

Product data sheet

Specifications



High power contactor, TeSys Giga, 3 pole (3NO), AC-3 $\leq 440\text{V}$ 225A, standard version, 100...250V wide band AC/DC coil

LC1G225KUE

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
[Ie] rated operational current	330 A (at $\leq 40\text{ }^{\circ}\text{C}$) at $\leq 1000\text{ V AC-1}$ 225 A (at $\leq 60\text{ }^{\circ}\text{C}$) at $\leq 440\text{ V AC-3}$
[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 $\leq 60\text{ }^{\circ}\text{C}$) Drop-out: 0.1 Uc Max...0.45 Uc Min (at $\leq 60\text{ }^{\circ}\text{C}$)
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Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	330 A (at $40\text{ }^{\circ}\text{C}$)
Rated breaking capacity	2050 A at 440 V
[Icw] rated short-time withstand current	1.8 kA - 10 s 1.0 kA - 30 s 0.85 kA - 1 min 0.56 kA - 3 min 0.44 kA - 10 min
Associated fuse rating	250 A aM at $\leq 440\text{ V}$ for motor 200 A aM at $\leq 690\text{ V}$ for motor 400 A gG at $\leq 690\text{ V}$
Average impedance	0.00015 Ohm
[Ui] rated insulation voltage	1000 V

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Power dissipation per pole	20 W AC-1 - lth 330 A 8 W AC-3 - lth 225 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) 110 kW at 400 V AC 50/60 Hz (AC-3e) 110 kW at 415 V AC 50/60 Hz (AC-3e) 132 kW at 440 V AC 50/60 Hz (AC-3e) 132 kW at 500 V AC 50/60 Hz (AC-3e) 160 kW at 690 V AC 50/60 Hz (AC-3e) 132 kW at 1000 V AC 50/60 Hz (AC-3e) 55 kW at 230 V AC 50/60 Hz (AC-3) 110 kW at 400 V AC 50/60 Hz (AC-3) 110 kW at 415 V AC 50/60 Hz (AC-3) 132 kW at 440 V AC 50/60 Hz (AC-3) 132 kW at 500 V AC 50/60 Hz (AC-3) 160 kW at 690 V AC 50/60 Hz (AC-3) 132 kW at 1000 V AC 50/60 Hz (AC-3) 55 kW at 230 V AC 50/60 Hz (AC-4) 110 kW at 400 V AC 50/60 Hz (AC-4) 110 kW at 415 V AC 50/60 Hz (AC-4) 129 kW at 440 V AC 50/60 Hz (AC-4) 132 kW at 500 V AC 50/60 Hz (AC-4) 132 kW at 690 V AC 50/60 Hz (AC-4) 110 kW at 1000 V AC 50/60 Hz (AC-4)
Motor power hp	60 hp at 200/208 V 60 Hz 75 hp at 230/240 V 60 Hz 150 hp at 460/480 V 60 Hz 150 hp at 575/600 V 60 Hz
Irms rated making capacity	2720 A at 440 V
Coil technology	Built-in bidirectional peak limiting
Safety reliability level	B10d = 400000 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 3000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	8 Mcycles
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	600 cyc/h AC-3 600 cyc/h AC-3e 300 cyc/h AC-1 150 cyc/h AC-4
Connections - terminals	Power circuit: bar 2 - busbar cross section: 25 x 6 mm Power circuit: lugs-ring terminals 1 185 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	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 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ UL 60335-1 UL 60335-2-40:Annex JJ
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
Product weight	3.5 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	25.800 cm
Package 1 Width	17.500 cm
Package 1 Length	32.000 cm
Package 1 Weight	4.599 kg
Unit Type of Package 2	S06
Number of Units in Package 2	12
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	64.690 kg

Offer Marketing Illustration

Product benefits / Features



TeSys Giga Contactors

Range Accessories


Mechanical Interlock


Cable memory kit


Terminal shroud


Auxiliary contact block


Remote Wear Diagnostic Module


Switching Module Kit


Control module


Phase separator


Change-over connection bar


Reverser connection bar

Offer Marketing Illustration

Product benefits / Features

TeSys Giga Contactors



Simplified maintenance

A patented modular design for the switching and control unit and cable memory enables better performance and faster spare parts replacement in an optimised footprint.



Ready for critical applications

Improved auxiliary contacts (17 V/1 mA, 10-8) enable better reliability in harsh environments and conform to high-density PLC input applications.



Resilience and uptime

Self diagnostic functions enable predictive maintenance with easier and safer commissioning.

