

Product datasheet

Specifications



High power contactor, TeSys Giga, 3 pole (3NO), AC-3 $\leq 440\text{V}$ 330A, standard version, 48...130V wide band AC/DC coil

LC1G330EHEN

EAN Code: 3606481921871

Main

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	440 A (at $<40\text{ }^\circ\text{C}$) at $\leq 1000\text{ V AC-1}$ 330 A (at $<60\text{ }^\circ\text{C}$) at $\leq 440\text{ V AC-3}$
[Uc] control circuit voltage	48...130 V AC 50/60 Hz 48...130 V DC
Control circuit voltage limits	Operational: 0.8 Uc Min...1.1 Uc Max (at $<60\text{ }^\circ\text{C}$) Drop-out: 0.1 Uc Max...0.45 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	440 A (at $40\text{ }^\circ\text{C}$)
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
Power dissipation per pole	30 W AC-1 - lth 440 A 16 W AC-3 - lth 330 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Motor power kW	90 kW at 230 V AC 50/60 Hz (AC-3e) 160 kW at 400 V AC 50/60 Hz (AC-3e) 160 kW at 415 V AC 50/60 Hz (AC-3e) 185 kW at 440 V AC 50/60 Hz (AC-3e) 200 kW at 500 V AC 50/60 Hz (AC-3e) 220 kW at 690 V AC 50/60 Hz (AC-3e) 185 kW at 1000 V AC 50/60 Hz (AC-3e) 90 kW at 230 V AC 50/60 Hz (AC-3) 160 kW at 400 V AC 50/60 Hz (AC-3) 160 kW at 415 V AC 50/60 Hz (AC-3) 200 kW at 440 V AC 50/60 Hz (AC-3) 200 kW at 500 V AC 50/60 Hz (AC-3) 220 kW at 690 V AC 50/60 Hz (AC-3) 185 kW at 1000 V AC 50/60 Hz (AC-3) 90 kW at 230 V AC 50/60 Hz (AC-4) 160 kW at 400 V AC 50/60 Hz (AC-4) 160 kW at 415 V AC 50/60 Hz (AC-4) 185 kW at 440 V AC 50/60 Hz (AC-4) 200 kW at 500 V AC 50/60 Hz (AC-4) 220 kW at 690 V AC 50/60 Hz (AC-4) 185 kW at 1000 V AC 50/60 Hz (AC-4)
Motor power hp	100 hp at 200/208 V 60 Hz 125 hp at 230/240 V 60 Hz 250 hp at 460/480 V 60 Hz 300 hp at 575/600 V 60 Hz
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 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)	780 VA
inrush power in W (DC)	695 W
hold-in power consumption in VA (50/60 Hz, AC)	17.6 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: 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
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	225 mm
Width	140 mm
Depth	226 mm
Net weight	7 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 _c

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	31.000 cm
Package 1 Width	22.500 cm
Package 1 Length	31.500 cm
Package 1 Weight	7.481 kg
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Height	105.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	39.924 kg

Logistical informations

Country of origin CN

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	1 442 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	46 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	2 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1 376 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	18 kg CO2 eq.

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 Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

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



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

The image displays a collection of accessories for TeSys Giga Contactors. At the top left, a large contactor is shown against a green circular background. Below it, twelve different accessories are arranged in three rows. Each accessory is accompanied by a small image and a text label. The accessories include: Mechanical interlock (two black plastic pieces), Cable memory kit (a black plastic component with three terminals), Terminal shroud (a clear plastic protective cover), Auxiliary contact block (a vertical green and black component), Remote Wear Diagnostic Module (a black rectangular module with a blue LED), Switching Module Kit (a white plastic component with three terminals), Control module (a black rectangular module with a green LED), Phase separator (two black plastic plates), Change-over connection bar (a black metal bar with four terminals), and Reverser connection bar (a black metal bar with four terminals).

Offer Marketing Illustration

Product benefits / Features



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

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.



Technical Illustration

Assembly's dimensions

