

Product data sheet

Specifications



Electronic thermal overload relay, TeSys Giga, 57-225 A, class 5E-30E, push-in control connection

LR9G225

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 | 57...225 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: 25 x 6 mm Power circuit: lugs-ring terminals 1 185 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 | 18 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 | 107 mm |
| Width | 105 mm |
| Depth | 126 mm |
| Net weight | 0.8 kg |
| Colour | Dark grey |

Packing Units

| | |
|-------------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 17.000 cm |
| Package 1 Width | 20.000 cm |
| Package 1 Length | 21.000 cm |

| | |
|-------------------------------------|-----------|
| Package 1 Weight | 1.406 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 | 3.383 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 | 35.624 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 223

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, a small image shows three relays mounted on a grey base. Below this, five individual accessories are shown with their respective labels: a grey mounting base, a black front protection cover, a black remote electrical stop, a mechanical remote control consisting of a cable with a push-button and a connector, and a green terminal block with six terminals labeled 0V, 1, 2, 3, 4, and 5.

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

