

LC1D18Q7

TeSys D IEC contactor, 18 A, 3 P, 10 HP at
480 VAC, nonreversing, 380 VAC 50/60 Hz coil



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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-3 AC-4 AC-1 |
| 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 | 18 A 140 °F (60 °C) ≤ 440 V AC AC-3 power circuit 32 A (at ≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit |
| Motor power kW | 4 kW 220...230 V AC 50/60 Hz AC-3) 7.5 kW 380...400 V AC 50/60 Hz AC-3) 9 kW 415...440 V AC 50/60 Hz AC-3) 10 kW 500 V AC 50/60 Hz AC-3) 10 kW 660...690 V AC 50/60 Hz AC-3) 4 kW 400 V AC 50/60 Hz AC-4) |
| Motor power HP (UL / CSA) | 1 Hp 115 V AC 50/60 Hz 1 phase 3 Hp 230/240 V AC 50/60 Hz 1 phase 5 Hp 200/208 V AC 50/60 Hz 3 phase 5 Hp 230/240 V AC 50/60 Hz 3 phase 10 Hp 460/480 V AC 50/60 Hz 3 phase 15 hp 575/600 V AC 50/60 Hz 3 phase |
| Control circuit type | AC at 50/60 Hz |
| [Uc] control circuit voltage | 380 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 32 A (at 60 °C) for power circuit |
| Irms rated making capacity | 140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit 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 40 °C - 10 s for power circuit 240 A 40 °C - 1 s for power circuit 40 A 40 °C - 10 min for power circuit 84 A 40 °C - 1 min for 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 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 |
| [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 |

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| Electrical durability | 1.65 Mcycles 18 A AC-3 <= 440 V 1 Mcycles 32 A AC-1 at Ue <= 440 V |
| Power dissipation per pole | 2.5 W AC-1 0.8 W AC-3 |
| 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 | RINA LROS (Lloyds register of shipping) GL CSA BV GOST DNV CCC UL |
| Connections - terminals | 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 Power circuit screw clamp terminals 1 0.00...0.01 in ² (1.5...6 mm ²)flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1.5...6 mm ²)flexible without cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...6 mm ²)flexible with cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1.5...6 mm ²)solid without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1.5...6 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 | 12...22 ms closing 4...19 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 | 15 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...70 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40...60 °C):operational AC 50 Hz 0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz 1...1.1 Uc (60...70 °C):operational AC 50/60 Hz |
| Inrush power in VA | 70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C) |
| Hold-in power consumption in VA | 7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C) |
| Heat dissipation | 2...3 W at 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 signalling circuit |
| Contact compatibility | M2 |
| Compatibility code | LC1D |
| Motor power range | 1.1...2 KW at 100...120 V 3 phases 7...11 KW at 525...690 V 3 phases 4...6 KW 200...240 V 3 phase 7...11 KW 380...440 V 3 phase 7...11 kW 480...500 V 3 phase |
| Motor starter type | Direct on-line contactor |

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 UL 94 |
| Mechanical robustness | Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor open10 Gn for 11 ms Shocks contactor closed15 Gn for 11 ms |
| Height | 3.03 in (77 mm) |
| Maximum Width | 1.77 in (45 mm) |
| Depth | 3.39 in (86 mm) |
| Net Weight | 0.73 lb(US) (0.33 kg) |

Ordering and shipping details

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| Category | 22354 - CTR, TESYS D, OPEN, 9-38A AC |
| Discount Schedule | I12 |
| GTIN | 00785901459835 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 0.78 lb(US) (0.35 kg) |
| Returnability | No |
| Country of origin | FR |

Packing Units

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| Unit Type of Package 1 | PCE |
| Package 1 Height | 1.97 in (5 cm) |
| Package 1 width | 3.62 in (9.2 cm) |
| Package 1 Length | 4.41 in (11.2 cm) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 20 |
| Package 2 Weight | 16.30 lb(US) (7.394 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 | 160 |
| Package 3 Weight | 151.28 lb(US) (68.62 kg) |
| Package 3 Height | 17.72 in (45 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 |
| REACH Regulation | REACH Declaration |
| 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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