

# Product datasheet

Specifications



TeSys F contactor - 3P(3 NO)-AC-1  
<= 440V 1260 A with coil LX1/ LX9  
- 110...600V AC 40/400Hz, LX4 -  
48...250V DC

LC1F1250

## 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              | 3P                                  |
| Power pole contact composition | 3 NO                                |
| [Ue] rated operational voltage | <= 690 V AC 50/60 Hz                |
| [Ie] rated operational current | 1260 A (at <40 °C) at <= 440 V AC-1 |

## Complementary

|   |  |
|---|--|
| [Uc] control circuit voltage                | 110...600 V AC 40...400 Hz with LX1/LX9 coil<br>28...250 V DC with LX4 coil  |
| [Uimp] rated impulse withstand voltage      | 8 kV   |
| Overvoltage category                        | III  |
| [Ith] conventional free air thermal current | 1260 A (at 40 °C)  |
| Irms rated making capacity                  | 1890 A conforming to IEC 60947-4-1   |
| Rated breaking capacity                     | 1890 A conforming to IEC 60947-4-1   |
| [Icw] rated short-time withstand current    | 3000 A 40 °C - 3 min<br>5200 A 40 °C - 30 s<br>4000 A 40 °C - 1 min<br>2000 A 40 °C - 10 min<br>8000 A 40 °C - 10 s  |
| Associated fuse rating                      | 1400 A gG at <= 440 V for power circuit  |
| Average impedance                           | 0.12 mOhm - Ith 1260 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                  | 120 W AC-1   |
| Control circuit voltage limits              | Operational: 0.85...1.1 Uc AC 40...400 Hz with LX1/LX9 coil<br>Drop-out: 0.25...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 |

|                                 |  |
|---------------------------------|--|
| Heat dissipation                | 20 W   |
| Operating time                  | 40...80 ms closing for with LX1/LX9 coil<br>100...200 ms opening for with LX1/LX9 coil<br>60...70 ms closing for with LX4 coil<br>40...50 ms opening for with LX4 coil   |
| Mounting support                | Plate  |
| Standards                       | IEC 60947-1<br>EN 60947-1<br>JIS C8201-4-1<br>EN 60947-4-1<br>IEC 60947-4-1  |
| Product certifications          | CB<br>UL<br>CSA<br>CQC<br>CE<br>UKCA<br>CCC  |
| Connections - terminals         | Power circuit: bar 2 cable(s)<br>Power circuit: bolted connection<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> solid without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup><br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> |
| Tightening torque               | Power circuit: 58 N.m<br>Control circuit: 1.2 N.m  |
| Mechanical durability           | 1 Mcycles  |
| Inrush power in VA              | 1500...1730 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil<br>1420...1920 VA (at 20 °C)with LX4 coil  |
| Hold-in power consumption in VA | 20...25 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil<br>6.5...12.5 VA (at 20 °C)with LX4 coil   |
| Maximum operating rate          | 1200 cyc/h 55 °C   |

## Environment

|   |   |
|---|---|
| Protective treatment                                  | TH  |
| Ambient air temperature for operation                 | -5...40 °C  |
| Ambient air temperature for storage                   | -60...80 °C   |
| Permissible ambient air temperature around the device | -40...60 °C   |
| Operating altitude                                    | 3000 m without derating   |
| Mechanical robustness                                 | Vibrations contactor open: 2 Gn, 5...300 Hz<br>Vibrations contactor closed: 4 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  | 338 mm  |
| Width   | 309 mm  |
| Depth   | 255 mm  |
| Net weight  | 19 kg   |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 33.0 cm |
| Package 1 Width              | 37.0 cm |
| Package 1 Length             | 44.0 cm |

|                  |         |
|------------------|---------|
| Package 1 Weight | 20.1 kg |
|------------------|---------|

Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>  |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information       |
| RoHS exemption information | <a href="#">Yes</a>   |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End of Life Information</a>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Recommended replacement(s)