

High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 115A, advanced version, 48...130V wide band AC/DC coil

LC1G115EHEA

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-6b AC-8b AC-8b AC-8a DC-1 DC-3 DC-5
Poles description	3P
[Ue] rated operational voltage	<= 1000 V AC 50/60 Hz <= 300 V DC
[le] rated operational current	250 A (at <40 °C) at 1000 V AC-1 115 A (at <60 °C) at 440 V AC-3
[Uc] control circuit voltage	48130 V AC/DC 50/60 Hz

Complementary	
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	250 A (at 40 °C)
Rated breaking capacity	1040 A at 440 V
[Icw] rated short-time withstand current	1.1 kA - 10 s 0.64 kA - 30 s 0.52 kA - 1 min 0.4 kA - 3 min 0.32 kA - 10 min
Associated fuse rating	125 A aM at 440 V 125 A aM at 690 V 315 A gG at 690 V
Average impedance	0.00018 Ohm

[Ui] rated insulation voltage	1000 V
Power dissipation per pole	10 W AC-1 - Ith 250 A 3 W AC-3 - Ith 115 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Network frequency	50/60 Hz
	16.67400 Hz
Motor power kW	30 kW at 230 V AC 50/60 Hz (AC-3e) 55 kW at 400 V AC 50/60 Hz (AC-3e) 55 kW at 415 V AC 50/60 Hz (AC-3e) 75 kW at 440 V AC 50/60 Hz (AC-3e) 75 kW at 500 V AC 50/60 Hz (AC-3e) 75 kW at 690 V AC 50/60 Hz (AC-3e) 30 kW at 230 V AC 50/60 Hz (AC-3) 55 kW at 400 V AC 50/60 Hz (AC-3) 55 kW at 415 V AC 50/60 Hz (AC-3) 75 kW at 440 V AC 50/60 Hz (AC-3) 75 kW at 500 V AC 50/60 Hz (AC-3) 75 kW at 690 V AC 50/60 Hz (AC-3) 30 kW at 230 V AC 50/60 Hz (AC-3) 55 kW at 440 V AC 50/60 Hz (AC-3) 55 kW at 440 V AC 50/60 Hz (AC-3) 65 kW at 440 V AC 50/60 Hz (AC-4) 65 kW at 440 V AC 50/60 Hz (AC-4) 65 kW at 440 V AC 50/60 Hz (AC-4) 65 kW at 500 V AC 50/60 Hz (AC-4) 65 kW at 500 V AC 50/60 Hz (AC-4) 75 kW at 690 V AC 50/60 Hz (AC-4)
Motor power hp	30 hp at 200/208 V 60 Hz 40 hp at 230/240 V 60 Hz 75 hp at 460/480 V 60 Hz 100 hp at 575/600 V 60 Hz
Irms rated making capacity	1560 A at 440 V
Control circuit voltage limits	Operational: 0.81.1 Uc AC/DC (at 60 °C) Drop-out: 0.10.45 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)	260 VA
Inrush power in W (DC)	190 W
Hold-in power consumption in VA (50/60 Hz, AC)	8.9 VA
Hold-in power consumption in W (DC)	5.0 W
Operating time	4560 ms closing 1545 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
Maximum operating rate  Connections - terminals	500 cyc/h AC-3 500 cyc/h AC-3e
	500 cyc/h AC-3 500 cyc/h AC-3e 150 cyc/h AC-4  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 0.22.5 mm² - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.252.5 mm² - cable stiffness: flexible with cable end Control circuit: push-in 2 0.51.0 mm² with cable end Control circuit: push-in 0.752.5 mm² - cable stiffness: solid stranded without cable end
Connections - terminals	500 cyc/h AC-3 500 cyc/h AC-3e 150 cyc/h AC-4  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 0.22.5 mm² - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.252.5 mm² - cable stiffness: flexible with cable end Control circuit: push-in 2 0.51.0 mm² with cable end Control circuit: push-in 0.752.5 mm² - cable stiffness: solid stranded without cable end Control circuit: push-in 0.752.5 mm² - cable stiffness: flexible with cable end
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	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
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	-2560 °C
Ambient air temperature for storage	-6080 °C
Mechanical robustness	Vibrations 5300 Hz 2 gn contactor open Vibrations 5300 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	-4070 °C at Uc
temperature around the device	
Packing Units	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	25.0 cm
Package 1 Width	24.0 cm
Package 1 Length	39.0 cm
Package 1 Weight	5.26 kg
Unit Type of Package 2	S06
Number of Units in Package 2	6
Package 2 Height	75.0 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	41.56 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

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

## **Product data sheet**

# LC1G115EHEA

#### 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

### Recommended replacement(s)