# Product datasheet

Specifications

Green Premium™

High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 500A, standard version, 100…250V wide band AC/DC coil

LC1G500KUEN

## Main

| | |
|---|---|
| **Range** | TeSys |
| **Range of product** | TeSys Giga |
| **product or component type** | Contactor |
| **Device short name** | LC1G |
| **contactor application** | Power switching<br>Motor control |
| **Utilisation category** | AC-1<br>AC-3<br>AC-3e<br>AC-4<br>AC-5a<br>AC-5b<br>AC-6a<br>AC-6b<br>AC-8a<br>AC-8b<br>DC-1<br>DC-3<br>DC-5 |
| **poles description** | 3P |
| **[Ue] rated operational voltage** | <= 1000 V AC 50/60 Hz<br><= 460 V DC |
| **[Ie] rated operational current** | 700 A (at <40 °C) at <= 1000 V AC-1<br>500 A (at <60 °C) at <= 440 V AC-3 |
| **[Uc] control circuit voltage** | 100...250 V AC 50/60 Hz<br>100...250 V DC |
| **Control circuit voltage limits** | Operational: 0.8 Uc Min...1.1 Uc Max (at <60 °C)<br>Drop-out: 0.1 Uc Max...0.45 Uc Min (at <60 °C) |

## Complementary

| | |
|---|---|
| **[Uimp] rated impulse withstand voltage** | 8 kV |
| **Overvoltage category** | III |
| **[Ith] conventional free air thermal current** | 700 A (at 40 °C) |
| **Rated breaking capacity** | 4600 A at 440 V |
| **[Icw] rated short-time withstand current** | 4.0 kA - 10 s<br>2.8 kA - 30 s<br>2.2 kA - 1 min<br>1.5 kA - 3 min<br>1.2 kA - 10 min |
| **Associated fuse rating** | 500 A aM at <= 440 V for motor<br>400 A aM at <= 690 V for motor<br>800 A gG at <= 690 V |

Life Is On | Schneider Electric

| | |
|---|---|
| Average impedance | 0.00008 Ohm |
| [Ui] rated insulation voltage | 1000 V |
| Power dissipation per pole | 40 W AC-1 - Ith 700 A<br>20 W AC-3 - Ith 500 A |
| Compatibility code | LC1G |
| Pole contact composition | 3 NO |
| Auxiliary contact composition | 1 NO + 1 NC |
| Motor power kW | 147 kW at 230 V AC 50/60 Hz (AC-3e)<br>250 kW at 400 V AC 50/60 Hz (AC-3e)<br>250 kW at 415 V AC 50/60 Hz (AC-3e)<br>280 kW at 440 V AC 50/60 Hz (AC-3e)<br>315 kW at 500 V AC 50/60 Hz (AC-3e)<br>355 kW at 690 V AC 50/60 Hz (AC-3e)<br>335 kW at 1000 V AC 50/60 Hz (AC-3e)<br>160 kW at 230 V AC 50/60 Hz (AC-3)<br>250 kW at 400 V AC 50/60 Hz (AC-3)<br>250 kW at 415 V AC 50/60 Hz (AC-3)<br>315 kW at 440 V AC 50/60 Hz (AC-3)<br>355 kW at 500 V AC 50/60 Hz (AC-3)<br>355 kW at 690 V AC 50/60 Hz (AC-3)<br>335 kW at 1000 V AC 50/60 Hz (AC-3)<br>150 kW at 230 V AC 50/60 Hz (AC-4)<br>250 kW at 400 V AC 50/60 Hz (AC-4)<br>250 kW at 415 V AC 50/60 Hz (AC-4)<br>295 kW at 440 V AC 50/60 Hz (AC-4)<br>295 kW at 500 V AC 50/60 Hz (AC-4)<br>355 kW at 690 V AC 50/60 Hz (AC-4)<br>280 kW at 1000 V AC 50/60 Hz (AC-4) |
| Motor power hp | 150 hp at 200/208 V 60 Hz<br>200 hp at 230/240 V 60 Hz<br>400 hp at 460/480 V 60 Hz<br>450 hp at 575/600 V 60 Hz |
| Irms rated making capacity | 5090 A at 440 V |
| Coil technology | Built-in bidirectional peak limiting |
| Safety reliability level | B10d = 400000 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 3000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 |
| Mechanical durability | 8 Mcycles |
| inrush power in VA (50/60 Hz, AC) | 750 VA |
| inrush power in W (DC) | 660 W |
| hold-in power consumption in VA (50/60 Hz, AC) | 15.5 VA |
| hold-in power consumption in W (DC) | 9.3 W |
| Operating time | 40...70 ms closing<br>15...50 ms opening |
| Maximum operating rate | 600 cyc/h AC-3<br>600 cyc/h AC-3e<br>300 cyc/h AC-1<br>150 cyc/h AC-4 |
| Connections - terminals | Power circuit: bar 2 - busbar cross section: 32 x 10 mm<br>Power circuit: lugs-ring terminals 1 185 mm²<br>Power circuit: bolted connection<br>Control circuit: push-in 1 0.2…2.5 mm² - cable stiffness: solid stranded without cable end<br>Control circuit: push-in 1 0.25…2.5 mm² - cable stiffness: flexible with cable end<br>Control circuit: push-in 2 0.5…1.0 mm² with cable end<br>Control circuit: push-in 0.75…2.5 mm² - cable stiffness: solid stranded without cable end<br>Control circuit: push-in 0.75…2.5 mm² - cable stiffness: flexible with cable end |
| Connection pitch | 45 mm |

