

Product data sheet

Specifications



TeSys Deca contactor , 3P(3 NO) , AC-3 , <= 440V, 50 A , 277V, AC 60 Hz coil

LC1D50A6W7

ⓘ Discontinued

Main

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| Range | TeSys |
| Range Of Product | TeSys Deca |
| Product Or Component Type | Contactors |
| Device Short Name | LC1D |
| Contactors Application | Resistive load Motor control |
| Utilisation Category | AC-4 AC-1 AC-3 |
| 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 <60 °C) at <= 440 V AC AC-3 for power circuit 80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit |
| [Uc] Control Circuit Voltage | 277 V AC 60 Hz |

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) |
| Motor Power Hp | 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 phases motors 15 hp at 230/240 V AC 50/60 Hz for 3 phases motors 40 hp at 460/480 V AC 50/60 Hz for 3 phases motors 40 hp at 575/600 V AC 50/60 Hz for 3 phases motors |
| Compatibility Code | LC1D |
| Pole Contact Composition | 3 NO |
| Contact Compatibility | M2 |
| Protective Cover | With |
| [Ith] Conventional Free Air Thermal Current | 10 A (at 60 °C) for signalling circuit 80 A (at 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 |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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| Rated Breaking Capacity | 900 A at 440 V for power circuit conforming to IEC 60947 |
| [Icw] Rated Short-Time Withstand Current | 400 A 40 °C - 10 s for power circuit 810 A 40 °C - 1 s for power circuit 84 A 40 °C - 10 min for power circuit 208 A 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 |
| [Ui] Rated Insulation Voltage | Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified Power circuit: 690 V conforming to IEC 60947-4-1 |
| Overvoltage Category | III |
| Pollution Degree | 3 |
| [Uimp] Rated Impulse Withstand Voltage | 6 kV conforming to IEC 60947 |
| Safety Reliability Level | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| Mechanical Durability | 6 Mcycles |
| Electrical Durability | 1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.1 Mcycles 80 A AC-1 at Ue <= 440 V |
| Control Circuit Type | AC at 60 Hz |
| Coil Technology | Without built-in suppressor module |
| Control Circuit Voltage Limits | 0.3...0.6 Uc (-40...70 °C):drop-out AC 60 Hz 0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz 1...1.1 Uc (60...70 °C):operational AC 60 Hz |
| Inrush Power In Va | 140 VA 60 Hz cos phi 0.75 (at 20 °C) |
| Hold-In Power Consumption In Va | 13 VA 60 Hz cos phi 0.3 (at 20 °C) |
| Heat Dissipation | 4...5 W at 60 Hz |
| Operating Time | 4...19 ms opening 12...26 ms closing |
| Maximum Operating Rate | 3600 cyc/h 60 °C |
| Connections - Terminals | Control circuit: lugs-ring terminals - external diameter: 8 mm Power circuit: lugs-ring terminals - external diameter: 16.5 mm |
| Tightening Torque | Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit: 6 N.m - on lugs-ring terminals hexagonal screw head 10 mm M6 |
| Auxiliary Contact Composition | 1 NO + 1 NC |
| Auxiliary Contacts Type | type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to 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 |

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| 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 | Rail Plate |

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 | LROS (Lloyds register of shipping) CSA GL CCC RINA GOST DNV BV UL |
| Ip Degree Of Protection | IP20 front face conforming to IEC 60529 |
| Protective Treatment | TH conforming to IEC 60068-2-30 |
| Climatic Withstand | conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat |
| Permissible Ambient Air Temperature Around The Device | -60...80 °C storage -40...60 °C operation 60...70 °C with derating |
| Operating Altitude | 0...3000 m |
| Fire Resistance | 850 °C conforming to 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 | 122 mm |
| Width | 55 mm |
| Depth | 120 mm |
| Net Weight | 0.855 kg |

Packing Units

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| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |

Contractual warranty

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| Warranty | 18 months |
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