



### Main

|                                     |                                   |
|-------------------------------------|-----------------------------------|
| Range                               | TeSys                             |
| Product name                        | TeSys LRF                         |
| Device short name                   | LR9F                              |
| Product or Component Type           | Electronic thermal overload relay |
| Relay application                   | Motor protection                  |
| Product Compatibility               | LC1F225...LC1F500                 |
| Network type                        | AC                                |
| Thermal overload class              | Class 20 IEC 60947-4              |
| Thermal protection adjustment range | 200...330 A                       |

### Complementary

|   |   |
|---|---|
| Network Frequency                           | 50/60 Hz  |
| Mounting support                            | Direct on contactor Plate   |
| Tripping threshold                          | 1.12 +/- 0.06 In tripping IEC 60947-4-1   |
| Surge withstand                             | 4 kV IEC 61000-4-5  |
| Contacts type and composition               | 1 NO + 1 NC   |
| [Ith] conventional free air thermal current | 5 A control circuit   |
| [Ue] rated operational voltage              | 1000 V AC 50/60 Hz power circuit VDE 0110 group C   |
| [Ui] rated insulation voltage               | Power circuit 1000 V AC IEC 60947-4   |
| [Uimp] rated impulse withstand voltage      | 8 kV IEC 60947-1  |
| Phase failure sensitivity                   | Tripping in 4 s +/- 20 % IEC 60947-4-1  |
| Reset                                       | Manual reset on front relay   |
| Control type                                | Dial White full-load current adjustment<br>Test button Red<br>Push-button Red reset<br>Push-button stop   |
| Local signalling                            | Trip indicator  |
| Temperature compensation                    | -4...158 °F (-20...70 °C)   |
| Current consumption                         | <= 5 mA no-load   |
| Switching capacity for alarm                | 0...150 mA  |
| Maximum voltage drop                        | <2.5 V closed state   |
| Connections - terminals                     | Control circuit screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) flexible - with cable end<br>Control circuit screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) solid<br>Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (0.75...4 mm <sup>2</sup> ) flexible - without cable end<br>Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...1.5 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 - without cable end<br>Control circuit screw clamp terminals 2 0.00 in <sup>2</sup> (1 mm <sup>2</sup> ) solid<br>Power circuit lugs-ring terminals M10 |
| Tightening torque                           | Control circuit 1.2 N.m screw clamp terminals<br>Power circuit 35 N.m screw clamp terminals   |
| Height                                      | 5.39 in (136.8 mm)  |
| Width                                       | 5.91 in (150 mm)  |
| Depth                                       | 5.02 in (127.6 mm)  |
| Net Weight                                  | 5.11 lb(US) (2.32 kg)   |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Environment

|                                       |   |
|---------------------------------------|---|
| Standards                             | IEC 60255-8<br>VDE 0660<br>IEC 60255-17<br>EN 60947-4-1<br>IEC 60947-4-1  |
| Product Certifications                | CSA<br>UL<br>UKCA   |
| Protective treatment                  | TH  |
| IP degree of protection               | IP20 conforming to IEC 60529<br>IP20 conforming to VDE 0106   |
| Ambient air temperature for operation | -4...131 °F (-20...55 °C) IEC 60255-8   |
| Ambient Air Temperature for Storage   | -40...185 °F (-40...85 °C)  |
| Operating altitude                    | <= 6561.68 ft (2000 m) without derating   |
| Fire resistance                       | 1562 °F (850 °C) IEC 60695-2-1  |
| Mechanical robustness                 | Shocks 13 Gn for 11 ms IEC 60068-2-7<br>Vibrations 5...300 Hz 2 Gn IEC 60068-2-6  |
| Dielectric strength                   | 6 kV 50 Hz IEC 255-5  |
| Electromagnetic compatibility         | Resistance to electrostatic discharge 6 kV in indirect mode IEC 61000-4-2<br>Resistance to electrostatic discharge 8 kV in air IEC 61000-4-2<br>Radiated radio-frequency electromagnetic field immunity test 10 V/m IEC 61000-4-3<br>Fast transients immunity test 2 kV IEC 61000-4-4 |

## Ordering and shipping details

|                       |                                  |
|-----------------------|----------------------------------|
| Category              | 22334-CONTACTOR,F-LINE,OVERLOADS |
| Discount Schedule     | I12                              |
| GTIN                  | 3389110640212                    |
| Nbr. of units in pkg. | 1                                |
| Package weight(Lbs)   | 4.15 lb(US) (1.884 kg)           |
| Returnability         | Yes                              |
| Country of origin     | FR                               |

## Packing Units

|                              |                          |
|------------------------------|--------------------------|
| Unit Type of Package 1       | PCE                      |
| Package 1 Height             | 6.77 in (17.2 cm)        |
| Package 1 width              | 7.09 in (18 cm)          |
| Package 1 Length             | 10.24 in (26 cm)         |
| Unit Type of Package 2       | S04                      |
| Number of Units in Package 2 | 6                        |
| Package 2 Weight             | 26.77 lb(US) (12.144 kg) |
| Package 2 Height             | 11.81 in (30 cm)         |
| Package 2 width              | 15.75 in (40 cm)         |
| Package 2 Length             | 23.62 in (60 cm)         |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. 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. |
| PVC free                 | Yes  |

### Contractual warranty

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