# Product data sheet
## Characteristics

# LC2D40F7
## reversing contactor TeSys LC2-D - 3 poles - AC-3 440V 40 A - coil 110 V AC

Product availability : Stock - Normally stocked in distribution facility

Price* : 741.00 USD



## 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<br>Motor control |
| Utilisation category | AC-3<br>AC-1 |
| Device presentation | Preassembled with reversing power busbar |
| Poles description | 3P |
| Pole contact composition | 3 NO |
| System Voltage | <= 1000 V AC 25...400 Hz power circuit |
| [Ie] rated operational current | 40 A (<= 131 °F (55 °C)) at <= 440 V AC AC-3 power circuit<br>60 A (<= 104 °F (40 °C)) at <= 440 V AC AC-1 power circuit |
| Motor power kW | 11 kW at 220...230 V AC 50/60 Hz<br>22 kW at 415 V AC 50/60 Hz<br>22 kW at 440 V AC 50/60 Hz<br>22 kW at 500 V AC 50/60 Hz<br>30 kW at 660...690 V AC 50/60 Hz<br>18.5 kW at 380...400 V AC 50/60 Hz |
| Motor power hp | 30 hp at 460...480 V AC 50/60 Hz 3 phases motors<br>5 hp at 230...240 V AC 50/60 Hz 1 phase motors<br>30 hp at 575...600 V AC 50/60 Hz 3 phases motors<br>10 hp at 220...240 V AC 50/60 Hz 3 phases motors<br>3 hp at 115 V AC 50/60 Hz 1 phase motors<br>10 hp at 200/208 V AC 50/60 Hz 3 phases motors |
| Control circuit type | AC 50/60 Hz |
| [Uc] control circuit voltage | 110 V AC 50/60 Hz |
| Auxiliary contact composition | 1 NO + 1 NC |
| [Uimp] rated impulse withstand voltage | 8 kV 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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|---|---|
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 10 A at <= 140 °F (60 °C) signalling circuit |
| Irms rated making capacity | 800 A at 440 V power circuit conforming to IEC 60947-4<br>140 A AC signalling circuit conforming to IEC 60947-5-1<br>250 A DC signalling circuit conforming to IEC 60947-5-1 |
| Rated breaking capacity | 800 A at 500 V power circuit conforming to IEC 60947<br>800 A at 220/415/440 V power circuit conforming to IEC 60947<br>400 A at 690 V power circuit conforming to IEC 60947 |
| [Icw] rated short-time withstand current | 100 A 1 s signalling circuit<br>120 A 500 ms signalling circuit<br>140 A 100 ms signalling circuit<br>320 A <= 104 °F (40 °C) 10 s power circuit<br>720 A <= 104 °F (40 °C) 1 s power circuit<br>72 A <= 104 °F (40 °C) 10 min power circuit<br>165 A <= 104 °F (40 °C) 1 min power circuit |
| Associated fuse rating | 10 A gG signalling circuit conforming to IEC 60947-5-1 |
| Average impedance | 1.5 mOhm at 50 Hz - Ith 60 A power circuit |
| [Ui] rated insulation voltage | 1000 V power circuit conforming to IEC 60947-4-1<br>600 V power circuit certifications CSA<br>600 V power circuit certifications UL<br>690 V signalling circuit conforming to IEC 60947-1<br>600 V signalling circuit certifications CSA<br>600 V signalling circuit certifications UL |
| Electrical durability | 1.5 Mcycles 40 A AC-3 at Ue <= 440 V<br>1.4 Mcycles 60 A AC-1 at Ue <= 440 V |
| Power dissipation per pole | 5.4 W AC-1<br>2.4 W AC-3 |
| Protective cover | With |
| Interlocking type | Mechanical |
| Mounting support | Rail<br>Plate |
| Standards | CSA C22.2 No 14<br>EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1<br>UL 508 |
| Product certifications | UL<br>CSA<br>CCC<br>EAC<br>GL<br>BV<br>DNV<br>RINA |
| Connections - terminals | Control circuit: screw clamp terminals 2 cable(s) 0...0 in² (1...2.5 mm²) - cable stiffness: flexible - with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: flexible - with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: solid - without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in² (1...4 mm²) - cable stiffness: solid - without cable end<br>Power circuit: screw clamp terminals 1 cable(s) 0...0.04 in² (2.5...25 mm²) - cable stiffness: solid - without cable end<br>Power circuit: screw clamp terminals 2 cable(s) 0...0.02 in² (2.5...16 mm²) - cable stiffness: flexible - without cable end<br>Power circuit: screw clamp terminals 2 cable(s) 0...0.02 in² (2.5...10 mm²) - cable stiffness: flexible - with cable end<br>Power circuit: screw clamp terminals 1 cable(s) 0...0.04 in² (2.5...25 mm²) - cable stiffness: flexible - without cable end<br>Power circuit: screw clamp terminals 2 cable(s) 0...0.02 in² (2.5...16 mm²) - cable stiffness: solid - without cable end |

