Product data sheet Characteristics

LC1D1150046B7

TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 200 A - 24 V AC 50/60 Hz coil





Main

| IVIAITI | |
|---|---|
| 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 |
| Power pole contact composition | 4 NO |
| [Ue] rated operational voltage | Power circuit: <= 1000 V AC 25400 Hz Power circuit: <= 460 V DC |
| [le] rated operational current | 200 A (at <60 °C) at <= 440 V AC AC-1 for power circuit |
| Control circuit type | AC at 50/60 Hz |
| [Uc] control circuit voltage | 24 V AC 50/60 Hz |
| [Uimp] rated impulse withstand voltage | 8 kV conforming to IEC 60947 |
| Overvoltage category | III |
| [lth] conventional free air thermal current | 200 A (at 60 °C) for power circuit |
| Irms rated making capacity | 1260 A at 440 V for power circuit conforming to IEC 60947 |
| Rated breaking capacity | 1100 A at 440 V for power circuit conforming to IEC 60947 |
| [lcw] rated short-time withstand current | 250 A 40 °C - 10 min for power circuit 550 A 40 °C - 1 min for power circuit 950 A 40 °C - 10 s for power circuit 1100 A 40 °C - 1 s for power circuit |
| Associated fuse rating | 250 A gG at <= 690 V coordination type 1 for power circuit 200 A gG at <= 690 V coordination type 2 for power circuit |
| Average impedance | 0.6 mOhm - Ith 200 A 50 Hz for power circuit |
| [Ui] rated insulation voltage | Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1 |
| Electrical durability | 0.8 Mcycles 200 A AC-1 at Ue <= 440 V |
| | |

| Power dissipation per pole | 24 W AC-1 |
|----------------------------|---|
| Safety 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 | GL GOST CSA CCC UL DNV LROS (Lloyds register of shipping) RINA BV |
| Connections - terminals | Control circuit: lugs-ring terminals (external diameter: 8 mm) Power circuit: lugs-ring terminals (external diameter: 25 mm) Power circuit: bars 1 cable(s) - busbar cross section: 5 x 25 mm |
| Tightening torque | Control circuit: 1.2 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.2 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit: 12 N.m - on lugs-ring terminals hexagonal screw head 13 mm M8 Power circuit: 12 N.m - on bars hexagonal screw head 13 mm M8 |
| Operating time | 620 ms opening 2050 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 | 8 Mcycles |
| Maximum operating rate | 2400 cyc/h 60 °C |
| | |

Complementary

| Coil technology | Built-in bidirectional peak limiting diode suppressor |
|---------------------------------|---|
| Control circuit voltage limits | Drop-out: 0.30.5 Uc AC 50/60 Hz (at 55 °C) Operational: 0.81.15 Uc AC 50/60 Hz (at 55 °C) |
| Inrush power in VA | 280350 VA 60 Hz cos phi 0.8 (at 20 °C) 280350 VA 50 Hz cos phi 0.8 (at 20 °C) |
| Hold-in power consumption in VA | 218 VA 60 Hz cos phi 0.3 (at 20 °C) 218 VA 50 Hz cos phi 0.3 (at 20 °C) |
| Heat dissipation | 38 W at 50/60 Hz |

Environment

| Littiioiiii | |
|---|--|
| 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 | -560 °C |
| Ambient air temperature for storage | -6080 °C |
| Permissible ambient air temperature around the device | -4070 °C at Uc |
| Operating altitude | 3000 m without |
| Fire resistance | 850 °C conforming to IEC 60695-2-1 |
| Flame retardance | V1 conforming to UL 94 |
| Mechanical robustness | Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 6 Gn for 11 ms |
| Height | 158 mm |
| Width | 155 mm |
| Depth | 115 mm |
| | |

| Net weight | 2.86 kg |
|----------------------------|---|
| Offer Sustainability | |
| Sustainable offer status | Green Premium product |
| REACh Regulation | REACh Declaration |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS declaration Product out of China RoHS scope. Substance declaration for your information |
| 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 |

Contractual warranty

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