# Product datasheet

Specifications



Discontinued

## 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

Local distributor code:

2220972 LC1F4004

Discontinued on: 11 Jan 2023

**EAN Code: 3389110122152**

## Main

| | |
|---|---|
| **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** | 4P |
| **power pole contact composition** | 4 NO |
| **[Ue] rated operational voltage** | <= 1000 V AC 50/60 Hz<br><= 460 V DC |
| **[Ie] rated operational current** | 500 A (at <40 °C) at <= 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<br>48...440 V DC with LX4 coil<br>100...250 V AC 50/60 Hz with LXE coil<br>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 conforming to 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<br>2400 A 40 °C - 30 s<br>1700 A 40 °C - 1 min<br>1200 A 40 °C - 3 min<br>1000 A 40 °C - 10 min |
| **Associated fuse rating** | 400 A aM at <= 440 V<br>500 A gG at <= 440 V |
| **Average impedance** | 0.26 mOhm - Ith 500 A 50 Hz |
| **[Ui] rated insulation voltage** | 1000 V conforming to IEC 60947-4-1<br>1500 V conforming to VDE 0110 group C |
| **Power dissipation per pole** | 65 W AC-1 |

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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|---|---|
| **Control circuit voltage limits** | Operational: 0.85...1.1 Uc AC 40...400 Hz with LX1/LX9 coil<br>Drop-out: 0.3...0.5 Uc AC 40...400 Hz with LX1/LX9 coil<br>Operational: 0.85...1.1 Uc DC with LX4 coil<br>Drop-out: 0.2...0.35 Uc DC with LX4 coil<br>Operational: 85...275 V AC 50/60 Hz with LXE coil<br>Drop-out: 0...60 V AC 50/60 Hz with LXE coil<br>Operational: 85...418 V DC with LXE coil<br>Drop-out: 0...45 V DC with LXE coil |
| **Heat dissipation** | 14 W<br>2.2…5.5 W |
| **Operating time** | 40...75 ms closing for with LX1/LX9 coil<br>100...170 ms opening for with LX1/LX9 coil<br>50...60 ms closing for with LX4 coil<br>45...60 ms opening for with LX4 coil<br>40...80 ms closing for with LXE coil<br>6...54 ms opening for with LXE coil |
| **Mounting support** | Plate |
| **Standards** | JIS C8201-4-1<br>IEC 60947-4-1<br>IEC 60947-1<br>EN 60947-4-1<br>EN 60947-1 |
| **Product certifications** | CB<br>ABS<br>DNV<br>RMRoS<br>LROS (Lloyds register of shipping)<br>BV<br>RINA<br>UL<br>CSA<br>UKCA |
| **Connections - terminals** | Power circuit: bar 2 cable(s) - busbar cross section: 30 x 5 mm<br>Power circuit: lugs-ring terminals 2 cable(s) 150 mm²<br>Control circuit: screw clamp terminals 1 cable(s) 1…4 mm²flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1…4 mm²flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1…4 mm²flexible with cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1…2.5 mm²solid without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1…4 mm²<br>Control circuit: screw clamp terminals 2 cable(s) 1…4 mm²<br>Control circuit: screw clamp terminals 1.0 cable(s) 0.2…2.5 mm²flexible without cable end<br>Control circuit: screw clamp terminals 1.0 cable(s) 0.25…2.5 mm²flexible with cable end<br>Control circuit: screw clamp terminals 1.0 cable(s) 0.2…2.5 mm²solid without cable end |
| **Tightening torque** | Power circuit: 35 N.m<br>Control circuit: 1.2 N.m<br>Control circuit: 0.6 N.m |
| **Mechanical durability** | 10 Mcycles |
| **Inrush power in VA** | 1000…1150 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil<br>920…1140 VA (at 20 °C)with LX4 coil<br>360…470 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil<br>410…450 VA (at 20 °C)with LXE coil |
| **Hold-in power consumption in VA** | 12…18 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil<br>4…7.5 VA (at 20 °C)with LX4 coil<br>4.5…7.0 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil<br>2.5…4.0 VA (at 20 °C)with LXE coil |
| **Maximum operating rate** | 2400 cyc/h 55 °C |
| **Compatibility code** | LC1F |

# Environment

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|---|---|
| **IP degree of protection** | IP20 front face with shrouds conforming to IEC 60529<br>IP20 front face with shrouds conforming to VDE 0106 |

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|---|---|
| **Protective treatment** | TH |
| **Ambient air temperature for operation** | -5…55 °C |
| **Ambient air temperature for storage** | -60…80 °C |
| **Permissible ambient air temperature around the device** | -40…70 °C |
| **Operating altitude** | 3000 m without derating |
| **Mechanical robustness** | Vibrations contactor open: 1.5 Gn, 5...300 Hz<br>Vibrations contactor closed: 5 Gn, 5...300 Hz<br>Shocks contactor open: 6 Gn for 1/2 sine wave (11 ms)<br>Shocks contactor closed: 15 Gn for 1/2 sine wave (11 ms) |
| **Height** | 206 mm |
| **Width** | 261 mm |
| **Depth** | 219 mm |
| **Net weight** | 8 kg |

## Packing Units

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|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 26.500 cm |
| **Package 1 Width** | 24.500 cm |
| **Package 1 Length** | 30.000 cm |
| **Package 1 Weight** | 9.648 kg |
| **Unit Type of Package 2** | S04 |
| **Number of Units in Package 2** | 2 |
| **Package 2 Height** | 30.000 cm |
| **Package 2 Width** | 40.000 cm |
| **Package 2 Length** | 60.000 cm |
| **Package 2 Weight** | 20.053 kg |

## Logistical informations

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|---|---|
| **Country of origin** | CZ |

## Contractual warranty

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|---|---|
| **Warranty (in months)** | 18 |

## 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

| | |
|---|---|
| Total lifecycle Carbon footprint | **6 126 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **62 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **3 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **6 041 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **20 kg CO2 eq.** |
| Environmental Disclosure | Product Environmental Profile |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **No, we have minimized the use of plastic in the packaging in compliance with regulations and considering quality and safety standards** |
| SCIP Number | **975ba4d0-bc82-40e2-8faa-6f6819f63b0c** |
| EU RoHS Directive | Compliant By Exemption |
| REACh Regulation | Reference contains Substances of Very High Concern above the threshold |

## Use Again

### Repack and remanufacture

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|---|---|
| Recyclability potential, in % | **95** |
| End of life manual availability | End of Life Information |
| Take-back | **No** |
| WEEE Label | **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins** |