



### Main

Range	TeSys
Product name	TeSys LRD
Product or component type	Electronic thermal overload relay
Device short name	LR9D
Relay application	Motor protection
Product compatibility	NSX circuit breaker LC1D115 LC1D150
Network type	AC
Thermal overload class	Class 10/20 conforming to IEC 60947-4-1
Signalling function	Alarm
Thermal protection adjustment range	90...150 A
[Ui] rated insulation voltage	Power circuit: 1000 V conforming to IEC 60947-4-1 Power circuit: 600 V conforming to CSA Power circuit: 600 V conforming to UL

### Complementary

Network frequency	50...60 Hz
[Us] rated supply voltage	24 V DC
Supply voltage limits	17...32 V
Mounting support	Under contactor Rail
Tripping threshold	1.05 +/- 0.06 In alarm conforming to IEC 60947-4-1 1.12 +/- 0.06 In de-energisation conforming to IEC 60947-4-1
Auxiliary contact composition	1 NO + 1 NC
[Ith] conventional free air thermal current	5 A for signalling circuit
[Ue] rated operational voltage	690 V AC 0...400 Hz for power circuit conforming to IEC 60947-4-1
Associated fuse rating	4 A gG for signalling circuit 4 A BS for signalling circuit
[Uimp] rated impulse withstand voltage	IEC 60947-1 6 kV
Phase failure sensitivity	Tripping in 4 s +/- 20 % conforming to IEC 60947-4-1
Control type	Red push-button: stop Blue push-button: reset
Temperature compensation	-20...60 °C
Switching capacity in mA	0...150 mA
Maximum voltage drop	<2.5 V closed state
Connections - terminals	Power circuit: bars Control circuit: screw clamp terminals 1 cable(s) 0.5...1.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 0.5...1.5 mm <sup>2</sup> flexible without cable end Alarm circuit: screw clamp terminals 1 cable(s) 0.5...1.5 mm <sup>2</sup> flexible without cable end
Tightening torque	Alarm circuit: 0.45 N.m - on screw clamp terminals Power circuit: 18 N.m - on bars M8 Control circuit: 1.2 N.m - on screw clamp terminals
Height	118 mm
Width	115 mm
Depth	125 mm
Net weight	0.9 kg

## Environment

Protective treatment	TH conforming to IEC 60068
IP degree of protection	IP20 conforming to IEC 60529
Ambient air temperature for operation	-20...60 °C without derating conforming to IEC 60947-4-1
Ambient air temperature for storage	-60...70 °C
Operating altitude	<= 2000 m without derating
Mechanical robustness	Vibrations: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 Shocks: 13 Gn for 11 ms conforming to IEC 60068-2-7
Dielectric strength	1.89 kV at 50 Hz conforming to IEC 60947-1
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 UL 60947-5-1 CSA C22.2 No 60947-4-1 CSA C22.2 No 60947-5-1 GB/T 14048.4 GB/T 14048.5
Product certifications	UL CSA CCC

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	904 g
Package 1 Height	15 cm
Package 1 width	15.5 cm
Package 1 Length	13 cm

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
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

## Contractual warranty

Warranty	18 months
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