

Product datasheet

Specifications



High power contactor, TeSys Giga,
3 pole (3NO), AC-3 $\leq 440\text{V}$ 185A,
standard version, 100...250V wide
band AC/DC coil

LC1G185KUEN

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	305 A (at $\leq 40\text{ }^{\circ}\text{C}$) at $\leq 1000\text{ V AC-1}$ 185 A (at $\leq 60\text{ }^{\circ}\text{C}$) at $\leq 440\text{ V AC-3}$
[Uc] control circuit voltage	100...250 V AC 50/60 Hz 100...250 V DC
Control circuit voltage limits	Operational: $0.8\text{ Uc Min} \dots 1.1\text{ Uc Max}$ (at $\leq 60\text{ }^{\circ}\text{C}$) Drop-out: $0.1\text{ Uc Max} \dots 0.45\text{ Uc Min}$ (at $\leq 60\text{ }^{\circ}\text{C}$)

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 $\leq 690\text{ V}$ 300 A UL Type J at $\leq 600\text{ V}$

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

Average impedance	0.00017 Ohm
[Ui] rated insulation voltage	1000 V
Power dissipation per pole	20 W AC-1 - lth 305 A 6 W AC-3 - lth 185 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Motor power kW	55 kW at 230 V AC 50/60 Hz (AC-3e) 90 kW at 400 V AC 50/60 Hz (AC-3e) 90 kW at 415 V AC 50/60 Hz (AC-3e) 110 kW at 440 V AC 50/60 Hz (AC-3e) 110 kW at 500 V AC 50/60 Hz (AC-3e) 110 kW at 690 V AC 50/60 Hz (AC-3e) 75 kW at 1000 V AC 50/60 Hz (AC-3e) 55 kW at 230 V AC 50/60 Hz (AC-3) 90 kW at 400 V AC 50/60 Hz (AC-3) 90 kW at 415 V AC 50/60 Hz (AC-3) 110 kW at 440 V AC 50/60 Hz (AC-3) 110 kW at 500 V AC 50/60 Hz (AC-3) 110 kW at 690 V AC 50/60 Hz (AC-3) 75 kW at 1000 V AC 50/60 Hz (AC-3) 55 kW at 230 V AC 50/60 Hz (AC-4) 90 kW at 400 V AC 50/60 Hz (AC-4) 90 kW at 415 V AC 50/60 Hz (AC-4) 100 kW at 440 V AC 50/60 Hz (AC-4) 110 kW at 500 V AC 50/60 Hz (AC-4) 110 kW at 690 V AC 50/60 Hz (AC-4) 75 kW at 1000 V AC 50/60 Hz (AC-4)
Motor power hp	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
Irms rated making capacity	2310 A at 440 V
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)	540 VA
inrush power in W (DC)	380 W
hold-in power consumption in VA (50/60 Hz, AC)	12.4 VA
hold-in power consumption in W (DC)	7.8 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: 25 x 6 mm Power circuit: lugs-ring terminals 1 185 mm² Power circuit: bolted connection Control circuit: push-in 1 0.2...2.5 mm² - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.25...2.5 mm² - cable stiffness: flexible with cable end Control circuit: push-in 2 0.5...1.0 mm² with cable end Control circuit: push-in 0.75...2.5 mm² - cable stiffness: solid stranded without cable end Control circuit: push-in 0.75...2.5 mm² - cable stiffness: flexible with cable end
Connection pitch	35 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	18 N.m
Height	193 mm
Width	108 mm
Depth	193 mm
Net weight	3.5 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 Uc

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	25.5 cm
Package 1 Width	17.5 cm
Package 1 Length	32 cm
Package 1 Weight	4.584 kg
Unit Type of Package 2	S06
Number of Units in Package 2	12
Package 2 Height	75 cm
Package 2 Width	60 cm
Package 2 Length	80 cm
Package 2 Weight	68.454 kg

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	763
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Compliant with Exemptions
SCIP Number	6fbdad13-bb7c-47d4-a6d6-d82dd6f54349
REACH Regulation	REACH Declaration
Halogen-free status	Halogen free plastic parts product
PVC free	No

Use Again

Repack and remanufacture	
Recyclability potential, in %	55
End of life manual availability	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

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 install cable memory kit](#)

[TeSys Giga - How to directly mount LR9G overload relay](#)

[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](#)

Offer Marketing Illustration

Product benefits / Features

A black TeSys Giga Contactor with a green label and a QR code. It has multiple terminals on top and bottom.

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.