

# Product datasheet

Specifications



## TeSys F contactor - 4P (4 NO) - AC-1 - <= 440 V 275 A - coil 220 V AC

LC1F1854M7

⚠ Discontinued on: Jul 4, 2022 AD

⚠ Discontinued

### Main

|                                |                                     |
|--------------------------------|-------------------------------------|
| Range                          | TeSys                               |
| Range of product               | TeSys F                             |
| Product or component type      | Contacteur                          |
| Device short name              | LC1F                                |
| Contacteur application         | Resistive load                      |
| Utilisation category           | AC-1                                |
| Poles description              | 4P                                  |
| [Ue] rated operational voltage | <= 460 V DC<br><= 690 V AC 50/60 Hz |
| [Uc] control circuit voltage   | 220 V AC 40...400 Hz                |
| [Ie] rated operational current | 275 A (at <40 °C) at <= 440 V AC-1  |

### Complementary

|                                             |                                                                                                                 |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| [Uimp] rated impulse withstand voltage      | 8 kV                                                                                                            |
| [Ith] conventional free air thermal current | 275 A (at 40 °C)                                                                                                |
| Rated breaking capacity                     | 1480 A conforming to IEC 60947-4-1                                                                              |
| [Icw] rated short-time withstand current    | 1500 A 40 °C - 10 s<br>920 A 40 °C - 30 s<br>740 A 40 °C - 1 min<br>500 A 40 °C - 3 min<br>400 A 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 - Ith 275 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                  | 12 W AC-3<br>25 W AC-1                                                                                          |
| Overvoltage category                        | III                                                                                                             |
| power pole contact composition              | 4 NO                                                                                                            |
| Control circuit voltage limits              | Operational: 0.85...1.1 Uc 40...400 Hz (at 55 °C)<br>Drop-out: 0.2...0.55 Uc 40...400 Hz (at 55 °C)             |
| Mechanical durability                       | 10 Mcycles                                                                                                      |
| Inrush power in VA                          | 1070 VA, 40...400 Hz cos phi 0.9 (at 20 °C)                                                                     |
| Hold-in power consumption in VA             | 9.9 VA, 40...400 Hz cos phi 0.9 (at 20 °C)                                                                      |

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

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum operating rate  | 2400 cyc/h 55 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Operating time          | 35 ms closing (at Uc)<br>130 ms opening (at Uc)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 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: 25 x 3 mm<br>Power circuit: lugs-ring terminals 1 cable(s) 150 mm²<br>Power circuit: connector 1 cable(s) 150 mm²<br>Power circuit: bolted connection |
| Tightening torque       | Control circuit: 1.2 N.m<br>Power circuit: 18 N.m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Mounting support        | Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Heat dissipation        | 8...9.8 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Standards               | EN 60947-1<br>IEC 60947-1<br>JIS C8201-4-1<br>IEC 60947-4-1<br>EN 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Product certifications  | RMRoS<br>CCC<br>CB<br>UL<br>LROS (Lloyds register of shipping)<br>RINA<br>ABS<br>BV<br>DNV<br>UKCA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Compatibility code      | LC1F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Control circuit type    | AC at 40...400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Environment

|                                                       |                                                                                                             |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| IP degree of protection                               | IP2X front face with shrouds conforming to IEC 60529<br>IP2X 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                                                | 174 mm                                                                                                      |
| Width                                                 | 208.5 mm                                                                                                    |
| Depth                                                 | 181 mm                                                                                                      |
| Operating altitude                                    | 3000 m without derating                                                                                     |
| Net weight                                            | 5.45 kg                                                                                                     |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 19.5 cm |
| Package 1 Width              | 21.5 cm |

|                  |          |
|------------------|----------|
| Package 1 Length | 26.0 cm  |
| Package 1 Weight | 5.981 kg |

## 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 >](#)



### Environmental footprint

|                                                        |                                               |
|--------------------------------------------------------|-----------------------------------------------|
| Total lifecycle Carbon footprint                       | 1 369 kg CO2 eq.                              |
| Environmental Disclosure                               | <a href="#">Product Environmental Profile</a> |
| Carbon footprint of the manufacturing phase [A1 to A3] | 108 kg CO2 eq.                                |
| Carbon footprint of the distribution phase [A4]        | 1 kg CO2 eq.                                  |
| Carbon footprint of the installation phase [A5]        | 0.5 kg CO2 eq.                                |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 1 249 kg CO2 eq.                              |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 10 kg CO2 eq.                                 |

## Use Better



### Materials and Substances

|                   |                                        |
|-------------------|----------------------------------------|
| SCIP Number       | B2d4179a-eb65-40a3-a1ef-d9a33060486f   |
| EU RoHS Directive | <a href="#">Compliant By Exemption</a> |
| PVC free          | Yes                                    |

## Use Longer



### Lifetime extension

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

## Use Again



### Repack and remanufacture

|                               |                                                                                                                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 |