

Product data sheet

Characteristics

LC1F4004

TeSys F contactor-4P(4 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 | Contacteur |
| Device short name | LC1F |
| Contacteur application | Resistive load |
| Utilisation category | AC-1 |
| Poles description | 4P |
| Power pole contact composition | 4 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 104 °F (40 °C) |
| Irms rated making capacity | 4000 A AC IEC 60947-4-1 |
| Rated breaking capacity | 3200 A IEC 60947-4-1 |
| [Icw] rated short-time withstand current | 3600 A 104 °F (40 °C) - 10 s 2400 A 104 °F (40 °C) - 30 s 1700 A 104 °F (40 °C) - 1 min 1200 A 104 °F (40 °C) - 3 min 1000 A 104 °F (40 °C) - 10 min |
| Associated fuse rating | 400 A aM <= 440 V 500 A gG <= 440 V |
| Average impedance | 0.26 mOhm - Ith 500 A 50 Hz |
| [Ui] rated insulation voltage | 1000 V IEC 60947-4-1 1500 V VDE 0110 group C |
| Power dissipation per pole | 65 W AC-1 |
| Control circuit voltage limits | Operational 0.85...1.1 Uc AC 40...400 Hz Drop-out 0.3...0.5 Uc AC 40...400 Hz Operational 0.85...1.1 Uc DC Drop-out 0.2...0.35 Uc 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 |

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| 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 UKCA |
| Connections - terminals | Power circuit bar 2 30 x 5 mm Power circuit lugs-ring terminals 2 0.23 in ² (150 mm ²) Control circuit screw clamp terminals 1 0.00...0.01 in ² (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 0.00...0.01 in ² (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 309.78 lbf.in (35 N.m) Control circuit 10.62 lbf.in (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 IEC 60529 IP20 front face with shrouds VDE 0106 |
| 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...158 °F (-40...70 °C) |
| Operating altitude | 9842.52 ft (3000 m) without derating |
| Mechanical robustness | Vibrations contactor open1.5 Gn, 5...300 Hz Vibrations contactor closed5 Gn, 5...300 Hz Shocks contactor open6 Gn for 1/2 sine wave (11 ms) Shocks contactor closed15 Gn for 1/2 sine wave (11 ms) |
| Height | 8.11 in (206 mm) |
| Width | 10.28 in (261 mm) |
| Depth | 8.62 in (219 mm) |
| Net Weight | 17.64 lb(US) (8 kg) |

Ordering and shipping details

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|-----------------------|---------------------------------|
| Category | 22336-CTR,F-LINE,AC,OPEN,NONREV |
| Discount Schedule | I12 |
| GTIN | 3389110122152 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 21.41 lb(US) (9.712 kg) |
| Returnability | No |
| Country of origin | CZ |

Packing Units

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|------------------------------|--------------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 10.08 in (25.6 cm) |
| Package 1 width | 10.00 in (25.4 cm) |
| Package 1 Length | 11.89 in (30.2 cm) |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 1 |
| Package 2 Weight | 22.35 lb(US) (10.14 kg) |
| Package 2 Height | 11.81 in (30 cm) |
| Package 2 width | 11.81 in (30 cm) |
| Package 2 Length | 15.75 in (40 cm) |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 8 |
| Package 3 Weight | 197.58 lb(US) (89.62 kg) |
| Package 3 Height | 30.31 in (77 cm) |
| Package 3 width | 31.50 in (80 cm) |
| Package 3 Length | 23.62 in (60 cm) |

Offer Sustainability

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| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| 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. |

Contractual warranty

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| Warranty | 18 months |
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