

Product datasheet

Specifications



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

LC1G5004EHEN

Main

Range	TeSys
Range of product	TeSys Giga
Product or component type	Contactor
Device short name	LC1G
Contactor 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 Uc Min...1.1 Uc Max (at $<60\text{ }^\circ\text{C}$) Drop-out: 0.1 Uc Max...0.45 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

Power dissipation per pole	40 W AC-1 - lth 700 A 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	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)	965 VA
inrush power in W (DC)	760 W
hold-in power consumption in VA (50/60 Hz, AC)	17.6 VA
hold-in power consumption in W (DC)	7.8 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
Connections - terminals	Power circuit: bar 2 - busbar cross section: 32 x 10 mm Power circuit: lugs-ring terminals 1 185 mm ² 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 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	185 mm
Depth	226 mm
Net weight	8.2 kg

Environment

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

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	27.000 cm
Package 1 Width	31.000 cm
Package 1 Length	32.000 cm
Package 1 Weight	9.689 kg
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	48.756 kg

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-CO₂ 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

[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 replace control module](#)

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

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

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.

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

