

Product data sheet

Specifications



High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 630A, advanced version, 200...500V wide band AC/DC coil

LC1G630LSEA

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	<= 1000 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	1050 A (at <40 °C) at <= 1000 V AC-1 630 A (at <60 °C) at <= 400 V AC-3
[Uc] control circuit voltage	200...500 V AC 50/60 Hz 200...500 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
Rated breaking capacity	5550 A at 440 V
[Icw] rated short-time withstand current	5.05 kA - 10 s 4.4 kA - 30 s 3.4 kA - 1 min 2.2 kA - 3 min 1.6 kA - 10 min
Associated fuse rating	630 A aM at <= 440 V for motor 500 A aM at <= 690 V for motor 1250 A gG at <= 690 V

Average impedance	0.000065 Ohm
[Ui] rated insulation voltage	1000 V
Power dissipation per pole	70 W AC-1 - lth 1050 A 26 W AC-3 - lth 630 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Motor power kW	180 kW at 230 V AC 50/60 Hz (AC-3e) 315 kW at 400 V AC 50/60 Hz (AC-3e) 335 kW at 415 V AC 50/60 Hz (AC-3e) 355 kW at 440 V AC 50/60 Hz (AC-3e) 375 kW at 500 V AC 50/60 Hz (AC-3e) 500 kW at 690 V AC 50/60 Hz (AC-3e) 450 kW at 1000 V AC 50/60 Hz (AC-3e) 200 kW at 230 V AC 50/60 Hz (AC-3) 335 kW at 400 V AC 50/60 Hz (AC-3) 375 kW at 415 V AC 50/60 Hz (AC-3) 400 kW at 440 V AC 50/60 Hz (AC-3) 400 kW at 500 V AC 50/60 Hz (AC-3) 500 kW at 690 V AC 50/60 Hz (AC-3) 450 kW at 1000 V AC 50/60 Hz (AC-3) 180 kW at 230 V AC 50/60 Hz (AC-4) 315 kW at 400 V AC 50/60 Hz (AC-4) 335 kW at 415 V AC 50/60 Hz (AC-4) 355 kW at 440 V AC 50/60 Hz (AC-4) 375 kW at 500 V AC 50/60 Hz (AC-4) 450 kW at 690 V AC 50/60 Hz (AC-4) 355 kW at 1000 V AC 50/60 Hz (AC-4)
Motor power hp	200 hp at 200/208 V 60 Hz 250 hp at 230/240 V 60 Hz 500 hp at 460/480 V 60 Hz 500 hp at 575/600 V 60 Hz
Coil technology	Built-in bidirectional peak limiting
Mechanical durability	5 Mcycles
Inrush power in VA (50/60 Hz, AC)	670 VA
Inrush power in W (DC)	390 W
Hold-in power consumption in VA (50/60 Hz, AC)	17.0 VA
Hold-in power consumption in W (DC)	11.0 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: 52 x 20 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	70 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	58 N.m
Height	388.5 mm
Width	211 mm
Depth	266 mm
Net weight	17.3 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	30.5 cm
Package 1 Width	34.5 cm
Package 1 Length	51.0 cm
Package 1 Weight	19.457 kg
Unit Type of Package 2	S06
Number of Units in Package 2	2
Package 2 Height	75.0 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	48.914 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

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 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)