

Product datasheet

Specifications



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

LR9F7381

⚠ Discontinued on: 31 Dec 2023

⚠ 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	LC1F800 LC1F400...LC1F630
Network Type	AC
Thermal Overload Class	Class 10 conforming to IEC 60947-4
Thermal Protection Adjustment Range	380...630 A
Signalling Function	Pre-alarm indicator

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
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

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

Switching Capacity For Alarm	0...150 mA
Maximum Voltage Drop	<2.5 V closed state
Connections - Terminals	Control circuit: screw clamp terminals 1 cable 0.75...2.5 mm ² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable 0.75...2.5 mm ² - cable stiffness: solid Control circuit: screw clamp terminals 1 cable 0.75...4 mm ² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable 1...1.5 mm ² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable 1...2.5 mm ² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable 1 mm ² - cable stiffness: solid Power circuit: lugs-ring terminals M12
Tightening Torque	Control circuit: 1.2 N.m on screw clamp terminals Power circuit: 58 N.m on screw clamp terminals
Height	228.8 mm
Width	193 mm
Depth	127.6 mm
Net Weight	4.16 kg

Environment

Standards	VDE 0660 IEC 60255-17 IEC 60255-8 EN 60947-4-1 IEC 60947-4-1
Product Certifications	CSA UL UKCA
Protective Treatment	TH
Ip Degree Of Protection	IP20 conforming to IEC 60529
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	20.000 cm
Package 1 Width	24.000 cm
Package 1 Length	21.000 cm
Package 1 Weight	3.466 kg

Unit Type Of Package 2	P06
Number Of Units In Package 2	36
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	140.656 kg

Contractual warranty

Warranty	18 months
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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-CO₂ 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](#)