

# 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
[I <sub>th</sub> ] conventional free air thermal current	5 A
[U <sub>c</sub> ] control circuit voltage	24...500 V AC 50/60 Hz 24...250 V DC
[U <sub>e</sub> ] rated operational voltage	1000 V AC 50/60 Hz
[U <sub>imp</sub> ] rated impulse withstand voltage	8 kV
Reset	Automatic reset Manual
Mechanical durability	7000 cycles
Surge withstand	4 kV

<b>Electromagnetic compatibility</b>	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
<b>Connections - terminals</b>	Power circuit: bar - busbar cross section: 25 x 6 mm Power circuit: lugs-ring terminals 1 185 mm <sup>2</sup> Control circuit: push-in 1 0.2...2.5 mm <sup>2</sup> - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.25...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: push-in 2 0.5...1.0 mm <sup>2</sup> with cable end
<b>Tightening torque</b>	18 N.m
<b>Mounting support</b>	Direct on contactor Plate
<b>Standards</b>	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
<b>Product certifications</b>	CB Scheme CCC cULus UKCA ATEX EU-RO-MR by DNV-GL EAC

## Environment

<b>IP degree of protection</b>	IP2X front face with shrouds conforming to IEC 60529 IP2X front face with shrouds conforming to VDE 0106
<b>Protective treatment</b>	TH
<b>Ambient air temperature for operation</b>	-25...60 °C
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Permissible ambient air temperature around the device</b>	-40...60 °C at Uc
<b>Adjustment of dial setting</b>	-25...60 °C
<b>Mechanical robustness</b>	Vibrations 5...300 Hz 6 gn contactor open Shocks 15 gn 11 ms contactor closed
<b>Height</b>	107 mm
<b>Width</b>	105 mm
<b>Depth</b>	126 mm
<b>Product weight</b>	0.8 kg
<b>Colour</b>	Dark grey

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	17.000 cm
<b>Package 1 Width</b>	20.000 cm
<b>Package 1 Length</b>	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



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	<a href="#">Product Environmental Profile</a>

## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Compliant with Exemptions
SCIP Number	958748fb-37b2-4e37-985e-0763521c22ab
REACH Regulation	<a href="#">REACH Declaration</a>

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](http://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	<a href="#">End of Life Information</a>
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**

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

## 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

## 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 Ir 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**

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## Technical Illustration

## Assembly's dimensions

