Product data sheet

Specifications

High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 150A, advanced version, 24…48V wide band AC/DC coil

LC1G150BEEA

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	275 A (at <40 °C) at <= 1000 V AC-1 150 A (at <60 °C) at <= 440 V AC-3
[Uc] control circuit voltage	24...48 V AC 50/60 Hz 24...48 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	275 A (at 40 °C)
Rated breaking capacity	1280 A at 440 V
[Icw] rated short-time withstand current	1.2 kA - 10 s 0.7 kA - 30 s 0.6 kA - 1 min 0.45 kA - 3 min 0.35 kA - 10 min
Associated fuse rating	160 A aM at <= 440 V for motor 160 A aM at <= 690 V for motor 315 A gG at <= 690 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

Average impedance	0.00018 Ohm
[Ui] rated insulation voltage	1000 V
Power dissipation per pole	10 W AC-1 - Ith 275 A 5 W AC-3 - Ith 150 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Motor power kW	37 kW at 230 V AC 50/60 Hz (AC-3e) 75 kW at 400 V AC 50/60 Hz (AC-3e) 75 kW at 415 V AC 50/60 Hz (AC-3e) 90 kW at 440 V AC 50/60 Hz (AC-3e) 90 kW at 500 V AC 50/60 Hz (AC-3e) 90 kW at 690 V AC 50/60 Hz (AC-3e) 75 kW at 1000 V AC 50/60 Hz (AC-3e) 37 kW at 230 V AC 50/60 Hz (AC-3) 75 kW at 400 V AC 50/60 Hz (AC-3) 75 kW at 415 V AC 50/60 Hz (AC-3) 90 kW at 440 V AC 50/60 Hz (AC-3) 90 kW at 500 V AC 50/60 Hz (AC-3) 90 kW at 690 V AC 50/60 Hz (AC-3) 75 kW at 1000 V AC 50/60 Hz (AC-3) 37 kW at 230 V AC 50/60 Hz (AC-4) 75 kW at 400 V AC 50/60 Hz (AC-4) 75 kW at 415 V AC 50/60 Hz (AC-4) 80 kW at 440 V AC 50/60 Hz (AC-4) 90 kW at 500 V AC 50/60 Hz (AC-4) 90 kW at 690 V AC 50/60 Hz (AC-4) 75 kW at 1000 V AC 50/60 Hz (AC-4)
Motor power hp	40 hp at 200/208 V 60 Hz 50 hp at 230/240 V 60 Hz 100 hp at 460/480 V 60 Hz 125 hp at 575/600 V 60 Hz
Irms rated making capacity	1890 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)	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	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 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 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	255 mm
Width	108 mm
Depth	193 mm
Net weight	4.1 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	26.000 cm
Package 1 Width	17.500 cm
Package 1 Length	32.000 cm
Package 1 Weight	5.072 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	75.864 kg

Environmental Data

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	710
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Compliant with Exemptions
SCIP Number	6fbdad13-bb7c-47d4-a6d6-d82dd6f54349
REACh Regulation	REACh Declaration
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
Halogen-free status	Halogen free plastic parts product
PVC free	No

Use Again

Repack and remanufacture

End of life manual availability	End of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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

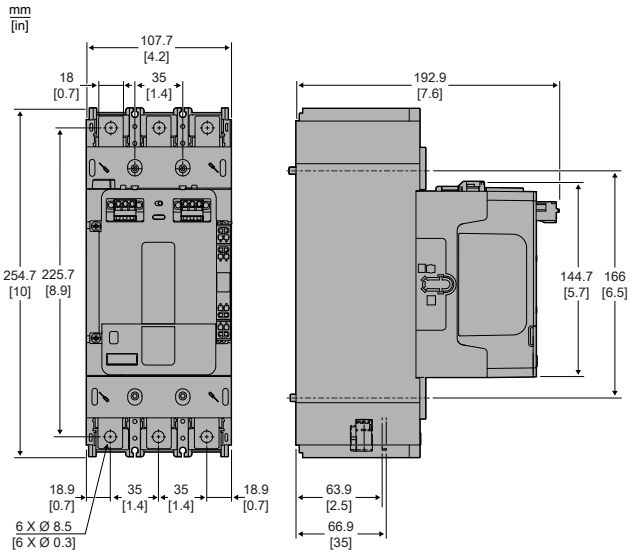
TeSys Giga - How to replace control module

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

Technical Illustration

Assembly's dimensions