

Product data sheet

Specifications



High power contactor, TeSys Giga, 3 pole (3NO), AC-3 $\leq 440\text{V}$ 630A, standard version, 100...250V wide band AC/DC coil

LC1G630KUEN

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	1050 A (at $<40\text{ }^\circ\text{C}$) at 1000 V AC-1 630 A (at $<60\text{ }^\circ\text{C}$) at 440 V AC-3
[Uc] control circuit voltage	100...250 V AC/DC 50/60 Hz

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	1050 A (at $40\text{ }^\circ\text{C}$)
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 500 A aM at 690 V 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 - Ith 1050 A 26 W AC-3 - Ith 630 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Network frequency	50/60 Hz 16.67...400 Hz
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
Irms rated making capacity	7220 A at 440 V
Control circuit voltage limits	Operational: 0.8...1.1 Uc AC/DC (at 60 °C) Drop-out: 0.1...0.45 Uc AC/DC (at 60 °C)
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)	800 VA
Inrush power in W (DC)	680 W
Hold-in power consumption in VA (50/60 Hz, AC)	15.0 VA
Hold-in power consumption in W (DC)	9.5 W
Operating time	45...60 ms closing 15...45 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 mm ² Power circuit: bolted connection Control circuit: push-in 1 0.2...2.5 mm ² - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.25...2.5 mm ² - cable stiffness: flexible with cable end Control circuit: push-in 2 0.5...1.0 mm ² with cable end Control circuit: push-in 0.75...2.5 mm ² - cable stiffness: solid stranded without cable end Control circuit: push-in 0.75...2.5 mm ² - 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	284 mm
Width	211 mm
Depth	266 mm
Net weight	14.2 kg
Colour	Dark grey

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
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	30.0 cm
Package 1 Width	34.5 cm
Package 1 Length	51.0 cm
Package 1 Weight	16.422 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	42.844 kg

Offer Sustainability

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

Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
PVC free	Yes
Halogen content performance	Halogen free plastic parts product

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)