

LC1G500EHEA

High power contactor, TeSys Giga, 3 pole (3NO), AC-3 $\leq 440\text{V } 500\text{A}$, advanced version, 48...130V wide band AC/DC coil



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	$\leq 1000\text{ V AC } 50/60\text{ Hz}$ $\leq 300\text{ V DC}$
[Ie] rated operational current	700 A (at $<40\text{ }^\circ\text{C}$) AC-1 500 A (at $<60\text{ }^\circ\text{C}$) AC-3
[Uc] control circuit voltage	48...130 V AC/DC 50/60 Hz
Colour	Dark grey

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	700 A (at $40\text{ }^\circ\text{C}$)
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 aM at 440 V 400 A aM at 690 V 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
Network frequency	50/60 Hz 16.67...400 Hz

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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
Irms rated making capacity	5090 A at 440 V
Control circuit voltage limits	Operational: 0.8...1.1 U _c AC/DC (at 60 °C) Drop-out: 0.1...0.45 U _c AC/DC (at 60 °C)
Coil technology	Built-in bidirectional peak limiting
Mechanical durability	5 Mcycles 8 Mcycles with sub-assembly substitution
Inrush power in VA (50/60 Hz, AC)	450 VA
Inrush power in W (DC)	360 W
Hold-in power consumption in VA (50/60 Hz, AC)	11.7 VA
Hold-in power consumption in W (DC)	8.3 W
Operating time	45...60 ms closing 15...45 ms opening
Maximum operating rate	300 Cyc/H AC-1 500 Cyc/H AC-3 500 Cyc/H AC-3e 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
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	255 mm
Net weight	8.2 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
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 Weight	9.169 kg
Package 1 Height	31.5 cm
Package 1 width	23 cm
Package 1 Length	37 cm
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Weight	46.676 kg
Package 2 Height	75 cm
Package 2 width	60 cm
Package 2 Length	80 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
PVC free	Yes
Halogen content performance	Halogen free plastic parts product

