

LC1D50AX7

IEC contactor, TeSys D, nonreversing, 50A,
40HP at 480VAC, up to 100kA SCCR, 3 phase,
3 NO, 600VAC 50/60Hz coil, open





Main

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|---|---|
| Range | TeSys |
| Product name | TeSys D |
| Product or component type | Contacteur |
| Device short name | LC1D |
| Contactor application | Resistive load Motor control |
| Utilisation category | AC-1 AC-3 AC-4 |
| Poles description | 3P |
| Power pole contact composition | 3 NO |
| [Ue] rated operational voltage | Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC |
| [Ie] rated operational current | 50 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit 80 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit |
| Motor power kW | 15 KW 220...230 V AC 50/60 Hz AC-3) 22 KW 380...400 V AC 50/60 Hz AC-3) 30 KW 500 V AC 50/60 Hz AC-3) 33 KW 660...690 V AC 50/60 Hz AC-3) 25 KW 415 V AC 50/60 Hz AC-3) 30 KW 440 V AC 50/60 Hz AC-3) 11 kW 400 V AC 50/60 Hz AC-4) |
| Motor power HP (UL / CSA) | 3 Hp 115 V at AC 50/60 Hz for 1 phase 7.5 Hp 230/240 V at AC 50/60 Hz for 1 phase 15 Hp 200/208 V at AC 50/60 Hz for 3 phase 15 Hp 230/240 V at AC 50/60 Hz for 3 phase 40 Hp 460/480 V at AC 50/60 Hz for 3 phase 40 hp 575/600 V at AC 50/60 Hz for 3 phase |
| Control circuit type | AC at 50/60 Hz |
| [Uc] control circuit voltage | 600 V AC 50/60 Hz |
| Auxiliary contact composition | 1 NO + 1 NC |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947 |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 10 A 140 °F (60 °C) signalling circuit 80 A 140 °F (60 °C) power circuit |
| Irms rated making capacity | 140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 900 A 440 V power circuit IEC 60947 |
| Rated breaking capacity | 900 A 440 V power circuit IEC 60947 |
| [Icw] rated short-time withstand current | 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 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit |
| Associated fuse rating | 10 A gG signalling circuit IEC 60947-5-1 100 A gG <= 690 V type 1 power circuit 100 A gG <= 690 V type 2 power circuit |
| Average impedance | 1.5 mOhm - Ith 80 A 50 Hz power circuit |
| [Ui] rated insulation voltage | Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL Power circuit 690 V IEC 60947-4-1 |
| Electrical durability | 1.45 Mcycles 50 A AC-3 <= 440 V 1.1 Mcycles 80 A AC-1 <= 440 V |

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| Power dissipation per pole | 3.7 W AC-3 9.6 W AC-1 |
| Front 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 | GL GOST UL DNV LROS (Lloyds register of shipping) RINA CCC CSA BV |
| Connections - terminals | Control circuit screw clamp terminals 2 0.00... 0.00 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.00... 0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.00... 0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.00... 0.01 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.00... 0.01 in ² (1...4 mm ²)solid without cable end Control circuit screw clamp terminals 2 0.00... 0.01 in ² (1...4 mm ²)solid without cable end Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²)flexible without cable end Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²)flexible without cable end Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²)flexible with cable end Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²)flexible with cable end Power circuit EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²)solid without cable end Power circuit EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²)solid without cable end |
| Tightening torque | Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 70.81 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in ² (25...35 mm ²) hexagonal 0.16 in (4 mm) Power circuit 44.25 lbf.in (5 N.m) EverLink BTR screw connectors 0.00...0.04 in ² (1...25 mm ²) hexagonal 0.16 in (4 mm) |
| Operating time | 4...19 ms opening 12...26 ms closing |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 |
| Mechanical durability | 6 Mcycles |
| Maximum operating rate | 3600 cyc/h 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 -40...158 °F (-40...70 °C) drop-out AC 50/60 Hz 0.8...1.1 Uc -40...140 °F (-40...60 °C) operational AC 50 Hz 0.85...1.1 Uc -40...140 °F (-40...60 °C) operational AC 60 Hz 1...1.1 Uc 140...158 °F (60...70 °C) operational AC 50/60 Hz |
| Inrush power in VA | 140 VA 60 Hz 0.75 68 °F (20 °C)) 160 VA 50 Hz 0.75 68 °F (20 °C)) |
| Hold-in power consumption in VA | 13 VA 60 Hz 0.3 68 °F (20 °C)) 15 VA 50 Hz 0.3 68 °F (20 °C)) |
| Heat dissipation | 4...5 W 50/60 Hz |
| Auxiliary contacts type | Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC 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 for signalling circuit |

Environment

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| IP degree of protection | IP20 front face IEC 60529 |
| Protective treatment | TH IEC 60068-2-30 |
| Pollution degree | 3 |
| Ambient air temperature for operation | -40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating |
| Ambient air temperature for storage | -76...176 °F (-60...80 °C) |
| Operating altitude | 0...9842.52 ft (0...3000 m) |
| Fire resistance | 1562 °F (850 °C) 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 10 Gn for 11 ms |
| Height | 4.80 in (122 mm) |
| Width | 2.17 in (55 mm) |
| Depth | 4.72 in (120 mm) |
| Net Weight | 1.88 lb(US) (0.855 kg) |

Ordering and shipping details

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| Category | 22357 - CTR, TESYS D, OPEN, 40-65A AC |
| Discount Schedule | I12 |
| GTIN | 00785901579342 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 1 lb(US) (0.45 kg) |
| Returnability | Yes |
| Country of origin | IN |

Packing Units

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| Package 1 Height | 0.620 dm |
| Package 1 width | 1.370 dm |
| Package 1 Length | 1.520 dm |

Offer Sustainability

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| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
| PVC free | Yes |

Contractual warranty

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| Warranty | 18 months |
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