

LR9D67

thermal overload relay for motor TeSys -
60...100 A - class 10



Main

Range of product	TeSys D
Device short name	LRD
Product or component type	Thermal overload relay
Relay application	Motor protection
Product compatibility	LC1D115 LC1D150
Network type	AC
Overload tripping class	Class 10 conforming to IEC 60947-4-1 Class 20
Signalling function	Alarm
Thermal protection adjustment range	60...100 A
Protection type	AM fuses 100 A - for power circuit BS fuse 5 A - for control circuit GB2 circuit breaker 5 A - for control circuit GG fuse 160 A - for power circuit GG fuse 5 A - for control circuit
[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
Connections - terminals	Control circuit: bars 2 cable 1...2.5 mm ² - cable stiffness: flexible - without cable end Control circuit: connector 1 cable 1...2.5 mm ² - cable stiffness: flexible - without cable end Control circuit: connector 2 cable 1...2.5 mm ² - cable stiffness: flexible - without cable end Power circuit: bars 1 cable 1...2.5 mm ² - cable stiffness: flexible - without cable end
Quantity per set	Set of 10

Complementary

Network frequency	50...60 Hz
Supply voltage limits	17...32 V
Mounting support	Direct on 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
Surge withstand	6 kV conforming to IEC 61000-4-5
[I _{th}] conventional free air thermal current	5 A for control circuit
[U _e] rated operational voltage	1000 V AC 50/60 Hz for power circuit conforming to IEC 60947-4-1
[U _{imp}] rated impulse withstand voltage	8 kV
Phase failure sensitivity	Tripping in 4 s +/- 20 % conforming to IEC 60947-4-1
Temperature compensation	-20...70 °C
Current consumption	<= 5 mA no-load
Switching capacity in mA	0...150 mA
Output overload protection	Self protected
Output short-circuit protection	Self protected
Voltage drop	<= 2.5 V closed state
Tightening torque	Alarm circuit: 0.45 N.m Control circuit: 1.2 N.m - on bars Control circuit: 1.2 N.m - on connector Control circuit: 18 N.m - on bars Control circuit: 18 N.m - on connector

Width	120 mm
Depth	132 mm
Product weight	0.9 kg

Environment

Standards	EN 60947-4-1 IEC 255-17 IEC 255-8 IEC 60947-4-1 VDE 0660
Product certifications	CSA 22-2 GOST UL 508
Protective treatment	TH
IP degree of protection	IP20 conforming to IEC 60529 IP20 conforming to VDE 0106
Ambient air temperature for operation	-20...60 °C without derating conforming to IEC 60947-4-1 -40...70 °C with derating conforming to IEC 60947-4-1
Ambient air temperature for storage	-40...85 °C
Fire resistance	850 °C conforming to IEC 60695-2-1
Shock resistance	13 gn 11 ms conforming to IEC 60068-2-7
Vibration resistance	2 gn 5...300 Hz conforming to IEC 60068-2-6
Dielectric strength	6 kV at 50 Hz conforming to IEC 60255-5
Resistance to electrostatic discharge	8 kV in air conforming to IEC 61000-4-2
Resistance to radiated fields	10 V/m conforming to IEC 61000-4-3
Resistance to fast transients	2 kV conforming to IEC 61000-4-4