

Product datasheet

Specifications



Contactor, TeSys Deca, 4P(4 NO), AC-1, 0 to 440V, 80A, 250V DC standard coil

LC1DT80A3UD

❗ Discontinued

Main

| | |
|--------------------------------|--|
| Range | TeSys TeSys Deca |
| Range Of Product | TeSys Deca |
| Product Or Component Type | Contactor |
| Device Short Name | LC1D |
| Contactor Application | Resistive load |
| Utilisation Category | AC-1 |
| Poles Description | 4P |
| [Ue] Rated Operational Voltage | Power circuit: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC |
| [Ie] Rated Operational Current | 80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit |
| [Uc] Control Circuit Voltage | 250 V DC |

Complementary

| | |
|---|--|
| Compatibility Code | LC1D |
| Pole Contact Composition | 4 NO |
| Contact Compatibility | M7 |
| Protective Cover | With |
| [Ith] Conventional Free Air Thermal Current | 10 A (at 60 °C) for signalling circuit 80 A (at 60 °C) for power circuit |
| Irms Rated Making Capacity | 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 1000 A at 440 V for power circuit conforming to IEC 60947 |
| Rated Breaking Capacity | 1000 A 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 900 A 40 °C - 1 s for power circuit 110 A 40 °C - 10 min for power circuit 260 A 40 °C - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit |
| Associated Fuse Rating | 10 A gG for signalling circuit conforming to IEC 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit |
| Average Impedance | 1.6 mOhm - Ith 80 A 50 Hz for power circuit |
| Power Dissipation Per Pole | 10.2 W AC-1 |

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

| | |
|--|--|
| [Ui] Rated Insulation Voltage | Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified Power circuit: 690 V conforming to IEC 60947-4-1 |
| Overvoltage Category | III |
| Pollution Degree | 3 |
| [Uimp] Rated Impulse Withstand Voltage | 6 kV conforming to IEC 60947 |
| Safety Reliability Level | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| Mechanical Durability | 10 Mcycles |
| Electrical Durability | 0.5 Mcycles 80 A AC-1 at Ue <= 440 V |
| Control Circuit Type | DC standard |
| Coil Technology | Built-in bidirectional peak limiting diode suppressor |
| Control Circuit Voltage Limits | 0.1...0.3 Uc (-40...70 °C):drop-out DC 0.75...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (60...70 °C):operational DC |
| Inrush Power In W | 19 W (at 20 °C) |
| Hold-In Power Consumption In W | 7.4 W at 20 °C |
| Operating Time | 42.5...57.5 ms closing 16...24 ms opening |
| Time Constant | 34 ms |
| Maximum Operating Rate | 3600 cyc/h 60 °C |
| Connections - Terminals | Power circuit: EverLink BTR screw connectors 1 1...35 mm² - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 2 1...25 mm² - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 1 1...35 mm² - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 2 1...25 mm² - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 1 1...35 mm² - cable stiffness: solid without cable end Power circuit: EverLink BTR screw connectors 2 1...25 mm² - cable stiffness: solid without cable end Control circuit: spring terminals 1 2.5 mm² - cable stiffness: flexible without cable end Control circuit: spring terminals 2 2.5 mm² - cable stiffness: flexible without cable end |
| Tightening Torque | Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 25...35 mm² hexagonal screw head 4 mm Power circuit: 5 N.m - on screw clamp terminals - cable 1...25 mm² hexagonal screw head 4 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 2.5 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 type mirror contact 1 NC conforming to IEC 60947-4-1 |
| Signalling Circuit Frequency | 25...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 1.5 ms on energisation between NC and NO contact |
| Mounting Support | Plate Rail |

Environment

| | |
|---|--|
| Standards | CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1 |
| Product Certifications | CSA GL DNV UL RINA LROS (Lloyds register of shipping) BV GOST CCC |
| Ip Degree Of Protection | IP20 front face conforming to IEC 60529 |
| Protective Treatment | TH conforming to IEC 60068-2-30 |
| Climatic Withstand | conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat |
| Permissible Ambient Air Temperature Around The Device | -40...60 °C 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 open (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor closed (15 Gn for 11 ms) Shocks contactor open (10 Gn for 11 ms) |
| Height | 122 mm |
| Width | 70 mm |
| Depth | 120 mm |
| Net Weight | 1.225 kg |

Packing Units

| | |
|------------------------------|--------|
| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 7.5 cm |
| Package 1 Width | 14 cm |
| Package 1 Length | 15 cm |
| Package 1 Weight | 1.1 kg |

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-CO₂ 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 >](#)

Well-being performance

| | | |
|-----------------------|---|---|
| ✓ | Reach Free Of Svhc | |
| ✓ | Toxic Heavy Metal Free | |
| ✓ | Mercury Free | |
| ✓ | Rohs Exemption Information | Yes |
| ✓ | Pvc Free | |
| | | |
| Eu Rohs Directive | Compliant | EU RoHS Declaration |
| | | |
| China Rohs Regulation | China RoHS declaration | Pro-active China RoHS declaration (out of China RoHS legal scope) |
| | | |
| Weee | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins | |