

Product datasheet

Specifications



Electronic thermal overload relay, TeSys Giga, 125-500 A, class 5E-30E, push-in control connection

LR9G500

Main

Range	TeSys
Product name	TeSys LRG
Product or component type	Electronic thermal overload relay
Device short name	LR9G
Relay application	Motor protection
Network type	AC
Thermal overload class	Class 5E...30E conforming to IEC 60947-4-1
Thermal protection adjustment range	125...500 A

Complementary

Network frequency	30...60 Hz 100 Hz
Overvoltage category	III
Tripping threshold	1.125 +/- 0.07 In conforming to IEC 60947-4-1
Protection type	Ground fault protection - tripping time adjustment: 0...1 s - for alarm circuit conforming to IEC 60947-4-1 Ground fault protection - tripping time adjustment: 0...1 s - for alarm circuit conforming to UL 60947-4-1 Phase loss - tripping time adjustment: 0...4 s - for alarm circuit Phase imbalance - tripping time adjustment: 0...5 s - for alarm circuit conforming to IEC 60947-4-1 Phase imbalance - tripping time adjustment: 0...5 s - for alarm circuit conforming to UL 60947-4-1
Local signalling	LED Trip indicator
Contacts type and composition	1 NO + 1 NC
[Ith] conventional free air thermal current	5 A
[Uc] control circuit voltage	24...500 V AC 50/60 Hz 24...250 V DC
[Ue] rated operational voltage	1000 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV
Reset	Automatic reset Manual
Mechanical durability	7000 cycles
Surge withstand	4 kV
Electromagnetic compatibility	EMC immunity conforming to IEC 60947-4-1 Emission tests criteria A conforming to IEC 60947-4-1

Immunity to radiated radio-electrical interference - test level: 20 V/m conforming to EN/IEC 61000-4-3 Voltage dips and interruptions immunity test conforming to SEMI F47	
Connections - terminals	Power circuit: bar - busbar cross section: 32 x 10 mm Power circuit: lugs-ring terminals 1 240 mm² Control circuit: push-in 1 0.2...2.5 mm² - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.25...2.5 mm² - cable stiffness: flexible with cable end Control circuit: push-in 2 0.5...1.0 mm² with cable end
Tightening torque	35 N.m
Mounting support	Direct on contactor Plate
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1 JIS C8201-5-1
Product certifications	CB Scheme CCC cULus UKCA ATEX EU-RO-MR by DNV-GL EAC

Environment

IP degree of protection	IP2X front face with shrouds conforming to IEC 60529 IP2X front face with shrouds conforming to VDE 0106
Protective treatment	TH
Ambient air temperature for operation	-25...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...60 °C at Uc
Adjustment of dial setting	-25...60 °C
Mechanical robustness	Vibrations 5...300 Hz 6 gn contactor open Shocks 15 gn 11 ms contactor closed
Height	114 mm
Width	140 mm
Depth	140 mm
Net weight	1.55 kg
Colour	Dark grey

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	18.500 cm
Package 1 Width	19.000 cm
Package 1 Length	24.000 cm
Package 1 Weight	2.104 kg
Unit Type of Package 2	S03
Number of Units in Package 2	2
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm

Package 2 Weight	4.733 kg
Unit Type of Package 3	P06
Number of Units in Package 3	16
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	45.864 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
PVC free	Yes
Halogen content performance	Halogen free plastic parts product

Installation Videos

[TeSys Giga - How to directly mount LR9G overload relay](#)

Recommended replacement(s)