

Product data sheet

Specifications



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

LC1G500EHEN

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 $<40\text{ }^\circ\text{C}$) at 1000 V AC-1 500 A (at $<60\text{ }^\circ\text{C}$) at 440 V AC-3
[Uc] control circuit voltage	48...130 V AC/DC 50/60 Hz

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 A 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
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 Uc AC/DC (at 60 °C) Drop-out: 0.1...0.45 Uc 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)	965 VA
Inrush power in W (DC)	760 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	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	225 mm
Width	140 mm
Depth	225 mm
Net weight	7.5 kg
Colour	Dark grey

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 Height	31.0 cm
Package 1 Width	22.5 cm
Package 1 Length	31.0 cm
Package 1 Weight	7.95 kg
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Height	105 cm
Package 2 Width	60 cm
Package 2 Length	80 cm
Package 2 Weight	41.8 kg
Package 3 Height	74 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
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
PVC free	Yes
Halogen content performance	Halogen free plastic parts product
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

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](#)

Recommended replacement(s)