

# Product data sheet

Specifications



Contactor, high power, TeSys Giga, standard version, 3 pole/NO, AC-3 <=440V 500A, 100-250VAC/DC coil

LC1G500KUE

Product availability: Stock - Normally stocked in distribution facility

## 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 <104 °F (40 °C)) at <= 1000 V AC-1<br>500 A (at <140 °F (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 <140 °F (60 °C))<br>Drop-out: 0.1 Uc Max...0.45 Uc Min (at <140 °F (60 °C)) |

## Complementary

|                                             |                                                                                                                         |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| [Uimp] rated impulse withstand voltage      | 8 kV                                                                                                                    |
| Overvoltage category                        | III                                                                                                                     |
| [Ith] conventional free air thermal current | 700 A (at 104 °F (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<br>600 A UL Type L at <= 600 V |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Average impedance                              | 0.00008 Ohm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| [Ui] rated insulation voltage                  | 1000 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Power dissipation per pole                     | 40 W AC-1 - lth 700 A<br>20 W AC-3 - lth 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) |
| Maximum Horse Power Rating                     | 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 EN/ISO 13849-1<br>B10d = 3000000 cycles contactor with mechanical load 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 0.3 in² (185 mm²)<br>Power circuit: bolted connection<br>Control circuit: push-in 1 0.0003...0.004 in² (0.2...2.5 mm²) - cable stiffness: solid stranded without cable end<br>Control circuit: push-in 1 0.0004...0.004 in² (0.25...2.5 mm²) - cable stiffness: flexible with cable end<br>Control circuit: push-in 2 0.0008...0.002 in² (0.5...1.0 mm²) with cable end<br>Control circuit: push-in 0.001...0.004 in² (0.75...2.5 mm²) - cable stiffness: solid stranded without cable end<br>Control circuit: push-in 0.001...0.004 in² (0.75...2.5 mm²) - cable stiffness: flexible with cable end                                                                                                                                 |
| Connection pitch                               | 1.8 in (45 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|                        |                                                                                                                                                                                                                |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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<br>IEC 60335-1:Clause 30.2<br>IEC 60335-2-40:Annex JJ<br>UL 60335-1<br>UL 60335-2-40:Annex JJ |
| Product Certifications | CB Scheme<br>CCC<br>cULus<br>EAC<br>CE<br>UKCA<br>EU-RO-MR by DNV-GL                                                                                                                                           |
| Tightening torque      | 309.8 lbf.in (35 N.m)                                                                                                                                                                                          |
| Height                 | 8.9 in (225 mm)                                                                                                                                                                                                |
| Width                  | 5.5 in (140 mm)                                                                                                                                                                                                |
| Depth                  | 8.9 in (226 mm)                                                                                                                                                                                                |
| Net Weight             | 15.4 lb(US) (7 kg)                                                                                                                                                                                             |

## Environment

|                                                       |                                                                                                                                                                      |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IP degree of protection                               | IP2X front face with shrouds IEC 60529<br>IP2X front face with shrouds VDE 0106                                                                                      |
| Ambient air temperature for operation                 | -13...140 °F (-25...60 °C)                                                                                                                                           |
| Ambient Air Temperature for Storage                   | -76...176 °F (-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 |
| color                                                 | Dark grey                                                                                                                                                            |
| Protective treatment                                  | TH                                                                                                                                                                   |
| Permissible ambient air temperature around the device | -40...158 °F (-40...70 °C) at Uc                                                                                                                                     |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US10I1222329  |
| Discount Schedule | 0I12          |
| GTIN              | 3606481921994 |
| Returnability     | Yes           |
| Country of origin | CN            |

## Packing Units

|                        |                       |
|------------------------|-----------------------|
| Unit Type of Package 1 | PCE                   |
| Nbr. of units in pkg.  | 1                     |
| Package 1 Height       | 11.811 in (30.000 cm) |
| Package 1 Width        | 8.858 in (22.500 cm)  |
| Package 1 Length       | 14.764 in (37.500 cm) |

|                              |                            |
|------------------------------|----------------------------|
| Package weight(Lbs)          | 18.519 lb(US) (8.400 kg)   |
| Unit Type of Package 2       | S06                        |
| Number of Units in Package 2 | 4                          |
| Package 2 Height             | 41.339 in (105.000 cm)     |
| Package 2 Width              | 23.622 in (60.000 cm)      |
| Package 2 Length             | 31.496 in (80.000 cm)      |
| Package 2 Weight             | 101.413 lb(US) (46.000 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                        |                                               |
|------------------------------------------------|-----------------------------------------------|
| Carbon footprint (kg CO2 eq, Total Life cycle) | 1672                                          |
| 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                            | 6fbdad13-bb7c-47d4-a6d6-d82dd6f54349                                                                                                                                                                                                                                                                                                               |
| REACH Regulation                       | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                                                                                  |
| California proposition 65              | WARNING: This product can expose you to chemicals including: Styrene, 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| Halogen content performance            | Halogen free plastic parts product                                                                                                                                                                                                                                                                                                                 |
| PVC free                               | No                                                                                                                                                                                                                                                                                                                                                 |

Use Again

| Repack and remanufacture      |                                                                                                                                                                                                                  |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclability potential, in % | 55                                                                                                                                                                                                               |
| Circularity Profile           | <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. |

Offer Marketing Illustration

Product benefits / Features

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Offer Marketing Illustration

Product benefits / Features

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### TeSys Giga Contactors





**Simplified maintenance**

A patented modular design for the switching and control unit and cable memory enables better performance and faster spare parts replacement in an optimised footprint.



**Ready for critical applications**

Improved auxiliary contacts (17 V/1 mA, 10-8) enable better reliability in harsh environments and conform to high-density PLC input applications.



**Resilience and uptime**

Self diagnostic functions enable predictive maintenance with easier and safer commissioning.

Offer Marketing Illustration

Product benefits / Features

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A black TeSys Giga Contactor, model LC1G500KUEN, is shown against a green circular background. The device has a modular design with a main body and a terminal block on top. It features a green label with the Schneider Electric logo and technical specifications. The terminal block has several green and black terminals for wiring.

### TeSys Giga Contactors

#### Technical Benefits

- Self-diagnostic indicators and full-scale protection help speed up corrections and prevent downtime.
- Modular design that simplifies machine integration and maintenance.
- High power contactors (up to 800 A AC-3 or 1050 A AC-1) for AC/DC motor applications and AC/DC load applications.
- They can be used up to 1000 Vac power voltage and 460 Vdc power voltage.
- Ground fault protection, phase imbalance/failure protection, and protection of single-phase loads.
- The coil is designed for less energy consumption and wider voltage bandwidth.

Offer Marketing Illustration

Product benefits / Features



