

LC1G800EHEA

High power contactor, TeSys Giga, 3 pole
(3NO), AC-3 $\leq 440\text{V}$ 800A, advanced version,
48...130V wide band AC/DC coil



Main

Range	TeSys
Range of product	TeSys Giga
Product or component type	Contacteur
Device short name	LC1G
Contacteur application	Power switching Motor control
Utilisation category	AC-1 AC-3 AC-3e AC-4 AC-5a AC-5b AC-6a AC-6b AC-8b AC-8a DC-1 DC-3 DC-5
Poles description	3P
[Ue] rated operational voltage	$\leq 1000\text{ V AC } 50/60\text{ Hz}$ $\leq 460\text{ V DC}$
[Ie] rated operational current	1050 A (at $\leq 40\text{ °C}$) at $\leq 1000\text{ V AC-1}$ 800 A (at $\leq 60\text{ °C}$) at $\leq 440\text{ V AC-3}$
[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 $\leq 60\text{ °C}$) Drop-out: 0.1 Uc Max...0.45 Uc Min (at $\leq 60\text{ °C}$)

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	1050 A (at 40 °C)
Rated breaking capacity	5870 A at 440 V
[Icw] rated short-time withstand current	5.5 kA - 10 s 4.6 kA - 30 s 3.6 kA - 1 min 2.6 kA - 3 min 1.7 kA - 10 min
Associated fuse rating	800 A aM at $\leq 440\text{ V}$ for motor 630 A aM at $\leq 690\text{ V}$ for motor 1250 A gG at $\leq 690\text{ V}$
Average impedance	0.000065 Ohm
[Ui] rated insulation voltage	1000 V
Power dissipation per pole	70 W AC-1 - Ith 1050 A 42 W AC-3 - Ith 800 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC

Motor power kW	200 kW at 230 V AC 50/60 Hz (AC-3e) 335 kW at 400 V AC 50/60 Hz (AC-3e) 355 kW at 415 V AC 50/60 Hz (AC-3e) 375 kW at 440 V AC 50/60 Hz (AC-3e) 425 kW at 500 V AC 50/60 Hz (AC-3e) 560 kW at 690 V AC 50/60 Hz (AC-3e) 450 kW at 1000 V AC 50/60 Hz (AC-3e) 250 kW at 230 V AC 50/60 Hz (AC-3) 450 kW at 400 V AC 50/60 Hz (AC-3) 450 kW at 415 V AC 50/60 Hz (AC-3) 450 kW at 440 V AC 50/60 Hz (AC-3) 500 kW at 500 V AC 50/60 Hz (AC-3) 560 kW at 690 V AC 50/60 Hz (AC-3) 450 kW at 1000 V AC 50/60 Hz (AC-3) 200 kW at 230 V AC 50/60 Hz (AC-4) 375 kW at 400 V AC 50/60 Hz (AC-4) 355 kW at 415 V AC 50/60 Hz (AC-4) 375 kW at 440 V AC 50/60 Hz (AC-4) 400 kW at 500 V AC 50/60 Hz (AC-4) 475 kW at 690 V AC 50/60 Hz (AC-4) 400 kW at 1000 V AC 50/60 Hz (AC-4)
Motor power hp	300 Hp at 200/208 V 60 Hz 350 Hp at 230/240 V 60 Hz 700 Hp at 460/480 V 60 Hz 800 hp at 575/600 V 60 Hz
Irms rated making capacity	7640 A at 440 V
Coil technology	Built-in bidirectional peak limiting
Mechanical durability	5 Mcycles
Inrush power in VA (50/60 Hz, AC)	560 VA
Inrush power in W (DC)	440 W
Hold-in power consumption in VA (50/60 Hz, AC)	12 VA
Hold-in power consumption in W (DC)	8.8 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: 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[RETURN]CCC[RETURN]cULus[RETURN]EAC[RETURN]CE[RETURN]UKCA[RETURN] RO-MR by DNV-GL
Tightening torque	58 N.m
Height	388.5 mm
Width	211 mm
Depth	266 mm
Net weight	17.3 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	35.000 cm
Package 1 Width	31.000 cm
Package 1 Length	52.000 cm
Package 1 Weight	19.398 kg
Unit Type of Package 2	PAL
Number of Units in Package 2	4
Package 2 Height	75.000 cm
Package 2 Width	80.000 cm
Package 2 Length	65.000 cm
Package 2 Weight	87.592 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	 REACH Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
Environmental Disclosure	 Product Environmental Profile
Circularity Profile	 End Of Life Information
PVC free	Yes
Halogen content performance	Halogen free plastic parts product



