

# Product data sheet

Specifications



## TeSys LRF - electronic thermal overload relay - 90...150 A - class 10

LR9F5369

⚠ Discontinued on: Dec 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	90...150 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
[Uiimp] 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 Test button Red Push-button Red reset 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

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

<b>Maximum voltage drop</b>	<2.5 V closed state
<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 Control circuit screw clamp terminals 1 0.001...0.004 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) solid 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 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 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 Control circuit screw clamp terminals 2 0.002 in <sup>2</sup> (1 mm <sup>2</sup> ) solid Power circuit lugs-ring terminals M8
<b>Tightening torque</b>	Control circuit 1.2 N.m screw clamp terminals 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>	1.951 lb(US) (0.885 kg)

## Environment

<b>Standards</b>	VDE 0660 IEC 60255-17 IEC 60947-4-1 IEC 60255-8 EN 60947-4-1
<b>Product Certifications</b>	UL CSA UKCA
<b>Protective treatment</b>	TH
<b>IP degree of protection</b>	IP20 conforming to IEC 60529 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>	Shocks 13 Gn for 11 ms IEC 60068-2-7 Vibrations 5...300 Hz 2 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 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

<b>Category</b>	US10I1222334
<b>Discount Schedule</b>	0I12
<b>GTIN</b>	3389110566000
<b>Returnability</b>	No
<b>Country of origin</b>	FR

## Packing Units

<b>Unit Type of Package 1</b>	PCE
-------------------------------	-----

<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	5.906 in (15.000 cm)
<b>Package 1 Width</b>	6.299 in (16.000 cm)
<b>Package 1 Length</b>	5.354 in (13.600 cm)
<b>Package weight(Lbs)</b>	30.547 oz (866.000 g)
<b>Unit Type of Package 2</b>	S04
<b>Number of Units in Package 2</b>	12
<b>Package 2 Height</b>	11.811 in (30.000 cm)
<b>Package 2 Width</b>	15.748 in (40.000 cm)
<b>Package 2 Length</b>	23.622 in (60.000 cm)
<b>Package 2 Weight</b>	24.912 lb(US) (11.300 kg)
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	48
<b>Package 3 Height</b>	29.528 in (75.000 cm)
<b>Package 3 Width</b>	23.622 in (60.000 cm)
<b>Package 3 Length</b>	31.496 in (80.000 cm)
<b>Package 3 Weight</b>	125.655 lb(US) (56.996 kg)

## **Contractual warranty**

<b>Warranty (in months)</b>	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

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
<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	<b>WARNING:</b> 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>
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.