

# LC1F150U5

TeSys F contactor - 3P (3 NO) - AC-3 - ≤ 440 V  
250 A - coil 240 V AC



## Main

|   |  |
|---|--|
| Range                                       | TeSys  |
| Product name                                | TeSys F  |
| Product or component type                   | Contactor  |
| Device short name                           | LC1F   |
| Contactor application                       | Motor control<br>Resistive load  |
| Utilisation category                        | AC-1<br>AC-3   |
| 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              | 250 A (≤ 40 °C) at ≤ 440 V AC AC-1<br>150 A (≤ 55 °C) at ≤ 440 V AC AC-3   |
| Motor power kW                              | 40 kW at 220...230 V AC 50/60 Hz<br>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>100 kW at 660...690 V AC 50/60 Hz |
| Control circuit type                        | AC 50 Hz   |
| Control circuit voltage                     | 240 V AC 50 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 kA 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 at 50 Hz - Ith 250 A   |
| [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                  | 22 W AC-1<br>8 W AC-3  |
| Mounting support                            | Plate  |
| Standards                                   | EN 60947-1<br>EN 60947-4-1<br>IEC 60947-1<br>IEC 60947-4-1<br>JEM 1038   |
| Product certifications                      | BV<br>CCC<br>CSA<br>DNV<br>GL<br>RINA<br>RMRoS   |

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|                         |  |
|-------------------------|--|
|                         | UL<br>LROS   |
| Connections - terminals | Control circuit : screw clamp terminals 2 cable(s)<br>1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : connector 1 cable(s) 120 mm <sup>2</sup><br>Control circuit : screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit : screw clamp terminals 2 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit : screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Control circuit : screw clamp terminals 1 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Control circuit : screw clamp terminals 2 cable(s)<br>1...4 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Power circuit : lugs-ring terminals 1 cable(s) 120 mm <sup>2</sup><br>Power circuit : bar 2 x ( 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   |
| Operating rate          | 2400 cyc/h at <= 55 °C   |

## Complementary

|                                 |  |
|---------------------------------|--|
| Control circuit voltage limits  | 0.85...1.1 Uc at 55 °C operational 50/60 Hz<br>0.35...0.55 Uc at 55 °C drop-out 50/60 Hz |
| Inrush power in VA              | 550 VA at 20 °C (cos $\phi$ 0.3) 50 Hz   |
| Hold-in power consumption in VA | 45 VA at 20 °C (cos $\phi$ 0.3) 50 Hz  |
| Heat dissipation                | 12...16 W  |

## Environment

|   |   |
|---|---|
| IP degree of protection                               | IP2x front face with shrouds (ordered separately) conforming to IEC 60529<br>IP2x front face with shrouds (ordered separately) 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 in temperature  |
| Mechanical robustness                                 | Vibrations contactor open 2 Gn, 5...300 Hz<br>Shocks contactor closed 15 Gn for 11 ms<br>Vibrations contactor closed 6 Gn, 5...300 Hz<br>Shocks contactor open 9 Gn for 11 ms |
| Height  | 170 mm  |
| Width   | 163.5 mm  |
| Depth   | 171 mm  |
| Product weight  | 3.43 kg   |

## Offer Sustainability

|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS                             | Compliant - since 0843 - Schneider Electric declaration of conformity |
| REACH                            | Reference not containing SVHC above the threshold                     |
| Product environmental profile    | Available   |
| Product end of life instructions | Available   |