

LC1F4002

TeSys F contactor-2P(2 NO)-AC-1 <= 440V 500A with coil LX1/LX9 -48...1000V AC 40/400Hz, LX4 -48...440V DC, LXE -100...250V AC 50/60Hz or 100...380V DC



Main

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| Range | TeSys |
| Product name | TeSys F |
| Product or component type | Contactor |
| Device short name | LC1F |
| Contactor application | Resistive load |
| Utilisation category | AC-1 |
| Poles description | 2P |
| Power pole contact composition | 2 NO |
| [Ue] rated operational voltage | <= 1000 V AC 50/60 Hz <= 460 V DC |
| [Ie] rated operational current | 500 A 104 °F (40 °C)) <= 440 V AC AC-1 |

Complementary

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| [Uc] control circuit voltage | 48...1000 V AC 40...400 Hz with LX1/LX9 coil 48...440 V DC with LX4 coil 100...250 V AC 50/60 Hz with LXE coil 100...380 V DC with LXE coil |
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 500 A (at 40 °C) |
| Irms rated making capacity | 4000 A AC IEC 60947-4-1 |
| Rated breaking capacity | 3200 A conforming to IEC 60947-4-1 |
| [Icw] rated short-time withstand current | 3600 A 40 °C - 10 s 2400 A 40 °C - 30 s 1700 A 40 °C - 1 min |

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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| | 1200 A 40 °C - 3 min 1000 A 40 °C - 10 min |
| Associated fuse rating | 400 A aM at ≤ 440 V 500 A gG at ≤ 440 V |
| Average impedance | 0.26 mOhm - lth 500 A 50 Hz |
| [Ui] rated insulation voltage | 1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C |
| Power dissipation per pole | 65 W AC-1 |
| Control circuit voltage limits | Operational 0.85...1.1 U _c AC 40...400 Hz Drop-out 0.3...0.5 U _c AC 40...400 Hz Operational 0.85...1.1 U _c DC Drop-out 0.2...0.35 U _c DC Operational 85...275 V AC 50/60 Hz Drop-out 0...60 V AC 50/60 Hz Operational 85...418 V DC Drop-out 0...45 V DC |
| Heat dissipation | 14 W 2.2...5.5 W |
| Operating time | 40...75 ms closing with LX1/LX9 coil 100...170 ms opening with LX1/LX9 coil 50...60 ms closing with LX4 coil 45...60 ms opening with LX4 coil 40...80 ms closing with LXE coil 6...54 ms opening with LXE coil |
| Mounting support | Plate |
| Standards | JIS C8201-4-1 IEC 60947-4-1 IEC 60947-1 EN 60947-4-1 EN 60947-1 |
| Product certifications | CB ABS DNV RMRoS LROS (Lloyds register of shipping) BV RINA UL CSA |
| Connections - terminals | Power circuit: bar 2 cable(s) - busbar cross section: 30 x 5 mm Power circuit: lugs-ring terminals 2 cable(s) 150 mm ² Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²)solid without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) Control circuit screw clamp terminals 1.0 0.00...0.00 in ² (0.2...2.5 mm ²)flexible without cable end Control circuit screw clamp terminals 1.0 0.00...0.00 in ² (0.25...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1.0 0.00...0.00 in ² (0.2...2.5 mm ²)solid without cable end |
| Tightening torque | Power circuit: 35 N.m Control circuit: 1.2 N.m Control circuit 5.31 lbf.in (0.6 N.m) |
| Mechanical durability | 10 Mcycles |
| Inrush power in VA | 1000...1150 VA, 40...400 Hz cos phi 0.9 (at 68 °F (20 °C))with LX1/LX9 coil 920...1140 VA (at 68 °F (20 °C))with LX4 coil 360...470 VA, 50/60 Hz cos phi 0.5 (at 68 °F (20 °C))with LXE coil 410...450 VA (at 68 °F (20 °C))with LXE coil |
| Hold-in power consumption in VA | 12...18 VA 4...7.5 VA 4.5...7.0 VA 2.5...4.0 VA |
| Maximum operating rate | 2400 cyc/h 131 °F (55 °C) |
| Compatibility code | LC1F |

Environment

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| IP degree of protection | IP20 front face with shrouds conforming to IEC 60529 |
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IP20 front face with shrouds conforming to VDE 0106

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| Protective treatment | TH |
| 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...70 °C |
| Mechanical robustness | Vibrations contactor open: 1.5 Gn, 5...300 Hz Vibrations contactor closed: 5 Gn, 5...300 Hz Shocks contactor open 6 Gn for 1/2 sine wave (11 ms) Shocks contactor closed 15 Gn for 1/2 sine wave (11 ms) |
| Height | 8.11 in (206 mm) |
| Width | 8.39 in (213 mm) |
| Depth | 8.62 in (219 mm) |
| Net weight | 17.64 lb(US) (8 kg) |

Packing Units

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| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 15.87 lb(US) (7.2 kg) |
| Package 1 Height | 9.45 in (24 cm) |
| Package 1 width | 9.84 in (25 cm) |
| Package 1 Length | 12.20 in (31 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 |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Contractual warranty

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| Warranty | 18 months |
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