

Product datasheet

Specifications



TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 9 A - 48 V DC coil

Local distributor code: 381800291 LC1D09ED

EAN Code : 3389110353174

Main

| | |
|--------------------------------|---|
| Range | TeSys TeSys Deca |
| Range of product | TeSys D TeSys Deca |
| Product or component type | Contacteur |
| Device short name | LC1D |
| Contacteur application | Resistive load Motor control |
| Utilisation category | AC-3 AC-1 AC-4 AC-3e |
| Poles description | 3P |
| [Ue] rated operational voltage | Power circuit: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC |
| [Ie] rated operational current | 9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 25 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 9 A (at <60 °C) at <= 440 V AC AC-3e for power circuit |

Complementary

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|-------------------------------|---|
| Motor power kW | 2.2 kW at 220...230 V AC 50/60 Hz (AC-3) 4 kW at 380...400 V AC 50/60 Hz (AC-3) 4 kW at 415...440 V AC 50/60 Hz (AC-3) 5.5 kW at 500 V AC 50/60 Hz (AC-3) 5.5 kW at 660...690 V AC 50/60 Hz (AC-3) 2.2 kW at 400 V AC 50/60 Hz (AC-4) 2.2 kW at 220...230 V AC 50/60 Hz (AC-3e) 4 kW at 380...400 V AC 50/60 Hz (AC-3e) 4 kW at 415...440 V AC 50/60 Hz (AC-3e) 5.5 kW at 500 V AC 50/60 Hz (AC-3e) 5.5 kW at 660...690 V AC 50/60 Hz (AC-3e) |
| Motor power hp | 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 0.33 hp at 115 V AC 50/60 Hz for 1 phase motors |
| Pole contact composition | 3 NO |
| Contact compatibility | M4 |
| Protective cover | With |
| 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 |
| Auxiliary contact composition | 1 NO + 1 NC |

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| [Ui] rated insulation voltage | Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60947 |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 25 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 |
| Associated fuse rating | 10 A gG for signalling circuit conforming to IEC 60947-5-1 25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit |
| Time constant | 28 ms |
| Control circuit type | DC standard |
| Coil technology | Built-in bidirectional peak limiting diode suppressor |
| Control circuit voltage limits | 0.1...0.25 U _c (-40...70 °C):drop-out DC 0.7...1.25 U _c (-40...60 °C):operational DC 1...1.25 U _c (60...70 °C):operational DC |
| Average impedance | 2.5 mOhm - Ith 25 A 50 Hz for power circuit |
| Power dissipation per pole | 1.56 W AC-1 0.2 W AC-3 0.2 W AC-3e |
| Minimum switching current | 5 mA for signalling circuit |
| Minimum switching voltage | 17 V for signalling circuit |
| Non-overlap time | 1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact |
| Maximum operating rate | 3600 cyc/h 60 °C |
| Inrush power in W | 5.4 W (at 20 °C) |
| Hold-in power consumption in W | 5.4 W at 20 °C |
| Insulation resistance | > 10 MOhm for signalling circuit |
| Tightening torque | Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 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 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 |
| Mounting support | Rail Plate |
| 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 2 Mcycles 9 A AC-3e at U _e <= 440 V |
| Mechanical durability | 30 Mcycles |
| 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 |
| Operating altitude | 0...3000 m |
| Compatibility code | LC1D |
| Product certifications | DNV LROS (Lloyds register of shipping) GOST GL UL CSA BV RINA |

Environment

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| Climatic withstand | conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D |
| Ambient air temperature for storage | -60...80 °C |
| 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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms |
| Height | 77 mm |
| Width | 45 mm |
| Depth | 95 mm |
| Net weight | 0.48 kg |

Packing Units

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|-------------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 523 g |
| Package 1 Height | 5 cm |
| Package 1 width | 9.2 cm |
| Package 1 Length | 11.2 cm |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 15 |
| Package 2 Weight | 8.078 kg |
| Package 2 Height | 15 cm |
| Package 2 width | 30 cm |
| Package 2 Length | 40 cm |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 120 |
| Package 3 Weight | 72.624 kg |
| Package 3 Height | 45 cm |
| Package 3 width | 60 cm |
| Package 3 Length | 80 cm |

Offer Sustainability

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|-----------------------------------|---|
| 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 |

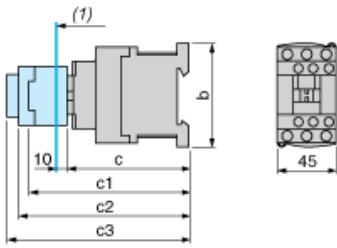
Circularity Profile [End of Life Information](#)

PVC free Yes

Contractual warranty

Warranty 18 months

Dimensions



(1) Minimum electrical clearance

| LC1 | | D09...D18 | D093...D123 | D099...D129 |
|-----------|------------------------------------|-----------|-------------|-------------|
| b | | 77 | 99 | 80 |
| c | without cover or add-on blocks | 93 | 93 | 93 |
| | with cover, without add-on blocks | 95 | 95 | 95 |
| c1 | with LAD N or C (2 or 4 contacts) | 126 | 126 | 126 |
| c2 | with LA6 DK10 | 138 | 138 | 138 |
| c3 | with LAD T, R, S | 146 | 146 | 146 |
| | with LAD T, R, S and sealing cover | 150 | 150 | 150 |

Wiring

