# Product data sheet
## Characteristics

# LC1F1700
## Contactor body without coil, TeSys F, 3P(3NO), AC-1 <=1000V 1700A



## 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 | 3P |
| Pole contact composition | 3 NO |
| [Ue] rated operational voltage | <= 1000 V AC 50/60 Hz<br><= 460 V DC |
| [Ie] rated operational current | 1700 A (at <40 °C) at <= 440 V AC AC-1 |

## Complementary

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|---|---|
| [Uc] control circuit voltage | 110...500 V AC 40...400 Hz with LX1/LX9 coil<br>110...440 V DC with LX4 coil |
| [Uimp] rated impulse withstand voltage | 8 KV |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 1700 A (at 40 °C) |
| Irms rated making capacity | 2550 A AC conforming to IEC 60947-4-1 |
| Rated breaking capacity | 2550 A conforming to IEC 60947-4-1 |
| [Icw] rated short-time withstand current | 10000 A 40 °C - 10 s for power circuit<br>7500 A 40 °C - 30 s<br>5500 A 40 °C - 1 min<br>4200 A 40 °C - 3 min<br>3000 A 40 °C - 10 min |
| Associated fuse rating | 1600 A gG at <= 440 V for power circuit conforming to IEC 60947-4-1 |
| Average impedance | 0.1 MOhm - Ith 1700 A 50 Hz |
| [Ui] rated insulation voltage | 1000 V conforming to IEC 60947-4-1<br>1500 V conforming to VDE 0110 group C<br>1000 V conforming to UL 60947-4-1 |
| Power dissipation per pole | 200 W AC-1 |
| Control circuit voltage limits | Operational: 0.85...1.1 Uc AC 40...400 Hz with LX1/LX9 coil<br>Drop-out: 0.3...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 |
| Heat dissipation | 18 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 |
| Mounting support | Plate |

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|---|---|
| Standards | EN 60947-1<br>JIS C8201-4-1<br>IEC 60947-1<br>EN 60947-4-1<br>IEC 60947-4-1<br>UL 60947-4-1A<br>CSA C22.2 No 60947-4-1 |
| Product certifications | CB Scheme[RETURN]CCC[RETURN]CSA[RETURN]UL[RETURN]EAC[RETURN]UKCA |
| Connections - terminals | Power circuit: bar 3 cable(s) - busbar cross section: 100 x 5 mm<br>Power circuit: bolted connection<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 |
| Tightening torque | Power circuit: 58 N.m<br>Control circuit: 1.2 N.m |
| Mechanical durability | 0.5 Mcycles |
| Inrush power in VA | 1600…2400 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil<br>2000…2200 VA (at 20 °C)with LX4 coil |
| Hold-in power consumption in VA | 29…37 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil<br>8…10 VA (at 20 °C)with LX4 coil |
| Maximum operating rate | 600 Cyc/H 55 °C |

## Environment

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|---|---|
| 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 | 332 Mm |
| Width | 438 Mm |
| Depth | 238.6 Mm |
| Net weight | 30 Kg |

## Packing Units

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|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 39.5 Cm |
| Package 1 Width | 50.0 Cm |
| Package 1 Length | 62.0 Cm |
| Package 1 Weight | 30.0 Kg |

## Offer Sustainability

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|---|---|
| Recyclability potential, in % | 84 |
| Total lifecycle Carbon footprint | 19 605 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 209.9260012899393 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 210 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 12.443632271127289 |
| Carbon footprint of the distribution phase [A4] | 12 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.2839807372471645 |
| Carbon footprint of the installation phase [A5] | 0.3 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 19327.69854600805 |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 19 328 kg CO2 eq. |
| Mercury free | Yes |
| Sustainable packaging | No |

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|---|---|
| Carbon footprint of the end-of-life phase [C1 to C4] | 54.697792261544336 |
| Carbon footprint of the end-of-life phase [C1 to C4] | 55 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |
| Total lifecycle Carbon footprint | 19605 |
| 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 c |
| SCIP Number | F040462c-f312-4a6d-9d16-164be5751a29 |
| REACh Regulation | Reference contains Substances of Very High Concern above the threshold |
| EU RoHS Directive | Compliant By Exemption |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead, which is known to the S |
| 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 a |

## Contractual warranty

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| Warranty (in months) | 18 |

Product Life Status : Commercialised