# Product datasheet

Specifications

## TeSys F reversing contactor - 3P(3 NO) AC-3 <= 440 V 150 A 220 V AC 40...400 Hz

LC2F150M7

Discontinued on: 30 Jun 2024

Discontinued

## Main

| | |
|---|---|
| **Range** | TeSys |
| **Product name** | TeSys F |
| **Product or component type** | Reversing contactor |
| **Device short name** | LC2F |
| **Contactor application** | Resistive load<br>Motor control |
| **Utilisation category** | AC-1<br>AC-3 |
| **Device presentation** | Preassembled with reversing power busbar |
| **Poles description** | 3P |
| **power pole contact composition** | 3 NO |
| **[Ue] rated operational voltage** | <= 1000 V AC 50/60 Hz<br><= 460 V DC |
| **[Ie] rated operational current** | 150 A (at <40 °C) at <= 440 V AC AC-3<br>250 A (at <40 °C) at <= 440 V AC AC-1 |
| **Motor power kW** | 65 kW at 1000 V AC 50/60 Hz<br>75 kW at 380...400 V AC 50/60 Hz<br>80 kW at 415 V AC 50/60 Hz<br>80 kW at 440 V AC 50/60 Hz<br>90 kW at 500 V AC 50/60 Hz<br>40 kW at 220...240 V AC 50/60 Hz<br>100 kW at 660...690 V AC 50/60 Hz |
| **Control circuit type** | AC at 40...400 Hz |
| **[Uc] control circuit voltage** | 220 V AC 40...400 Hz |
| **[Uimp] rated impulse withstand voltage** | 8 kV |
| **Overvoltage category** | III |
| **[Ith] conventional free air thermal current** | 250 A (at 40 °C) |
| **Irms rated making capacity** | 1500 A AC conforming to IEC 60947-4-1 |
| **Rated breaking capacity** | 1200 A conforming to IEC 60947-4-1 |
| **[Icw] rated short-time withstand current** | 1200 A 40 °C - 10 s<br>700 A 40 °C - 30 s<br>600 A 40 °C - 1 min<br>450 A 40 °C - 3 min<br>350 A 40 °C - 10 min |
| **Associated fuse rating** | 160 A aM at <= 440 V<br>250 A gG at <= 440 V |
| **Average impedance** | 0.35 mOhm - Ith 250 A 50 Hz |

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

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|---|---|
| **[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** | 8 W AC-3 |
| **Interlocking type** | Mechanical |
| **Mounting support** | Plate |
| **Standards** | IEC 60947-1<br>JIS C8201-4-1<br>EN 60947-4-1<br>EN 60947-1<br>IEC 60947-4-1 |
| **Product certifications** | RINA<br>ABS<br>CSA<br>DNV<br>CB<br>UL<br>LROS (Lloyds register of shipping)<br>RMRoS<br>CCC<br>UKCA |
| **Connections - terminals** | 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 without 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 mm²flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1…4 mm²solid without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1…4 mm²solid without cable end<br>Power circuit: lugs-ring terminals 1 cable(s) 120 mm²<br>Power circuit: connector 1 cable(s) 120 mm²<br>Power circuit: bar 2 cable(s) - busbar cross section: 25 x 3 mm |
| **Tightening torque** | Control circuit: 1.2 N.m<br>Power circuit: 18 N.m |
| **Operating time** | 23...35 ms closing<br>5...15 ms opening |
| **Mechanical durability** | 10 Mcycles |
| **Maximum operating rate** | 2400 cyc/h 55 °C |

## Complementary

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|---|---|
| **Control circuit voltage limits** | Operational: 0.85...1.1 Uc at 50/60 Hz (at <55 °C)<br>Drop-out: 0.2...0.55 Uc at 50/60 Hz (at <55 °C) |
| **Inrush power in VA** | 550 VA 50 Hz cos phi 0.3 (at 20 °C)<br>660 VA 60 Hz cos phi 0.3 (at 20 °C) |
| **Hold-in power consumption in VA** | 45 VA 50 Hz cos phi 0.3 (at 20 °C)<br>55 VA 60 Hz cos phi 0.3 (at 20 °C) |
| **Heat dissipation** | 12…16 W |

## 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 |
| **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 |

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|---|---|
| **Mechanical robustness** | Vibrations contactor open: 2 Gn, 5...300 Hz<br>Vibrations contactor closed: 6 Gn, 5...300 Hz<br>Shocks contactor open: 9 Gn for 11 ms<br>Shocks contactor closed: 15 Gn for 11 ms |
| **Height** | 170 mm |
| **Width** | 345 mm |
| **Depth** | 171 mm |
| **Net weight** | 7.66 kg |

## Packing Units

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|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 21.000 cm |
| **Package 1 Width** | 53.000 cm |
| **Package 1 Length** | 3.600 cm |
| **Package 1 Weight** | 10.000 kg |
| **Unit Type of Package 2** | P06 |
| **Number of Units in Package 2** | 4 |
| **Package 2 Height** | 75.000 cm |
| **Package 2 Width** | 80.000 cm |
| **Package 2 Length** | 60.000 cm |
| **Package 2 Weight** | 48.000 kg |

## 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

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|---|---|
| Total lifecycle Carbon footprint | **1 097 kg CO2 eq.** |
| Environmental Disclosure | **Product Environmental Profile** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **135 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **1 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0.6 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **948 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **12 kg CO2 eq.** |

## Use Better

### Materials and Substances

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|---|---|
| EU RoHS Directive | **Compliant with Exemptions** |
| SCIP Number | **B2d4179a-eb65-40a3-a1ef-d9a33060486f** |
| REACh Regulation | **REACh Declaration** |

## Use Longer

### Lifetime extension

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|---|---|
| Repair | **No** |

## Use Again

### Repack and remanufacture

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|---|---|
| Recyclability potential, in % | **91** |
| 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** |