# Product datasheet

Specifications



## Contactor, Tesys Deca Advanced, 3P(3NO), AC-3/AC-3e, <=440V, 150A, 100-250V AC/DC coil,connector

LC1D150AKUE

## Main

| | |
|---|---|
| **Range** | TeSys Deca |
| **Range of product** | TeSys Deca Advanced |
| **Product or component type** | Contactor |
| **Device short name** | LC1D |
| **Contactor application** | Motor control<br>Resistive load |
| **Utilisation category** | AC-3<br>AC-3e<br>AC-1<br>AC-4<br>DC-1<br>DC-3<br>DC-5 |
| **Poles description** | 3P |
| **[Ue] rated operational voltage** | Power circuit: <= 1000 V AC 16.67...400 Hz<br>Power circuit: <= 300 V DC |
| **[Ie] rated operational current** | 150 A (at <60 °C) at <= 440 V AC AC-3 for power circuit<br>150 A (at <60 °C) at <= 440 V AC AC-3e for power circuit<br>200 A (at <60 °C) at <= 440 V AC AC-1 for power circuit |
| **[Uc] control circuit voltage** | 100...250 V AC 50/60 Hz<br>100...250 V DC |

## Complementary

| | |
|---|---|
| **Motor power kW** | 40 kW at 230 V AC 50/60 Hz (AC-3)<br>75 kW at 400 V AC 50/60 Hz (AC-3)<br>80 kW at 415 V AC 50/60 Hz (AC-3)<br>90 kW at 440 V AC 50/60 Hz (AC-3)<br>90 kW at 500 V AC 50/60 Hz (AC-3)<br>100 kW at 690 V AC 50/60 Hz (AC-3)<br>75 kW at 1000 V AC 50/60 Hz (AC-3)<br>40 kW at 230 V AC 50/60 Hz (AC-3e)<br>75 kW at 400 V AC 50/60 Hz (AC-3e)<br>80 kW at 415 V AC 50/60 Hz (AC-3e)<br>90 kW at 440 V AC 50/60 Hz (AC-3e)<br>90 kW at 500 V AC 50/60 Hz (AC-3e)<br>100 kW at 690 V AC 50/60 Hz (AC-3e)<br>75 kW at 1000 V AC 50/60 Hz (AC-3e)<br>37 kW at 230 V AC 50/60 Hz (AC-4)<br>75 kW at 400 V AC 50/60 Hz (AC-4)<br>75 kW at 440 V AC 50/60 Hz (AC-4)<br>75 kW at 500 V AC 50/60 Hz (AC-4)<br>80 kW at 690 V AC 50/60 Hz (AC-4)<br>65 kW at 1000 V AC 50/60 Hz (AC-4) |
| **Motor power hp** | 40 hp at 200/208 V 60 Hz<br>50 hp at 230/240 V 60 Hz<br>100 hp at 460/480 V 60 Hz<br>125 hp at 575/600 V 60 Hz |
| **Compatibility code** | LC1D |

Excluding VAT, FCA Jabal Ali & are subject to change – check with your local distributor.

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

| | |
|---|---|
| **Pole contact composition** | 3 NO |
| **Protective cover** | With |
| **[Ith] conventional free air thermal current** | 200 A (at 60 °C) for power circuit |
| **Irms rated making capacity** | 1885 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 |
| **Rated breaking capacity** | 1440 A at 440 V for power circuit conforming to IEC 60947 |
| **[Icw] rated short-time withstand current** | 350 A 40 °C - 10 min for power circuit<br>600 A 40 °C - 1 min for power circuit<br>1280 A 40 °C - 10 s for power circuit<br>1800 A 40 °C - 1 s 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** | 160 A aM at <= 440 V for power circuit<br>125 A aM at <= 690 V for power circuit<br>250 A gG at <= 690 V for power circuit<br>10 A gG for signalling circuit<br>0.2 A gG for control circuit |
| **Average impedance** | 0.45 mOhm - Ith 200 A 50 Hz for power circuit |
| **Power dissipation per pole** | 8 W AC-3<br>8 W AC-3e<br>22 W AC-1 |
| **[Ui] rated insulation voltage** | Power circuit: 600 V CSA certified<br>Power circuit: 600 V UL certified<br>Power circuit: 1000 V conforming to IEC 60947-4-1<br>Signalling circuit: 690 V conforming to IEC 60947-1<br>Signalling circuit: 600 V CSA certified<br>Signalling circuit: 600 V UL certified |
| **Overvoltage category** | III |
| **Pollution degree** | 3 |
| **[Uimp] rated impulse withstand voltage** | 8 kV conforming to IEC 60947 |
| **Safety reliability level** | B10d = 684932 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 10000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| **Mechanical durability** | 8 Mcycles |
| **Electrical durability** | 0.85 Mcycles 150 A AC-3 at Ue <= 440 V<br>0.85 Mcycles 150 A AC-3e at Ue <= 440 V<br>0.5 Mcycles 200 A AC-1 at Ue <= 440 V |
| **Control circuit type** | AC at 50/60 Hz<br>DC |
| **Coil technology** | Built-in bidirectional peak limiting diode suppressor |
| **Control circuit voltage limits** | 0.8 Uc Min...1.1 Uc Max (-40…60 °C):operational AC/DC<br>0.1 Uc Max (-40…60 °C):drop-out AC/DC |
| **Inrush power in VA** | 170 VA (at 20 °C) |
| **Inrush power in W** | 105 W (at 20 °C) |
| **Hold-in power consumption in VA** | 8 VA (at 20 °C) |
| **Hold-in power consumption in W** | 4.5 W at 20 °C |
| **Heat dissipation** | 1.1 W at 20 °C |
| **Operating time** | 25...90 ms opening<br>20...90 ms closing |
| **Maximum operating rate** | 2400 cyc/h at 60 °C<br>3600 cyc/h at Uc at 20 ºC |

