

Product data sheet

Specifications



High power contactor, TeSys Giga, 4 pole (4NO), AC-1 $\leq 440\text{V}$ 440A, advanced version, 200...500V wide band AC/DC coil

LC1G3304LSEA

Main

Range	TeSys
Range of product	TeSys Giga
Product or component type	Contactors
Device short name	LC1G
Contactors 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	330 A (at $<140\text{ }^{\circ}\text{F}$ ($60\text{ }^{\circ}\text{C}$)) at $\leq 440\text{ V AC-3}$ 440 A (at $<104\text{ }^{\circ}\text{F}$ ($40\text{ }^{\circ}\text{C}$)) at $\leq 1000\text{ V AC-1}$
[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 $<140\text{ }^{\circ}\text{F}$ ($60\text{ }^{\circ}\text{C}$)) Drop-out: 0.1 Uc Max...0.45 Uc Min (at $<140\text{ }^{\circ}\text{F}$ ($60\text{ }^{\circ}\text{C}$))

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	440 A (at $104\text{ }^{\circ}\text{F}$ ($40\text{ }^{\circ}\text{C}$))
Rated breaking capacity	2940 A at 440 V
[Icw] rated short-time withstand current	2.65 kA - 10 s 1.8 kA - 30 s 1.3 kA - 1 min 0.9 kA - 3 min 0.75 kA - 10 min
Associated fuse rating	400 A aM at $\leq 440\text{ V}$ for motor 250 A aM at $\leq 690\text{ V}$ for motor 500 A gG at $\leq 690\text{ V}$ 600 A UL Type L at $\leq 600\text{ V}$
Average impedance	0.000144 Ohm
[Ui] rated insulation voltage	1000 V

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

Power dissipation per pole	30 W AC-1 - lth 440 A 16 W AC-3 - lth 330 A
Compatibility code	LC1G
Pole contact composition	4 NO
Auxiliary contact composition	1 NO + 1 NC
Irms rated making capacity	3830 A at 440 V
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)	530 VA
inrush power in W (DC)	300 W
hold-in power consumption in VA (50/60 Hz, AC)	16.1 VA
hold-in power consumption in W (DC)	9.0 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 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 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	7.3 in (185 mm)
Depth	8.9 in (226 mm)
Net weight	19.6 lb(US) (8.9 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
Colour	Dark grey
Protective treatment	TH
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °C) at Uc

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	12.205 in (31.000 cm)
Package 1 Width	10.630 in (27.000 cm)
Package 1 Length	14.567 in (37.000 cm)
Package 1 Weight	23.318 lb(US) (10.577 kg)
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Height	29.528 in (75.000 cm)
Package 2 Width	23.622 in (60.000 cm)
Package 2 Length	31.496 in (80.000 cm)
Package 2 Weight	115.743 lb(US) (52.500 kg)

Contractual warranty

Warranty (in months)	18
----------------------	----



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	2 834 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	57 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	3 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	2 753 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	22 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
Halogen content performance	Halogen free plastic parts product
PVC free	No

Use Longer



Lifetime extension

Repair	No
--------	----

Use Again



Repack and remanufacture

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



TeSys Giga Contactors

Range Accessories



Mechanical Interlock



Cable memory kit



Terminal shroud



Auxiliary contact block



Remote Wear Diagnostic Module



Switching Module Kit



Control module



Phase separator



Change-over connection bar



Reverser connection bar

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.



Offer Marketing Illustration

Product benefits / Features

A black TeSys Giga Contactor, model LC1G3304LSEA, is shown against a green circular background. The device has a modular design with a main body and a terminal block on top. It features a green label with the Schneider Electric logo and technical specifications. The terminal block has several green and black terminals for wiring.

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.

