Product datasheet

Specifications

, Green Premium™



REVERSING CONTACTOR 575VAC 40A IEC

LC2DT40B7

() Discontinued on: 30 Sept 2020

① Discontinued

Main

| Mann | |
|--|---|
| Range | TeSys |
| Product name | TeSys Deca |
| product or component type | Changeover contactor |
| Device short name | LC2D |
| contactor application | Resistive load |
| Utilisation category | AC-1 |
| | AC-3 |
| | AC-3e |
| | AC-4 |
| device presentation | Preassembled with reversing power busbar |
| poles description | 4P |
| power pole contact composition | 4 NO |
| [Ue] rated operational voltage | Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC |
| [le] rated operational current | 40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit |
| Control circuit type | AC at 50/60 Hz |
| [Uc] control circuit voltage | 24 V AC 50/60 Hz |
| Auxiliary contact composition | 1 NO + 1 NC |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60947 |
| Overvoltage category | III |
| [Ith] conventional free air thermal | 10 A (at 60 °C) for signalling circuit |
| current | 40 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 |
| | 450 A at 440 V for power circuit conforming to IEC 60947 |
| Rated breaking capacity | 450 A at 440 V for power circuit conforming to IEC 60947 |
| [Icw] rated short-time withstand | 50 A 40 °C - 10 min for power circuit |
| current | 120 A 40 °C - 1 min for power circuit |
| | 240 A 40 °C - 10 s for power circuit |
| | 380 A 40 °C - 1 s 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 |
| | 63 A gG at <= 690 V coordination type 1 for power circuit |
| | 40 A gG at <= 690 V coordination type 2 for power circuit |
| Average impedance | 2 mOhm - Ith 40 A 50 Hz for power circuit |
| | |

| [Ui] rated insulation voltage | Power circuit: 690 V conforming to IEC 60947-4-1 |
|--|---|
| | 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 |
| Electrical durability | 1.4 Mcycles 40 A AC-1 at Ue <= 440 V |
| Power dissipation per pole | 3.2 W AC-1 |
| Front cover | With |
| Interlocking type | Mechanical |
| mounting support | Plate |
| | Rail |
| Standards | CSA C22.2 No 14 |
| | EN 60947-4-1 |
| | EN 60947-5-1 |
| | IEC 60947-4-1 |
| | IEC 60947-5-1 |
| | UL 508 |
| Product certifications | BV |
| | CCC |
| | CSA |
| | DNV |
| | GL |
| | RINA |
| | UL |
| | EAC |
| Connections - terminals | Control circuit: screw clamp terminals 1 cable(s) 14 mm ² flexible without cable end |
| | Control circuit: screw clamp terminals 2 cable(s) 14 mm ² flexible without cable end |
| | Control circuit: screw clamp terminals 1 cable(s) 14 mm ² flexible with cable end |
| | Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end |
| | Control circuit: screw clamp terminals 1 cable(s) 14 mm ² solid without cable end |
| | Control circuit: screw clamp terminals 2 cable(s) 14 mm ² solid without cable end |
| | Power circuit: connector 1 cable(s) 2.510 mm ² flexible without cable end |
| | Power circuit: connector 2 cable(s) 2.510 mm ² flexible without cable end |
| | Power circuit: connector 1 cable(s) 2.510 mm ² flexible with cable end |
| | Power circuit: connector 2 cable(s) 2.510 mm ² flexible with cable end |
| | Power circuit: connector 1 cable(s) 2.516 mm ² solid without cable end |
| | Power circuit: connector 2 cable(s) 2.516 mm ² solid without cable end |
| Tightening torque | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm |
| | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 |
| | Power circuit: 1.7 N.m - on connector - with screwdriver flat Ø 6 mm |
| | Power circuit: 1.7 N.m - on connector - with screwdriver Philips No 2 |
| Operating time | 1222 ms closing |
| | 419 ms opening |
| 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 | 15 Mcycles |
| Maximum operating rate | 3600 cyc/h 60 °C |
| in the second se | |

Complementary

| Coil technology | Without built-in suppressor module |
|---------------------------------|---|
| Control circuit voltage limits | 0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.1 Uc (-4055 °C):operational AC 50 Hz |
| | 0.851.1 Uc (-4055 °C):operational AC 60 Hz 11.1 Uc (5570 °C):operational AC 50/60 Hz |
| Inrush power in VA | 70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C) |
| Hold-in power consumption in VA | 7.5 VA (at 20 °C) cos phi 0.3 60 Hz 7 VA (at 20 °C) cos phi 0.3 50 Hz |
| Heat dissipation | 23 W at 50/60 Hz |

| 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 | 25400 Hz | |
| Minimum switching current | 5 mA for signalling circuit | |
| Minimum switching voltage | 17 V 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 | |
| Insulation resistance | > 10 MOhm for signalling circuit | |

Environment

| IP degree of protection | IP20 front face conforming to IEC 60529 | |
|---------------------------------------|---|--|
| Climatic withstand | conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D | |
| Protective treatment | TH conforming to IEC 60068-2-30 | |
| Pollution degree | 3 | |
| Ambient air temperature for operation | -4060 °C 6070 °C with derating | |
| Ambient air temperature for storage | -6080 °C | |
| Operating altitude | 03000 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, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms | |
| Height | 91 mm | |
| Width | 90 mm | |
| Depth | 98 mm | |
| net weight | 0.85 kg | |

Packing Units

| - | |
|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 8.48 cm |
| Package 1 Width | 9 cm |
| Package 1 Length | 9.25 cm |
| Package 1 Weight | 870 g |

Contractual warranty

Warranty

18 months

Sustainability Screen Premium

Green PremiumTM 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-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 >



Transparency RoHS/REACh

Well-being performance

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

Certifications & Standards

| Eu Rohs Directive | Compliant |
|--------------------------|--|
| | EU RoHS Declaration |
| China Rohs Regulation | China RoHS declaration 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 |