

# Product data sheet

Specifications



## CONTACTOR 600VAC 65AMP IEC +OPTIONS

LC1D656LE7

! Discontinued

### Main

|                                |  |
|--------------------------------|--|
| Range                          | TeSys  |
| Range Of Product               | TeSys Deca   |
| Product Or Component Type      | Contacteur   |
| Device Short Name              | LC1D   |
| Contacteur Application         | Resistive load<br>Motor control  |
| Utilisation Category           | AC-1<br>AC-3<br>AC-3<br>AC-1   |
| Poles Description              | 3P   |
| [Ue] Rated Operational Voltage | Power circuit: <= 690 V AC 25...400 Hz   |
| [Ie] Rated Operational Current | 80 A (at <60 °C) at 220 V AC AC-1 for power circuit<br>65 A (at <60 °C) at 220 V AC AC-3 for power circuit |
| [Uc] Control Circuit Voltage   | 220 V AC 50 Hz   |

### Complementary

|   |   |
|---|---|
| Motor Power Kw                              | 37 kW at 500 V AC 50 Hz<br>37 kW at 660...690 V AC 50 Hz<br>18.5 kW at 220...230 V AC 50 Hz<br>30 kW at 415 V AC 50 Hz<br>37 kW at 1000 V AC 50 Hz<br>30 kW at 380...400 V AC 50 Hz   |
| Motor Power Hp                              | 20 hp at 200/208 V AC 60 Hz for 3 phases motors<br>20 hp at 230/240 V AC 60 Hz for 3 phases motors<br>40 hp at 460/480 V AC 60 Hz for 3 phases motors<br>50 hp at 575/600 V AC 60 Hz for 3 phases motors<br>5 hp at 115 V AC 60 Hz for 1 phase motors<br>10 hp at 230/240 V AC 60 Hz for 1 phase motors |
| Compatibility Code                          | LC1D  |
| Pole Contact Composition                    | 3 NO  |
| Protective Cover                            | With  |
| [Ith] Conventional Free Air Thermal Current | 10 A (at 60 °C) for control circuit<br>80 A (at 60 °C) for power circuit  |
| Irms Rated Making Capacity                  | 1000 A at 440 V for power circuit conforming to IEC 60947<br>140 A AC for control circuit conforming to IEC 60947-5-1   |
| Rated Breaking Capacity                     | 1000 kA at 440 V for power circuit conforming to IEC 60947  |
| [Icw] Rated Short-Time Withstand Current    | 520 A 40 °C - 10 s for power circuit<br>900 A 40 °C - 1 s for power circuit   |

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

|  |   |
|--|---|
| Associated Fuse Rating                 | 125 A gG at <= 690 V coordination type 2 for power circuit<br>10 A gG for control circuit conforming to IEC 60947-5-1<br>125 A gG at <= 690 V coordination type 1 for power circuit   |
| Average Impedance                      | 1.5 Ohm - lth 80 A 50 Hz for power circuit  |
| Power Dissipation Per Pole             | 9.6 W AC-1<br>6.3 W AC-3  |
| [Ui] Rated Insulation Voltage          | Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<br>Control circuit: 690 V conforming to IEC 60947-1<br>Power circuit: 690 V conforming to IEC 60947-1<br>Control circuit: 600 V CSA certified<br>Control circuit: 600 V UL certified                                      |
| Overvoltage Category                   | III   |
| [Uimp] Rated Impulse Withstand Voltage | 6 kV conforming to IEC 60947  |
| Mechanical Durability                  | 6000000 cycles  |
| Control Circuit Type                   | AC at 50 Hz   |
| Coil Technology                        | Without built-in  |
| Control Circuit Voltage Limits         | 0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz<br>1...1.1 Uc (60...70 °C):operational AC 50/60 Hz<br>0.3...0.6 Uc (-40...70 °C):drop-out AC 50 Hz<br>0.8...1.1 Uc (-40...55 °C):operational AC 50 Hz  |
| Inrush Power In Va                     | 140 VA cos phi 0.75 (at 20 °C)<br>160 VA cos phi 0.75 (at 20 °C)  |
| Hold-In Power Consumption In Va        | 13 VA 60 Hz cos phi 0.3 (at 20 °C)<br>15 VA 50 Hz cos phi 0.3 (at 20 °C)  |
| Heat Dissipation                       | 4...5 W at 50/60 Hz for control circuit   |
| Operating Time                         | 4...19 ms opening<br>12...26 ms closing   |
| Maximum Operating Rate                 | 3600 cyc/mn 60 °C   |
| Connections - Terminals                | Control circuit: lugs - external diameter: 8 mm<br>Power circuit: lugs - external diameter: 16 mm   |
| Tightening Torque                      | Power circuit: 2.5 N.m - on lugs - with screwdriver flat Ø 8 mm<br>Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver pozidriv No 2<br>Control circuit: 1.7 N.m - on lugs - with screwdriver Philips No 2<br>Control circuit: 1.7 N.m - on lugs - with screwdriver flat Ø 6 mm |
| Auxiliary Contact Composition          | 1 NO + 1 NC   |
| 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  |
| Terminals Description Iso N°1          | (13-14)NO   |
| Minimum Switching Voltage              | 17 V for control circuit  |
| Minimum Switching Current              | 5 mA for control circuit  |
| Insulation Resistance                  | > 10 MOhm for control circuit   |
| Non-Overlap Time                       | 1.5 ms on de-energisation between NC and NO contacts<br>1.5 ms on energisation between NC and NO contacts   |
| Mounting Support                       | Rail<br>Plate   |

## Environment

|           |  |
|-----------|--|
| Standards | IEC 60947-4-1<br>UL 508<br>EN 60947-5-1<br>IEC 60947-5-1 |
|-----------|--|

|   |  |
|---|--|
| Product Certifications                                | UL<br>GOST<br>CCC<br>LROS (Lloyds register of shipping)<br>DNV<br>RINA<br>GL<br>CSA<br>GL  |
| Ip Degree Of Protection                               | IP2X conforming to IEC 60529<br>IP2X conforming to VDE 0106  |
| Protective Treatment                                  | TH (pollution degree 3) conforming to IEC 60068-2-30   |
| Climatic Withstand                                    | conforming to IACS E10 exposure to damp heat   |
| Permissible Ambient Air Temperature Around The Device | -60...80 °C storage<br>-40...60 °C operation<br>60...70 °C with derating   |
| 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 opened (2 Gn, 5...300 Hz)<br>Vibrations contactor closed (4 Gn, 5...300 Hz)<br>Shocks contactor opened (10 Gn)<br>Shocks contactor closed (15 gn) |
| Height  | 122 mm   |
| Width   | 70 mm  |
| Depth   | 118 mm   |
| Net Weight  | 2.185 kg   |
| Quantity Per Set                                      | Set of 1   |

## Packing Units

|                              |     |
|------------------------------|-----|
| Unit Type Of Package 1       | PCE |
| Number Of Units In Package 1 | 1   |

## 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.

[Learn more about Green Premium >](#)

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



Transparency   RoHS/REACH

## Certifications & Standards

|                          |  |
|--------------------------|--|
| Eu Rohs Directive        | Pro-active compliance (Product out of EU RoHS legal scope) |
|                          | <a href="#">EU RoHS Declaration</a>                        |
| <hr/>                    |  |
| Environmental Disclosure | <a href="#">Product Environmental Profile</a>              |
|                          |  |
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| Circularity Profile      | <a href="#">End of Life Information</a>                    |
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