Product datasheet

Specifications

High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 500A, advanced version, 200…500V wide band AC/DC coil

LC1G500LSEA

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	700 A (at <40 °C) at <= 1000 V AC-1 500 A (at <60 °C) at <= 440 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 Uc Min...1.1 Uc Max (at <60 °C) Drop-out: 0.1 Uc Max...0.45 Uc Min (at <60 °C)

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
Rated breaking capacity	4600 A at 440 V
[Icw] rated short-time withstand current	4.0 kA - 10 s 2.8 kA - 30 s 2.2 kA - 1 min 1.5 kA - 3 min 1.2 kA - 10 min
Associated fuse rating	500 A aM at <= 440 V for motor 400 A aM at <= 690 V for motor 800 A gG at <= 690 V
Average impedance	0.00008 Ohm

[Ui] rated insulation voltage	1000 V
Power dissipation per pole	40 W AC-1 - Ith 700 A 20 W AC-3 - Ith 500 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Motor power kW	147 kW at 230 V AC 50/60 Hz (AC-3e) 250 kW at 400 V AC 50/60 Hz (AC-3e) 250 kW at 415 V AC 50/60 Hz (AC-3e) 280 kW at 440 V AC 50/60 Hz (AC-3e) 315 kW at 500 V AC 50/60 Hz (AC-3e) 355 kW at 690 V AC 50/60 Hz (AC-3e) 335 kW at 1000 V AC 50/60 Hz (AC-3e) 160 kW at 230 V AC 50/60 Hz (AC-3) 250 kW at 400 V AC 50/60 Hz (AC-3) 250 kW at 415 V AC 50/60 Hz (AC-3) 315 kW at 440 V AC 50/60 Hz (AC-3) 355 kW at 500 V AC 50/60 Hz (AC-3) 355 kW at 690 V AC 50/60 Hz (AC-3) 335 kW at 1000 V AC 50/60 Hz (AC-3) 150 kW at 230 V AC 50/60 Hz (AC-4) 250 kW at 400 V AC 50/60 Hz (AC-4) 250 kW at 415 V AC 50/60 Hz (AC-4) 295 kW at 440 V AC 50/60 Hz (AC-4) 295 kW at 500 V AC 50/60 Hz (AC-4) 355 kW at 690 V AC 50/60 Hz (AC-4) 280 kW at 1000 V AC 50/60 Hz (AC-4)
Motor power hp	150 hp at 200/208 V 60 Hz 200 hp at 230/240 V 60 Hz 400 hp at 460/480 V 60 Hz 450 hp at 575/600 V 60 Hz
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)	535 VA
inrush power in W (DC)	300 W
hold-in power consumption in VA (50/60 Hz, AC)	15.4 VA
hold-in power consumption in W (DC)	8.6 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 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	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	290 mm
Width	140 mm
Depth	226 mm
Net weight	7.8 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	31.000 cm
Package 1 Width	22.800 cm
Package 1 Length	37.200 cm
Package 1 Weight	9.536 kg
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	46.704 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.eq.CO2 per CR, Total Life cycle)	**1677**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

EU RoHS Directive	**Compliant with Exemptions**
REACh Regulation	**REACh Declaration**
Halogen content performance	**Halogen free plastic parts product**
PVC free	**Yes**

Use Again

Repack and remanufacture

Circularity Profile	**End of Life Information**
Take-back	**No**

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 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

TeSys Giga - How to assemble star-delta starter solution New