



### 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 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 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
Maximum voltage drop	<2.5 V closed state
Connections - terminals	Control circuit screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) flexible - with cable end Control circuit screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) solid Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (0.75...4 mm <sup>2</sup> ) flexible - without cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...1.5 mm <sup>2</sup> ) flexible - with cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible - without cable end Control circuit screw clamp terminals 2 0.00 in <sup>2</sup> (1 mm <sup>2</sup> ) solid Power circuit lugs-ring terminals M8
Tightening torque	Control circuit 1.2 N.m screw clamp terminals Power circuit 18 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)

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## 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	-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	Shocks 13 Gn for 11 ms IEC 60068-2-7 Vibrations 5...300 Hz 2 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	22334-CONTACTOR,F-LINE,OVERLOADS
Discount Schedule	I12
GTIN	3389110640199
Returnability	Yes
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.12 in (13.0 cm)
Package 1 Width	5.91 in (15.0 cm)
Package 1 Length	6.30 in (16.0 cm)
Package 1 Weight	30.41 oz (862.0 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	24.24 lb(US) (10.996 kg)

## Offer Sustainability

Sustainable offer status	Green Premium product
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant  <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 Yes

Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes
<b>Contractual warranty</b>	
Warranty	18 months