

Product data sheet

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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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 mm ² Control circuit: push-in 1 0.2...2.5 mm ² - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.25...2.5 mm ² - cable stiffness: flexible with cable end Control circuit: push-in 2 0.5...1.0 mm ² 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 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ UL 60335-1
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 U _c
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	1.3 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

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

Total lifecycle Carbon footprint 666

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic No

[EU RoHS Directive](#) Compliant with Exemptions

SCIP Number 958748fb-37b2-4e37-985e-0763521c22ab

REACH Regulation [REACH Declaration](#)

California proposition 65 **WARNING:** This product can expose you to chemicals including: Nickel (Metallic), which is known to the State of California to cause cancer, and Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Halogen-free status Halogen free plastic parts product

PVC free Yes

Use Again

Repack and remanufacture

End of life manual availability [End of Life Information](#)

Take-back No

WEEE Label  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Installation

Installation Videos

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

Offer Marketing Illustration

Product benefits / Features



TeSys Giga Electronic Thermal Overload Relays
Range Accessories

Mounting base

Front protection cover

Remote electrical stop

Mechanical remote control

Terminal block

The image displays five accessories for TeSys Giga Electronic Thermal Overload Relays. At the top left is a photograph of the main relay unit. Below it are five individual accessories: a grey mounting base, a black front protection cover, a black remote electrical stop, a mechanical remote control with a cable and connector, and a green terminal block with six terminals.

Offer Marketing Illustration

Product benefits / Features

TeSys Giga Electronic Thermal Overload Relays

Technical Benefits



- Rotary switch for phase imbalance, reset mode, ground fault, trip class selection, and 64 position rotary switch for enhanced I_r setting accuracy.
- Tripping classes is selectable from class 5E to class 30E to suit different application needs from fast tripping, general purpose and high inertia loads.
- It is available for manual and auto reset options and LED indicator for Motor ON and pre-trip alarm.
- It provides phase imbalance, phase failure, in-built ground-fault and single-phase loads protections.

Offer Marketing Illustration

Product benefits / Features

TeSys Giga Electronic Thermal Overload Relays



Operation and maintenance

Self-diagnostic indicators and full-scale protection that helps speed-up corrections and prevent downtime



Full-scale protection

Enhances equipment reliability and robustness by up to 90%, while full-scale protection reduces recovery time after a trip by 50%.



Simpler connection

Modular design that simplifies machine integration and maintenance



Technical Illustration

Assembly's dimensions

