

Product data sheet

Specifications



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

LR9F7381

⚠ Discontinued on: Jun 15, 2023

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Product availability: Non-Stock - Not 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	LC1F800 LC1F400...LC1F630
Network type	AC
Thermal overload class	Class 10 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 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
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)

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

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

Current consumption	<= 5 mA no-load
switching capacity for alarm	0...150 mA
Maximum voltage drop	<2.5 V closed state
Connections - terminals	Control circuit screw clamp terminals 1 0.001...0.004 in² (0.75...2.5 mm²) flexible - with cable end Control circuit screw clamp terminals 1 0.001...0.004 in² (0.75...2.5 mm²) solid Control circuit screw clamp terminals 1 0.001...0.006 in² (0.75...4 mm²) flexible - without cable end Control circuit screw clamp terminals 2 0.002...0.002 in² (1...1.5 mm²) flexible - with cable end Control circuit screw clamp terminals 2 0.002...0.004 in² (1...2.5 mm²) flexible - without cable end Control circuit screw clamp terminals 2 0.002 in² (1 mm²) solid Power circuit lugs-ring terminals M12
Tightening torque	Control circuit 1.2 N.m screw clamp terminals Power circuit 58 N.m screw clamp terminals
Height	9.008 in (228.8 mm)
Width	7.6 in (193 mm)
Depth	5.02 in (127.6 mm)
Net Weight	9.17 lb(US) (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	-4...131 °F (-20...55 °C) IEC 60255-8
Ambient Air Temperature for Storage	-40...185 °F (-40...85 °C)
Operating altitude	<= 6561.68 ft (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

Ordering and shipping details

Category	US10I1222334
Discount Schedule	0I12
GTIN	3389110566048
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7.874 in (20.000 cm)
Package 1 Width	9.449 in (24.000 cm)
Package 1 Length	8.268 in (21.000 cm)
Package 1 Weight	7.641 lb(US) (3.466 kg)
Unit Type of Package 2	P06
Number of Units in Package 2	36
Package 2 Height	29.528 in (75.000 cm)
Package 2 Width	23.622 in (60.000 cm)
Package 2 Length	31.496 in (80.000 cm)
Package 2 Weight	310.094 lb(US) (140.656 kg)

Contractual warranty

Warranty	18 months
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Sustainability

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

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[Guide to assess a product's sustainability >](#)



Transparency

Well-being performance

 Mercury Free	
 Rohs Exemption Information	Yes
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
California Proposition 65	WARNING: 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 www.P65Warnings.ca.gov