Product datasheet

Specifications

Green Premium™

TeSys LRF - electronic thermal overload relay - 90...150 A - class 20

Local distributor code:

380914735 LR9F5569

Discontinued on: 15 Jun 2023

Discontinued

EAN Code: 3389110640199

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 20 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	IEC 60255-17 EN 60947-4-1 IEC 60255-8 VDE 0660 IEC 60947-4-1
Product Certifications	CSA UL 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	13.0 cm
Package 1 Width	15.0 cm
Package 1 Length	16.0 cm
Package 1 Weight	862.0 g
Unit Type Of Package 2	S04
Number Of Units In Package 2	12

Package 2 Height	30.0 cm
Package 2 Width	40.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	10.996 kg

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

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

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

Well-being performance

Mercury Free	
Rohs Exemption Information	Yes
Pvc Free	

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration 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 collection and never end up in rubbish bins
Circularity Profile	End of Life Information