

LC1D40ABNE

TeSys Deca contactor, 3P(3NO), AC-3/AC-3e/
≤440V 40A, 24-60V AC/DC coil, EverLink



Main

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| Range | TeSys TeSys Deca |
| Product name | TeSys D Green TeSys Deca |
| Product or component type | Contacteur |
| Device short name | LC1D |
| Contactor application | Resistive load Motor control |
| Utilisation category | AC-3 AC-1 AC-3e |
| Poles description | 3P |
| Power pole contact composition | 3 NO |
| [Ue] rated operational voltage | Power circuit: ≤ 690 V AC 25...400 Hz |
| [Ie] rated operational current | 60 A (at <60 °C) at ≤ 440 V AC-1 for power circuit 40 A (at <60 °C) at ≤ 440 V AC-3 for power circuit 40 A (at <60 °C) at ≤ 440 V AC-3e for power circuit |
| Motor power kW | 11 kW at 220...230 V AC 50 Hz (AC-3) 18.5 kW at 380...400 V AC 50 Hz (AC-3) 22 kW at 415 V AC 50 Hz (AC-3) 22 kW at 440 V AC 50 Hz (AC-3) 22 kW at 500 V AC 50 Hz (AC-3) 30 kW at 660...690 V AC 50 Hz (AC-3) 11 kW at 220...230 V AC 50 Hz (AC-3e) 18.5 kW at 380...400 V AC 50 Hz (AC-3e) 22 kW at 415 V AC 50 Hz (AC-3e) 22 kW at 440 V AC 50 Hz (AC-3e) 22 kW at 500 V AC 50 Hz (AC-3e) 30 kW at 660...690 V AC 50 Hz (AC-3e) |
| Motor power HP (UL / CSA) | 3 Hp at 115 V AC 60 Hz for 1 phase motors 5 Hp at 230/240 V AC 60 Hz for 1 phase motors 10 Hp at 200/208 V AC 60 Hz for 3 phases motors 10 Hp at 230/240 V AC 60 Hz for 3 phases motors 30 Hp at 460/480 V AC 60 Hz for 3 phases motors 30 hp at 575/600 V AC 60 Hz for 3 phases motors |
| [Uc] control circuit voltage | 24...60 V AC 50/60 Hz 24...60 V DC |
| Coil type | AC/DC electronic |
| Auxiliary contact composition | 1 NO + 1 NC |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60947 |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 60 A (at 60 °C) for power circuit 10 A (at 60 °C) for signalling circuit |
| Irms rated making capacity | 800 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 | 800 A at 440 V for power circuit conforming to IEC 60947 |

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| [Icw] rated short-time withstand current | 72 A 40 °C - 10 min for power circuit 165 A 40 °C - 1 min for power circuit 320 A 40 °C - 10 s for power circuit 720 A 40 °C - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit |
| Associated fuse rating | 80 A gG at ≤ 690 V coordination type 1 for power circuit 80 A gG at ≤ 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1 |
| Average impedance | 1.5 mOhm - Ith 60 A 50 Hz for power circuit |
| [Ui] rated insulation voltage | Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1 |
| Electrical durability | 2 Mcycles 35 A AC-3 at Ue ≤ 440 V 0.7 Mcycles 60 A AC-1 at Ue ≤ 440 V 2 Mcycles 35 A AC-3e at Ue ≤ 440 V |
| Power dissipation per pole | 5.4 W AC-1 2.4 W AC-3 2.4 W AC-3e |
| Front cover | With |
| Mounting support | Plate Rail |
| Standards | EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC 60335-1 |
| Product certifications | CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping) UKCA |
| Connections - terminals | 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 2 cable(s) 1... 2.5 mm ² flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1... 4 mm ² solid Control circuit: screw clamp terminals 2 cable(s) 1... 4 mm ² solid Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm ² flexible without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm ² flexible with cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm ² solid Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm ² flexible without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm ² flexible with cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm ² solid |
| 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 EverLink BTR screw connectors - cable 25...35 mm ² hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm ² hexagonal screw head 4 mm Power circuit: 2.5 N.m - on lugs-ring terminals - with screwdriver pozidriv No 2 M4 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver pozidriv No 2 M3.5 |

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| Operating time | 55...65 ms closing 20...120 ms opening (date code >= 17221) 20...80 ms opening (date code >= 18011) |
| 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

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| Coil technology | Built-in bidirectional peak limiting |
| Control circuit voltage limits | <= 0.1 Uc (-40...70 °C):drop-out AC/DC 0.85...1.1 Uc (-40...60 °C):operational AC 0.8...1.1 Uc (-40...60 °C):operational DC 1...1.1 Uc (60...70 °C):operational AC/DC |
| Inrush power in VA | 15 VA 50/60 Hz (at 20 °C) |
| Inrush power in W | 16 W at 20 °C |
| Hold-in power consumption in VA | 1 VA (at 20 °C) 50/60 Hz |
| Hold-in power consumption in W | 0.7 W at 20 °C |
| Heat dissipation | 0.7 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 de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact |
| Insulation resistance | > 10 MOhm for signalling circuit |

Environment

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| IP degree of protection | IP20 front face conforming to IEC 60529 |
| Climatic withstand | Conforming to IACS E10 Conforming to IEC 60947-1 Annex Q category D |
| Pollution degree | 3 |
| 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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms |
| Ambient air temperature for operation | -40...60 °C 60...70 °C with derating |
| Height | 122 mm |
| Width | 55 mm |
| Depth | 120 mm |
| Net weight | 0.992 kg |
| Colour | Grey (SE GREY 6) Green (SE GREEN 2) |

Packing Units

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| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 1.05 kg |
| Package 1 Height | 6.2 cm |
| Package 1 width | 13.7 cm |
| Package 1 Length | 15.2 cm |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 9 |

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| Package 2 Weight | 9.75 kg |
| Package 2 Height | 15 cm |
| Package 2 width | 30 cm |
| Package 2 Length | 40 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 |
| 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 |
| Halogen content performance | Halogen free plastic parts & cables product |

Contractual warranty

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| Warranty | 18 months |
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