

LC1D50AM7

TeSys D contactor - 3P(3 NO) - AC-3 - ≤ 440 V
50 A - 220 V AC 50/60 Hz coil

Product availability : Stock - Normally stocked in distribution facility



Price* : 234.00 USD



Main

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|--------------------------------|--|
| Range of product | TeSys D |
| 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 |
| System Voltage | ≤ 300 V DC power circuit ≤ 690 V AC 25...400 Hz power circuit |
| [Ie] rated operational current | 50 A (≤ 140 °F (60 °C)) at ≤ 440 V AC AC-3 power circuit 80 A (≤ 140 °F (60 °C)) at ≤ 440 V AC AC-1 power circuit |
| Motor power kW | 22 kW at 380...400 V AC 50/60 Hz AC-3 25 kW at 415 V AC 50/60 Hz AC-3 30 kW at 440 V AC 50/60 Hz AC-3 30 kW at 500 V AC 50/60 Hz AC-3 33 kW at 660...690 V AC 50/60 Hz AC-3 15 kW at 220...230 V AC 50/60 Hz AC-3 11 kW at 400 V AC 50/60 Hz AC-4 |
| Motor power hp | 3 hp at 115 V AC 50/60 Hz 1 phase motors 7.5 hp at 230/240 V AC 50/60 Hz 1 phase motors 15 hp at 200/208 V AC 50/60 Hz 3 phases motors 15 hp at 230/240 V AC 50/60 Hz 3 phases motors 40 hp at 460/480 V AC 50/60 Hz 3 phases motors 40 hp at 575/600 V AC 50/60 Hz 3 phases motors |
| Control circuit type | AC 50/60 Hz |
| [Uc] control circuit voltage | 220 V AC 50/60 Hz |

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| Auxiliary contact composition | 1 NO + 1 NC |
| [Uimp] rated impulse withstand voltage | Conforming to IEC 60947 |
| Overvoltage 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 | 900 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 | 900 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 400 A <= 104 °F (40 °C) 10 s power circuit 810 A <= 104 °F (40 °C) 1 s power circuit 84 A <= 104 °F (40 °C) 10 min power circuit 208 A <= 104 °F (40 °C) 1 min power circuit |
| Associated fuse rating | 100 A gG at <= 690 V coordination type 1 power circuit 100 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 |
| [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 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V |
| Power dissipation per pole | 3.7 W AC-3 9.6 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 | BV DNV RINA CSA CCC LROS UL GL GOST |
| 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 Power circuit: EverLink BTR screw connectors 1 cable(s) 0...0.05 in ² (1...35 mm ²) - cable stiffness: flexible - without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 0...0.05 in ² (1...35 mm ²) - cable stiffness: flexible - with cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 0...0.05 in ² (1...35 mm ²) - cable stiffness: solid - without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 0...0.04 in ² (1...25 mm ²) - cable stiffness: flexible - without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 0...0.04 in ² (1...25 mm ²) - cable stiffness: flexible - with cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 0...0.04 in ² (1...25 mm ²) - cable stiffness: solid - without 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 |

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| | 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 |
| 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) |

Complementary

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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 |
| Power range | 7...11 kW 200...240 V 3 phases 15...25 kW 200...240 V 3 phases 15...25 kW 380...440 V 3 phases 30...50 kW 380...440 V 3 phases 30...50 kW 480...500 V 3 phases |
| Motor starter type | Direct on-line contactor |
| Contactor coil voltage | 220 V AC standard |

Environment

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| IP degree of protection | IP2x 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) |

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| Depth | 4.72 in (120 mm) |
| Product weight | 1.88 lb(US) (0.855 kg) |

Ordering and shipping details

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|-----------------------|------------------------------------|
| Category | 22345 - CTR,D-LINE,OPEN,NONREV-NEW |
| Discount Schedule | I12 |
| GTIN | 00785901565246 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 2.0600000000000001 |
| Returnability | Y |
| Country of origin | ID |

Offer Sustainability

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|----------------------------------|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 0001 - 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 end of life instructions | Available |

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 LA4 4BB3 | |
| | with LA4 DF, DT | 157 |
| | with LA4 DM, DW | 161 |
| c | without cover or add-on blocks | 118 |
| | with cover, without add-on blocks | 201 |
| c1 | with LAD N (1 contact) | – |
| | with LAD N or C (250 4 contacts) | |
| c2 | with LA6 DK10, LAD 6DK | 163 |
| c3 | with LAD T, R, S | 171 |
| | with LAD T, R, S and sealing cover | 175 |

Wiring



Our Proposal - Type 1 : Circuit Breaker + Contactor for Motor Power 22 kW and 415 VAC

| Motor Power (kW) | Icu (kA) | Breaker | Contactor |
|------------------|----------|---|--|
| 22 | 50 |  GV3P50 |  LC1D50AM7 |

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.