

LC1D1506FD

Contacteur, TeSys Deca, 3P(3NO), AC-3/AC-3e, <=440V, 150A, 110V DC standard coil, lugs/bars terminals



Main

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| Range | TeSys |
| Range of Product | TeSys Deca |
| Product or Component Type | Contacteur |
| Device short name | LC1D |
| Contacteur application | Resistive load Motor control |
| Utilisation category | AC-3 AC-1 AC-4 AC-3e |
| Poles description | 3P |
| [Ue] rated operational voltage | Power circuit <= 1000 V AC 25...400 Hz Power circuit <= 300 V DC |
| [Ie] rated operational current | 200 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 150 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 150 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit |
| [Uc] control circuit voltage | 110 V DC |

Complementary

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| Motor power kW | 40 kW at 220...230 V AC 50/60 Hz (AC-3) 75 kW at 380...400 V AC 50/60 Hz (AC-3) 80 kW at 415...440 V AC 50/60 Hz (AC-3) 90 kW at 500 V AC 50/60 Hz (AC-3) 100 kW at 660...690 V AC 50/60 Hz (AC-3) 75 kW at 1000 V AC 50/60 Hz (AC-3) 22 kW at 400 V AC 50/60 Hz (AC-4) 40 kW at 220...230 V AC 50/60 Hz (AC-3e) 75 kW at 380...400 V AC 50/60 Hz (AC-3e) 80 kW at 415...440 V AC 50/60 Hz (AC-3e) 90 kW at 500 V AC 50/60 Hz (AC-3e) 100 kW at 660...690 V AC 50/60 Hz (AC-3e) 75 kW at 1000 V AC 50/60 Hz (AC-3e) |
| Maximum Horse Power Rating | 40 Hp at 200/208 V AC 50/60 Hz for 3 phase motors 50 Hp at 230/240 V AC 50/60 Hz for 3 phase motors 100 Hp at 460/480 V AC 50/60 Hz for 3 phase motors 125 hp at 575/600 V AC 50/60 Hz for 3 phase motors |
| Compatibility code | LC1D |
| Pole contact composition | 3 NO |
| Contact compatibility | M10 |
| Protective cover | With |
| [Ith] conventional free air thermal current | 200 A (at 140 °F (60 °C)) for power circuit |
| Irms rated making capacity | 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 1660 A at 440 V for power circuit conforming to IEC 60947 |
| Rated breaking capacity | 1400 A at 440 V for power circuit conforming to IEC 60947 |

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| [Icw] rated short-time withstand current | 250 A 104 °F (40 °C) - 10 min for power circuit 580 A 104 °F (40 °C) - 1 min for power circuit 1200 A 104 °F (40 °C) - 10 s for power circuit 1400 A 104 °F (40 °C) - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit |
| Associated fuse rating | 10 A gG for signalling circuit conforming to IEC 60947-5-1 315 A gG at ≤ 690 V coordination type 1 for power circuit 250 A gG at ≤ 690 V coordination type 2 for power circuit |
| Average impedance | 0.6 mOhm - Ith 200 A 50 Hz for power circuit |
| Power dissipation per pole | 24 W AC-1 13.5 W AC-3 13.5 W AC-3e |
| [Ui] rated insulation voltage | Power circuit 600 V CSA Power circuit 600 V UL Power circuit 1000 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL |
| Overvoltage category | III |
| Pollution degree | 3 |
| [Uimp] rated impulse withstand voltage | 8 kV IEC 60947 |
| Safety reliability level | B10d = 684932 cycles contactor with nominal load EN/ISO 13849-1 B10d = 10000000 cycles contactor with mechanical load EN/ISO 13849-1 |
| Mechanical durability | 8 Mcycles |
| Electrical durability | 0.85 Mcycles 150 A AC-3 ≤ 440 V 1 Mcycles 200 A AC-1 ≤ 440 V 0.85 Mcycles 150 A AC-3e ≤ 440 V |
| Control circuit type | DC standard |
| Coil technology | With integral suppression device |
| Control circuit voltage limits | 0.75...1.2 Uc -40...131 °F (-40...55 °C) operational DC 0.15...0.4 Uc -40...158 °F (-40...70 °C) drop-out DC 1...1.2 Uc 131...158 °F (55...70 °C) operational DC |
| Inrush power in W | 270...365 W 68 °F (20 °C)) |
| Hold-in power consumption in W | 2.4...5.1 W 68 °F (20 °C) |
| Operating time | 20...35 ms closing 40...75 ms opening |
| Time constant | 25 ms |
| Maximum operating rate | 1200 cyc/h 140 °F (60 °C) |
| Connections - terminals | Control circuit: lugs-ring terminals - external diameter: 0.31 in (8 mm) Power circuit: lugs-ring terminals - external diameter: 0.98 in (25 mm) Power circuit: bars 1 - busbar cross section: 5 x 25 mm |
| Tightening torque | Control circuit 10.62 lbf.in (1.2 N.m) lugs-ring terminals flat Ø 6 mm M3.5 Control circuit 10.62 lbf.in (1.2 N.m) lugs-ring terminals Philips No 2 M3.5 Power circuit 106.21 lbf.in (12 N.m) lugs-ring terminals hexagonal 0.51 in (13 mm) M8 Power circuit 106.21 lbf.in (12 N.m) bars hexagonal 0.51 in (13 mm) M8 Control circuit 10.62 lbf.in (1.2 N.m) lugs-ring terminals pozidriv No 2 M3.5 |
| Auxiliary contact composition | 1 NO + 1 NC |
| 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 voltage | 17 V for signalling circuit |
| Minimum switching current | 5 mA for signalling circuit |
| Insulation resistance | > 10 MOhm for 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 |
| Mounting Support | Plate Rail |

Environment

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| 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 | GOST[RETURN]CSA[RETURN]CCC[RETURN]LR0S (Lloyds register of shipping) [RETURN]DNV[RETURN]GL[RETURN]BV[RETURN]JUL[RETURN]RINA[RETURN]UKCA[RET |
| IP degree of protection | IP20 front face IEC 60529 |
| Protective treatment | THIEC 60068-2-30 |
| Climatic withstand | IACS E10 exposure to damp heat |
| Permissible ambient air temperature around the device | -40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating |
| 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 6 Gn for 11 ms) |
| Height | 6.22 in (158 mm) |
| Width | 4.72 in (120 mm) |
| Depth | 5.35 in (136 mm) |
| Net Weight | 5.51 lb(US) (2.5 kg) |

Packing Units

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| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 6.61 in (16.8 cm) |
| Package 1 Width | 8.19 in (20.8 cm) |
| Package 1 Length | 7.28 in (18.5 cm) |
| Package 1 Weight | 4.65 lb(US) (2.11 kg) |

Offer Sustainability

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| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Compliant with Exemptions |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS Declaration |
| RoHS exemption information | Yes |
| 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 |