



Main

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| Range | TeSys |
| Product name | TeSys D |
| Product or component type | Contactor |
| Device short name | LC1D |
| Contactor application | Resistive load Motor control |
| Utilisation category | AC-3 AC-4 AC-1 |
| 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 | 32 A (≤ 60 °C) at ≤ 440 V AC AC-3 for power circuit 50 A (≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit |
| Motor power kW | 15 kW at 380...400 V AC 50/60 Hz AC-3 7.5 kW at 220...230 V AC 50/60 Hz AC-3 18.5 kW at 500 V AC 50/60 Hz AC-3 18.5 kW at 660...690 V AC 50/60 Hz AC-3 15 kW at 415...440 V AC 50/60 Hz AC-3 7.5 kW at 400 V AC 50/60 Hz AC-4 |
| Motor power hp | 2 hp at 115 V AC 50/60 Hz for 1 phase motors 5 hp at 230/240 V AC 50/60 Hz for 1 phase motors 7.5 hp at 200/208 V AC 50/60 Hz for 3 phases motors 10 hp at 230/240 V AC 50/60 Hz for 3 phases motors 20 hp at 460/480 V AC 50/60 Hz for 3 phases motors 30 hp at 575/600 V AC 50/60 Hz for 3 phases motors |
| Control circuit type | DC standard |
| [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 |

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| [I _{th}] conventional free air thermal current | 50 A at ≤ 60 °C for power circuit 10 A at ≤ 60 °C for signalling circuit |
| I _{rms} rated making capacity | 550 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 | 550 A at 440 V for power circuit conforming to IEC 60947 |
| [I _{cw}] rated short-time withstand current | 138 A ≤ 40 °C 1 min power circuit 260 A ≤ 40 °C 10 s power circuit 430 A ≤ 40 °C 1 s power circuit 60 A ≤ 40 °C 10 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit |
| Associated fuse rating | 63 A gG at ≤ 690 V coordination type 1 for power circuit 63 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 mΩ at 50 Hz - I _{th} 50 A for power circuit |
| [U _i] 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 | 1.65 Mcycles 32 A AC-3 at U _e ≤ 440 V 1.4 Mcycles 50 A AC-1 at U _e ≤ 440 V |
| Power dissipation per pole | 2 W AC-3 5 W AC-1 |
| Protective cover | With |
| 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 | CCC CSA BV UL LROS (Lloyds register of shipping) RINA GL GOST DNV |
| 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) 1.5...10 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 Power circuit : screw clamp terminals 1 cable(s) 2.5...10 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable(s) 2.5...10 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 1 cable(s) 1...10 mm ² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 2 cable(s) 1.5...6 mm ² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 2 cable(s) 2.5...10 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 : 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit : 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2 |
| Operating time | 53.55...72.45 ms closing |

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|--------------------------|--|
| | 16...24 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 |
| 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...0.25 Uc drop-out at 60 °C, DC 0.7...1.25 Uc operational at 60 °C, DC |
| Time constant | 28 ms |
| Inrush power in W | 5.4 W at 20 °C |
| Hold-in power consumption in W | 5.4 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 |

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 closed 15 Gn for 11 ms Shocks contactor open 8 Gn for 11 ms |
| Height | 85 mm |
| Width | 45 mm |
| Depth | 101 mm |
| Product weight | 0.535 kg |

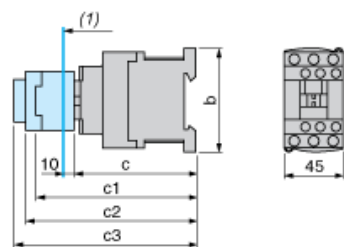
Offer Sustainability

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| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 0627 - 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 |
| Product end of life instructions | Available  End of life manual |

Contractual warranty

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| Warranty period | 18 months |
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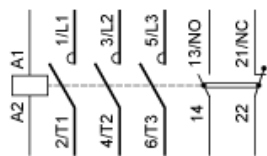
Dimensions



(1) Minimum electrical clearance

| LC1 | | D25...D38 | D183...D323 |
|--|-----------------------------------|-----------|-------------|
| b | | 85 | 99 |
| c | without cover or add-on blocks | 99 | 99 |
| with cover, without add- on blocks | 101 | 101 | |
| c1 | with LAD N or C (2 or 4 contacts) | 132 | 132 |
| c2 | with LA6 DK10 | 144 | 144 |
| c3 | with LAD T, R, S | 152 | 152 |
| with LAD T, R, S and sealing cover | 156 | 156 | |

Wiring



Our Proposal - Type 1 : Circuit Breaker + Contactor for Motor Power 15 kW and 415 VAC

| Motor power (kW) | ICU (kA) | Breaker | Contactor (*) |
|---------------------|-------------|--|---|
| 15 | 10 |  GV2ME32 |  LC1D32BD |

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.