



Commercial status

End of Commercialisation :

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Main

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|---|---|
| Range of product | TeSys D |
| 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-3 |
| Poles description | 3P |
| Pole contact composition | 3 NO |
| [Ue] rated operational voltage | ≤ 300 V DC for power circuit ≤ 690 V AC 25...400 Hz for power circuit |
| [Ie] rated operational current | 9 A (≤ 60 °C) at ≤ 440 V AC AC-3 for power circuit 16 A (≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit |
| Motor power kW | 4 kW at 380...400 V AC 50/60 Hz 2.2 kW at 220...230 V AC 50/60 Hz 5.5 kW at 500 V AC 50/60 Hz 5.5 kW at 660...690 V AC 50/60 Hz 4 kW at 415...440 V AC 50/60 Hz |
| Motor power hp | 0.33 hp at 115 V AC 50/60 Hz for 1 phase motors 1 hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 hp at 200/208 V AC 50/60 Hz for 3 phases motors 2 hp at 230/240 V AC 50/60 Hz for 3 phases motors 5 hp at 460/480 V AC 50/60 Hz for 3 phases motors 7.5 hp at 575/600 V AC 50/60 Hz for 3 phases motors |
| Control circuit type | DC standard |
| [Uc] control circuit voltage | 96 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 | 16 A at ≤ 60 °C for power circuit 10 A at ≤ 60 °C for signalling circuit |
| Irms rated making capacity | 250 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 | 250 A at 440 V for power circuit conforming to IEC 60947 |

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| [I _{cw}] rated short-time withstand current | 105 A ≤ 40 °C 10 s power circuit 210 A ≤ 40 °C 1 s power circuit 30 A ≤ 40 °C 10 min power circuit 61 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 | 20 A gG at ≤ 690 V coordination type 2 for power circuit 25 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 - I _{th} 16 A for power circuit |
| [U _i] 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 | 0.6 Mcycles 25 A AC-1 at U _e ≤ 440 V 2 Mcycles 9 A AC-3 at U _e ≤ 440 V |
| Power dissipation per pole | 0.2 W AC-3 1.56 W AC-1 |
| Protective cover | Without |
| 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 | DNV GL LROS (Lloyds register of shipping) UL BV GOST CCC RINA CSA |
| Connections - terminals | Control circuit : spring terminals 1 cable(s) 2.5 mm ² - cable stiffness: flexible - without cable end Control circuit : spring terminals 2 cable(s) 2.5 mm ² - cable stiffness: flexible - without cable end Power circuit : spring terminals 1 cable(s) 2.5 mm ² - cable stiffness: flexible - without cable end Power circuit : spring terminals 2 cable(s) 2.5 mm ² - cable stiffness: flexible - without cable end |
| 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 | Built-in bidirectional peak limiting diode suppressor |
| 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 |

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| 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 | M4 |
| 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 |
| 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 | 80 mm |
| Width | 45 mm |
| Depth | 93 mm |
| Product weight | 0.48 kg |

Contractual warranty

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