

# Product data sheet

Specifications



High power contactor, TeSys Giga, 4 pole (4NO), AC-1  $\leq 440\text{V}$  700A, advanced version, 24...48V wide band AC/DC coil

LC1G5004BEEA

## Main

|                                |                                                                                                                                                                                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                          | TeSys                                                                                                                                                                                                                |
| Range of product               | TeSys Giga                                                                                                                                                                                                           |
| Product or component type      | Contactors                                                                                                                                                                                                           |
| Device short name              | LC1G                                                                                                                                                                                                                 |
| Contactors application         | Power switching                                                                                                                                                                                                      |
| Utilisation category           | AC-3<br>AC-3e<br>AC-1<br>AC-5a<br>AC-5b<br>AC-6a<br>AC-6b<br>DC-1<br>DC-3<br>DC-5                                                                                                                                    |
| Poles description              | 4P                                                                                                                                                                                                                   |
| [Ue] rated operational voltage | $\leq 1000\text{ V AC }50/60\text{ Hz}$<br>$\leq 460\text{ V DC}$                                                                                                                                                    |
| [Ie] rated operational current | 500 A (at $<140\text{ }^{\circ}\text{F}$ ( $60\text{ }^{\circ}\text{C}$ )) at $\leq 440\text{ V AC-3}$<br>700 A (at $<104\text{ }^{\circ}\text{F}$ ( $40\text{ }^{\circ}\text{C}$ )) at $\leq 1000\text{ V AC-1}$    |
| [Uc] control circuit voltage   | 24...48 V AC 50/60 Hz<br>24...48 V DC                                                                                                                                                                                |
| Control circuit voltage limits | Operational: 0.8 Uc Min...1.1 Uc Max (at $<140\text{ }^{\circ}\text{F}$ ( $60\text{ }^{\circ}\text{C}$ ))<br>Drop-out: 0.1 Uc Max...0.45 Uc Min (at $<140\text{ }^{\circ}\text{F}$ ( $60\text{ }^{\circ}\text{C}$ )) |

## Complementary

|                                             |                                                                                                                                                                     |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Uimp] rated impulse withstand voltage      | 8 kV                                                                                                                                                                |
| Overvoltage category                        | III                                                                                                                                                                 |
| [Ith] conventional free air thermal current | 700 A (at $104\text{ }^{\circ}\text{F}$ ( $40\text{ }^{\circ}\text{C}$ ))                                                                                           |
| 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 $\leq 440\text{ V}$ for motor<br>400 A aM at $\leq 690\text{ V}$ for motor<br>800 A gG at $\leq 690\text{ V}$<br>600 A UL Type L at $\leq 600\text{ V}$ |
| Average impedance                           | 0.00008 Ohm                                                                                                                                                         |
| [Ui] rated insulation voltage               | 1000 V                                                                                                                                                              |

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

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                       | 4 NO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Auxiliary contact composition                  | 1 NO + 1 NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Irms rated making capacity                     | 1560 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)              | 490 VA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| inrush power in W (DC)                         | 350 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| hold-in power consumption in VA (50/60 Hz, AC) | 17.9 VA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| hold-in power consumption in W (DC)            | 6.0 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 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>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                                         | 11.4 in (290 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Width                                          | 7.3 in (185 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Depth                                          | 8.9 in (226 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Net weight                                     | 19.6 lb(US) (8.9 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 |
| Colour                                                | Dark grey                                                                                                                                                            |
| Protective treatment                                  | TH                                                                                                                                                                   |
| Permissible ambient air temperature around the device | -40...158 °F (-40...70 °C) at Uc                                                                                                                                     |

## Packing Units

|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Number of Units in Package 1 | 1                       |
| Package 1 Height             | 11.8 in (30 cm)         |
| Package 1 Width              | 10.4 in (26.5 cm)       |
| Package 1 Length             | 14.6 in (37 cm)         |
| Package 1 Weight             | 24.9 lb(US) (11.3 kg)   |
| Unit Type of Package 2       | S06                     |
| Number of Units in Package 2 | 4                       |
| Package 2 Height             | 28.9 in (73.5 cm)       |
| Package 2 Width              | 23.6 in (60.0 cm)       |
| Package 2 Length             | 31.5 in (80.0 cm)       |
| Package 2 Weight             | 113.10 lb(US) (51.3 kg) |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## 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                       | 3 595 kg CO2 eq.                              |
| Carbon footprint of the manufacturing phase [A1 to A3] | 54 kg CO2 eq.                                 |
| Carbon footprint of the distribution phase [A4]        | 3 kg CO2 eq.                                  |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 3 518 kg CO2 eq.                              |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 21 kg CO2 eq.                                 |
| Environmental Disclosure                               | <a href="#">Product Environmental Profile</a> |

## Use Better



### Materials and Substances

|                                        |                                                                                        |
|----------------------------------------|----------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                                                    |
| Packaging without single use plastic   | Yes                                                                                    |
| SCIP Number                            | 6fbdad13-bb7c-47d4-a6d6-d82dd6f54349                                                   |
| EU RoHS Directive                      | <a href="#">Compliant By Exemption</a>                                                 |
| REACH Regulation                       | <a href="#">Reference contains Substances of Very High Concern above the threshold</a> |
| Halogen content performance            | Halogen free plastic parts product                                                     |
| PVC free                               | No                                                                                     |

## Use Longer



### Lifetime extension

|        |    |
|--------|----|
| Repair | 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



Offer Marketing Illustration

Product benefits / Features



Offer Marketing Illustration

Product benefits / Features

### 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



The image shows a TeSys Giga Contactor, a large industrial electrical component. It is a dark grey, modular unit with multiple terminals on top and bottom. A green label on the front features the Schneider Electric logo and technical specifications. The unit is shown against a green circular background.

### 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.

Technical Illustration

Assembly's dimensions

