

LC1D09GD

IEC contactor, TeSys D, nonreversing, 9A, 5HP
at 480VAC, up to 100kA SCCR, 3 phase, 3
NO, 125VDC coil, open style





Main

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| Range | TeSys |
| Product name | TeSys D |
| Product or component type | Contacteur |
| Device short name | LC1D |
| Contacteur application | Resistive load Motor control |
| Utilisation category | AC-1 AC-4 AC-3 |
| 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 | 9 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit 25 A 140 °F (60 °C) <= 440 V AC AC-1 power circuit |
| Motor power kW | 2.2 KW 220...230 V AC 50/60 Hz AC-3) 4 KW 380...400 V AC 50/60 Hz AC-3) 4 KW 415...440 V AC 50/60 Hz AC-3) 5.5 KW 500 V AC 50/60 Hz AC-3) 5.5 KW 660...690 V AC 50/60 Hz AC-3) 2.2 kW 400 V AC 50/60 Hz AC-4) |
| Motor power HP (UL / CSA) | 1 Hp 230/240 V at AC 50/60 Hz for 1 phase 2 Hp 200/208 V at AC 50/60 Hz for 3 phase 2 Hp 230/240 V at AC 50/60 Hz for 3 phase 5 Hp 460/480 V at AC 50/60 Hz for 3 phase 7.5 Hp 575/600 V at AC 50/60 Hz for 3 phase 0.33 hp 115 V at AC 50/60 Hz for 1 phase |
| Control circuit type | DC standard |
| [Uc] control circuit voltage | 125 V DC |
| 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 | 25 A 140 °F (60 °C) power circuit 10 A 140 °F (60 °C) signalling circuit |
| Irms rated making capacity | 250 A 440 V power circuit IEC 60947 140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 |
| Rated breaking capacity | 250 A 440 V power circuit IEC 60947 |
| [Icw] rated short-time withstand current | 105 A 104 °F (40 °C) - 10 s power circuit 210 A 104 °F (40 °C) - 1 s power circuit 30 A 104 °F (40 °C) - 10 min power circuit 61 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 25 A gG <= 690 V type 1 power circuit 20 A gG <= 690 V type 2 power circuit |
| Average impedance | 2.5 mOhm - Ith 25 A 50 Hz power circuit |
| [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 |
| Electrical durability | 0.6 Mcycles 25 A AC-1 <= 440 V 2 Mcycles 9 A AC-3 <= 440 V |
| Power dissipation per pole | 1.56 W AC-1 0.2 W AC-3 |

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| Front cover | With |
| Mounting support | Plate Rail |
| 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 | UL GL BV LROS (Lloyds register of shipping) CCC DNV RINA CSA GOST |
| Connections - terminals | Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Power circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²)flexible with cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)solid without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)solid without 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 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)solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)solid without cable end |
| Tightening torque | Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power 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 flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 |
| Operating time | 53.55...72.45 ms closing 16...24 ms opening |
| 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 | 30 Mcycles |
| Maximum operating rate | 3600 cyc/h 140 °F (60 °C) |

Complementary

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| Coil technology | Built-in bidirectional peak limiting diode suppressor |
| Control circuit voltage limits | 0.1...0.25 U _c -40...158 °F (-40...70 °C) drop-out DC 0.7...1.25 U _c -40...140 °F (-40...60 °C) operational DC 1...1.25 U _c 140...158 °F (60...70 °C) operational DC |
| Time constant | 28 ms |
| Inrush power in W | 5.4 W 68 °F (20 °C)) |
| Hold-in power consumption in W | 5.4 W 68 °F (20 °C) |
| 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 |

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|---------------------------|---|
| 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 |

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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms |
| Height | 3.03 in (77 mm) |
| Width | 1.77 in (45 mm) |
| Depth | 3.74 in (95 mm) |
| Net Weight | 1.06 lb(US) (0.48 kg) |

Ordering and shipping details

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| Category | 22355 - CTR, TESYS D, OPEN, 9-38A DC |
| Discount Schedule | I12 |
| GTIN | 00785901182368 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 1.16 lb(US) (0.53 kg) |
| Returnability | Yes |
| Country of origin | ID |

Packing Units

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| Unit Type of Package 1 | PCE |
| Package 1 Height | 2.13 in (5.4 cm) |
| Package 1 width | 3.62 in (9.2 cm) |
| Package 1 Length | 4.33 in (11 cm) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 15 |
| Package 2 Weight | 17.92 lb(US) (8.13 kg) |
| Package 2 Height | 5.91 in (15 cm) |
| Package 2 width | 11.81 in (30 cm) |
| Package 2 Length | 15.75 in (40 cm) |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 120 |
| Package 3 Weight | 164.86 lb(US) (74.78 kg) |
| Package 3 Height | 31.50 in (80 cm) |
| Package 3 width | 31.50 in (80 cm) |
| Package 3 Length | 23.62 in (60 cm) |

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 |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| 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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