

Product datasheet

Specifications



TeSys Deca contactor, 3P(3NO), AC-3/AC-3e/ ≤440V 65A, 220V AC 50/60Hz coil

LC1D65M7

Main

| | |
|--------------------------------|---|
| Range | TeSys |
| Range of product | TeSys Deca |
| Product or component type | Contacteur |
| Device short name | LC1D |
| Contacteur application | Motor control Resistive load |
| Utilisation category | AC-1 AC-2 AC-4 AC-3e AC-1 |
| Poles description | 3P |
| [Ue] rated operational voltage | Power circuit: ≤ 690 V AC 25...400 Hz |
| [Ie] rated operational current | 65 A (at <60 °C) at ≤ 440 V AC AC-3 for power circuit 65 A (at <60 °C) at ≤ 440 V AC AC-3e for power circuit 80 A (at <60 °C) at ≤ 440 V AC AC-1 for power circuit 50 A (at <60 °C) at ≤ 440 V AC AC-3 for power circuit |
| [Uc] control circuit voltage | 48 V AC 50/60 Hz |

Complementary

| | |
|--|--|
| Motor power kW | 30 kW at 380...400 V AC 50 Hz 37 kW at 500 V AC 50 Hz 37 kW at 660...690 V AC 50 Hz 18.5 kW at 220...230 V AC 50 Hz 30 kW at 415 V AC 50 Hz 37 kW at 1000 V AC 50 Hz (AC-3) 25 kW at 415 V AC 50 Hz (AC-3) 22 kW at 380...400 V AC 50 Hz (AC-3) |
| Motor power hp | 10 hp at 230/240 V AC 60 Hz for 1 phase motors 20 hp at 200/208 V AC 60 Hz for 3 phases motors 20 hp at 230/240 V AC 60 Hz for 3 phases motors 40 hp at 460/480 V AC 60 Hz for 3 phases motors 50 hp at 575/600 V AC 60 Hz for 3 phases motors 7.5 hp at 230/240 V AC 60 Hz for 1 phase motors 3 hp at 115 V AC 60 Hz for 1 phase motors |
| Compatibility code | LC1D |
| Pole contact composition | 3 NO |
| Protective cover | With |
| [I _{th}] conventional free air thermal current | 80 A (at 60 °C) for power circuit 10 A (at 60 °C) for control circuit |
| Irms rated making capacity | 140 A at 440 V AC for control circuit conforming to IEC 60947-5-1 140 A AC for control circuit conforming to IEC 60947-5-1 |

900 A at 440 V for power circuit conforming to IEC 60947

| | |
|---|---|
| Rated breaking capacity | 900 A at 440 V for power circuit conforming to IEC 60947 |
| 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 conforming to IEC 60947-5-1 100 A gG at ≤ 690 V coordination type 1 for power circuit 10 A gG for control circuit conforming to IEC 60947-5-1 |
| Power dissipation per pole | 6.4 W AC-1 4.2 W AC-3e 9.6 W AC-1 3.7 W AC-3 |
| [Ui] rated insulation voltage | Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified conforming to IEC 60947-1 Control circuit: 690 V conforming to IEC 60947-1 Power circuit: 690 V CSA certified conforming to IEC 60947-1 Control circuit: 600 V CSA certified |
| Overvoltage category | III |
| [Uimp] rated impulse withstand voltage | 8 kV conforming to IEC 60947 |
| Safety reliability level | B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 |
| Mechanical durability | 6000000 cycles |
| Control circuit type | AC at 50/60 Hz |
| Coil technology | Without built-in bidirectional peak limiting diode suppressor |
| Control circuit voltage limits | 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 0.3...0.6 U _c (-40...70 °C):drop-out AC 50/60 Hz |
| Inrush power in VA | 160 VA cos phi 0.75 (at 20 °C) 140 VA cos phi 0.75 (at 20 °C) |
| Hold-in power consumption in VA | 15 VA 50 Hz cos phi 0.3 (at 20 °C) 13 VA 60 Hz cos phi 0.3 (at 20 °C) |
| Heat dissipation | 4...5 W at 50/60 Hz for control circuit |
| Operating time | 12...26 ms closing 4...19 ms opening |
| Maximum operating rate | 3600 cyc/h 60 °C |
| Connections - terminals | Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: rigid without cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...2.5 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: flexible with cable end Power circuit: screw terminals 2 2.5...25 mm ² - cable stiffness: rigid Power circuit: screw terminals 2 2.5...16 mm ² - cable stiffness: rigid without cable end Power circuit: screw terminals 1 2.5...25 mm ² - cable stiffness: flexible without cable end Power circuit: screw terminals 2 2.5...16 mm ² - cable stiffness: flexible without cable end Power circuit: screw terminals 1 2.5...25 mm ² - cable stiffness: flexible with cable end Power circuit: screw terminals 2 2.5...10 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: rigid Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: rigid |
| Tightening torque | Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw terminal - with screwdriver flat Ø 6 to Ø 8 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver pozidriv No 2 Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm |
| Auxiliary contact composition | 1 NO + 1 NC |
| Auxiliary contacts type | type mirror contact 1 NC conforming to IEC 60947-4-1 type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 |
| Terminals description ISO n°1 | (21-22)NC (A1-A2)CO |
| Minimum switching voltage | 17 V for control circuit |
| Minimum switching current | 5 mA for control circuit |
| Insulation resistance | > 10 MOhm for control circuit |
| Non-overlap time | 1.5 ms on energisation between NC and NO contacts 1.5 ms on de-energisation between NC and NO contacts |

| | |
|-------------------------|----------------|
| Mounting support | Plate Plate |
|-------------------------|----------------|

Environment

| | |
|--------------------------------|--|
| Standards | CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 UL 508 IEC 60947-4-1 |
| Product certifications | DNV LROS (Lloyds register of shipping) CCC CSA BV UL GL GOST UKCA RINA |
| IP degree of protection | IP2X conforming to VDE 0106 IP2X conforming to IEC 60529 |
| Climatic withstand | conforming to IACS E10 exposure to damp heat |
| Operating altitude | 0...3000 m |
| Fire resistance | 850 °C conforming to IEC 60695-2-1 |
| Flame retardance | V1 conforming to UL 94 |
| Mechanical robustness | Shocks contactor closed (15 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor opened (10 Gn for 11 ms) |
| Height | 127 mm |
| Width | 75 mm |
| Depth | 119 mm |
| Net weight | 1.4 kg |

Packing Units

| | |
|-------------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 9.5 cm |
| Package 1 Width | 13.2 cm |
| Package 1 Length | 14.0 cm |
| Package 1 Weight | 1.447 kg |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 5 |
| Package 2 Height | 15.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 7.566 kg |

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 |
| China RoHS Regulation | China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope) |
| RoHS exemption information | Yes |
| 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 |

Contractual warranty

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

Recommended replacement(s)