Specifications



Reversing Contactor, TeSys Deca, 3P(3NO), AC-3, <=440V, 9A, 24V DC low consumption coil, screw clamp terminals

LC2D09BL

Main

| Main | | | | | |
|---|--|--|--|--|--|
| Range | TeSys TeSys Deca | | | | |
| Product Name | TeSys D TeSys Deca | | | | |
| Product Or Component Type | Reversing contactor | | | | |
| Device Short Name | LC2D | | | | |
| Contactor Application | Resistive load Motor control | | | | |
| Utilisation Category | AC-3 AC-1 AC-3e | | | | |
| Device Presentation | Preassembled with reversing power busbar | | | | |
| Poles Description | 3P | | | | |
| Power Pole Contact Composition | 3 NO | | | | |
| [Ue] Rated Operational Voltage | Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC | | | | |
| [Ie] Rated Operational Current | 9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 25 A (at <60 °C) at <= 440 V AC AC-1 for power circuit | | | | |
| Motor Power Kw | 2.2 kW at 220230 V AC 5060 Hz 4 kW at 380400 V AC 5060 Hz 4 kW at 415 V AC 5060 Hz 4 kW at 440 V AC 5060 Hz 5.5 kW at 500 V AC 5060 Hz 5.5 kW at 660690 V AC 5060 Hz | | | | |
| Motor Power Hp (UI / Csa) | 0.5 hp at 115 V AC 60 Hz for 1 phase motors 1 hp at 230/240 V AC 60 Hz for 1 phase motors 2 hp at 200/208 V AC 60 Hz for 3 phases motors 2 hp at 230/240 V AC 60 Hz for 3 phases motors 5 hp at 460/480 V AC 60 Hz for 3 phases motors 7.5 hp at 575/600 V AC 60 Hz for 3 phases motors | | | | |
| Control Circuit Type | DC low consumption | | | | |
| [Uc] Control Circuit Voltage | 24 V DC | | | | |
| 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 Current | 10 A (at 60 °C) for signalling circuit 25 A (at 60 °C) for power circuit | | | | |
| Irms Rated Making Capacity 250 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 | | | | | |
| Rated Breaking Capacity | 250 A at 440 V for power circuit conforming to IEC 60947 | | | | |

| [Icw] Rated Short-Time Withstand Current | 30 A 40 °C - 10 min for power circuit 61 A 40 °C - 1 min for power circuit 105 A 40 °C - 10 s for power circuit 210 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 | 25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1 | | | | | |
| Average Impedance | 2.5 mOhm - Ith 25 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 | 0.6 Mcycles 25 A AC-1 at Ue <= 440 V 2 Mcycles 9 A AC-3 at Ue <= 440 V 2 Mcycles 9 A AC-3e at Ue <= 440 V | | | | | |
| Power Dissipation Per Pole | 0.2 W AC-3 1.56 W AC-1 0.2 W AC-3e | | | | | |
| Front Cover | With | | | | | |
| Interlocking Type | Mechanical | | | | | |
| Mounting Support | Rail Plate | | | | | |
| 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 | DNV CSA CCC UL GL LROS (Lloyds register of shipping) BV RINA GOST UKCA | | | | | |
| Connections - Terminals | Power circuit: screw clamp terminals 1 cable(s) 14 mm ² flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm ² flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm ² flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 125 mm ² flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm ² solid Power circuit: screw clamp terminals 1 cable(s) 14 mm ² solid Control circuit: screw clamp terminals 1 cable(s) 14 mm ² lexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm ² lexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm ² lexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm ² flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm ² flexible with 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) 14 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm ² flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm ² solid | | | | | |
| Tightening Torque | Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 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 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 | | | | | |
| Operating Time | 65.4588.55 ms closing 2030 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 | 30 Mcycles | | | | |
| Maximum Operating Rate | 3600 cyc/h 60 °C | | | | |

Complementary

| Coil Technology | Built-in bidirectional peak limiting diode suppressor | | | |
|--------------------------------|--|--|--|--|
| Control Circuit Voltage Limits | 0.10.3 Uc (-4070 °C):drop-out DC 0.81.25 Uc (-4060 °C):operational DC 11.25 Uc (6070 °C):operational DC | | | |
| Time Constant | 40 ms | | | |
| Inrush Power In W | 2.4 W (at 20 °C) | | | |
| Hold-In Power Consumption In W | 2.4 W at 20 °C | | | |
| 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 -6080 °C Storage | | | |
| 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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms | | |
| Height | 77 mm | | |
| Width | 90 mm | | |
| Depth | 95 mm | | |
| Net Weight | 1.017 kg | | |
| | | | |

Packing Units

| Number O | f Units In | Package 1 |
|----------|------------|-----------|
|----------|------------|-----------|

PCE

| Package 1 Height | 9.500 cm |
|------------------------------|------------|
| Package 1 Width | 11.200 cm |
| Package 1 Length | 14.000 cm |
| Package 1 Weight | 1.141 kg |
| Unit Type Of Package 2 | S02 |
| Number Of Units In Package 2 | 6 |
| Package 2 Height | 15.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 7.140 kg |
| Unit Type Of Package 3 | P06 |
| Number Of Units In Package 3 | 96 |
| Package 3 Height | 75.000 cm |
| Package 3 Width | 60.000 cm |
| Package 3 Length | 80.000 cm |
| Package 3 Weight | 122.240 kg |

Contractual warranty

Warranty

18 months

Sustainability

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 >



Eà

Transparency RoHS/REACh

Well-being performance

Toxic Heavy Metal Free

| ~ | Mercury Free | |
|----------|--------------------------------|--|
| S | Rohs Exemption Information Yes | |
| ~ | Pvc Free | |

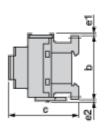
Certifications & Standards

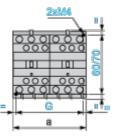
| Reach Regulation | REACh Declaration |
|---------------------------|---|
| Eu Rohs Directive | Compliant with Exemptions |
| China Rohs Regulation | China RoHS declaration Product out of China RoHS scope. Substance declaration for your information |
| Environmental Disclosure | Product Environmental Profile |
| 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 |

Product data sheet

Dimensions Drawings

Dimensions





| LC2 or 2 x LC1 | а | b | c ⁽¹⁾ | e1 | e2 | G |
|--|----|----|------------------|----|-----|----|
| D09 to D18 (AC) | 90 | 77 | 86 | 4 | 1.5 | 80 |
| D093 to D123 (AC) | 90 | 99 | 86 | - | - | 80 |
| D09 to D18 (DC) | 90 | 77 | 95 | 4 | 1.5 | 80 |
| D093 to D123 (DC) | 90 | 99 | 95 | - | - | 80 |
| D25 to D38 (AC) | 90 | 85 | 92 | 9 | 5 | 80 |
| D183 to D383 (AC) | 90 | 99 | 92 | - | - | 80 |
| D25 to D32 (DC) | 90 | 85 | 101 | 9 | 5 | 80 |
| D183 to D383 (DC) | 90 | 99 | 101 | - | - | 80 |
| e1 and e2: including cabling. | | | | | | |
| (1) With safety cover, without add-on block. | | | | | | |

Product data sheet

Connections and Schema

Wiring

