

# Product data sheet

Specifications



High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 185A, advanced version, 24...48V wide band AC/DC coil

LC1G185BEEA

## 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	<= 1000 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	305 A (at <40 °C) at <= 1000 V AC-1 185 A (at <60 °C) at <= 400 V AC-3
[Uc] control circuit voltage	24...48 V AC 50/60 Hz 24...48 V DC
Control circuit voltage limits	Operational: 0.8 Uc Min...1.1 Uc Max (at <60 °C) Drop-out: 0.1 Uc Max...0.45 Uc Min (at <60 °C)

## Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	305 A (at 40 °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 <= 440 V for motor

	160 A aM at <= 690 V for motor 315 A gG at <= 690 V
Average impedance	0.00017 Ohm
[Ui] rated insulation voltage	1000 V
Power dissipation per pole	20 W AC-1 - lth 305 A 6 W AC-3 - lth 185 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Motor power kW	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)
Motor power hp	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
Irms rated making capacity	2310 A at 440 V
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)	290 VA
Inrush power in W (DC)	220 W
Hold-in power consumption in VA (50/60 Hz, AC)	10 VA
Hold-in power consumption in W (DC)	5.7 W
Operating time	40...70 ms closing 15...50 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: 25 x 6 mm Power circuit: lugs-ring terminals 1 185 mm² Power circuit: bolted connection Control circuit: push-in 1 0.2...2.5 mm² - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.25...2.5 mm² - cable stiffness: flexible with cable end Control circuit: push-in 2 0.5...1.0 mm² with cable end Control circuit: push-in 0.75...2.5 mm² - cable stiffness: solid stranded without cable end Control circuit: push-in 0.75...2.5 mm² - cable stiffness: flexible with cable end
Connection pitch	35 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	18 N.m
Height	255 mm
Width	108 mm
Depth	193 mm
Net weight	4.1 kg
<b>Environment</b>	
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
Colour	Dark grey
Protective treatment	TH
Permissible ambient air temperature around the device	-40...70 °C at Uc
<b>Packing Units</b>	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	23.5 cm
Package 1 Width	25.0 cm
Package 1 Length	38.5 cm
Package 1 Weight	5.275 kg
Unit Type of Package 2	S06
Number of Units in Package 2	6
Package 2 Height	75.0 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	44.0 kg
<b>Offer Sustainability</b>	
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
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

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)