

# Product datasheet

Specifications



High power contactor, TeSys Giga, 3 pole (3NO), AC-3  $\leq 440\text{V } 500\text{A}$ , advanced version, 24...48V wide band AC/DC coil

LC1G500BEEA

## Main

Range	TeSys
Range of product	TeSys Giga
product or component type	Contactor
Device short name	LC1G
contactor 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	24...48 V AC 50/60 Hz 24...48 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 $\leq 690\text{ V}$

<b>Average impedance</b>	0.00008 Ohm
<b>[Ui] rated insulation voltage</b>	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>	3 NO
<b>Auxiliary contact composition</b>	1 NO + 1 NC
<b>Motor power kW</b>	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)
<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>	490 VA
<b>inrush power in W (DC)</b>	350 W
<b>hold-in power consumption in VA (50/60 Hz, AC)</b>	17.9 VA
<b>hold-in power consumption in W (DC)</b>	6.0 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-1 150 cyc/h AC-4
<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

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
Product certifications	CB Scheme CCC cULus EAC CE UKCA EU-RO-MR by DNV-GL
Tightening torque	35 N.m
Height	290 mm
Width	140 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 <sub>c</sub>

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	22.0 cm
Package 1 Width	31.0 cm
Package 1 Length	37.5 cm
Package 1 Weight	9.178 kg
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Height	75.0 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	50.5 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-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](#)

---

✓ Pvc Free

---

✓ Halogen Free Plastic Parts Product

---

## 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 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](#)

[TeSys Giga - How to assemble star-delta starter solution New](#)