



## Main

|                                |                                                  |
|--------------------------------|--------------------------------------------------|
| Range                          | TeSys                                            |
| Product name                   | TeSys F                                          |
| Product or component type      | Contactor                                        |
| Device short name              | LC1F                                             |
| Contactor application          | Resistive load                                   |
| Utilisation category           | AC-1                                             |
| Poles description              | 3P                                               |
| Power pole contact composition | 3 NO                                             |
| [Ue] rated operational voltage | $\leq 1000$ V AC 50/60 Hz<br>$\leq 460$ V DC     |
| [Ie] rated operational current | 2100 A (at $\leq 40$ °C) at $\leq 440$ V AC AC-1 |
| [Uc] control circuit voltage   | 230 V AC 40...400 Hz                             |

## Complementary

|                                             |                                                                                                                      |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| [Uimp] rated impulse withstand voltage      | 8 kV                                                                                                                 |
| Overvoltage category                        | III                                                                                                                  |
| [Ith] conventional free air thermal current | 2100 A (at 40 °C)                                                                                                    |
| Rated breaking capacity                     | 3150 A conforming to IEC 60947-4-1                                                                                   |
| [Icw] rated short-time withstand current    | 10000 A 40 °C - 10 s<br>7500 A 40 °C - 30 s<br>5500 A 40 °C - 1 min<br>4200 A 40 °C - 3 min<br>3000 A 40 °C - 10 min |
| Associated fuse rating                      | 2000 A gG at $\leq 440$ 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                                          |
| Power dissipation per pole                  | 200 W AC-1                                                                                                           |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mounting support                | Plate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Standards                       | EN 60947-1<br>JIS C8201-4-1<br>EN 60947-4-1<br>IEC 60947-4-1<br>IEC 60947-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Product certifications          | CETLus<br>CCC<br>CSA<br>CB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Connections - terminals         | Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> solid 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Control circuit voltage limits  | Operational: 0.85...1.1 U <sub>c</sub> 40...400 Hz (at 55 °C)<br>Drop-out: 0.3...0.5 U <sub>c</sub> 40...400 Hz (at 55 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Inrush power in VA              | 2200 VA 40...400 Hz cos phi 0.9 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Hold-in power consumption in VA | 36 VA 40...400 Hz cos phi 0.9 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Heat dissipation                | 36 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Operating time                  | 100...170 ms opening<br>40...75 ms closing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Maximum operating rate          | 600 cyc/h 55 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Compatibility code              | LC1F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## 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    |
| Operating altitude                                    | 3000 m without |
| Height                                                | 332 mm         |
| Width                                                 | 438 mm         |
| Depth                                                 | 238.6 mm       |
| Product weight                                        | 31 kg          |

## Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                           |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>                                                                            |
| Mercury free               | Yes                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information       |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                               |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                                     |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

## Contractual warranty

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