

# Product datasheet

Specifications



## TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 225 A - coil 380 V AC

LC1F225Q6

⚠ Discontinued on: Apr 27, 2021 AD

⚠ Discontinued

### Main

|                                |                                                                          |
|--------------------------------|--------------------------------------------------------------------------|
| Range                          | TeSys                                                                    |
| Range of product               | TeSys F                                                                  |
| Product or component type      | Contactor                                                                |
| Device short name              | LC1F                                                                     |
| Contactor application          | Motor control<br>Resistive load                                          |
| Utilisation category           | AC-1<br>AC-4<br>AC-3                                                     |
| Poles description              | 3P                                                                       |
| [Ue] rated operational voltage | <= 460 V DC<br><= 690 V AC 50/60 Hz                                      |
| [Uc] control circuit voltage   | 380 V AC 60 Hz                                                           |
| [Ie] rated operational current | 315 A (at <40 °C) at <= 440 V AC-1<br>225 A (at <55 °C) at <= 440 V AC-3 |

### Complementary

|                                             |                                                                                                                  |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| [Uimp] rated impulse withstand voltage      | 8 kV                                                                                                             |
| [Ith] conventional free air thermal current | 315 A (at 40 °C)                                                                                                 |
| Rated breaking capacity                     | 1800 A conforming to IEC 60947-4-1                                                                               |
| [Icw] rated short-time withstand current    | 1800 A 40 °C - 10 s<br>1000 A 40 °C - 30 s<br>850 A 40 °C - 1 min<br>560 A 40 °C - 3 min<br>440 A 40 °C - 10 min |
| Associated fuse rating                      | 315 A gG at <= 440 V<br>250 A aM at <= 440 V                                                                     |
| Average impedance                           | 0.32 mOhm - Ith 315 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                  | 32 W AC-1<br>16 W AC-3                                                                                           |
| Overvoltage category                        | III                                                                                                              |
| power pole contact composition              | 3 NO                                                                                                             |

Disclaimer: 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

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor power kW                  | 110 kW at 380...400 V AC 50/60 Hz (AC-3)<br>110 kW at 415 V AC 50/60 Hz (AC-3)<br>110 kW at 440 V AC 50/60 Hz (AC-3)<br>129 kW at 500 V AC 50/60 Hz (AC-3)<br>129 kW at 660...690 V AC 50/60 Hz (AC-3)<br>63 kW at 220...230 V AC 50/60 Hz (AC-3)<br>40 kW at 400 V AC 50/60 Hz (AC-4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Control circuit voltage limits  | Operational: 0.85...1.1 Uc 50/60 Hz (at 55 °C)<br>Drop-out: 0.35...0.55 Uc 50/60 Hz (at 55 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Mechanical durability           | 10 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Inrush power in VA              | 970 VA, 60 Hz cos phi 0.3 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Hold-in power consumption in VA | 66 VA, 60 Hz cos phi 0.3 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Maximum operating rate          | 2400 cyc/h 55 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Operating time                  | 20...35 ms closing<br>7...15 ms opening                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 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: bar 2 cable(s) - busbar cross section: 32 x 4 mm<br>Power circuit: lugs-ring terminals 1 cable(s) 185 mm²<br>Power circuit: connector 1 cable(s) 185 mm²<br>Power circuit: bolted connection |
| Tightening torque               | Control circuit: 1.2 N.m<br>Power circuit: 35 N.m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Mounting support                | Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Heat dissipation                | 18...24 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Standards                       | IEC 60947-4-1<br>IEC 60947-1<br>JIS C8201-4-1<br>EN 60947-1<br>EN 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Product certifications          | RMRoS<br>BV<br>ABS<br>RINA<br>CCC<br>UL<br>CB<br>DNV<br>LROS (Lloyds register of shipping)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Compatibility code              | LC1F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Control circuit type            | AC at 60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Environment

|                                                       |                                                                                                             |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 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                                                                                                 |
| Height                                                | 197 mm                                                                                                      |
| Width                                                 | 168.5 mm                                                                                                    |
| Depth                                                 | 181 mm                                                                                                      |

|                    |                         |
|--------------------|-------------------------|
| Operating altitude | 3000 m without derating |
| Net weight         | 4.75 kg                 |

## Packing Units

|                              |     |
|------------------------------|-----|
| Unit Type of Package 1       | PCE |
| Number of Units in Package 1 | 1   |

## Contractual warranty

|                      |    |
|----------------------|----|
| 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 >](#)

### Use Better

| Materials and Substances |                           |
|--------------------------|---------------------------|
| EU RoHS Directive        | <a href="#">Compliant</a> |
| PVC free                 | Yes                       |

### Use Longer

| Lifetime extension |    |
|--------------------|----|
| Repair             | No |

### Use Again

| Repack and remanufacture |                                                                                                                                                                                                                 |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WEEE Label               |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |