## Product data sheet

Specifications





() Discontinued

# TeSys LRF - electronic thermal overload relay - 380...630 A - class 10

LR9F7381

(Discontinued on: Jun 15, 2023

Product availability: Non-Stock - Not 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               | LC1F800<br>LC1F400LC1F630         |  |
| network type                        | AC                                |  |
| Thermal overload class              | Class 10 IEC 60947-4              |  |
| Thermal protection adjustment range | 380630 A                          |  |
| Signalling function                 | Pre-alarm indicator               |  |

### 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   |  |
| [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  |  |
| 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                    | -4.000000000158.0000000000 °F (-2070 °C)  |  |

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

| Current consumption          | <= 5 mA no-load  |  |
|------------------------------|--|--|
| switching capacity for alarm | 0150 mA<br><2.5 V closed state   |  |
| Maximum voltage drop         |  |  |
| Connections - terminals      | Control circuit screw clamp terminals 1 0.0010.004 in <sup>2</sup> (0.752.5 mm <sup>2</sup> ) flexible - with cable end    |  |
|                              | Control circuit screw clamp terminals 1 0.0010.004 in <sup>2</sup> (0.752.5 mm <sup>2</sup> ) solid                        |  |
|                              | Control circuit screw clamp terminals 1 0.0010.006 in² (0.754 mm²) flexible -<br>without cable end                         |  |
|                              | Control circuit screw clamp terminals 2 0.0020.002 in <sup>2</sup> (11.5 mm <sup>2</sup> ) flexible - with cable end       |  |
|                              | Control circuit screw clamp terminals 2 0.0020.004 in <sup>2</sup> (12.5 mm <sup>2</sup> ) flexible -<br>without cable end |  |
|                              | Control circuit screw clamp terminals 2 0.002 in <sup>2</sup> (1 mm <sup>2</sup> ) solid                                   |  |
|                              | Power circuit lugs-ring terminals M12  |  |
| Tightening torque            | Control circuit 1.2 N.m screw clamp terminals  |  |
|                              | Power circuit 58 N.m screw clamp terminals   |  |
| Height                       | 9.008 in (228.8 mm)  |  |
| Width                        | 7.6 in (193 mm)  |  |
| Depth                        | 5.02 in (127.6 mm)   |  |
| Net Weight                   | 9.17 lb(US) (4.16 kg)  |  |
|                              |  |  |

### Environment

| Standards                             | VDE 0660  |  |
|---------------------------------------|---|--|
|                                       | IEC 60255-17  |  |
|                                       | IEC 60255-8   |  |
|                                       | EN 60947-4-1  |  |
|                                       | IEC 60947-4-1   |  |
|                                       | IEC 00947-4-1   |  |
| Product Certifications                | CSA   |  |
|                                       | UL  |  |
|                                       | UKCA  |  |
|                                       | UKCA  |  |
| Protective treatment                  | ТН  |  |
| IP degree of protection               | IP20 conforming to IEC 60529  |  |
| Ambient air temperature for operation | -4.000000000131.000000000 °F (-2055 °C) IEC 60255-8                               |  |
| •                                     |   |  |
| Ambient Air Temperature for Storage   | -40.000000000185.0000000000 °F (-4085 °C)   |  |
| Operating altitude                    | <= 6561.68 ft (2000 m) without derating   |  |
| Fire resistance                       | 1562.000000000 °F (850 °C) IEC 60695-2-1  |  |
| Mechanical robustness                 | Shocks13 Gn for 11 ms IEC 60068-2-7   |  |
|                                       | Vibrations 5300 Hz2 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         |  |
|                                       | Resistance to electrostatic discharge 8 kV in air IEC 61000-4-2                   |  |
|                                       | Radiated radio-frequency electromagnetic field immunity test 10 V/m IEC 61000-4-3 |  |
|                                       | Fast transients immunity test 2 kV IEC 61000-4-4                                  |  |
|                                       |   |  |

## Ordering and shipping details

| Category          | US10I1222334  |  |
|-------------------|---------------|--|
| Discount Schedule | 0112          |  |
| GTIN              | 3389110566048 |  |
| Returnability     | No            |  |
| Country of origin | FR            |  |

## **Packing Units**

| Unit Type of Package 1       | PCE                         |
|------------------------------|-----------------------------|
| Number of Units in Package 1 | 1                           |
| Package 1 Height             | 7.874 in (20.000 cm)        |
| Package 1 Width              | 9.449 in (24.000 cm)        |
| Package 1 Length             | 8.268 in (21.000 cm)        |
| Package 1 Weight             | 7.641 lb(US) (3.466 kg)     |
| Unit Type of Package 2       | P06                         |
| Number of Units in Package 2 | 36                          |
| Package 2 Height             | 29.528 in (75.000 cm)       |
| Package 2 Width              | 23.622 in (60.000 cm)       |
| Package 2 Length             | 31.496 in (80.000 cm)       |
| Package 2 Weight             | 310.094 lb(US) (140.656 kg) |

## **Contractual warranty**

Warranty

18 months

## Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Guide to assess a product's sustainability >



Transparency RoHS/REACh

#### Well-being performance

Mercury Free
Rohs Exemption Information Yes
Pvc Free

#### **Certifications & Standards**

| Eu Rohs Directive         | Compliant with Exemptions   |
|---------------------------|---|
| China Rohs Regulation     | China RoHS declaration<br>Product out of China RoHS scope. Substance declaration for your information.  |
| Environmental Disclosure  | Product Environmental Profile   |
| Weee                      | The product must be disposed on European Union markets following specific waste<br>collection and never end up in rubbish bins.   |
| Circularity Profile       | End of Life Information   |
| 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 www.P65Warnings.ca.gov |