

Product datasheet

Specifications



High power contactor, TeSys Giga, 3 pole (3NO), AC-3 $\leq 440\text{V } 500\text{A}$, standard version, 100...250V wide band AC/DC coil

LC1G500KUE

EAN Code: 3606481921994

Main

| | |
|--------------------------------|--|
| Range | TeSys |
| Range of product | TeSys Giga |
| Product or component type | Contactors |
| Device short name | LC1G |
| Contactors application | Power switching Motor control |
| Utilisation category | AC-1 AC-3 AC-3e AC-4 AC-5a AC-5b AC-6a AC-6b AC-8a AC-8b DC-1 DC-3 DC-5 |
| Poles description | 3P |
| [Ue] rated operational voltage | $\leq 1000\text{ V AC } 50/60\text{ Hz}$ $\leq 460\text{ V DC}$ |
| [Ie] rated operational current | 700 A (at $<40\text{ }^\circ\text{C}$) at $\leq 1000\text{ V AC-1}$ 500 A (at $<60\text{ }^\circ\text{C}$) at $\leq 440\text{ V AC-3}$ |
| [Uc] control circuit voltage | 100...250 V AC 50/60 Hz 100...250 V DC |
| Control circuit voltage limits | Operational: $0.8\text{ } U_c\text{ Min} \dots 1.1\text{ } U_c\text{ Max}$ (at $<60\text{ }^\circ\text{C}$) Drop-out: $0.1\text{ } U_c\text{ Max} \dots 0.45\text{ } U_c\text{ Min}$ (at $<60\text{ }^\circ\text{C}$) |

Complementary

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|---|---|
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 700 A (at $40\text{ }^\circ\text{C}$) |
| Rated breaking capacity | 4600 A at 440 V |
| [Icw] rated short-time withstand current | 4.0 kA - 10 s 2.8 kA - 30 s 2.2 kA - 1 min 1.5 kA - 3 min 1.2 kA - 10 min |

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| Associated fuse rating | 500 A aM at ≤ 440 V for motor 400 A aM at ≤ 690 V for motor 800 A gG at ≤ 690 V 600 A UL Type L at ≤ 600 V |
| Average impedance | 0.00008 Ohm |
| [Ui] rated insulation voltage | 1000 V |
| Power dissipation per pole | 40 W AC-1 - lth 700 A 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) 250 kW at 400 V AC 50/60 Hz (AC-3e) 250 kW at 415 V AC 50/60 Hz (AC-3e) 280 kW at 440 V AC 50/60 Hz (AC-3e) 315 kW at 500 V AC 50/60 Hz (AC-3e) 355 kW at 690 V AC 50/60 Hz (AC-3e) 335 kW at 1000 V AC 50/60 Hz (AC-3e) 160 kW at 230 V AC 50/60 Hz (AC-3) 250 kW at 400 V AC 50/60 Hz (AC-3) 250 kW at 415 V AC 50/60 Hz (AC-3) 315 kW at 440 V AC 50/60 Hz (AC-3) 355 kW at 500 V AC 50/60 Hz (AC-3) 355 kW at 690 V AC 50/60 Hz (AC-3) 335 kW at 1000 V AC 50/60 Hz (AC-3) 150 kW at 230 V AC 50/60 Hz (AC-4) 250 kW at 400 V AC 50/60 Hz (AC-4) 250 kW at 415 V AC 50/60 Hz (AC-4) 295 kW at 440 V AC 50/60 Hz (AC-4) 295 kW at 500 V AC 50/60 Hz (AC-4) 355 kW at 690 V AC 50/60 Hz (AC-4) 280 kW at 1000 V AC 50/60 Hz (AC-4) |
| Motor power hp | 150 hp at 200/208 V 60 Hz 200 hp at 230/240 V 60 Hz 400 hp at 460/480 V 60 Hz 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 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 15...50 ms opening |
| Maximum operating rate | 600 cyc/h AC-3 600 cyc/h AC-3e 300 cyc/h AC-1 150 cyc/h AC-4 |

