

# Product datasheet

Specifications



High power contactor, TeSys Giga, 3 pole (3NO), AC-3  $\leq 440\text{V } 500\text{A}$ , advanced version, 24...48V wide band AC/DC coil

LC1G500BEEA

## 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-8a AC-8b DC-1 DC-3 DC-5
Poles description	3P
[Ue] rated operational voltage	$\leq 1000\text{ V AC } 50/60\text{ Hz}$ $\leq 300\text{ V DC}$
[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	24...48 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

<b>[Ui] rated insulation voltage</b>	1000 V
<b>Power dissipation per pole</b>	40 W AC-1 - Ith 700 A 20 W AC-3 - Ith 500 A
<b>Compatibility code</b>	LC1G
<b>Pole contact composition</b>	3 NO
<b>Auxiliary contact composition</b>	1 NO + 1 NC
<b>Network frequency</b>	50/60 Hz 16.67...400 Hz
<b>Motor power kW</b>	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)
<b>Motor power hp</b>	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
<b>Irms rated making capacity</b>	5090 A at 440 V
<b>Control circuit voltage limits</b>	Operational: 0.8...1.1 Uc AC/DC (at 60 °C) Drop-out: 0.1...0.45 Uc AC/DC (at 60 °C)
<b>Coil technology</b>	Built-in bidirectional peak limiting
<b>Mechanical durability</b>	5 Mcycles 8 Mcycles with sub-assembly substitution
<b>Inrush power in VA (50/60 Hz, AC)</b>	490 VA
<b>Inrush power in W (DC)</b>	350 W
<b>Hold-in power consumption in VA (50/60 Hz, AC)</b>	17.9 VA
<b>Hold-in power consumption in W (DC)</b>	6.0 W
<b>Operating time</b>	45...60 ms closing 15...45 ms opening
<b>Maximum operating rate</b>	300 cyc/h AC-1 500 cyc/h AC-3 500 cyc/h AC-3e 150 cyc/h AC-4
<b>Connections - terminals</b>	Power circuit: bar 2 - busbar cross section: 32 x 10 mm Power circuit: lugs-ring terminals 1 185 mm <sup>2</sup> Power circuit: bolted connection Control circuit: push-in 1 0.2...2.5 mm <sup>2</sup> - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.25...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: push-in 2 0.5...1.0 mm <sup>2</sup> with cable end Control circuit: push-in 0.75...2.5 mm <sup>2</sup> - cable stiffness: solid stranded without cable end Control circuit: push-in 0.75...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end
<b>Connection pitch</b>	45 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

<b>Product certifications</b>	CB Scheme CCC cULus EAC CE UKCA EU-RO-MR by DNV-GL
<b>Tightening torque</b>	35 N.m
<b>Height</b>	290 mm
<b>Width</b>	140 mm
<b>Depth</b>	255 mm
<b>Net weight</b>	8.2 kg
<b>Colour</b>	Dark grey

## Environment

<b>IP degree of protection</b>	IP2x front face with shrouds conforming to IEC 60529 IP2x front face with shrouds conforming to VDE 0106
<b>Ambient air temperature for operation</b>	-25...60 °C
<b>Ambient air temperature for storage</b>	-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>Protective treatment</b>	TH
<b>Permissible ambient air temperature around the device</b>	-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>	22.0 cm
<b>Package 1 Width</b>	31.0 cm
<b>Package 1 Length</b>	37.5 cm
<b>Package 1 Weight</b>	9.178 kg
<b>Unit Type of Package 2</b>	S06
<b>Number of Units in Package 2</b>	4
<b>Package 2 Height</b>	75.0 cm
<b>Package 2 Width</b>	60.0 cm
<b>Package 2 Length</b>	80.0 cm
<b>Package 2 Weight</b>	50.5 kg

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>

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<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>PVC free</b>	Yes
<b>Halogen content performance</b>	Halogen free plastic parts product

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**Installation Videos**

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[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](#)

**Recommended replacement(s)**