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| | Power circuit: screw clamp terminals 1 cable(s) 0...0.04 in² (2.5...25 mm²) - cable stiffness: flexible - with cable end |
| Tightening torque | Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver Philips No 2<br>Power circuit: 53.1 lbf.in (6 N.m) - on screw clamp terminals<br>Power circuit: 53.1 lbf.in (6 N.m) - on screw clamp terminals - with screwdriver flat Ø 8 mm |
| Operating time | 20...26 ms closing<br>8...12 ms opening |
| Safety reliability level | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| Mechanical durability | 16000000 cycles |
| Operating rate | 3600 cyc/h at <= 131 °F (55 °C) |

## Complementary

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| Coil technology | Built-in bidirectional peak limiting diode suppressor |
| Control circuit voltage limits | 0.85...1.1 Uc operational at 131 °F (55 °C), AC 60 Hz<br>0.3...0.6 Uc drop-out at 131 °F (55 °C), AC 60 Hz<br>0.3...0.6 Uc drop-out at 131 °F (55 °C), AC 50/60 Hz<br>0.8...1.1 Uc operational at 131 °F (55 °C), AC 50/60 Hz |
| Inrush power in VA | 200 VA at 68 °F (20 °C) (cos ϕ 0.75) 50 Hz<br>220 VA at 68 °F (20 °C) (cos ϕ 0.75) 60 Hz |
| Heat dissipation | 6...10 W at 50/60 Hz |
| Auxiliary contacts type | Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1<br>Type mirror contact (1 NC) conforming to IEC 60947-4-1 |
| Signalling circuit frequency | 25...400 Hz |
| Minimum switching current | 5 mA signalling circuit |
| Minimum switching voltage | 17 V signalling circuit |
| Non-overlap time | 1.5 ms on de-energisation (between NC and NO contact)<br>1.5 ms on energisation (between NC and NO contact) |
| Insulation resistance | > 10 MOhm 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 | 23...131 °F (-5...55 °C) |
| Ambient air temperature for storage | -76...176 °F (-60...80 °C) |
| Permissible ambient air temperature around the device | -40...158 °F (-40...70 °C) at Uc |
| Operating altitude | 9842.52 ft (3000 m) without derating in temperature |
| Fire resistance | 1760 °F (960 °C) conforming to IEC 60695-2-1 |
| Flame retardance | V1 conforming to UL 94 |
| Mechanical robustness | Vibrations contactor open 2 Gn, 5...300 Hz<br>Shocks contactor open 8 Gn for 11 ms<br>Vibrations contactor closed 3 Gn, 5...300 Hz<br>Shocks contactor closed 10 Gn for 11 ms |
| Height | 5 in (127 mm) |
| Width | 6.5 in (165 mm) |
| Depth | 5.59 in (142 mm) |
| Product weight | 5.29 lb(US) (2.4 kg) |

## Ordering and shipping details

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|---|---|
| Category | 22346 - CTR,D-LINE,OPEN,REVERSING-NEW |
| Discount Schedule | I12 |
| GTIN | 00785901208044 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 7.1200000000000001 |

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|---|---|
| Returnability | Y |
| Country of origin | CZ |

## Contractual warranty

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| Warranty period | 18 months |