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| Range | TeSys |
| Product name | TeSys D |
| Product or component type | Contacteur |
| Device short name | LC1D |
| Contacteur application | Motor control Resistive load |
| Utilisation category | AC-1 AC-3 AC-4 |
| Poles description | 3P |
| Pole contact composition | 3 NO |
| System Voltage | <= 690 V AC 25...400 Hz power circuit <= 300 V DC power circuit |
| [Ie] rated operational current | 80 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit 65 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 power circuit |
| Motor power kW | 11 kW at 400 V AC 50/60 Hz AC-4 30 kW at 380...400 V AC 50/60 Hz AC-3 37 kW at 500 V AC 50/60 Hz AC-3 37 kW at 660...690 V AC 50/60 Hz AC-3 18.5 kW at 220...230 V AC 50/60 Hz AC-3 |
| Motor power hp | 40 hp at 460/480 V AC 50/60 Hz 3 phases motors 5 hp at 115 V AC 50/60 Hz 1 phase motors 10 hp at 230/240 V AC 50/60 Hz 1 phase motors 20 hp at 200/208 V AC 50/60 Hz 3 phases motors 20 hp at 230/240 V AC 50/60 Hz 3 phases motors 50 hp at 575/600 V AC 50/60 Hz 3 phases motors |
| Control circuit type | AC 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 | Conforming to IEC 60947 |
| Oversvoltage category | III |
| [Ith] conventional free air thermal current | 80 A at <= 140 °F (60 °C) power circuit 10 A at <= 140 °F (60 °C) signalling circuit |
| Irms rated making capacity | 1000 A at 440 V power circuit conforming to IEC 60947 140 A AC signalling circuit conforming to IEC 60947-5-1 250 A DC signalling circuit conforming to IEC 60947-5-1 |
| Rated breaking capacity | 1000 A at 440 V 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 520 A <= 104 °F (40 °C) 10 s power circuit 900 A <= 104 °F (40 °C) 1 s power circuit 110 A <= 104 °F (40 °C) 10 min power circuit 260 A <= 104 °F (40 °C) 1 min power circuit |
| Associated fuse rating | 125 A gG at <= 690 V coordination type 1 power circuit 125 A gG at <= 690 V coordination type 2 power circuit 10 A gG signalling circuit conforming to IEC 60947-5-1 |
| Average impedance | 1.5 mOhm at 50 Hz - Ith 80 A power circuit |

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| [Ui] rated insulation voltage | 600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V power circuit conforming to IEC 60947-4-1 690 V signalling circuit conforming to IEC 60947-1 600 V signalling circuit certifications CSA 600 V signalling circuit certifications UL |
| Electrical durability | 1.45 Mcycles 65 A AC-3 at $U_e \leq 440$ V 1.4 Mcycles 80 A AC-1 at $U_e \leq 440$ V |
| Power dissipation per pole | 6.3 W AC-3 9.6 W AC-1 |
| Protective cover | With |
| Mounting support | Plate Rail |
| Standards | UL 508 CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 |
| Product certifications | CCC CSA GOST UL |
| Connections - terminals | Control circuit: screw clamp terminals 2 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Power circuit : screw connection 2 cable(s) 1...25 mm ² - cable stiffness: flexible - with cable end Power circuit : screw connection 2 cable(s) 1...25 mm ² - cable stiffness: solid - without cable end Power circuit : screw connection 2 cable(s) 1...25 mm ² - cable stiffness: flexible - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm ² - cable stiffness: solid - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm ² - cable stiffness: flexible - without cable end Power circuit : screw connection 1 cable(s) 1...35 mm ² - cable stiffness: flexible - with cable end |
| Tightening torque | Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 70.8 lbf.in (8 N.m) - on EverLink BTR screw connectors - cable 0.04...0.05 in ² (25...35 mm ²) hexagonal 0.16 in (4 mm) Power circuit : 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm ² hexagonal 4 mm |
| Operating time | 12...26 ms closing 4...19 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 | 6 Mcycles |
| Operating rate | 3600 cyc/h at ≤ 140 °F (60 °C) |

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| Coil technology | Without built-in suppressor module |
| Control circuit voltage limits | 0.3...0.6 Uc drop-out at 140 °F (60 °C), AC 50/60 Hz 0.8...1.1 Uc operational at 140 °F (60 °C), AC 50 Hz 0.85...1.1 Uc operational at 140 °F (60 °C), AC 60 Hz |
| Inrush power in VA | 140 VA at 68 °F (20 °C) (cos ϕ 0.75) 60 Hz 160 VA at 68 °F (20 °C) (cos ϕ 0.75) 50 Hz |
| Hold-in power consumption in VA | 13 VA at 68 °F (20 °C) (cos ϕ 0.3) 60 Hz 15 VA at 68 °F (20 °C) (cos ϕ 0.3) 50 Hz |
| Heat dissipation | 4...5 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 signalling circuit |
| Minimum switching voltage | 17 V 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 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 | 23...140 °F (-5...60 °C) |
| ambient air temperature for storage | -76...176 °F (-60...80 °C) |
| permissible ambient air temperature around the device | -40...158 °F (-40...70 °C) at Uc |
| operating altitude | 9842.52 ft (3000 m) without derating in temperature |
| fire resistance | 1562 °F (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 | 4.8 in (122 mm) |
| width | 2.17 in (55 mm) |
| depth | 4.72 in (120 mm) |
| product weight | 1.9 lb(US) (0.86 kg) |

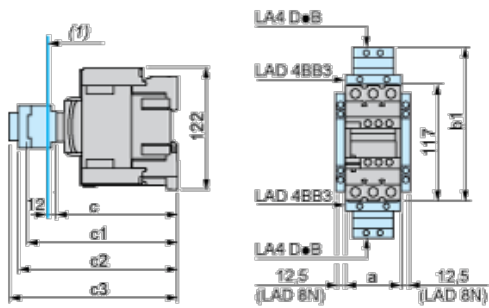
Offer Sustainability

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| Green Premium product | Green Premium product |
| Compliant - since 0001 - Schneider Electric declaration of conformity | Compliant - since 0001 - Schneider Electric declaration of conformity |
| Reference not containing SVHC above the threshold | Reference not containing SVHC above the threshold |
| Available | Available |
| Available | Available |
| WARNING: This product can expose you to chemicals including: | WARNING: This product can expose you to chemicals including: |
| Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. | Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. |
| For more information go to www.p65warnings.ca.gov | For more information go to www.p65warnings.ca.gov |

Contractual warranty

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| Warranty period | 18 months |
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Dimensions



(1) Minimum electrical clearance

| LC1 | | D40A...D65A |
|-----|------------------------------------|-------------|
| a | | 55 |
| b1 | with LA4 D•2 | – |
| | with LA4 DB3 or LAD 4BB3 | 136 |
| | with LA4 DF, DT | 157 |
| | with LA4 DM, DW, DL | 166 |
| c | without cover or add-on blocks | 118 |
| | with cover, without add-on blocks | 120 |
| c1 | with LAD N (1 contact) | – |
| | with LAD N or C (2 or 4 contacts) | 150 |
| c2 | with LA6 DK10, LAD 6DK | 163 |
| c3 | with LAD T, R, S | 171 |
| | with LAD T, R, S and sealing cover | 175 |

Wiring

