

# Product datasheet

Specifications



## TeSys F contactor - 3P (3 NO) - AC-1 - $\leq 1000\text{ V}$ 2100 A - coil 1000 V AC

LC1F2100R7

⚠ Discontinued on: 1 Nov 2020

⚠ Discontinued

### Main

|                                |                                                                    |
|--------------------------------|--------------------------------------------------------------------|
| Range                          | TeSys                                                              |
| Range of product               | TeSys F                                                            |
| Product or component type      | Contactor                                                          |
| Device short name              | LC1F                                                               |
| Contactor application          | Resistive load                                                     |
| Utilisation category           | AC-1                                                               |
| Poles description              | 3P                                                                 |
| [Ue] rated operational voltage | $\leq 1000\text{ V AC } 50/60\text{ Hz}$<br>$\leq 460\text{ V DC}$ |
| [Uc] control circuit voltage   | 440 V AC 40...400 Hz                                               |
| [Ie] rated operational current | 2100 A (at $\leq 40\text{ °C}$ ) AC AC-1                           |

### Complementary

|                                             |                                                                                                                                                                   |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Uimp] rated impulse withstand voltage      | 8 kV                                                                                                                                                              |
| [Ith] conventional free air thermal current | 2100 A (at $40\text{ °C}$ )                                                                                                                                       |
| Rated breaking capacity                     | 3150 A conforming to IEC 60947-4-1                                                                                                                                |
| [Icw] rated short-time withstand current    | 10000 A $40\text{ °C}$ - 10 s<br>7500 A $40\text{ °C}$ - 30 s<br>5500 A $40\text{ °C}$ - 1 min<br>4200 A $40\text{ °C}$ - 3 min<br>3000 A $40\text{ °C}$ - 10 min |
| Associated fuse rating                      | 2000 A gG at $\leq 440\text{ V}$                                                                                                                                  |
| Average impedance                           | 0.1 mOhm - Ith 2100 A 50 Hz                                                                                                                                       |
| [Ui] rated insulation voltage               | 1000 V conforming to IEC 60947-4-1<br>1500 V conforming to VDE 0110 group C<br>1000 V conforming to UL 60947-4-1                                                  |
| Power dissipation per pole                  | 200 W AC-1                                                                                                                                                        |
| Overvoltage category                        | III                                                                                                                                                               |
| power pole contact composition              | 3 NO                                                                                                                                                              |
| Control circuit voltage limits              | Operational: 0.85...1.1 U <sub>c</sub> 40...400 Hz (at $55\text{ °C}$ )<br>Drop-out: 0.3...0.5 U <sub>c</sub> 40...400 Hz (at $55\text{ °C}$ )                    |
| Inrush power in VA                          | 2200 VA, 40...400 Hz cos phi 0.9 (at $20\text{ °C}$ )                                                                                                             |
| Hold-in power consumption in VA             | 36 VA, 40...400 Hz cos phi 0.9 (at $20\text{ °C}$ )                                                                                                               |
| Maximum operating rate                      | 600 cyc/h $55\text{ °C}$                                                                                                                                          |

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

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating time          | 100...170 ms opening<br>40...75 ms closing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 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 4 cable(s) - busbar cross section: 100 x 5 mm<br>Power circuit: bolted connection |
| Tightening torque       | Control circuit: 1.2 N.m<br>Power circuit: 58 N.m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Mounting support        | Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Heat dissipation        | 36 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Standards               | EN 60947-4-1<br>IEC 60947-1<br>EN 60947-1<br>IEC 60947-4-1<br>JIS C8201-4-1<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Product certifications  | UL<br>CSA<br>CCC<br>CB Scheme<br>EAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Compatibility code      | LC1F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Control circuit type    | AC at 40...400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Environment

|                                                       |                         |
|-------------------------------------------------------|-------------------------|
| Protective treatment                                  | TH                      |
| Ambient air temperature for operation                 | -5...40 °C              |
| Ambient air temperature for storage                   | -60...80 °C             |
| Permissible ambient air temperature around the device | -40...60 °C             |
| Height                                                | 332 mm                  |
| Width                                                 | 438 mm                  |
| Depth                                                 | 238.6 mm                |
| Operating altitude                                    | 3000 m without derating |
| Net weight                                            | 31 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> |

### Use Longer

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

### Use Again

| Repack and remanufacture        |                                                                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| End of life manual availability | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| WEEE Label                      |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |