# Product data sheet

Specifications





IEC contactor, TeSys Deca, nonreversing, 18A, 10HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 120VAC 50/60Hz coil, open

LC1D18G7

Product availability: Stock - Normally stocked in distribution facility

#### Price\*: 163.20 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-1<br>AC-4<br>AC-3<br>AC-3e     Poles Description   3P     [Ue] Rated Operational Voltage   Power circuit <= 690 V AC 25400 Hz<br>Power circuit <= 300 V DC   |  |
|---|--|
| Device Short Name LC1D   Contactor Application Resistive load<br>Motor control   Utilisation Category AC-1<br>AC-4<br>AC-3<br>AC-3e   Poles Description 3P   [Ue] Rated Operational Voltage Power circuit <= 690 V AC 25400 Hz<br>Power circuit <= 300 V DC   [Ie] Rated Operational Current 18 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit<br>32 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit |  |
| Contactor Application   Resistive load<br>Motor control     Utilisation Category   AC-1<br>AC-4<br>AC-3<br>AC-3e     Poles Description   3P     [Ue] Rated Operational Voltage   Power circuit <= 690 V AC 25400 Hz<br>Power circuit <= 300 V DC  |  |
| Motor control     Utilisation Category   AC-1<br>AC-4<br>AC-3<br>AC-3e     Poles Description   3P     [Ue] Rated Operational Voltage   Power circuit <= 690 V AC 25400 Hz<br>Power circuit <= 300 V DC  |  |
| AC-4     AC-3     AC-3e     Poles Description     3P     [Ue] Rated Operational Voltage     Power circuit <= 690 V AC 25400 Hz  |  |
| [Ue] Rated Operational Voltage   Power circuit <= 690 V AC 25400 Hz     Power circuit <= 300 V DC     [le] Rated Operational Current   18 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit     32 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit  |  |
| [le] Rated Operational Current   18 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit  |  |
| 32 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit   |  |
|   |  |
| [Uc] Control Circuit Voltage 120 V AC 50/60 Hz  |  |

### Complementary

| Motor Power Kw             | 4 kW at 220230 V AC 50/60 Hz (AC-3)<br>7.5 kW at 380400 V AC 50/60 Hz (AC-3)<br>9 kW at 415440 V AC 50/60 Hz (AC-3)<br>10 kW at 500 V AC 50/60 Hz (AC-3)<br>10 kW at 660690 V AC 50/60 Hz (AC-3)<br>4 kW at 400 V AC 50/60 Hz (AC-3)<br>4 kW at 220230 V AC 50/60 Hz (AC-3e)<br>7.5 kW at 380400 V AC 50/60 Hz (AC-3e)<br>9 kW at 415440 V AC 50/60 Hz (AC-3e) |
|----------------------------|--|
|                            | 10 kW at 500 V AC 50/60 Hz (AC-3e)<br>10 kW at 660690 V AC 50/60 Hz (AC-3e)  |
| Maximum Horse Power Rating | 1 hp at 115 V AC 50/60 Hz for 1 phase motors<br>3 hp at 230/240 V AC 50/60 Hz for 1 phase motors<br>5 hp at 200/208 V AC 50/60 Hz for 3 phase motors<br>5 hp at 230/240 V AC 50/60 Hz for 3 phase motors<br>10 hp at 460/480 V AC 50/60 Hz for 3 phase motors<br>15 hp at 575/600 V AC 50/60 Hz for 3 phase motors   |
| Compatibility Code         | LC1D   |
| Pole Contact Composition   | 3 NO   |
| Contact Compatibility      | M2   |
| 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.

