



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 LC1D150 LC1D115
Network type	AC
Overload tripping class	Class 20 conforming to IEC 60947-4-1
Signalling function	Alarm
Thermal protection adjustment range	90...150 A
[Ui] rated insulation voltage	1000 V power circuit conforming to IEC 60947-4-1 600 V power circuit conforming to CSA 600 V power circuit conforming to UL

Complementary

Network frequency	50...60 Hz
[Us] rated supply voltage	24 V DC
Supply voltage limits	17...32 V
Mounting support	Rail Under contactor
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
[Ith] conventional free air thermal current	5 A for signalling circuit
[Ue] rated operational voltage	690 V 50...60 Hz
Associated fuse rating	5 A gG for signalling circuit
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 61000-4-5

Phase failure sensitivity	Tripping in 4 s +/- 20 % conforming to IEC 60947-4-1
Control type	Red push-button stop Blue push-button for reset mode
Temperature compensation	-20...60 °C
Switching capacity in mA	0...150 mA
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 ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 0.5...1.5 mm ² - cable stiffness: flexible - without cable end Alarm circuit : screw clamp terminals 1 cable(s) 0.5...1.5 mm ² - cable stiffness: flexible - without cable end
Tightening torque	Alarm circuit : 0.45 N.m - on screw clamp terminals Power circuit : 18 N.m - on bars screw : M8 Control circuit : 1.2 N.m - on screw clamp terminals
Depth	132 mm
Product weight	0.885 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
Fire resistance	850 °C conforming to IEC 60695-2-1
Mechanical robustness	Vibrations 2 Gn, 5...300 Hz IEC 60068-2-6 Shocks 13 Gn for 11 ms IEC 60068-2-7
Dielectric strength	6 kV at 50 Hz conforming to IEC 60255-5
Standards	EN 60947-4-1 IEC 255-17 VDE 0660 IEC 255-8 IEC 60947-4-1
Product certifications	CSA 22-2 UL 508

Contractual warranty

Warranty period	18 months
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