Gn, 5...300 Hz)<br>Vibrations contactor closed 4 Gn, 5...300 Hz)<br>Shocks contactor open 10 Gn for 11 ms)<br>Shocks contactor closed 15 Gn for 11 ms) |
| <b>Height</b>                | 3.03 in (77 mm)  |
| <b>Width</b>                 | 1.77 in (45 mm)  |
| <b>Depth</b>                 | 3.39 in (86 mm)  |
| <b>Net Weight</b>            | 0.81 lb(US) (0.368 kg)   |

## Ordering and shipping details

|                          |               |
|--------------------------|---------------|
| <b>Category</b>          | US10I1222356  |
| <b>Discount Schedule</b> | 0112          |
| <b>Gtin</b>              | 3606480987649 |
| <b>Returnability</b>     | No            |
| <b>Country Of Origin</b> | US            |

## Packing Units

|                                     |                         |
|-------------------------------------|-------------------------|
| <b>Unit Type Of Package 1</b>       | PCE                     |
| <b>Number Of Units In Package 1</b> | 1                       |
| <b>Package 1 Height</b>             | 2.05 in (5.200 cm)      |
| <b>Package 1 Width</b>              | 3.66 in (9.300 cm)      |
| <b>Package 1 Length</b>             | 4.49 in (11.400 cm)     |
| <b>Package 1 Weight</b>             | 13.83 oz (392.000 g)    |
| <b>Unit Type Of Package 2</b>       | S02                     |
| <b>Number Of Units In Package 2</b> | 15                      |
| <b>Package 2 Height</b>             | 5.91 in (15.000 cm)     |
| <b>Package 2 Width</b>              | 11.81 in (30.000 cm)    |
| <b>Package 2 Length</b>             | 15.75 in (40.000 cm)    |
| <b>Package 2 Weight</b>             | 13.69 lb(US) (6.211 kg) |

## Contractual warranty

|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 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.

[Learn more about Green Premium >](#)

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



Transparency RoHS/REACH

## Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

✓ Halogen Free Plastic Parts & Cables Product

## 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](#)

Weee [The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.](#)

Circularity Profile [End of Life Information](#)