

# Product datasheet

Specifications



High power contactor, TeSys Giga, 4 pole (4NO), AC-1  $\leq 440\text{V}$  305A, advanced version, 48...130V wide band AC/DC coil

LC1G1854EHEA

## 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	185 A (at $<60\text{ }^\circ\text{C}$ ) at $\leq 440\text{ V AC-3}$ 305 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	305 A (at $40\text{ }^\circ\text{C}$ )
Rated breaking capacity	1610 A at 440 V
[Icw] rated short-time withstand current	1.5 kA - 10 s 0.92 kA - 30 s 0.74 kA - 1 min 0.5 kA - 3 min 0.4 kA - 10 min
Associated fuse rating	200 A aM at $\leq 440\text{ V}$ for motor 160 A aM at $\leq 690\text{ V}$ for motor 315 A gG at $\leq 690\text{ V}$
Average impedance	0.00017 Ohm
[Ui] rated insulation voltage	1000 V

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

<b>Power dissipation per pole</b>	20 W AC-1 - lth 305 A 6 W AC-3 - lth 185 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>	50 hp at 200/208 V 60 Hz 60 hp at 230/240 V 60 Hz 125 hp at 460/480 V 60 Hz 150 hp at 575/600 V 60 Hz
<b>Irms rated making capacity</b>	2310 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>	260 VA
<b>inrush power in W (DC)</b>	190 W
<b>hold-in power consumption in VA (50/60 Hz, AC)</b>	8.9 VA
<b>hold-in power consumption in W (DC)</b>	5.0 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: 25 x 6 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>	35 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>	18 N.m
<b>Height</b>	255 mm
<b>Width</b>	143 mm
<b>Depth</b>	193 mm

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Net weight	5.1 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	25.000 cm
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Package 1 Width	26.000 cm
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Package 1 Length	38.500 cm
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Package 1 Weight	6.377 kg
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Unit Type of Package 2	S06
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Number of Units in Package 2	6
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Package 2 Height	75.000 cm
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Package 2 Width	60.000 cm
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Package 2 Length	80.000 cm
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Package 2 Weight	48.262 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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**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.