Product data sheet
Characteristics

LR9F5367
thermal overload relay for motor - TeSys LR9 - 60...100 A - class 10

Main

Range of product	TeSys F
Device short name	LR9F
Product or component type	Electronic thermal overload relay
Relay application	Motor
Product compatibility	LC1F115...LC1F185
Network type	DC
Overload tripping class	Class 10
Signalling function	Alarm
Thermal protection adjustment range	60...100 A
Protection type	GG fuse 5 A - for control circuit GG fuse 200 A - for power circuit GB2 circuit breaker 5 A - for control circuit BS fuse 5 A - for control circuit AM fuses 100 A - for power circuit
Quantity per set	Set of 10

Complementary

Network frequency	50/60 Hz
[Us] rated supply voltage	24 V DC
Supply voltage limits	17...32 V
Mounting support	Rail Direct on contactor
Tripping threshold	1.12 +/- 0.06 In tripping conforming to IEC 60947-4-1 1.05 +/- 0.06 In alarm conforming to IEC 60947-4-1
Surge withstand	4 kV conforming to IEC 61000-4-5
[Ith] conventional free air thermal current	5 A for control circuit
Maximum power	600 VA at 600 V AC 600 VA at 380 V AC 600 VA at 220 V AC 50 W at 110 V DC 45 W at 220 V DC 400 VA at 110 V AC 25 W at 440 V DC 200 VA at 48 V AC 100 W at 48 V DC 100 W at 24 V DC 100 VA at 24 V AC
[Ue] rated operational voltage	1000 V AC 50/60 Hz for power circuit conforming to VDE 0110 group C
[Ui] rated insulation voltage	1000 V AC power circuit conforming to IEC 60947-4
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947-1
Phase failure sensitivity	Tripping in 4 s +/- 20 % conforming to IEC 60947-4-1
Reset	Manual reset on front relay
Temperature compensation	-20...70 °C
Current consumption	<= 5 mA no-load
Switching capacity in mA	0...150 mA
Output overload protection	Auto-protected
Output short-circuit protection	Auto-protected
Voltage drop	<= 2.5 V closed state

Connections - terminals	Control circuit: screw clamp terminals 2 cable 1 mm² - cable stiffness: solid Control circuit: screw clamp terminals 2 cable 1...2.5 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable 1...1.5 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable 0.75...4 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable 0.75...2.5 mm² - cable stiffness: solid Control circuit: screw clamp terminals 1 cable 0.75...2.5 mm² - cable stiffness: flexible - with cable end
Tightening torque	Power circuit: 18 N.m - on screw clamp terminals Control circuit: 1.2 N.m - on screw clamp terminals Alarm circuit: 0.45 N.m
Height	96 mm
Width	120 mm
Depth	123.5 mm
Product weight	0.9 kg

Environment

Standards	EN 60947-4-1 IEC 60255-17 IEC 60255-8 IEC 60947-4-1 VDE 0660
Product certifications	CSA GOST UL
Protective treatment	TH standard version
IP degree of protection	IP20 conforming to VDE 0106 IP20 conforming to IEC 60529
Ambient air temperature for operation	-20...55 °C conforming to IEC 60255-8
Ambient air temperature for storage	-40...85 °C
Operating altitude	<= 2000 m without derating
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 255-5
Resistance to electrostatic discharge	8 kV in air conforming to IEC 61000-4-2 6 kV in indirect mode 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

Contractual warranty

Period	18 months