

Product data sheet

Specifications



Contactor, high power, TeSys Giga, advanced version, 3 pole/NO, AC-3 <=440V 500A, 200-500VAC/DC coil

LC1G500LSEA

Product availability: Stock - Normally stocked in distribution facility

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-8b AC-8a DC-1 DC-3 DC-5
Poles description	3P
[Ue] rated operational voltage	<= 1000 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	700 A (at <104 °F (40 °C)) at <= 1000 V AC-1 500 A (at <140 °F (60 °C)) at <= 440 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 Uc Min...1.1 Uc Max (at <140 °F (60 °C)) Drop-out: 0.1 Uc Max...0.45 Uc Min (at <140 °F (60 °C))

Complementary

[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 <= 440 V for motor 400 A aM at <= 690 V for motor 800 A gG at <= 690 V 600 A UL Type L at <= 600 V
Average impedance	0.00008 Ohm

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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Ui] rated insulation voltage	1000 V
Power dissipation per pole	40 W AC-1 - Ith 700 A 20 W AC-3 - Ith 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)
Maximum Horse Power Rating	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 EN/ISO 13849-1 B10d = 3000000 cycles contactor with mechanical load 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 0.3 in² (185 mm²) Power circuit: bolted connection Control circuit: push-in 1 0.0003...0.004 in² (0.2...2.5 mm²) - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.0004...0.004 in² (0.25...2.5 mm²) - cable stiffness: flexible with cable end Control circuit: push-in 2 0.0008...0.002 in² (0.5...1.0 mm²) with cable end Control circuit: push-in 0.001...0.004 in² (0.75...2.5 mm²) - cable stiffness: solid stranded without cable end Control circuit: push-in 0.001...0.004 in² (0.75...2.5 mm²) - cable stiffness: flexible with cable end
Connection pitch	1.8 in (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 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	309.8 lbf.in (35 N.m)
Height	11.4 in (290 mm)
Width	5.5 in (140 mm)
Depth	8.9 in (226 mm)
Product Weight	17.2 lb(US) (7.8 kg)

Environment

IP degree of protection	IP2X front face with shrouds IEC 60529 IP2X front face with shrouds VDE 0106
Ambient Air Temperature for Operation	-13...140 °F (-25...60 °C)
Ambient Air Temperature for Storage	-76...176 °F (-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
color	Dark grey
Protective treatment	TH
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °C) at Uc

Ordering and shipping details

Category	US10I1222329
Discount Schedule	0I12
GTIN	3606481922496
Returnability	Yes
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	12.205 in (31.000 cm)
Package 1 Width	8.976 in (22.800 cm)
Package 1 Length	14.646 in (37.200 cm)
Package weight(Lbs)	21.023 lb(US) (9.536 kg)

Unit Type of Package 2	P06
Number of Units in Package 2	8
Package 2 Height	29.5 in (75 cm)
Package 2 Width	23.6 in (60 cm)
Package 2 Length	31.5 in (80 cm)
Package 2 Weight	186.926 lb(US) (84.788 kg)

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Total lifecycle Carbon footprint	1 621 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	76 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	14 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1 520 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	12 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	6fbdad13-bb7c-47d4-a6d6-d82dd6f54349
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
California proposition 65	WARNING: This product can expose you to chemicals including: Styrene, which is known to the State of California to cause cancer, and Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
Halogen content performance	Halogen free plastic parts product
PVC free	No

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	55
Circularity Profile	End of Life Information
Take-back	No



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Offer Marketing Illustration

Product benefits / Features

A black TeSys Giga Contactor, model LC1G500LSEA, is shown against a green circular background. The device has a modular design with multiple terminals and a green label on the front.

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



Offer Marketing Illustration

Product benefits / Features



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.