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|--------------------------------|---|
| Connections - terminals | Power circuit: bar 2 - busbar cross section: 32 x 10 mm Power circuit: lugs-ring terminals 1 185 mm ² Power circuit: bolted connection 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 Control circuit: push-in 0.75...2.5 mm ² - cable stiffness: solid stranded without cable end Control circuit: push-in 0.75...2.5 mm ² - cable stiffness: flexible with cable end |
| Connection pitch | 45 mm |
| Mounting support | 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 60335-1 UL 60335-2-40:Annex JJ |
| Product certifications | CB Scheme CCC cULus EAC CE UKCA EU-RO-MR by DNV-GL |
| Tightening torque | 35 N.m |
| Height | 225 mm |
| Width | 140 mm |
| Depth | 226 mm |
| Net weight | 7 kg |

Environment

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| IP degree of protection | IP2X front face with shrouds conforming to IEC 60529 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 Vibrations 5...300 Hz 4 gn contactor closed Shocks 10 gn 11 ms contactor open Shocks 15 gn 11 ms contactor closed |
| Colour | Dark grey |
| Protective treatment | TH |
| Permissible ambient air temperature around the device | -40...70 °C at U _c |

Packing Units

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|-------------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 30.000 cm |
| Package 1 Width | 22.500 cm |
| Package 1 Length | 37.500 cm |
| Package 1 Weight | 8.400 kg |

| | |
|-------------------------------------|------------|
| Unit Type of Package 2 | S06 |
| Number of Units in Package 2 | 4 |
| Package 2 Height | 105.000 cm |
| Package 2 Width | 60.000 cm |
| Package 2 Length | 80.000 cm |
| Package 2 Weight | 46.000 kg |

Logistical informations

Country of origin CN

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

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|----------------------------------|------|
| Total lifecycle Carbon footprint | 1672 |
|----------------------------------|------|

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| Environmental Disclosure | Product Environmental Profile |
|--------------------------|---|

Use Better

Materials and Substances

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| Packaging made with recycled cardboard | Yes |
|--|-----|

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| Packaging without single use plastic | No |
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|-----------------------------------|---------------------------|
| EU RoHS Directive | Compliant with Exemptions |
|-----------------------------------|---------------------------|

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|-------------|--------------------------------------|
| SCIP Number | 6fbdad13-bb7c-47d4-a6d6-d82dd6f54349 |
|-------------|--------------------------------------|

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| REACH Regulation | REACH Declaration |
|------------------|-----------------------------------|

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|---------------------|------------------------------------|
| Halogen-free status | Halogen free plastic parts product |
|---------------------|------------------------------------|

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|----------|----|
| PVC free | No |
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Use Again

Repack and remanufacture

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|---------------------------------|---|
| End of life manual availability | End of Life Information |
|---------------------------------|---|

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|-----------|----|
| Take-back | No |
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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](#)

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



TeSys Giga Contactors
Range Accessories

Mechanical interlock, Cable memory kit, Terminal shroud, Auxiliary contact block, Remote Wear Diagnostic Module, Switching Module Kit, Control module, Phase separator, Change-over connection bar, Reverser connection bar

The image displays a collection of accessories for TeSys Giga Contactors. At the top left, a large contactor is shown against a green circular background. Below it, twelve different accessories are arranged in three rows. Each accessory is accompanied by a small image and a text label. The accessories include: Mechanical interlock (two small black components), Cable memory kit (a black rectangular component), Terminal shroud (a clear plastic cover), Auxiliary contact block (a vertical green and black component), Remote Wear Diagnostic Module (a black rectangular component with a blue light), Switching Module Kit (a white component with multiple terminals), Control module (a black rectangular component with a green light), Phase separator (two black rectangular components), Change-over connection bar (a black component with multiple terminals), and Reverser connection bar (a black component with multiple terminals).

Offer Marketing Illustration

Product benefits / Features



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

