



Main

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| Range of product | TeSys D |
| Range | TeSys |
| Product name | TeSys D |
| Product or component type | Contacteur |
| Device short name | LC1D |
| Contacteur application | Motor control Resistive load |
| Utilisation category | AC-4 AC-1 AC-3 |
| Poles description | 3P |
| Pole contact composition | 3 NO |
| [Ue] rated operational voltage | <= 300 V DC for power circuit <= 690 V AC 25...400 Hz for power circuit |
| [Ie] rated operational current | 25 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit 9 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit |
| Motor power kW | 2.2 kW at 400 V AC 50/60 Hz AC-4 2.2 kW at 220...230 V AC 50/60 Hz AC-3 4 kW at 380...400 V AC 50/60 Hz AC-3 5.5 kW at 500 V AC 50/60 Hz AC-3 5.5 kW at 660...690 V AC 50/60 Hz AC-3 4 kW at 415...440 V AC 50/60 Hz AC-3 |
| Motor power hp | 0.33 hp at 115 V AC 50/60 Hz for 1 phase motors 1 hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 hp at 200/208 V AC 50/60 Hz for 3 phases motors 2 hp at 230/240 V AC 50/60 Hz for 3 phases motors 5 hp at 460/480 V AC 50/60 Hz for 3 phases motors 7.5 hp at 575/600 V AC 50/60 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 |

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

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| Overvoltage category | III |
| [Ith] conventional free air thermal current | 25 A at ≤ 60 °C for power circuit 10 A at ≤ 60 °C for signalling 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 | 105 A ≤ 40 °C 10 s power circuit 210 A ≤ 40 °C 1 s power circuit 30 A ≤ 40 °C 10 min power circuit 61 A ≤ 40 °C 1 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit |
| Associated fuse rating | 20 A gG at ≤ 690 V coordination type 2 for power circuit 25 A gG at ≤ 690 V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1 |
| Average impedance | 2.5 mOhm at 50 Hz - Ith 25 A for power circuit |
| [Ui] rated insulation voltage | 600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1 600 V for signalling circuit certifications CSA 600 V for signalling circuit certifications UL |
| Electrical durability | 0.6 Mcycles 25 A AC-1 at Ue ≤ 440 V 2 Mcycles 9 A AC-3 at Ue ≤ 440 V |
| Power dissipation per pole | 0.2 W AC-3 1.56 W AC-1 |
| Protective cover | With |
| 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 |
| Product certifications | UL GL CSA DNV RINA LROS (Lloyds register of shipping) BV GOST CCC |
| Connections - terminals | Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with cable end Power 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: 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 Power circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: solid - without cable end |
| 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 |
| Operating time | 65.45...88.55 ms closing 20...30 ms opening |

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| 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 |
| Operating rate | 3600 cyc/h at <= 60 °C |

Complementary

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| Coil technology | Built-in bidirectional peak limiting diode suppressor |
| Control circuit voltage limits | 0.1...0.3 Uc drop-out at 60 °C, DC 0.8...1.25 Uc operational at 60 °C, 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 | 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 energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact |
| Insulation resistance | > 10 MOhm for signalling circuit |
| Power range | 1.1...2 kW 200...240 V 3 phases 2.2...3 kW 380...440 V 3 phases 4...6 kW 380...440 V 3 phases 4...6 kW 480...500 V 3 phases |
| Motor starter type | Direct on-line contactor |
| Contactor coil voltage | 24 V DC low consumption |

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 | -5...60 °C |
| Ambient air temperature for storage | -60...80 °C |
| Permissible ambient air temperature around the device | -40...70 °C at Uc |
| 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 | 77 mm |
| Width | 45 mm |
| Depth | 95 mm |
| Product weight | 0.48 kg |

Offer Sustainability

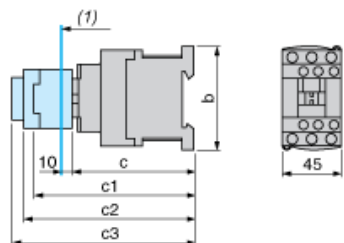
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| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 0721 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity |
| REACH | Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold |
| Product environmental profile | Available Product environmental |

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| Product end of life instructions | Available 📄 End of life manual |
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Contractual warranty

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| Warranty period | 18 months |
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Dimensions





(1) Minimum electrical clearance

| LC1 | | D09...D18 | D093...D123 | D099...D129 |
|-----|------------------------------------|-----------|-------------|-------------|
| b | | 77 | 99 | 80 |
| c | without cover or add-on blocks | 93 | 93 | 93 |
| | with cover, without add-on blocks | 95 | 95 | |
| c1 | with LAD N or C (2 or 4 contacts) | 126 | 126 | 126 |
| c2 | with LA6 DK10 | 138 | 138 | 138 |
| c3 | with LAD T, R, S | 146 | 146 | 146 |
| | with LAD T, R, S and sealing cover | 150 | 150 | |

Wiring



Our Proposal - Type 1 : Circuit Breaker + Contactor for Motor Power from 0,06 to 4 kW and 415 VAC

| Motor power (kW) | ICU (kA) | Breaker | Contactor (*) |
|------------------|----------|--|---|
| 0.06 | > 100 |  GV2ME02 |  LC1D09BL |
| 0.09 | > 100 |  GV2ME03 |  LC1D09BL |
| 0,12 to 0,18 | > 100 |  GV2ME04 |  LC1D09BL |
| 0,25 to 0,37 | > 100 |  GV2ME05 |  LC1D09BL |
| 0.55 | > 100 |  GV2ME06 |  LC1D09BL |
| 0.75 | > 100 |  GV2ME07 |  LC1D09BL |
| 1,1 to 1,5 | > 100 |  GV2ME08 |  LC1D09BL |
| 2.2 | > 100 |  GV2ME10 |  LC1D09BL |
| 3 to 4 | > 100 |  GV2ME14 |  LC1D09BL |

Non contractual pictures.

Type 1 coordination requires that in a short-circuit condition, the contactor or starter must not present any danger to personnel or installations and must not be able to resume operation without repair or the replacement of parts.