

Product datasheet

Specifications



High power contactor, TeSys Giga, 3P(3NO), DC-1 $\leq 1500\text{V}$ 250A, 3 poles in series, 48...130V wideband AC/DC coil, for DC application, standard version

LC1G250DCEHEN

Main

Range	TeSys
Range of product	TeSys Giga
Product or component type	Contactors
Device short name	LC1G
Contactors application	Power switching
Utilisation category	DC-1
Poles description	3P
[Ue] rated operational voltage	$\leq 1500\text{ V DC}$ 3 poles in series $\leq 1000\text{ V DC}$ 2 poles in series
[Ie] rated operational current	250 A (at $<40\text{ }^{\circ}\text{C}$) DC-1 for 3 poles in series 200 A (at $<40\text{ }^{\circ}\text{C}$) DC-1 for 2 poles in series
[Uc] control circuit voltage	48...130 V AC 50/60 Hz 48...130 V DC
Control circuit voltage limits	Operational: 0.8 Uc Min...1.1 Uc Max (at $<60\text{ }^{\circ}\text{C}$) Drop-out: 0.1 Uc Max...0.45 Uc Min (at $<60\text{ }^{\circ}\text{C}$)

Complementary

[Uimp] rated impulse withstand voltage	12 kV
Overvoltage category	III
[Ith] conventional free air thermal current	250 A (at $40\text{ }^{\circ}\text{C}$)
Rated breaking capacity	375 A at 1500 V for DC 3 poles in series 300 A at 1000 V for DC 2 poles in series
Associated fuse rating	315 A aR at 1500 V for for DC 250 A aR at 1000 V for for DC
Average impedance	0.00017 Ohm
[Ui] rated insulation voltage	1500 V
Power dissipation per pole	10.7 W
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Irms rated making capacity	375 A at 1500 V DC for 3 poles in series 300 A at 1000 V DC for 2 poles in series
Coil technology	Built-in bidirectional peak limiting

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

Safety reliability level	B10d = 5000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	1 Mcycles
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	100 cyc/h DC-1
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 DIN 3852-Y CSA C22.2 No 60947-4-2
Product certifications	CB Scheme CCC cULus CE UKCA
Tightening torque	18 N.m
Height	193 mm
Width	108 mm
Depth	193 mm
Net 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	25.5 cm
Package 1 Width	17.5 cm
Package 1 Length	32 cm
Package 1 Weight	4.584 kg
Unit Type of Package 2	S06
Number of Units in Package 2	12
Package 2 Height	75 cm
Package 2 Width	60 cm
Package 2 Length	80 cm
Package 2 Weight	68.454 kg

Contractual warranty

Warranty (in months)	18
----------------------	----

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

 Environmental footprint	
Total lifecycle Carbon footprint	655 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	28 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	614 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	11 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better

 Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	6fbdad13-bb7c-47d4-a6d6-d82dd6f54349
PVC free	Yes

Use Longer

 Lifetime extension	
Repair	No

Use Again

 Repack and remanufacture	
Recyclability potential, in %	55
End of life manual availability	End of Life Information
Take-back	No