Product datasheet

Specifications



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

Local distributor code:

380914654 LR9F5369

Discontinued on: 1 Sept 2023

Discontinued

EAN Code: 3389110566000

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 conforming to 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 conforming to IEC 60947-4-1
Surge withstand	4 kV conforming to IEC 61000-4-5
Contacts type and composition	1 NO + 1 NC
[Ith] conventional free air thermal current	5 A for control circuit
[Ue] rated operational voltage	1000 V AC 50/60 Hz for power circuit conforming to VDE 0110 group C
[Ui] rated insulation voltage	Power circuit: 1000 V AC conforming to IEC 60947-4
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947-1
Phase failure sensitivity	Tripping in 4 s +/- 20 % conforming to 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	-20…70 °C
Current consumption	<= 5 mA no-load
switching capacity for alarm	0...150 mA
Maximum voltage drop	<2.5 V closed state

Disclaimer: 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

Connections - terminals	Control circuit: screw clamp terminals 1 cable 0.75…2.5 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable 0.75…2.5 mm² - cable stiffness: solid Control circuit: screw clamp terminals 1 cable 0.75…4 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable 1…1.5 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable 1…2.5 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable 1 mm² - cable stiffness: solid Power circuit: lugs-ring terminals M8
Tightening torque	Control circuit: 1.2 N.m on screw clamp terminals Power circuit: 18 N.m on screw clamp terminals
Height	96 mm
Width	115 mm
Depth	123.5 mm
Net weight	0.885 kg

Environment

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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15.000 cm
Package 1 Width	16.000 cm
Package 1 Length	13.600 cm
Package 1 Weight	866.000 g
Unit Type of Package 2	S04
Number of Units in Package 2	12

Package 2 Height	30.000 cm
Package 2 Width	40.000 cm
Package 2 Length	60.000 cm
Package 2 Weight	11.300 kg
Unit Type of Package 3	P06
Number of Units in Package 3	48
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	56.996 kg

Logistical informations

Country of origin	FR

Contractual warranty

Warranty (in months)	18

Environmental Data

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

Total lifecycle Carbon footprint	**133 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**4 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.6 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.1 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**127 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**2 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
SCIP Number	**D5a17874-1166-4927-b008-33d15e304a41**
EU RoHS Directive	**Compliant By Exemption**
PVC free	**Yes**

Use Again

Repack and remanufacture

Recyclability potential, in %	**92**
End of life manual availability	**End of Life Information**
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**