



### Main

|                                |   |
|--------------------------------|---|
| Range                          | TeSys   |
| Product name                   | TeSys F   |
| Product or component type      | Contacteur  |
| Device short name              | LC1F  |
| Contacteur application         | Motor control<br>Resistive load   |
| Utilisation category           | AC-1<br>AC-3<br>AC-4  |
| Poles description              | 3P  |
| Pole contact composition       | 3 NO  |
| System Voltage                 | <= 460 V DC<br><= 460 V DC<br><= 690 V AC 50/60 Hz  |
| [Ie] rated operational current | 275 A (<= 40 °C) at <= 440 V AC-1<br>185 A (<= 55 °C) at <= 440 V AC-3  |
| Motor power kW                 | 55 kW at 220...230 V AC 50/60 Hz AC-3<br>90 kW at 380...400 V AC 50/60 Hz AC-3<br>100 kW at 415 V AC 50/60 Hz AC-3<br>100 kW at 440 V AC 50/60 Hz AC-3<br>110 kW at 500 V AC 50/60 Hz AC-3<br>110 kW at 660...690 V AC 50/60 Hz AC-3<br>33 kW at 400 V AC 50/60 Hz AC-4 |
| [Uc] control circuit voltage   | 120 V AC 60 Hz  |

### Complementary

|   |   |
|---|---|
| [Uimp] rated impulse withstand voltage      | 8 kV  |
| Overvoltage category                        | III   |
| [Ith] conventional free air thermal current | 275 A at <= 104 °F (40 °C)  |
| Rated breaking capacity                     | 1480 A conforming to IEC 60947-4-1  |
| [Icw] rated short-time withstand current    | 1500 A <= 104 °F (40 °C) 10 s<br>920 A <= 104 °F (40 °C) 30 s<br>740 A <= 104 °F (40 °C) 1 min<br>500 A <= 104 °F (40 °C) 3 min<br>400 A <= 104 °F (40 °C) 10 min |
| Associated fuse rating                      | 200 A aM at <= 440 V<br>315 A gG at <= 440 V  |
| Average impedance                           | 0.33 mOhm at 50 Hz - Ith 275 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                  | 12 W AC-3<br>25 W AC-1  |
| Mounting support                            | Plate   |
| Standards                                   | EN 60947-1<br>EN 60947-4-1<br>IEC 60947-1<br>IEC 60947-4-1<br>JIS C8201-4-1   |
| Product certifications                      | ABS<br>BV<br>CCC<br>DNV<br>LRoS (Lloyds register of shipping)<br>RINA<br>RMRoS<br>UL  |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                                 |   |
|---------------------------------|---|
| Connections - terminals         | Control circuit: screw clamp terminals 2 cable(s) 0...0 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end<br>Power circuit: connector 1 cable(s) 0.23 in <sup>2</sup> (150 mm <sup>2</sup> )<br>Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible - without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: flexible - with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid - without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) - cable stiffness: solid - without cable end<br>Power circuit: lugs-ring terminals 1 cable(s) 0.23 in <sup>2</sup> (150 mm <sup>2</sup> )<br>Power circuit : bolted connection<br>Power circuit : bar 2 x (25 x 3 mm) |
| Tightening torque               | Control circuit: 10.62 lbf.in (1.2 N.m)<br>Power circuit: 159.29 lbf.in (18 N.m)  |
| Control circuit voltage limits  | 0.85...1.1 Uc at 131 °F (55 °C) operational 50/60 Hz<br>0.35...0.55 Uc at 131 °F (55 °C) drop-out 50/60 Hz  |
| Inrush power in VA              | 970 VA at 68 °F (20 °C) (cos φ 0.3) 60 Hz   |
| Hold-in power consumption in VA | 66 VA at 68 °F (20 °C) (cos φ 0.3) 60 Hz  |
| Heat dissipation                | 18...24 W   |
| Operating time                  | 20...35 ms closing<br>7...15 ms opening   |
| Mechanical durability           | 10 Mcycles  |
| Operating rate                  | 2400 cyc/h at ≤ 131 °F (55 °C)  |

## 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                 | 23...131 °F (-5...55 °C)  |
| ambient air temperature for storage                   | -76...176 °F (-60...80 °C)  |
| permissible ambient air temperature around the device | -40...158 °F (-40...70 °C)  |
| operating altitude                                    | 9842.52 ft (3000 m) without derating  |
| mechanical robustness                                 | Vibrations resistance contactor open 2 Gn, 5...300 Hz<br>Shocks resistance contactor closed 15 Gn for 11 ms<br>Vibrations resistance contactor closed 5 Gn, 5...300 Hz<br>Shocks resistance contactor open 7 Gn for 11 ms |
| height  | 6.85 in (174 mm)  |
| width   | 6.63 in (168.5 mm)  |
| depth   | 7.13 in (181 mm)  |
| product weight  | 10.25 lb(US) (4.65 kg)  |

## Offer Sustainability

|   |   |
|---|---|
| Green Premium product   | Green Premium product   |
| Compliant - since 0843 - Schneider Electric declaration of conformity | Compliant - since 0843 - Schneider Electric declaration of conformity |
| Reference not containing SVHC above the threshold                     | Reference not containing SVHC above the threshold                     |
| Available   | Available   |
| Available   | Available   |

## Contractual warranty

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