| [Ith] Conventional Free Air<br>Thermal Current | 10 A (at 140 °F (60 °C)) for signalling circuit<br>32 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<br>250 A DC for signalling circuit conforming to IEC 60947-5-1<br>300 A at 440 V for power circuit conforming to IEC 60947  |
| Rated Breaking Capacity                        | 300 A at 440 V for power circuit conforming to IEC 60947  |
| [Icw] Rated Short-Time Withstand<br>Current    | 145 A 104 °F (40 °C) - 10 s for power circuit<br>240 A 104 °F (40 °C) - 1 s for power circuit<br>40 A 104 °F (40 °C) - 1 min for power circuit<br>84 A 104 °F (40 °C) - 1 min 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 |
| Associated Fuse Rating                         | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>50 A gG at <= 690 V coordination type 1 for power circuit<br>35 A gG at <= 690 V coordination type 2 for power circuit  |
| Average Impedance                              | 2.5 mOhm - Ith 32 A 50 Hz for power circuit   |
| Power Dissipation Per Pole                     | 2.5 W AC-1<br>0.8 W AC-3<br>0.8 W AC-3e   |
| [Ui] Rated Insulation Voltage                  | Power circuit 690 V IEC 60947-4-1<br>Power circuit 600 V CSA<br>Power circuit 600 V UL<br>Signalling circuit 690 V IEC 60947-1<br>Signalling circuit 600 V CSA<br>Signalling circuit 600 V UL   |
| Overvoltage Category                           | III   |
| Pollution Degree                               | 3   |
| [Uimp] Rated Impulse Withstand<br>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                          | 15 Mcycles  |
| Electrical Durability                          | 1.65 Mcycles 18 A AC-3 <= 440 V<br>1 Mcycles 32 A AC-1 <= 440 V<br>1.65 Mcycles 18 A AC-3e <= 440 V   |
| Control Circuit Type                           | AC 50/60 Hz   |
| Coil Technology                                | Without built-in suppressor module  |
| Control Circuit Voltage Limits                 | 0.30.6 Uc -40158 °F (-4070 °C) drop-out AC 50/60 Hz<br>0.81.1 Uc -40140 °F (-4060 °C) operational AC 50 Hz<br>0.851.1 Uc -40140 °F (-4060 °C) operational AC 60 Hz<br>11.1 Uc 140158 °F (6070 °C) operational AC 50/60 Hz   |
| Inrush Power In Va                             | 70 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C))<br>70 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))  |
| Hold-In Power Consumption In Va                | 7.5 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C))<br>7 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))  |
| Heat Dissipation                               | 23 W at 50/60 Hz  |
| Operating Time                                 | 1222 ms closing<br>419 ms opening   |
| Maximum Operating Rate                         | 3600 cyc/h 140 °F (60 °C)   |

| Connections - Terminals       | Control circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness:                               |
|-------------------------------|--|
|                               | flexible without cable end<br>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  |
|                               | Power circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (1.56 mm <sup>2</sup> ) - cable stiffness:                               |
|                               | flexible without cable end   |
|                               | Power circuit: screw clamp terminals 2 0.000.01 in <sup>2</sup> (1.56 mm <sup>2</sup> ) - cable stiffness: flexible without cable end    |
|                               | Power circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (16 mm <sup>2</sup> ) - cable stiffness:<br>flexible with cable end      |
|                               | Power circuit: screw clamp terminals 2 0.000.01 in <sup>2</sup> (14 mm <sup>2</sup> ) - cable stiffness:                                 |
|                               | flexible with cable end  |
|                               | Power circuit: screw clamp terminals 1 0.000.01 in <sup>2</sup> (1.56 mm <sup>2</sup> ) - cable stiffness:                               |
|                               | solid without cable end  |
|                               | Power circuit: screw clamp terminals 2 0.000.01 in <sup>2</sup> (1.56 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  |
|                               | 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  |
| la sul stism. De sistema s    |  |
| 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   |
| Manuating Cruns ant           |  |
| 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  | BV<br>GL<br>CCC<br>CSA<br>RINA<br>DNV<br>GOST<br>LROS (Lloyds register of shipping)<br>UL<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                         | 3.39 in (86 mm)                            |
| Net Weight                    | 0.73 lb(US) (0.33 kg)                      |

# Ordering and shipping details

| Category          | US10I1222354  |
|-------------------|---------------|
| Discount Schedule | 0112          |
| Gtin              | 3389110349474 |
| Returnability     | Yes           |
| Country Of Origin | ID            |

### **Packing Units**

| Unit Type Of Package 1       | PCE                     |
|------------------------------|-------------------------|
| Number Of Units In Package 1 | 1                       |
| Package 1 Height             | 2.17 in (5.500 cm)      |
| Package 1 Width              | 3.74 in (9.500 cm)      |
| Package 1 Length             | 4.72 in (12.000 cm)     |
| Package 1 Weight             | 12.84 oz (364.000 g)    |
| Unit Type Of Package 2       | S02                     |
| Number Of Units In Package 2 | 16                      |
| 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 2 Weight             | 14.00 lb(US) (6.350 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.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

### Well-being performance

Reach Free Of Svhc
Toxic Heavy Metal Free
Mercury Free
Rohs Exemption Information Yes
Pvc Free

#### **Certifications & Standards**

| Reach Regulation          | REACh Declaration   |
|---------------------------|---|
| Eu Rohs Directive         | Compliant<br>EU RoHS Declaration  |
| China Rohs Regulation     | China RoHS declaration<br>Pro-active China RoHS declaration (out of China RoHS legal scope)   |
| 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   |
| 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 |