Product data sheet
Characteristics

LR9F71
TeSys LRF - electronic thermal overload relay - 132...220 A - class 10/20



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	LC1F185...LC1F265
Network type	AC
Thermal overload class	Class 10/20 IEC 60947-4
Thermal protection adjustment range	132…220 A
Signalling function	Pre-alarm indicator

Complementary

Network frequency	50/60 Hz
[Us] rated supply voltage	24 V DC
Supply voltage limits	17…32 V
Mounting support	Direct on contactor Plate
Tripping threshold	1.05 +/- 0.06 In alarm IEC 60947-4-1 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 reset Push-button Red stop Selector switch load balancing Selector switch class 10/20
Local signalling	Trip indicator Alarm
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

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.
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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 M10 Alarm circuit screw clamp terminals 1 0.00…0.00 in² (0.5…1.5 mm²) flexible - without cable end
Tightening torque	Control circuit 1.2 N.m screw clamp terminals Power circuit 35 N.m screw clamp terminals Alarm circuit 0.45 N.m screw clamp terminals
Height	3.98 in (101 mm)
Width	4.53 in (115 mm)
Maximum Depth	4.86 in (123.5 mm)
Net Weight	2.09 lb(US) (0.95 kg)

Environment

Standards	IEC 60947-4-1 IEC 60255-8 IEC 60255-17 VDE 0660 EN 60947-4-1
Product certifications	UL CSA
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	22334 - CONTACTOR,F-LINE,OVERLOADS
Discount Schedule	I12
GTIN	03389118057555
Nbr. of units in pkg.	1
Package weight(Lbs)	2.36 lb(US) (1.07 kg)
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	5.91 in (15 cm)
Package 1 width	6.30 in (16 cm)
Package 1 Length	5.12 in (13 cm)

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 www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

Contractual warranty

Warranty	18 months