

# Product datasheet

Specifications



High power contactor, TeSys Giga, 4 pole (4NO), AC-1  $\leq 440\text{V}$  700A, advanced version, 48...130V wide band AC/DC coil

LC1G5004EHEA

## 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 AC-3e AC-1 AC-5a AC-5b AC-6a AC-6b DC-1 DC-3 DC-5
Poles description	4P
[Ue] rated operational voltage	$\leq 1000\text{ V AC } 50/60\text{ Hz}$ $\leq 460\text{ V DC}$
[Ie] rated operational current	500 A (at $<60\text{ }^\circ\text{C}$ ) at $\leq 440\text{ V AC-3}$ 700 A (at $<40\text{ }^\circ\text{C}$ ) at $\leq 1000\text{ V AC-1}$
[Uc] control circuit voltage	48...130 V AC 50/60 Hz 48...130 V DC
Control circuit voltage limits	Operational: $0.8\text{ Uc Min} \dots 1.1\text{ Uc Max}$ (at $<60\text{ }^\circ\text{C}$ ) Drop-out: $0.1\text{ Uc Max} \dots 0.45\text{ Uc Min}$ (at $<60\text{ }^\circ\text{C}$ )

## Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	700 A (at $40\text{ }^\circ\text{C}$ )
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
Associated fuse rating	500 A aM at $\leq 440\text{ V}$ for motor 400 A aM at $\leq 690\text{ V}$ for motor 800 A gG at $\leq 690\text{ V}$
Average impedance	0.00008 Ohm
[Ui] rated insulation voltage	1000 V

<b>Power dissipation per pole</b>	40 W AC-1 - lth 700 A 20 W AC-3 - lth 500 A
<b>Compatibility code</b>	LC1G
<b>Pole contact composition</b>	4 NO
<b>Auxiliary contact composition</b>	1 NO + 1 NC
<b>Motor power hp</b>	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
<b>Irms rated making capacity</b>	5090 A at 440 V
<b>Coil technology</b>	Built-in bidirectional peak limiting
<b>Safety reliability level</b>	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
<b>Mechanical durability</b>	8 Mcycles
<b>inrush power in VA (50/60 Hz, AC)</b>	450 VA
<b>inrush power in W (DC)</b>	360 W
<b>hold-in power consumption in VA (50/60 Hz, AC)</b>	11.7 VA
<b>hold-in power consumption in W (DC)</b>	8.3 W
<b>Operating time</b>	40...70 ms closing 15...50 ms opening
<b>Maximum operating rate</b>	600 cyc/h AC-3 600 cyc/h AC-3e 300 cyc/h AC-1
<b>Connections - terminals</b>	Power circuit: bar 2 - busbar cross section: 32 x 10 mm Power circuit: lugs-ring terminals 1 185 mm <sup>2</sup> Power circuit: bolted connection 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 Control circuit: push-in 0.75...2.5 mm <sup>2</sup> - cable stiffness: solid stranded without cable end Control circuit: push-in 0.75...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end
<b>Connection pitch</b>	45 mm
<b>Mounting support</b>	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 UL 60335-1 UL 60335-2-40:Annex JJ
<b>Product certifications</b>	CB Scheme CCC cULus EAC CE UKCA EU-RO-MR by DNV-GL
<b>Tightening torque</b>	35 N.m
<b>Height</b>	290 mm
<b>Width</b>	185 mm
<b>Depth</b>	226 mm

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Net weight	8.7 kg
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## 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
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Ambient air temperature for operation	-25...60 °C
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Ambient air temperature for storage	-60...80 °C
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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
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Colour	Dark grey
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Protective treatment	TH
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Permissible ambient air temperature around the device	-40...70 °C at U <sub>c</sub>
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## Packing Units

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Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	30 cm
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Package 1 Width	26.5 cm
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Package 1 Length	37 cm
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Package 1 Weight	10.0 kg
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Unit Type of Package 2	S06
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Number of Units in Package 2	4
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Package 2 Height	73.5 cm
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Package 2 Width	60.0 cm
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Package 2 Length	80.0 cm
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Package 2 Weight	51.3 kg
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## Sustainability

**Green Premium™ 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<sub>2</sub> 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](#)

## 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

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[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 replace control module](#)

[TeSys Giga - How to replace switching modules](#)

[TeSys Giga - How to assemble change-over solution](#)

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.

