

Product datasheet

Specifications



High power contactor, TeSys Giga, 3 pole (3NO), AC-3 $\leq 440\text{V } 500\text{A}$, advanced version, 200...500V wide band AC/DC coil

LC1G500LSEA

Main

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|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range | TeSys |
| Range of product | TeSys Giga |
| Product or component type | Contacteur |
| Device short name | LC1G |
| Contacteur application | Power switching Motor control |
| Utilisation category | AC-1 AC-3 AC-3e AC-4 AC-5a AC-5b AC-6a AC-6b AC-8b AC-8a 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 | 200...500 V AC 50/60 Hz 200...500 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

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|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| 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 |

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| [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 |
| 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) | 535 VA |
| inrush power in W (DC) | 300 W |
| hold-in power consumption in VA (50/60 Hz, AC) | 15.4 VA |
| hold-in power consumption in W (DC) | 8.6 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 |
| 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 |

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| 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 | 290 mm |
| Width | 140 mm |
| Depth | 226 mm |
| Net weight | 8.2 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 Uc |

Packing Units

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| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 31.000 cm |
| Package 1 Width | 22.800 cm |
| Package 1 Length | 37.200 cm |
| Package 1 Weight | 9.176 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 | 46.704 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 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](#)