

Product data sheet

Specifications



TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 <= 440 V 80 A 110 V AC 50/60 Hz coil

LC1D65008F7

Main

| | |
|---|--|
| Range | TeSys |
| Product name | TeSys D |
| Product or component type | Contactors |
| Device short name | LC1D |
| Contactors application | Resistive load |
| Utilisation category | AC-1 |
| Poles description | 4P |
| Power pole contact composition | 2 NO + 2 NC |
| [Ue] rated operational voltage | Power circuit: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC |
| [Ie] rated operational current | 80 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 | 110 V AC 50/60 Hz |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60947 |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 80 A (at 60 °C) for power circuit |
| Irms rated making capacity | 1000 A at 440 V for power circuit conforming to IEC 60947 |
| Rated breaking capacity | 1000 A at 440 V for power circuit conforming to IEC 60947 |
| [Icw] rated short-time withstand current | 520 A 40 °C - 10 s for power circuit 900 A 40 °C - 1 s for power circuit 110 A 40 °C - 10 min for power circuit 260 A 40 °C - 1 min for power circuit |
| Associated fuse rating | 125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit |
| Average impedance | 1.5 mOhm - Ith 80 A 50 Hz for power circuit |
| [Ui] rated insulation voltage | Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 690 V conforming to IEC 60947-4-1 |
| Electrical durability | 1.4 Mcycles 80 A AC-1 at Ue <= 440 V |
| Power dissipation per pole | 9.6 W AC-1 |
| Front cover | Without |
| Mounting support | 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 | UL CCC GL LROS (Lloyds register of shipping) GOST CSA RINA BV DNV |
| Connections - terminals | Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm ² flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² solid without cable end Power circuit: screw clamp terminals 1 cable(s) 1...35 mm ² flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 1...25 mm ² flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 1...35 mm ² flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1...25 mm ² flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 1...35 mm ² solid without cable end Power circuit: screw clamp terminals 2 cable(s) 1...25 mm ² solid without cable end |
| Tightening torque | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 8 N.m - on screw clamp terminals - cable 25...35 mm ² hexagonal screw head 4 mm Power circuit: 5 N.m - on screw clamp terminals - cable 1...25 mm ² hexagonal screw head 4 mm |
| Operating time | 4...19 ms opening 12...26 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 | 6 Mcycles |
| Maximum operating rate | 3600 cyc/h 60 °C |

Complementary

| | |
|--|---|
| Coil technology | Without built-in suppressor module |
| Control circuit voltage limits | 0.3...0.6 U _c (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 U _c (-40...60 °C):operational AC 50 Hz 0.85...1.1 U _c (-40...60 °C):operational AC 60 Hz 1...1.1 U _c (60...70 °C):operational AC 50/60 Hz |
| Inrush power in VA | 140 VA 60 Hz cos phi 0.75 (at 20 °C) 160 VA 50 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) 15 VA 50 Hz cos phi 0.3 (at 20 °C) |
| Heat dissipation | 4...5 W at 50/60 Hz |

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 | -40...60 °C 60...70 °C with derating |
| Ambient air temperature for storage | -60...80 °C |
| Operating altitude | 0...3000 m |
| Fire resistance | 850 °C conforming to IEC 60695-2-1 |
| 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 | 127 mm |
| Width | 85 mm |
| Depth | 125 mm |
| Net weight | 1.45 kg |

Packing Units

| | |
|------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 1.456 kg |
| Package 1 Height | 11.2 cm |
| Package 1 width | 13.5 cm |
| Package 1 Length | 15.2 cm |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 5 |
| Package 2 Weight | 7.594 kg |
| Package 2 Height | 15 cm |
| Package 2 width | 30 cm |
| Package 2 Length | 40 cm |
| Unit Type of Package 3 | S06 |
| Number of Units in Package 3 | 48 |
| Package 3 Weight | 81.352 kg |
| Package 3 Height | 73.5 cm |
| Package 3 width | 60 cm |
| Package 3 Length | 80 cm |

Offer Sustainability

| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope) |
| 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 |
| PVC free | Yes |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov |

Contractual warranty

Warranty

18 months