



Commercial status

End of Commercialisation :

⚠ End of Commercialisation

Main

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| Range of product | TeSys D |
| Range | TeSys |
| Product name | TeSys D |
| Product or component type | Contactor |
| Device short name | LC1D |
| Contactor application | Resistive load |
| Utilisation category | AC-1 |
| Poles description | 4P |
| Pole contact composition | 2 NO + 2 NC |
| [Ue] rated operational voltage | ≤ 300 V DC for power circuit ≤ 690 V AC 25...400 Hz for power circuit |
| [Ie] rated operational current | 32 A (≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit |
| Control circuit type | DC standard |
| [Uc] control circuit voltage | 440 V DC |
| Auxiliary contact composition | 1 NO + 1 NC |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60947 |
| Overtoltage category | III |
| [Ith] conventional free air thermal current | 32 A at ≤ 60 °C for power circuit 10 A at ≤ 60 °C for signalling circuit |
| Irms rated making capacity | 300 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 |
| 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 power circuit 240 A ≤ 40 °C 1 s power circuit 40 A ≤ 40 °C 10 min power circuit 84 A ≤ 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 | 35 A gG at ≤ 690 V coordination type 2 for power circuit 50 A gG at ≤ 690 V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1 |
| Average impedance | 2.5 mOhm at 50 Hz - Ith 32 A for power circuit |
| [Ui] rated insulation voltage | 600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1 600 V for signalling circuit certifications CSA 600 V for signalling circuit certifications UL |
| Electrical durability | 1 Mcycles 32 A AC-1 at Ue ≤ 440 V |

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| Power dissipation per pole | 2.5 W AC-1 |
| Protective 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 | LROS (Lloyds register of shipping) CSA RINA BV GOST CCC DNV UL GL |
| Connections - terminals | Control circuit : lugs-ring terminals - external diameter: 8 mm Power circuit : lugs-ring terminals - external diameter: 8 mm |
| Tightening torque | Control circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm-screw : M3.5 Control circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 screw : M3.5 Power circuit : 1.8 N.m - on lugs-ring terminals - with screwdriver flat Ø 8 mm-screw : M3.5 Power circuit : 1.8 N.m - on lugs-ring terminals - with screwdriver Philips No 2 screw : M3.5 |
| Operating time | 53.55...72.45 ms closing 16...24 ms opening |
| 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 | 30 Mcycles |
| Operating rate | 3600 cyc/h at <= 60 °C |

Complementary

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| Coil technology | With integral suppression device |
| Control circuit voltage limits | 0.1...0.25 U _c drop-out at 60 °C, DC 0.7...1.25 U _c operational at 60 °C, DC |
| Time constant | 28 ms |
| Inrush power in W | 5.4 W at 20 °C |
| Hold-in power consumption in W | 5.4 W at 20 °C |
| 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 current | 5 mA for signalling circuit |
| Minimum switching voltage | 17 V for signalling circuit |
| Non-overlap time | 1.5 ms on energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact |
| Insulation resistance | > 10 MOhm for signalling circuit |
| Contact compatibility | M7 |
| Compatibility code | LC1D |

Environment

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| IP degree of protection | IP20 front face conforming to IEC 60529 |
| Protective treatment | TH conforming to IEC 60068-2-30 |
| Pollution degree | 3 |
| Ambient air temperature for operation | -5...60 °C |
| Ambient air temperature for storage | -60...80 °C |
| Permissible ambient air temperature around the device | -40...70 °C at U _c |
| Operating altitude | 3000 m without derating |

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| 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 open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms |
| Height | 91 mm |
| Width | 45 mm |
| Depth | 107 mm |
| Product weight | 0.585 kg |

Contractual warranty

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| Warranty period | 18 months |
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| Product Life Status : | End of commercialisation |
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