

Product datasheet

Specifications



TeSys D contactor - 3P(3 NO) - AC-3 - ≤ 440 V 32 A - 110 V DC coil

Local distributor code:

381816861

LC1D32FD

EAN Code: 3389110357387

Main

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|--------------------------------|---|
| Range of product | TeSys Deca |
| Product or component type | Contactor |
| Device short name | LC1D |
| Contactor application | Resistive load Motor control |
| Utilisation category | AC-3 AC-4 AC-1 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 | 32 A (at <60 °C) at ≤ 440 V AC AC-3 for power circuit 50 A (at <60 °C) at ≤ 440 V AC AC-1 for power circuit 32 A (at <60 °C) at ≤ 440 V AC AC-3e for power circuit |
| [Uc] control circuit voltage | 110 V DC |

Complementary

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| Motor power kW | 7.5 kW at 220...230 V AC 50/60 Hz (AC-3) 15 kW at 380...400 V AC 50/60 Hz (AC-3) 15 kW at 415...440 V AC 50/60 Hz (AC-3) 18.5 kW at 500 V AC 50/60 Hz (AC-3) 18.5 kW at 660...690 V AC 50/60 Hz (AC-3) 7.5 kW at 400 V AC 50/60 Hz (AC-4) 7.5 kW at 220...230 V AC 50/60 Hz (AC-3e) 15 kW at 380...400 V AC 50/60 Hz (AC-3e) 15 kW at 415...440 V AC 50/60 Hz (AC-3e) 18.5 kW at 500 V AC 50/60 Hz (AC-3e) 18.5 kW at 660...690 V AC 50/60 Hz (AC-3e) |
| Motor power hp | 2 hp at 115 V AC 50/60 Hz for 1 phase motors 5 hp at 230/240 V AC 50/60 Hz for 1 phase motors 10 hp at 200/208 V AC 50/60 Hz for 3 phases motors 10 hp at 230/240 V AC 50/60 Hz for 3 phases motors 20 hp at 460/480 V AC 50/60 Hz for 3 phases motors 25 hp at 575/600 V AC 50/60 Hz for 3 phases motors |
| Compatibility code | LC1D |
| Pole contact composition | 3 NO |
| Protective cover | With |
| [Ith] conventional free air thermal current | 10 A (at 60 °C) for signalling circuit 50 A (at 60 °C) for power circuit |
| Irms rated making capacity | 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 550 A at 440 V for power circuit conforming to IEC 60947 |
| Rated breaking capacity | 550 A at 440 V for power circuit conforming to IEC 60947 |

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| [Icw] rated short-time withstand current | 260 A 40 °C - 10 s for power circuit 430 A 40 °C - 1 s for power circuit 60 A 40 °C - 10 min for power circuit 138 A 40 °C - 1 min 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 | 10 A gG for signalling circuit conforming to IEC 60947-5-1 63 A gG at <= 690 V coordination type 1 for power circuit 63 A gG at <= 690 V coordination type 2 for power circuit |
| Average impedance | 2 mOhm - lth 50 A 50 Hz for power circuit |
| Power dissipation per pole | 2 W AC-3 5 W AC-1 2 W AC-3e |
| [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 |
| Overvoltage category | III |
| Pollution degree | 3 |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60947 |
| 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 | 30 Mcycles |
| Electrical durability | 1.65 Mcycles 32 A AC-3 at Ue <= 440 V 1.4 Mcycles 50 A AC-1 at Ue <= 440 V 1.65 Mcycles 32 A AC-3e at Ue <= 440 V |
| Control circuit type | DC standard |
| Coil technology | Built-in bidirectional peak limiting diode suppressor |
| Control circuit voltage limits | 0.1...0.25 Uc (-40...70 °C):drop-out DC 0.7...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (60...70 °C):operational DC |
| Inrush power in W | 5.4 W (at 20 °C) |
| Hold-in power consumption in W | 5.4 W at 20 °C |
| Operating time | 63 ±15 % ms closing 20 ±20 % ms opening |
| Time constant | 28 ms |
| Maximum operating rate | 3600 cyc/h at 60 °C |

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| Connections - terminals | 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...4 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 |
| | Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: solid without cable end |
| | Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: solid without cable end |
| | Power circuit: screw clamp terminals 1 2.5...10 mm ² - cable stiffness: flexible without cable end |
| | Power circuit: screw clamp terminals 2 2.5...10 mm ² - cable stiffness: flexible without cable end |
| | Power circuit: screw clamp terminals 1 1...10 mm ² - cable stiffness: flexible with cable end |
| | Power circuit: screw clamp terminals 2 1.5...6 mm ² - cable stiffness: flexible with cable end |
| | Power circuit: screw clamp terminals 1 1.5...10 mm ² - cable stiffness: solid without cable end |
| | Power circuit: screw clamp terminals 2 2.5...10 mm ² - cable stiffness: solid without cable end |