| | |
|---|---|
| **Connections - terminals** | Power circuit: connector 1 10…120 mm² - cable stiffness: flexible without cable end<br>Power circuit: connector 2 10…50 mm² - cable stiffness: flexible without cable end<br>Power circuit: connector 1 10…120 mm² - cable stiffness: flexible with cable end<br>Power circuit: connector 2 10…50 mm² - cable stiffness: flexible with cable end<br>Power circuit: connector 1 10…120 mm² - cable stiffness: solid without cable end<br>Power circuit: connector 2 10…50 mm² - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: solid without cable end |
| **Tightening torque** | Power circuit: 12 N.m - on connector hexagonal screw head 4 mm<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 |
| **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 |
| **Signalling circuit frequency** | 16.67...400 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<br>1.5 ms on energisation between NC and NO contact |
| **Mounting support** | Plate |

## Environment

| | |
|---|---|
| **Standards** | EN/IEC 60947-4-1<br>EN/IEC 60947-5-1<br>UL 60947-4-1<br>UL 60947-5-1<br>CSA C22.2 No 60947-4-1<br>CSA C22.2 No 60947-5-1<br>JIS C8201-4-1<br>JIS C8201-5-1<br>GB/T 14048.4<br>GB/T 14048.5 |
| **Product certifications** | CB Scheme<br>CCC<br>cULus<br>CE<br>UKCA<br>EU-RO-MR by DNV-GL |
| **IP degree of protection** | IP20 front face conforming to IEC 60529 |
| **Protective treatment** | None conforming to IEC 60068-2-30 |
| **Climatic withstand** | conforming to IACS E10 exposure to damp heat<br>conforming to IEC 60947-1 Annex Q category D exposure to damp heat |
| **Permissible ambient air temperature around the device** | -40…60 °C operation<br>60…70 °C with derating<br>-60…80 °C storage |
| **Operating altitude** | 0...3000 m without derating |
| **Fire resistance** | 850 °C conforming to IEC 60695-2-11 |

| | |
|---|---|
| **Mechanical robustness** | Vibrations contactor open (2 Gn, 5...300 Hz) conforming to IEC 60068-2-6<br>Vibrations contactor closed (4 Gn, 5...300 Hz) conforming to IEC 60068-2-6<br>Shocks contactor open (10 Gn for 11 ms) conforming to IEC 60068-2-27<br>Shocks contactor closed (15 Gn for 11 ms) conforming to IEC 60068-2-27 |
| **Height** | 152 mm |
| **Width** | 97 mm |
| **Depth** | 155 mm |
| **Net weight** | 2.4 kg |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 18.900 cm |
| **Package 1 Width** | 13.200 cm |
| **Package 1 Length** | 18.200 cm |
| **Package 1 Weight** | 2.668 kg |
| **Unit Type of Package 2** | P06 |
| **Number of Units in Package 2** | 48 |
| **Package 2 Height** | 75.000 cm |
| **Package 2 Width** | 60.000 cm |
| **Package 2 Length** | 80.000 cm |
| **Package 2 Weight** | 140.000 kg |

## Contractual warranty

| | |
|---|---|
| **Warranty (in months)** | 18 |

## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

### Environmental footprint

| | |
|---|---|
| Total lifecycle Carbon footprint | **366 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **26 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **0.4 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0.3 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **334 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **5 kg CO2 eq.** |
| Environmental Disclosure | **Product Environmental Profile** |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **No** |
| SCIP Number | **608af421-265e-4dfd-b0b3-1192c9364536** |
| EU RoHS Directive | **Compliant By Exemption** |
| REACh Regulation | **Reference contains Substances of Very High Concern above the threshold** |
| Halogen-free status | **Halogen free plastic parts product** |

## Use Again

### Repack and remanufacture

| | |
|---|---|
| Recyclability potential, in % | **78** |
| End of life manual availability | **End of Life Information** |
| Take-back | **No** |
| WEEE Label | **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins** |

Image of product / Alternate images

**Alternative**





# Product datasheet LC1D150AKUE