Life Is On Schneider Electric

| mounting support | Plate |
|---|---|
| Standards | EN/IEC 60947-4-1<br>EN/IEC 60947-5-1<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>JIS C8201-4-1<br>JIS C8201-5-1 |
| Product certifications | CB Scheme<br>CCC<br>cULus<br>EAC<br>CE<br>UKCA<br>EU-RO-MR by DNV-GL |
| Tightening torque | 35 N.m |
| Height | 225 mm |
| Width | 140 mm |
| Depth | 226 mm |
| net weight | 7.5 kg |

## Environment

| IP degree of protection | IP2X front face with shrouds conforming to IEC 60529<br>IP2X front face with shrouds conforming to VDE 0106 |
|---|---|
| Ambient air temperature for operation | -25…60 °C |
| Ambient air temperature for storage | -60…80 °C |
| Mechanical robustness | Vibrations 5…300 Hz 2 gn contactor open<br>Vibrations 5…300 Hz 4 gn contactor closed<br>Shocks 10 gn 11 ms contactor open<br>Shocks 15 gn 11 ms contactor closed |
| Colour | Dark grey |
| Protective treatment | TH |
| Permissible ambient air temperature around the device | -40…70 °C at Uc |

## Packing Units

| Unit Type of Package 1 | PCE |
|---|---|
| Number of Units in Package 1 | 1 |
| Package 1 Height | 31.0 cm |
| Package 1 Width | 22.5 cm |
| Package 1 Length | 31.0 cm |
| Package 1 Weight | 7.96 kg |
| Unit Type of Package 2 | S06 |
| Number of Units in Package 2 | 4 |
| Package 2 Height | 105 cm |
| Package 2 Width | 60 cm |
| Package 2 Length | 80 cm |
| Package 2 Weight | 46 kg |

# Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-$CO_2$ products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency    RoHS/REACh

## Well-being performance

✔ Mercury Free

✔ Rohs Exemption Information       Yes

✔ Pvc Free

✔ Halogen Free Plastic Parts Product

## Certifications & Standards

| | |
|---|---|
| **Reach Regulation** | REACh Declaration |
| **Eu Rohs Directive** | Compliant with Exemptions |
| **China Rohs Regulation** | China RoHS declaration |
| **Environmental Disclosure** | Product Environmental Profile |
| **Circularity Profile** | End of Life Information |

Installation

## Installation Videos

TeSys Giga - How to install the auxiliary contact block

TeSys Giga - How to install and remove remote wear diagnosis module

TeSys Giga - How to install mechanical interlock kit

TeSys Giga - How to install cable memory kit

TeSys Giga - How to directly mount LR9G overload relay

TeSys Giga - How to replace control module

TeSys Giga - How to replace switching modules

TeSys Giga - How to assemble reverser solution

TeSys Giga - How to assemble change-over solution