Product data sheet

Specifications

Green Premium™

TeSys LRF - electronic thermal overload relay - 30...50 A - class 10

LR9F5357

Discontinued on: Dec 31, 2023

End-of-service on: Mar 28, 2024

To be discontinued

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	30…50 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
[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 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

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

Maximum Voltage Drop	<2.5 V closed state
Connections - Terminals	Control circuit screw clamp terminals 1 0.00…0.00 in² (0.75…2.5 mm²) flexible - with cable end Control circuit screw clamp terminals 1 0.00…0.00 in² (0.75…2.5 mm²) solid Control circuit screw clamp terminals 1 0.00…0.01 in² (0.75…4 mm²) flexible - without cable end Control circuit screw clamp terminals 2 0.00…0.00 in² (1…1.5 mm²) flexible - with cable end Control circuit screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) flexible - without cable end Control circuit screw clamp terminals 2 0.00 in² (1 mm²) solid Power circuit lugs-ring terminals M6
Tightening Torque	Control circuit 1.2 N.m screw clamp terminals Power circuit 10 N.m screw clamp terminals
Height	3.78 in (96 mm)
Width	4.53 in (115 mm)
Depth	4.86 in (123.5 mm)
Net Weight	1.95 lb(US) (0.885 kg)

Environment

Standards	IEC 60255-8 IEC 60947-4-1 VDE 0660 IEC 60255-17 EN 60947-4-1
Product Certifications	CSA UL UKCA
Protective Treatment	TH
Ip Degree Of Protection	IP20 IEC 60529 IP20 VDE 0106
Ambient Air Temperature For Operation	-4…131 °F (-20…55 °C) IEC 60255-8
Ambient Air Temperature For Storage	-40…185 °F (-40…85 °C)
Operating Altitude	<= 2000 m without derating
Fire Resistance	1562 °F (850 °C) IEC 60695-2-1
Mechanical Robustness	Shocks13 Gn for 11 ms IEC 60068-2-7 Vibrations 5...300 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

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.31 in (13.5 cm)
Package 1 Width	5.91 in (15.0 cm)
Package 1 Length	6.30 in (16.0 cm)
Package 1 Weight	27.48 oz (779.0 g)
Unit Type Of Package 2	S04
Number Of Units In Package 2	12

Package 2 Height	11.81 in (30.0 cm)
Package 2 Width	15.75 in (40.0 cm)
Package 2 Length	23.62 in (60.0 cm)
Package 2 Weight	22.53 lb(US) (10.218 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