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| 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: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm |
| | Power circuit: 2.5 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: 2.5 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 | |

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| Auxiliary contact composition | 1 NO + 1 NC |
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| 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 |
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| Signalling circuit frequency | 25...400 Hz |
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| Minimum switching voltage | 17 V for signalling circuit |
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| Minimum switching current | 5 mA for signalling circuit |
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| Insulation resistance | > 10 MOhm for signalling circuit |
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| Non-overlap time | 1.5 ms on de-energisation between NC and NO contact |
| | 1.5 ms on energisation between NC and NO contact |

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| Mounting support | Plate |
| | Rail |

Environment

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| Standards | CSA C22.2 No 14 |
| | EN 60947-4-1 |
| | EN 60947-5-1 |
| | IEC 60947-4-1 |
| | IEC 60947-5-1 |
| | UL 60947-4-1 |
| | IEC 60335-1:Clause 30.2 |
| | IEC 60335-2-40:Annex JJ |
| | UL 60335-2-40:Annex JJ |
| CSA C22.2 No 60947-4-1 | |

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| Product certifications | UL |
| | CCC |
| | CSA |
| | Marine |
| | UKCA |
| | EAC |
| | CB Scheme |

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| IP degree of protection | IP20 front face conforming to IEC 60529 |
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| Protective treatment | TH conforming to IEC 60068-2-30 |
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| Climatic withstand | conforming to IACS E10 exposure to damp heat |
| | conforming to IEC 60947-1 Annex Q category D exposure to damp heat |

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| Permissible ambient air temperature around the device | -40...60 °C 60...70 °C with derating |
| Operating altitude | 0...3000 m |
| Fire resistance | 850 °C conforming to IEC 60695-2-1 |
| Flame retardance | V1 conforming to UL 94 |
| 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 (8 Gn for 11 ms) |
| Height | 85 mm |
| Width | 45 mm |
| Depth | 101 mm |
| Net weight | 0.535 kg |

Packing Units

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|-------------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 5.000 cm |
| Package 1 Width | 9.200 cm |
| Package 1 Length | 11.200 cm |
| Package 1 Weight | 576.000 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 15 |
| Package 2 Height | 15.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 8.933 kg |

Logistical informations

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| Country of origin | FR |
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Contractual warranty

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| Warranty (in months) | 18 |
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

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| Total lifecycle Carbon footprint | 45 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 3 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 0.2 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 40 kg CO2 eq. |
| Carbon footprint of the end-of-life phase [C1 to C4] | 1 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |

Use Better



Materials and Substances

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| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | Yes |
| SCIP Number | 50ae7612-fd2e-41e4-a369-50d0dea6e592 |
| EU RoHS Directive | Compliant By Exemption |
| REACH Regulation | Reference contains Substances of Very High Concern above the threshold |
| PVC free | Yes |

Use Longer




Lifetime extension

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| Repair | No |
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Use Again



Repack and remanufacture

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| Recyclability potential, in % | 75 |
| End of life manual availability | End of Life Information |
| Take-back | Nej |
| WEEE Label |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Offer Marketing Illustration

Product benefits / Features

TeSys Deca Contactors



Reliable

Multi-standard solutions, high reliability, long mechanical and electrical durability for different sizes, and the most complete accessories.



Energy efficiency

These electronic-coil contactors require up to 80 % less energy than electro-mechanical contactors.



Universal

Multi standards certified (IEC, UL, CSA, CCC, EAC, Marine), Green Premium compliant (RoHS/REACH).



Offer Marketing Illustration

Product benefits / Features

TeSys Deca Contactors

Technical Benefits



- Deca green delivers a consistent low consumption range of contactors from 9 A to 80 A.
- Covers control voltage from 24 to 250 V, with same coils for AC and DC.
- Designed to meet the requirements of industrial and HVAC applications
- With IEC60335-1 compliance, improved fire resistance, and dust-proof auxiliaries
- Suitable for safety applications thanks to mechanically linked contacts and mirror contacts
- Outstanding breaking/making capacity up to 20 In with PLC direct connection

Offer Marketing Illustration

Product benefits / Features



TeSys Deca Contactors
Range Accessories

A collection of accessories for TeSys Deca contactors, including:

- Auxiliary contact block
- Contactor Coil
- Time delay auxiliary contact block
- Mechanical interlock
- Power connections
- Assembling kits
- Comb busbar

The image displays various electrical components against a light background. At the top left, a large black contactor is shown against a green circular backdrop. Below it, several smaller components are arranged in a grid-like fashion, each with a corresponding label. The components include auxiliary contact blocks of different sizes, a white contactor coil, a circular time delay auxiliary contact block, mechanical interlocks, power connection strips, assembling kits, and comb busbars.

Image of product / Alternate images

Alternative



Technical Illustration

Assembly's dimensions

