

# Product data sheet

Specifications



High power contactor, TeSys Giga,  
3P(3NO), AC-3  $\leq 440\text{V}$   
630A, standard version, 200-500V  
AC/DC wide band coil

LC1G630LSEN

## Main

Range	TeSys
Range of product	TeSys Giga
Product or component type	Contactors
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	1050 A (at $<104\text{ }^\circ\text{F}$ ( $40\text{ }^\circ\text{C}$ )) at $\leq 1000\text{ V AC-1}$ 630 A (at $<140\text{ }^\circ\text{F}$ ( $60\text{ }^\circ\text{C}$ )) at $\leq 440\text{ V AC-3}$
[Uc] control circuit voltage	200...500 V AC 50/60 Hz 200...500 V DC
Control circuit voltage limits	Operational: $0.8\text{ Uc Min} \dots 1.1\text{ Uc Max}$ (at $<140\text{ }^\circ\text{F}$ ( $60\text{ }^\circ\text{C}$ )) Drop-out: $0.1\text{ Uc Max} \dots 0.45\text{ Uc Min}$ (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	1050 A (at $104\text{ }^\circ\text{F}$ ( $40\text{ }^\circ\text{C}$ ))
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
Associated fuse rating	630 A aM at $\leq 440\text{ V}$ for motor 500 A aM at $\leq 690\text{ V}$ for motor 1250 A gG at $\leq 690\text{ V}$ 1000 A UL Type L at $\leq 600\text{ V}$

<b>Average impedance</b>	0.000065 Ohm
<b>[Ui] rated insulation voltage</b>	1000 V
<b>Power dissipation per pole</b>	70 W AC-1 - lth 1050 A 26 W AC-3 - lth 630 A
<b>Compatibility code</b>	LC1G
<b>Pole contact composition</b>	3 NO
<b>Auxiliary contact composition</b>	1 NO + 1 NC
<b>Motor power kW</b>	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)
<b>Motor power hp</b>	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
<b>Irms rated making capacity</b>	7220 A at 440 V
<b>Coil technology</b>	Built-in bidirectional peak limiting
<b>Safety reliability level</b>	B10d = 100000 cycles contactor with nominal load EN/ISO 13849-1 B10d = 1800000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Mechanical durability</b>	5 Mcycles
<b>inrush power in VA (50/60 Hz, AC)</b>	670 VA
<b>inrush power in W (DC)</b>	390 W
<b>hold-in power consumption in VA (50/60 Hz, AC)</b>	17 VA
<b>hold-in power consumption in W (DC)</b>	11 W
<b>Operating time</b>	40...70 ms closing 15...50 ms opening
<b>Maximum operating rate</b>	600 cyc/h AC-3 600 cyc/h AC-3e 300 cyc/h AC-1 150 cyc/h AC-4
<b>Connections - terminals</b>	Power circuit: bar 2 - busbar cross section: 52 x 20 mm Power circuit: lugs-ring terminals 1 0.3 in <sup>2</sup> (185 mm <sup>2</sup> ) Power circuit: bolted connection Control circuit: push-in 1 0.0003...0.004 in <sup>2</sup> (0.2...2.5 mm <sup>2</sup> ) - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.0004...0.004 in <sup>2</sup> (0.25...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Control circuit: push-in 2 0.0008...0.002 in <sup>2</sup> (0.5...1.0 mm <sup>2</sup> ) with cable end Control circuit: push-in 0.001...0.004 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) - cable stiffness: solid stranded without cable end Control circuit: push-in 0.001...0.004 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end
<b>Connection pitch</b>	2.8 in (70 mm)

<b>Mounting support</b>	Plate
<b>Standards</b>	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
<b>Product certifications</b>	CB Scheme CCC cULus EAC CE UKCA EU-RO-MR by DNV-GL
<b>Tightening torque</b>	513.3 lbf.in (58 N.m)
<b>Height</b>	11.2 in (284 mm)
<b>Width</b>	8.3 in (211 mm)
<b>Depth</b>	10.5 in (266 mm)
<b>Net weight</b>	31.3 lb(US) (14.2 kg)

## Environment

<b>IP degree of protection</b>	IP2X front face with shrouds IEC 60529 IP2X front face with shrouds VDE 0106
<b>Ambient air temperature for operation</b>	-13...140 °F (-25...60 °C)
<b>Ambient air temperature for storage</b>	-76...176 °F (-60...80 °C)
<b>Mechanical robustness</b>	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
<b>Colour</b>	Dark grey
<b>Protective treatment</b>	TH
<b>Permissible ambient air temperature around the device</b>	-40...158 °F (-40...70 °C) at Uc

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	13.600 in (34.544 cm)
<b>Package 1 Width</b>	11.800 in (29.972 cm)
<b>Package 1 Length</b>	15.400 in (39.116 cm)
<b>Package 1 Weight</b>	38.700 lb(US) (17.554 kg)

## Contractual warranty

<b>Warranty (in months)</b>	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	2 076 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	88 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	5 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1 950 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	34 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	6fbdad13-bb7c-47d4-a6d6-d82dd6f54349
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>
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	<a href="#">End of Life Information</a>
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