

LC1D50AJD

IEC contactor, TeSys Deca, nonreversing, 50A, 40HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 12VDC coil, open style



Main

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| Range | TeSys TeSys Deca |
| Range of Product | TeSys Deca |
| Product or Component Type | Contacteur |
| Device short name | LC1D |
| Contacteur application | Motor control Resistive load |
| Utilisation category | AC-4 AC-1 AC-3 AC-3e |
| Poles description | 3P |
| [Ue] rated operational voltage | Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC |
| [Ie] rated operational current | 50 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 50 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit |
| [Uc] control circuit voltage | 12 V DC |

Complementary

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| Motor power kW | 15 KW at 220...230 V AC 50/60 Hz (AC-3) 22 KW at 380...400 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) 25 KW at 415 V AC 50/60 Hz (AC-3) 30 KW at 440 V AC 50/60 Hz (AC-3) 11 KW at 400 V AC 50/60 Hz (AC-4) 15 KW at 220...230 V AC 50/60 Hz (AC-3e) 22 KW at 380...400 V AC 50/60 Hz (AC-3e) 30 KW at 500 V AC 50/60 Hz (AC-3e) 33 KW at 660...690 V AC 50/60 Hz (AC-3e) 25 KW at 415 V AC 50/60 Hz (AC-3e) 30 kW at 440 V AC 50/60 Hz (AC-3e) |
| Maximum Horse Power Rating | 3 Hp at 115 V AC 50/60 Hz for 1 phase motors 7.5 Hp at 230/240 V AC 50/60 Hz for 1 phase motors 15 Hp at 200/208 V AC 50/60 Hz for 3 phase motors 15 Hp at 230/240 V AC 50/60 Hz for 3 phase motors 40 Hp at 460/480 V AC 50/60 Hz for 3 phase motors 40 hp at 575/600 V AC 50/60 Hz for 3 phase motors |
| Compatibility code | LC1D |
| Pole contact composition | 3 NO |
| Contact compatibility | M4 |
| Protective cover | With |
| [Ith] conventional free air thermal current | 10 A (at 140 °F (60 °C)) for signalling circuit 80 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 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947 |
| Rated breaking capacity | 900 A at 440 V for power circuit conforming to IEC 60947 |

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| [Icw] rated short-time withstand current | 400 A 104 °F (40 °C) - 10 s for power circuit 810 A 104 °F (40 °C) - 1 s for power circuit 84 A 104 °F (40 °C) - 10 min for power circuit 208 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 60947-5-1 100 A gG at ≤ 690 V coordination type 1 for power circuit 100 A gG at ≤ 690 V coordination type 2 for power circuit |
| Average impedance | 1.5 mOhm - Ith 80 A 50 Hz for power circuit |
| Power dissipation per pole | 3.7 W AC-3 9.6 W AC-1 3.7 W AC-3e |
| [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 |
| Overvoltage category | III |
| Pollution degree | 3 |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947 |
| 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 | 10 Mcycles |
| Electrical durability | 1.45 Mcycles 50 A AC-3 ≤ 440 V 0.5 Mcycles 80 A AC-1 ≤ 440 V 1.45 Mcycles 50 A AC-3e ≤ 440 V |
| Control circuit type | DC standard |
| Coil technology | Built-in bidirectional peak limiting diode suppressor |
| Control circuit voltage limits | 0.1...0.3 Uc -40...158 °F (-40...70 °C) drop-out DC 0.75...1.25 Uc -40...140 °F (-40...60 °C) operational DC 1...1.25 Uc 140...158 °F (60...70 °C) operational DC |
| Inrush power in W | 19 W 68 °F (20 °C)) |
| Hold-in power consumption in W | 7.4 W 68 °F (20 °C) |
| Operating time | 42.5...57.5 ms closing 16...24 ms opening |
| Time constant | 34 ms |
| Maximum operating rate | 3600 cyc/h 140 °F (60 °C) |
| Connections - terminals | 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: 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 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: EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²) - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) - cable stiffness: flexible without cable end Power circuit: EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²) - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) - cable stiffness: flexible with cable end Power circuit: EverLink BTR screw connectors 1 0.00...0.05 in ² (1...35 mm ²) - cable stiffness: solid without cable end Power circuit: EverLink BTR screw connectors 2 0.00...0.04 in ² (1...25 mm ²) - cable stiffness: solid without cable end |

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| Tightening torque | Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors 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) Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors pozidriv No 2 Power circuit 22.13 lbf.in (2.5 N.m) EverLink BTR screw connectors 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 | CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1 |
| Product Certifications | CCC[RETURN]DNV[RETURN]GL[RETURN]BV[RETURN]LROS (Lloyds register of shipping)[RETURN]UL[RETURN]RINA[RETURN]CSA[RETURN]GOST |
| 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 |
| 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 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 | 2.05 lb(US) (0.93 kg) |

Ordering and shipping details

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|-------------------|-------------------------------------|
| Category | 22358-CTR, TESYS D, OPEN, 40-65A DC |
| Discount Schedule | I12 |
| GTIN | 3389118327603 |
| Returnability | No |
| Country of origin | FR |

Packing Units

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| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 2.36 in (6.0 cm) |
| Package 1 Width | 5.51 in (14.0 cm) |
| Package 1 Length | 5.91 in (15.0 cm) |
| Package 1 Weight | 29.98 oz (850.0 g) |

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 Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| 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 |

Contractual warranty

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| Warranty | 18 months |
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