



Commercial status

End of Commercialisation :

⚠ End of Commercialisation

Main

| | |
|---|---|
| Range of product | TeSys D |
| Range | TeSys |
| Product name | TeSys D |
| Product or component type | Contacteur |
| Device short name | LC1D |
| Contacteur 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 | 40 A (≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit |
| Control circuit type | AC 50/60 Hz |
| [Uc] control circuit voltage | 690 V AC 50/60 Hz |
| 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 | 40 A at ≤ 60 °C for power circuit 10 A at ≤ 60 °C for signalling circuit |
| Irms rated making capacity | 450 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 | 450 A at 440 V for power circuit conforming to IEC 60947 |
| [Icw] rated short-time withstand current | 120 A ≤ 40 °C 1 min power circuit 240 A ≤ 40 °C 10 s power circuit 380 A ≤ 40 °C 1 s power circuit 50 A ≤ 40 °C 10 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit |
| Associated fuse rating | 40 A gG at ≤ 690 V coordination type 2 for power circuit 63 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 mOhm at 50 Hz - Ith 40 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 | 1.4 Mcycles 40 A AC-1 at Ue ≤ 440 V |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

| | |
|----------------------------|--|
| Power dissipation per pole | 3.2 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 | GOST UL BV CCC GL LROS (Lloyds register of shipping) RINA DNV CSA |
| 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 | 4...19 ms opening 12...22 ms closing |
| 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 | 15 Mcycles |
| Operating rate | 3600 cyc/h at ≤ 60 °C |

Complementary

| | |
|---------------------------------|--|
| Coil technology | Without built-in suppressor module |
| Control circuit voltage limits | 0.3...0.6 U _c drop-out at 60 °C, AC 50/60 Hz 0.8...1.1 U _c operational at 60 °C, AC 50 Hz 0.85...1.1 U _c operational at 60 °C, AC 60 Hz |
| Inrush power in VA | 70 VA at 20 °C (cos φ 0.75) 60 Hz 70 VA at 20 °C (cos φ 0.75) 50 Hz |
| Hold-in power consumption in VA | 7.5 VA at 20 °C (cos φ 0.3) 60 Hz 7 VA at 20 °C (cos φ 0.3) 50 Hz |
| Heat dissipation | 2...3 W at 50/60 Hz |
| 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 | M6 |
| Compatibility code | LC1D |

Environment

| | |
|---------------------------------------|---|
| 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 Uc |
| 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 closed 15 Gn for 11 ms Shocks contactor open 8 Gn for 11 ms |
| Height | 105 mm |
| Width | 45 mm |
| Depth | 99 mm |
| Product weight | 0.425 kg |

Contractual warranty

| | |
|-----------------|-----------|
| Warranty period | 18 months |
|-----------------|-----------|

| | |
|-----------------------|---------------------------------|
| Product Life Status : | End of commercialisation |
|-----------------------|---------------------------------|