

# Product data sheet

Specifications



High power contactor, TeSys Giga, 3 pole (3NO), AC-3  $\leq 440\text{V}$  185A, standard version, 100...250V wide band AC/DC coil

LC1G185KUEN

## 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-8a AC-8b DC-1 DC-3 DC-5
Poles description	3P
[Ue] rated operational voltage	$\leq 1000\text{ V AC } 50/60\text{ Hz}$ $\leq 460\text{ V DC}$
[Ie] rated operational current	305 A (at $<40\text{ }^\circ\text{C}$ ) at $\leq 1000\text{ V AC-1}$ 185 A (at $<60\text{ }^\circ\text{C}$ ) at $\leq 400\text{ V AC-3}$
[Uc] control circuit voltage	100...250 V AC 50/60 Hz 100...250 V DC
Control circuit voltage limits	Operational: 0.8 Uc Min...1.1 Uc Max (at $<60\text{ }^\circ\text{C}$ ) Drop-out: 0.1 Uc Max...0.45 Uc Min (at $<60\text{ }^\circ\text{C}$ )

## Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	305 A (at $40\text{ }^\circ\text{C}$ )
Rated breaking capacity	1610 A at 440 V
[Icw] rated short-time withstand current	1.5 kA - 10 s 0.92 kA - 30 s 0.74 kA - 1 min 0.5 kA - 3 min 0.4 kA - 10 min
Associated fuse rating	200 A aM at $\leq 440\text{ V}$ for motor

160 A aM at <= 690 V for motor  
315 A gG at <= 690 V

<b>Average impedance</b>	0.00017 Ohm
<b>[Ui] rated insulation voltage</b>	1000 V
<b>Power dissipation per pole</b>	20 W AC-1 - lth 305 A 6 W AC-3 - lth 185 A
<b>Compatibility code</b>	LC1G
<b>Pole contact composition</b>	3 NO
<b>Auxiliary contact composition</b>	1 NO + 1 NC
<b>Motor power kW</b>	55 kW at 230 V AC 50/60 Hz (AC-3e) 90 kW at 400 V AC 50/60 Hz (AC-3e) 90 kW at 415 V AC 50/60 Hz (AC-3e) 110 kW at 440 V AC 50/60 Hz (AC-3e) 110 kW at 500 V AC 50/60 Hz (AC-3e) 110 kW at 690 V AC 50/60 Hz (AC-3e) 75 kW at 1000 V AC 50/60 Hz (AC-3e) 55 kW at 230 V AC 50/60 Hz (AC-3) 90 kW at 400 V AC 50/60 Hz (AC-3) 90 kW at 415 V AC 50/60 Hz (AC-3) 110 kW at 440 V AC 50/60 Hz (AC-3) 110 kW at 500 V AC 50/60 Hz (AC-3) 110 kW at 690 V AC 50/60 Hz (AC-3) 75 kW at 1000 V AC 50/60 Hz (AC-3) 55 kW at 230 V AC 50/60 Hz (AC-4) 90 kW at 400 V AC 50/60 Hz (AC-4) 90 kW at 415 V AC 50/60 Hz (AC-4) 100 kW at 440 V AC 50/60 Hz (AC-4) 110 kW at 500 V AC 50/60 Hz (AC-4) 110 kW at 690 V AC 50/60 Hz (AC-4) 75 kW at 1000 V AC 50/60 Hz (AC-4)
<b>Motor power hp</b>	50 hp at 200/208 V 60 Hz 60 hp at 230/240 V 60 Hz 125 hp at 460/480 V 60 Hz 150 hp at 575/600 V 60 Hz
<b>Irms rated making capacity</b>	2310 A at 440 V
<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>	540 VA
<b>Inrush power in W (DC)</b>	380 W
<b>Hold-in power consumption in VA (50/60 Hz, AC)</b>	12.4 VA
<b>Hold-in power consumption in W (DC)</b>	7.8 W
<b>Operating time</b>	40...70 ms closing 15...50 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: 25 x 6 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>	35 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>	18 N.m
<b>Height</b>	193 mm
<b>Width</b>	108 mm
<b>Depth</b>	193 mm
<b>Net weight</b>	3.6 kg

## 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>Colour</b>	Dark grey
<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>	23.000 cm
<b>Package 1 Width</b>	24.500 cm
<b>Package 1 Length</b>	38.500 cm
<b>Package 1 Weight</b>	4.766 kg
<b>Unit Type of Package 2</b>	P06
<b>Number of Units in Package 2</b>	6
<b>Package 2 Height</b>	75.000 cm
<b>Package 2 Width</b>	60.000 cm
<b>Package 2 Length</b>	80.000 cm
<b>Package 2 Weight</b>	41.034 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>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>

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<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
<b>California proposition 65</b>	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>

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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 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)**