

# LC1G500EHEN

Contactor, high power, TeSys Giga, standard version, 3 pole/NO, AC-3  $\leq 440$  V 500 A, 48-130 V AC/DC coil



## 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	$\leq 1000$ V AC 50/60 Hz $\leq 460$ V DC
[Ie] rated operational current	700 A (at $\leq 104$ °F (40 °C)) at $\leq 1000$ V AC-1 500 A (at $\leq 140$ °F (60 °C)) at $\leq 440$ 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 $\leq 140$ °F (60 °C)) Drop-out: 0.1 Uc Max...0.45 Uc Min (at $\leq 140$ °F (60 °C))

## Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	700 A (at 104 °F (40 °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 $\leq 440$ V for motor 400 A aM at $\leq 690$ V for motor 800 A gG at $\leq 690$ 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)
Maximum Horse Power Rating	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
Coil technology	Built-in bidirectional peak limiting
Mechanical durability	8 Mcycles
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	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 0.29 in <sup>2</sup> (185 mm <sup>2</sup> ) Power circuit: bolted connection Control circuit: push-in 1 0.00...0.00 in <sup>2</sup> (0.2...2.5 mm <sup>2</sup> ) - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.00...0.00 in <sup>2</sup> (0.25...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Control circuit: push-in 2 0.00...0.00 in <sup>2</sup> (0.5...1.0 mm <sup>2</sup> ) with cable end Control circuit: push-in 0.00...0.00 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) - cable stiffness: solid stranded without cable end Control circuit: push-in 0.00...0.00 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) - cable stiffness: flexible with cable end
Connection pitch	1.77 in (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[RETURN]CCC[RETURN]cULus[RETURN]EAC[RETURN]CE[RETURN]UKCA[RETURN] RO-MR by DNV-GL
Tightening torque	309.78 lbf.in (35 N.m)
Height	8.86 in (225 mm)
Width	5.51 in (140 mm)
Depth	8.90 in (226 mm)
Net Weight	16.53 lb(US) (7.5 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	3606481921895
Returnability	Yes
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	12.20 in (31.0 cm)
Package 1 Width	8.86 in (22.5 cm)
Package 1 Length	12.20 in (31.0 cm)
Package 1 Weight	17.53 lb(US) (7.95 kg)
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Height	41.34 in (105 cm)
Package 2 Width	23.62 in (60 cm)
Package 2 Length	31.50 in (80 cm)
Package 2 Weight	92.15 lb(US) (41.8 kg)

## Offer Sustainability

Sustainable offer status	Green Premium 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
PVC free	Yes
Halogen content performance	Halogen free plastic parts product