

# Product data sheet

Specifications



## TeSys LRF - electronic thermal overload relay - 48...80 A - class 10

LR9F5363

 Discontinued on: Jun 30, 2024

 Discontinued

Product availability: Stock - Normally stocked in distribution facility

## 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               | LC1F115...LC1F185                 |
| Network type                        | AC                                |
| Thermal overload class              | Class 10 IEC 60947-4              |
| Thermal protection adjustment range | 48...80 A                         |

## Complementary

|  |   |
|--|---|
| Network Frequency  | 50/60 Hz  |
| Mounting support   | Direct on contactor<br>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   |
| [I <sub>th</sub> ] conventional free air thermal current | 5 A control circuit   |
| [U <sub>e</sub> ] rated operational voltage              | 1000 V AC 50/60 Hz power circuit VDE 0110 group C   |
| [U <sub>i</sub> ] rated insulation voltage               | Power circuit 1000 V AC IEC 60947-4   |
| [U <sub>imp</sub> ] 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   |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

|                                |   |
|--------------------------------|---|
| <b>Connections - terminals</b> | Control circuit screw clamp terminals 1 0.001...0.004 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) flexible - with cable end<br>Control circuit screw clamp terminals 1 0.001...0.004 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) solid<br>Control circuit screw clamp terminals 1 0.001...0.006 in <sup>2</sup> (0.75...4 mm <sup>2</sup> ) flexible - without cable end<br>Control circuit screw clamp terminals 2 0.002...0.002 in <sup>2</sup> (1...1.5 mm <sup>2</sup> ) flexible - with cable end<br>Control circuit screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible - without cable end<br>Control circuit screw clamp terminals 2 0.002 in <sup>2</sup> (1 mm <sup>2</sup> ) solid<br>Power circuit lugs-ring terminals M8 |
| <b>Tightening torque</b>       | Control circuit 1.2 N.m screw clamp terminals<br>Power circuit 18 N.m screw clamp terminals   |
| <b>Height</b>                  | 3.8 in (96 mm)  |
| <b>Width</b>                   | 4.5 in (115 mm)   |
| <b>Depth</b>                   | 4.9 in (123.5 mm)   |
| <b>Net Weight</b>              | 2.0 lb(US) (0.9 kg)   |

## Environment

|  |   |
|--|---|
| <b>Standards</b>                             | IEC 60255-17<br>IEC 60255-8<br>VDE 0660<br>EN 60947-4-1<br>IEC 60947-4-1  |
| <b>Product Certifications</b>                | CSA<br>UL<br>UKCA   |
| <b>Protective treatment</b>                  | TH  |
| <b>IP degree of protection</b>               | IP20 conforming to IEC 60529<br>IP20 conforming to VDE 0106   |
| <b>Ambient air temperature for operation</b> | -4...131 °F (-20...55 °C) IEC 60255-8   |
| <b>Ambient Air Temperature for Storage</b>   | -40...185 °F (-40...85 °C)  |
| <b>Operating altitude</b>                    | <= 6561.68 ft (2000 m) without derating   |
| <b>Fire resistance</b>                       | 1562 °F (850 °C) IEC 60695-2-1  |
| <b>Mechanical robustness</b>                 | Shocks13 Gn for 11 ms IEC 60068-2-7<br>Vibrations 5...300 Hz2 GN IEC 60068-2-6  |
| <b>Dielectric strength</b>                   | 6 kV 50 Hz IEC 255-5  |
| <b>Electromagnetic compatibility</b>         | 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

|                          |               |
|--------------------------|---------------|
| <b>Category</b>          | US10I1222334  |
| <b>Discount Schedule</b> | 0I12          |
| <b>GTIN</b>              | 3389110565980 |
| <b>Returnability</b>     | Yes           |
| <b>Country of origin</b> | FR            |

## Packing Units

|                               |     |
|-------------------------------|-----|
| <b>Unit Type of Package 1</b> | PCE |
| <b>Nbr. of units in pkg.</b>  | 1   |

|                              |                           |
|------------------------------|---------------------------|
| Package 1 Height             | 5.1 in (13.0 cm)          |
| Package 1 Width              | 6.02 in (15.3 cm)         |
| Package 1 Length             | 6.2 in (15.8 cm)          |
| Package weight(Lbs)          | 31.0 oz (878.0 g)         |
| Unit Type of Package 2       | S04                       |
| Number of Units in Package 2 | 12                        |
| Package 2 Height             | 11.8 in (30.0 cm)         |
| Package 2 Width              | 15.7 in (40.0 cm)         |
| Package 2 Length             | 23.6 in (60.0 cm)         |
| Package 2 Weight             | 24.723 lb(US) (11.214 kg) |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



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

|  |     |
|--|-----|
| Carbon footprint (kg CO2 eq, Total Life cycle) | 133 |
|--|-----|

## Use Better

### Materials and Substances

|                                   |                           |
|-----------------------------------|---------------------------|
| <a href="#">EU RoHS Directive</a> | Compliant with Exemptions |
|-----------------------------------|---------------------------|

|             |                                      |
|-------------|--------------------------------------|
| SCIP Number | D5a17874-1166-4927-b008-33d15e304a41 |
|-------------|--------------------------------------|

|                  |                                   |
|------------------|-----------------------------------|
| REACH Regulation | <a href="#">REACH Declaration</a> |
|------------------|-----------------------------------|

|                           |   |
|---------------------------|---|
| 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="#">www.P65Warnings.ca.gov</a> |
|---------------------------|---|

|          |     |
|----------|-----|
| PVC free | Yes |
|----------|-----|

## Use Again

### Repack and remanufacture

|                     |   |
|---------------------|---|
| Circularity Profile | <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. |
|------------|--|