

Product data sheet

Specifications



Contactor, high power, TeSys Giga, 630A, std version, AC-1, <= 440V, 1050A, 3 pole/NO, 48-130VAC/DC coil

LC1G630EHEN

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	1050 A (at <104 °F (40 °C)) at <= 1000 V AC-1 630 A (at <140 °F (60 °C)) at <= 440 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 <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
[Ith] conventional free air thermal current	1050 A (at 104 °F (40 °C))
Rated breaking capacity	5550 A at 440 V
[Icw] rated short-time withstand current	5.05 kA - 10 s 4.4 kA - 30 s 3.4 kA - 1 min 2.2 kA - 3 min 1.6 kA - 10 min

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

Associated fuse rating	630 A aM at <= 440 V for motor 500 A aM at <= 690 V for motor 1250 A gG at <= 690 V 1000 A UL Type L at <= 600 V
Average impedance	0.000065 Ohm
[Ui] rated insulation voltage	1000 V
Power dissipation per pole	70 W AC-1 - lth 1050 A 26 W AC-3 - lth 630 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Motor power kW	180 kW at 230 V AC 50/60 Hz (AC-3e) 315 kW at 400 V AC 50/60 Hz (AC-3e) 335 kW at 415 V AC 50/60 Hz (AC-3e) 355 kW at 440 V AC 50/60 Hz (AC-3e) 375 kW at 500 V AC 50/60 Hz (AC-3e) 500 kW at 690 V AC 50/60 Hz (AC-3e) 450 kW at 1000 V AC 50/60 Hz (AC-3e) 200 kW at 230 V AC 50/60 Hz (AC-3) 335 kW at 400 V AC 50/60 Hz (AC-3) 375 kW at 415 V AC 50/60 Hz (AC-3) 400 kW at 440 V AC 50/60 Hz (AC-3) 400 kW at 500 V AC 50/60 Hz (AC-3) 500 kW at 690 V AC 50/60 Hz (AC-3) 450 kW at 1000 V AC 50/60 Hz (AC-3) 180 kW at 230 V AC 50/60 Hz (AC-4) 315 kW at 400 V AC 50/60 Hz (AC-4) 335 kW at 415 V AC 50/60 Hz (AC-4) 355 kW at 440 V AC 50/60 Hz (AC-4) 375 kW at 500 V AC 50/60 Hz (AC-4) 450 kW at 690 V AC 50/60 Hz (AC-4) 355 kW at 1000 V AC 50/60 Hz (AC-4)
Maximum Horse Power Rating	250 hp at 200/208 V 60 Hz 300 hp at 230/240 V 60 Hz 600 hp at 460/480 V 60 Hz 700 hp at 575/600 V 60 Hz
Irms rated making capacity	7220 A at 440 V
Coil technology	Built-in bidirectional peak limiting
Safety reliability level	B10d = 100000 cycles contactor with nominal load EN/ISO 13849-1 B10d = 1800000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	5 Mcycles
inrush power in VA (50/60 Hz, AC)	990 VA
inrush power in W (DC)	790 W
hold-in power consumption in VA (50/60 Hz, AC)	18.7 VA
hold-in power consumption in W (DC)	9.5 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: 52 x 20 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	2.8 in (70 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	513.3 lbf.in (58 N.m)
Height	11.2 in (284 mm)
Width	8.3 in (211 mm)
Depth	10.5 in (266 mm)
Net Weight	31.3 lb(US) (14.2 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	3606481921901
Returnability	Yes

Country of origin	CN
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Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	11.811 in (30.000 cm)
Package 1 Width	13.583 in (34.500 cm)
Package 1 Length	19.882 in (50.500 cm)
Package weight(Lbs)	35.543 lb(US) (16.122 kg)
Unit Type of Package 2	S06
Number of Units in Package 2	2
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	94.799 lb(US) (43.000 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	
Carbon footprint (kg CO2 eq, Total Life cycle)	2076
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
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 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



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 LC1G630EHEN, 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.

Technical Illustration

Assembly's dimensions

