



## Main

|                                |                                                                                                                                                                                                                                                         |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                          | TeSys                                                                                                                                                                                                                                                   |
| Product name                   | TeSys F                                                                                                                                                                                                                                                 |
| Product or component type      | Contactor                                                                                                                                                                                                                                               |
| Device short name              | LC1F                                                                                                                                                                                                                                                    |
| Contactor application          | Motor control<br>Resistive load                                                                                                                                                                                                                         |
| Utilisation category           | AC-3<br>AC-4<br>AC-1                                                                                                                                                                                                                                    |
| Poles description              | 3P                                                                                                                                                                                                                                                      |
| Power pole contact composition | 3 NO                                                                                                                                                                                                                                                    |
| [Ue] rated operational voltage | ≤ 690 V AC 50/60 Hz                                                                                                                                                                                                                                     |
| [Ie] rated operational current | 200 A 104 °F (40 °C) ≤ 440 V AC-1<br>115 A 131 °F (55 °C) ≤ 440 V AC-3                                                                                                                                                                                  |
| Motor power kW                 | 55 kW 380...400 V AC 50/60 Hz AC-3)<br>59 kW 415 V AC 50/60 Hz AC-3)<br>59 kW 440 V AC 50/60 Hz AC-3)<br>75 kW 500 V AC 50/60 Hz AC-3)<br>80 kW 660...690 V AC 50/60 Hz AC-3)<br>30 kW 220...230 V AC 50/60 Hz AC-3)<br>18.5 kW 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 | 200 A 104 °F (40 °C)                                                                                                                                         |
| Rated breaking capacity                     | 920 A IEC 60947-4-1                                                                                                                                          |
| [Icw] rated short-time withstand current    | 1100 A 104 °F (40 °C) - 10 s<br>640 A 104 °F (40 °C) - 30 s<br>520 A 104 °F (40 °C) - 1 min<br>400 A 104 °F (40 °C) - 3 min<br>320 A 104 °F (40 °C) - 10 min |
| Associated fuse rating                      | 125 A aM ≤ 440 V<br>200 A gG ≤ 440 V                                                                                                                         |
| Average impedance                           | 0.37 mOhm - Ith 200 A 50 Hz                                                                                                                                  |
| [Ui] rated insulation voltage               | 1000 V IEC 60947-4-1<br>1500 V VDE 0110 group C                                                                                                              |
| Power dissipation per pole                  | 15 W AC-1<br>5 W AC-3                                                                                                                                        |
| Mounting support                            | Plate                                                                                                                                                        |
| Standards                                   | IEC 60947-4-1<br>IEC 60947-1<br>EN 60947-1<br>JIS C8201-4-1<br>EN 60947-4-1                                                                                  |

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product certifications          | ABS<br>BV<br>UL<br>RINA<br>LROS (Lloyds register of shipping)<br>RMRoS<br>CCC<br>DNV<br>CB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Connections - terminals         | Power circuit bar 2 20 x 3 mm<br>Power circuit lugs-ring terminals 1 0.15 in <sup>2</sup> (95 mm <sup>2</sup> )<br>Power circuit connector 1 0.15 in <sup>2</sup> (95 mm <sup>2</sup> )<br>Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end<br>Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end<br>Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end<br>Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end<br>Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end<br>Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end<br>Power circuit bolted connection |
| Tightening torque               | Power circuit 88.51 lbf.in (10 N.m)<br>Control circuit 10.62 lbf.in (1.2 N.m)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Control circuit voltage limits  | Operational 0.85...1.1 Uc 50/60 Hz 131 °F (55 °C))<br>Drop-out 0.35...0.55 Uc 50/60 Hz 131 °F (55 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Inrush power in VA              | 660 VA 60 Hz cos phi 0.3 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Hold-in power consumption in VA | 55 VA 60 Hz cos phi 0.3 (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Heat dissipation                | 12...16 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Operating time                  | 23...35 ms closing<br>5...15 ms opening                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Mechanical durability           | 10 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Maximum operating rate          | 2400 cyc/h 131 °F (55 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Compatibility code              | LC1F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Environment

|                                                       |                                                                                 |
|-------------------------------------------------------|---------------------------------------------------------------------------------|
| IP degree of protection                               | IP2x front face with shrouds IEC 60529<br>IP2x front face with shrouds VDE 0106 |
| Protective treatment                                  | TH                                                                              |
| Ambient air temperature for operation                 | -40...140 °F (-40...60 °C)                                                      |
| Ambient air temperature for storage                   | -76...176 °F (-60...80 °C)                                                      |
| Permissible ambient air temperature around the device | 140...158 °F (60...70 °C) at Uc                                                 |
| Operating altitude                                    | 9842.52 ft (3000 m) without derating                                            |
| Height                                                | 6.38 in (162 mm)                                                                |
| Maximum Width                                         | 6.43 in (163.3 mm)                                                              |
| Depth                                                 | 6.73 in (171 mm)                                                                |
| Net Weight                                            | 7.56 lb(US) (3.43 kg)                                                           |

## Ordering and shipping details

|                       |                                   |
|-----------------------|-----------------------------------|
| Category              | 22336 - CTR,F-LINE,AC,OPEN,NONREV |
| Discount Schedule     | I12                               |
| GTIN                  | 00785901079781                    |
| Nbr. of units in pkg. | 1                                 |
| Package weight(Lbs)   | 8.9 lb(US) (4.04 kg)              |
| Returnability         | No                                |
| Country of origin     | CZ                                |

## Packing Units

|                        |                 |
|------------------------|-----------------|
| Unit Type of Package 1 | PCE             |
| Package 1 Height       | 8.27 in (21 cm) |
| Package 1 width        | 7.87 in (20 cm) |
| Package 1 Length       | 9.45 in (24 cm) |

## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                       |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                           |
| EU RoHS Directive          | Compliant <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>                                                                                                                                                                                                                                                      |
| 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 |
|----------|-----------|