

Product data sheet

Specifications



TeSys D reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 40 A - 690 V AC coil

LC2D40AY7

ⓘ Discontinued

Main

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| Range | TeSys |
| Product Name | TeSys D |
| Product Or Component Type | Reversing contactor |
| Device Short Name | LC2D |
| Contactor Application | Resistive load Motor control |
| Utilisation Category | AC-3 AC-1 |
| Device Presentation | Preassembled with reversing power busbar |
| Poles Description | 3P |
| Power Pole Contact Composition | 3 NO |
| [Ue] Rated Operational Voltage | Power circuit: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC |
| [Ie] Rated Operational Current | 40 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 60 A (at <60 °C) at <= 440 V AC AC-1 for power circuit |
| Motor Power Kw | 18.5 kW at 380...400 V AC 50 Hz 11 kW at 220...230 V AC 50 Hz 22 kW at 415...440 V AC 50 Hz 22 kW at 500 V AC 50 Hz 30 kW at 660...690 V AC 50 Hz |
| Motor Power Hp (UI / Csa) | 5 hp at 230/240 V AC 60 Hz for 1 phase motors 10 hp at 230/240 V AC 60 Hz for 3 phases motors 30 hp at 575/600 V AC 60 Hz for 3 phases motors 10 hp at 200/208 V AC 60 Hz for 3 phases motors 3 hp at 115 V AC 60 Hz for 1 phase motors 30 hp at 460/480 V AC 60 Hz for 3 phases motors |
| Control Circuit Type | AC at 50/60 Hz |
| [Uc] Control Circuit Voltage | 690 V AC 50/60 Hz |
| 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 | 10 A (at 60 °C) for signalling circuit 60 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 60947-5-1 800 A at 440 V for power circuit conforming to IEC 60947 |
| Rated Breaking Capacity | 800 A at 440 V for power circuit conforming to IEC 60947 |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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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 | 10 A gG for signalling circuit conforming to IEC 60947-5-1 80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit |
| 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 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 |
| Electrical Durability | 1.5 Mcycles 40 A AC-3 at Ue <= 440 V 1.4 Mcycles 60 A AC-1 at Ue <= 440 V |
| Power Dissipation Per Pole | 2.4 W AC-3 5.4 W AC-1 |
| Front Cover | With |
| Interlocking Type | Mechanical |
| Mounting Support | Rail Plate |
| 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 | GOST CCC UL CSA |
| Connections - Terminals | Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm²solid Control circuit: screw clamp terminals 2 cable(s) 1...4 mm²solid Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm²flexible without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm²flexible without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm²flexible with cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm²flexible with cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm²solid Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm²solid |
| 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 mm² hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm² 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

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| Coil Technology | Without built-in suppressor module |
| Control Circuit Voltage Limits | 0.3...0.6 Uc (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40...60 °C):operational AC 50 Hz 0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz 1...1.1 Uc (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 |
| 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 |
| 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 |
| 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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms |
| Height | 122 mm |
| Width | 119 mm |
| Depth | 120 mm |
| Net Weight | 1.87 kg |

Contractual warranty

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| Warranty | 18 months |
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Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)

Well-being performance

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| <div><div>✓</div><div>Toxic Heavy Metal Free</div></div> | |
| <div><div>✓</div><div>Mercury Free</div></div> | |
| <div><div><div>✓</div><div>Rohs Exemption Information</div></div><div>Yes</div></div> | |
| <div><div><div>Eu Rohs Directive</div><div>Compliant</div><div>EU RoHS Declaration</div></div></div> | |
| <div><div><div>China Rohs Regulation</div><div>China RoHS declaration</div></div></div> | |