

LC2D50AKUE

TeSys D reversing contactor - 3P - ≤ 440 V - 50 A AC-3 - 100...250 V AC/DC coil



Main

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| Range of product | TeSys D |
| Range | TeSys |
| Product name | TeSys D Green |
| Product or component type | Reversing contactor |
| Device short name | LC2D |
| Contactor application | Motor control Resistive load |
| Utilisation category | AC-1 AC-3 |
| Device presentation | Preassembled with reversing power busbar |
| Poles description | 3P |
| Pole contact composition | 3 NO |
| [Ue] rated operational voltage | ≤ 690 V AC 25...400 Hz for power circuit |
| [Ie] rated operational current | 50 A (≤ 60 °C) at ≤ 440 V AC AC-3 for power circuit 80 A (≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit |
| Motor power kW | 15 kW at 220...230 V AC 50/60 Hz 22 kW at 380...400 V AC 50/60 Hz 25 kW at 415 V AC 50/60 Hz 30 kW at 440 V AC 50/60 Hz 30 kW at 500 V AC 50/60 Hz 33 kW at 660...690 V AC 50/60 Hz |
| Control circuit type | AC 50/60 Hz AC/DC electronic DC AC/DC electronic |
| [Uc] control circuit voltage | 100...250 V DC 100...250 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 current | 80 A at ≤ 60 °C for power circuit 10 A at ≤ 60 °C for signalling circuit |
| Irms rated making capacity | 900 A at 440 V for power circuit conforming to IEC 60947 |

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| | 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 | 900 A at 440 V for power circuit conforming to IEC 60947 |
| [Icw] rated short-time withstand current | 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit 400 A ≤ 40 °C 10 s power circuit 810 A ≤ 40 °C 1 s power circuit 84 A ≤ 40 °C 10 min power circuit 208 A ≤ 40 °C 1 min power circuit |
| Associated fuse rating | 100 A gG at ≤ 690 V coordination type 1 for power circuit 100 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 | 1.5 mOhm at 50 Hz - Ith 80 A for power circuit |
| [Ui] rated insulation voltage | 690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1 |
| Electrical durability | 1.4 Mcycles 50 A AC-3 ≤ 440 V ≥ 17221 700000 cycles 80 A AC-1 ≤ 440 V ≥ 17221 38000 cycles AC-4 ≤ 440 V ≥ 17221 |
| Power dissipation per pole | 3.7 W AC-3 9.6 W AC-1 |
| Protective cover | With |
| Interlocking type | Mechanical |
| Mounting support | Plate Rail |
| Standards | EN/IEC 60947-4-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 EN/IEC 60947-5-1 |
| Product certifications | UL CSA CCC EAC KC |
| Connections - terminals | Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with cable end Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm ² - cable stiffness: flexible - without cable end Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm ² - cable stiffness: flexible - with cable end Power circuit : EverLink BTR screw connectors 1 cable(s) 1...35 mm ² - cable stiffness: solid - without cable end Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm ² - cable stiffness: flexible - without cable end Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm ² - cable stiffness: flexible - with cable end Power circuit : EverLink BTR screw connectors 2 cable(s) 1...25 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: 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 : 8 N.m - on EverLink BTR screw connectors - cable 25...35 mm ² hexagonal 4 mm Power circuit : 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm ² hexagonal 4 mm |
| Operating time | 55...65 ms closing 20...120 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 | 6000000 cycles |
| Operating rate | 3600 cyc/h at ≤ 60 °C |




Complementary

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| Coil technology | Built-in bidirectional peak limiting |
| Control circuit voltage limits | $\leq 0.1 U_c$ drop-out at 60 °C 0.85...1.1 U_c operational at 60 °C |
| Inrush power in VA | 18 VA at 20 °C 50/60 Hz |
| Inrush power in W | 14 W at 20 °C |
| Hold-in power consumption in VA | 1.8 VA at 20 °C 50/60 Hz |
| Hold-in power consumption in W | 1.2 W at 20 °C |
| Heat dissipation | 1.2 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 | 25...400 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

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| IP degree of protection | IP20 front face conforming to IEC 60529 |
| Protective treatment | TH conforming to IEC 60068-2-30 |
| Pollution degree | 3 |
| Ambient air temperature for operation | -25...60 °C |
| Ambient air temperature for storage | -60...80 °C |
| Permissible ambient air temperature around the device | -40...70 °C at U_c |
| Operating altitude | 3000 m without derating in temperature |
| 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 open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms |
| Height | 122 mm |
| Width | 119 mm |
| Depth | 120 mm |
| Product weight | 2.164 kg |
| Colour | Grey SE GREY 6 Green SE GREEN 2 |

Offer Sustainability

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|----------------------------------|---|
| Sustainable offer status | Not Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 1625 - Schneider Electric declaration of conformity  Schneider Electric declaration of conformity |
| Product environmental profile | Available  Product environmental |
| Product end of life instructions | Available  End of life manual |