

LC1D188FD

Contacteur, TeSys Deca, 4P(2NO+2NC), AC-1, <=440V, 32A, 110VDC coil, screw clamp terminal



Main

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| Range of Product | TeSys Deca |
| Product or Component Type | Contacteur |
| Device short name | LC1D |
| Contacteur application | Resistive load |
| Utilisation category | AC-1 AC-3 AC-3e AC-4 |
| Poles description | 4P |
| [Ue] rated operational voltage | Power circuit <= 690 V AC 25...400 Hz |
| [Ie] rated operational current | 32 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit |
| [Uc] control circuit voltage | 110 V DC |

Complementary

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| Compatibility code | LC1D |
| Pole contact composition | 2 NO + 2 NC |
| Contact compatibility | M7 |
| Protective cover | With |
| [Ith] conventional free air thermal current | 10 A (at 140 °F (60 °C)) for signalling circuit 32 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 60947-5-1 300 A at 440 V for power circuit conforming to IEC 60947 |
| Rated breaking capacity | 300 A at 440 V for power circuit conforming to IEC 60947 |
| [Icw] rated short-time withstand current | 145 A 104 °F (40 °C) - 10 s for power circuit 240 A 104 °F (40 °C) - 1 s for power circuit 40 A 104 °F (40 °C) - 10 min for power circuit 84 A 104 °F (40 °C) - 1 min 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 50 A gG at <= 690 V coordination type 1 for power circuit 35 A gG at <= 690 V coordination type 2 for power circuit |
| Average impedance | 2.5 mOhm - Ith 32 A 50 Hz for power circuit |
| Power dissipation per pole | 2.5 W AC-1 |
| [Ui] rated insulation voltage | Power circuit 690 V IEC 60947-4-1 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 |
| Overvoltage category | III |
| Pollution degree | 3 |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947 |
| Safety reliability level | B10d = 1369863 cycles contacteur with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contacteur with mechanical load EN/ISO 13849-1 |
| Mechanical durability | 30 Mcycles |

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| Electrical durability | 1 Mcycles 32 A AC-1 <= 440 V |
| Control circuit type | DC standard |
| Coil technology | With integral suppression device |
| Control circuit voltage limits | 0.1...0.25 U _c -40...140 °F (-40...60 °C) drop-out DC 0.7...1.25 U _c -40...140 °F (-40...60 °C) operational DC |
| Inrush power in W | 5.4 W 68 °F (20 °C)) |
| Hold-in power consumption in W | 5.4 W 68 °F (20 °C) |
| Operating time | 63 ±15 % ms closing 20 ±20 % ms opening |
| Time constant | 28 ms |
| Maximum operating rate | 3600 cyc/h 140 °F (60 °C) |
| Connections - terminals | Control circuit: screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 0.00...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 0.00...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 0.00...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 0.00...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 0.00...0.02 in ² (2.5...16 mm ²) - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 0.00...0.02 in ² (2.5...16 mm ²) - cable stiffness: 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 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 15.93 lbf.in (1.8 N.m) screw clamps terminals flat Ø 6 mm Power circuit 15.93 lbf.in (1.8 N.m) screw clamps terminals Philips No 2 Power circuit 15.93 lbf.in (1.8 N.m) screw clamp terminals pozidriv No 2 |
| 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 | EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 60947-4-1 UL 60947-5-1 CSA C22.2 No 60947-4-1 CSA C22.2 No 60947-5-1 GB/T 14048.4 |
| Product Certifications | UL[RETURN]CSA[RETURN]CCC[RETURN]EAC[RETURN]UKCA[RETURN]CB[RETURN]EU-RO-MR by DNV-GL |
| IP degree of protection | IP20 front face IEC 60529 |
| Protective treatment | THIEC 60068-2-30 |
| Climatic withstand | IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat |

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| 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 open 10 Gn for 11 ms) Shocks contactor closed 15 Gn for 11 ms) |
| Height | 3.58 in (91 mm) |
| Width | 1.77 in (45 mm) |
| Depth | 4.21 in (107 mm) |
| Net Weight | 1.29 lb(US) (0.585 kg) |

Packing Units

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| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 2.17 in (5.5 cm) |
| Package 1 Width | 3.74 in (9.5 cm) |
| Package 1 Length | 4.72 in (12.0 cm) |
| Package 1 Weight | 22.15 oz (628.0 g) |

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 |
| PVC free | Yes |