Product data sheet

Specifications

High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 185A, standard version, 100…250V wide band AC/DC coil

LC1G185KUEN

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	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 °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 - Ith 305 A 6 W AC-3 - Ith 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)	540 VA
Inrush power in W (DC)	380 W
Hold-in power consumption in VA (50/60 Hz, AC)	12.4 VA
Hold-in power consumption in W (DC)	7.8 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	193 mm
Width	108 mm
Depth	193 mm
Net weight	3.6 kg

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
Colour	Dark grey
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	23.000 cm
Package 1 Width	24.500 cm
Package 1 Length	38.500 cm
Package 1 Weight	4.766 kg
Unit Type of Package 2	P06
Number of Units in Package 2	6
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	41.034 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
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

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Installation

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)