

Product data sheet

Characteristics

LC1G400EHEA

High power contactor, TeSys Giga, 3 pole (3NO), AC-3 $\leq 440\text{V}$ 400A, advanced version, 48...130V wide band AC/DC coil



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-8b AC-8a DC-1 DC-3 DC-5
Poles description	3P
[Ue] rated operational voltage	$\leq 1000\text{ V AC 50/60 Hz}$ $\leq 460\text{ V DC}$
[Ie] rated operational current	550 A (at $<40\text{ }^{\circ}\text{C}$) at $\leq 1000\text{ V AC-1}$ 400 A (at $<60\text{ }^{\circ}\text{C}$) 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 $<60\text{ }^{\circ}\text{C}$) Drop-out: 0.1 Uc Max...0.45 Uc Min (at $<60\text{ }^{\circ}\text{C}$)

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	550 A (at $40\text{ }^{\circ}\text{C}$)
Rated breaking capacity	3480 A at 440 V
[Icw] rated short-time withstand current	3.6 KA - 10 s 2.4 KA - 30 s 1.7 KA - 1 min 1.2 KA - 3 min 1.0 KA - 10 min
Associated fuse rating	500 A aM at $\leq 440\text{ V}$ for motor 315 A aM at $\leq 690\text{ V}$ for motor 630 A gG at $\leq 690\text{ V}$
Average impedance	0.0001 Ohm
[Ui] rated insulation voltage	1000 V
Power dissipation per pole	30 W AC-1 - Ith 550 A 16 W AC-3 - Ith 400 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC

Motor power kW	110 KW at 230 V AC 50/60 Hz (AC-3e) 200 KW at 400 V AC 50/60 Hz (AC-3e) 200 KW at 415 V AC 50/60 Hz (AC-3e) 250 KW at 440 V AC 50/60 Hz (AC-3e) 250 KW at 500 V AC 50/60 Hz (AC-3e) 315 KW at 690 V AC 50/60 Hz (AC-3e) 220 KW at 1000 V AC 50/60 Hz (AC-3e) 110 KW at 230 V AC 50/60 Hz (AC-3) 200 KW at 400 V AC 50/60 Hz (AC-3) 200 KW at 415 V AC 50/60 Hz (AC-3) 250 KW at 440 V AC 50/60 Hz (AC-3) 250 KW at 500 V AC 50/60 Hz (AC-3) 315 KW at 690 V AC 50/60 Hz (AC-3) 220 KW at 1000 V AC 50/60 Hz (AC-3) 110 KW at 230 V AC 50/60 Hz (AC-4) 200 KW at 400 V AC 50/60 Hz (AC-4) 200 KW at 415 V AC 50/60 Hz (AC-4) 220 KW at 440 V AC 50/60 Hz (AC-4) 250 KW at 500 V AC 50/60 Hz (AC-4) 315 KW at 690 V AC 50/60 Hz (AC-4) 220 kW at 1000 V AC 50/60 Hz (AC-4)
Motor power hp	125 Hp at 200/208 V 60 Hz 150 Hp at 230/240 V 60 Hz 300 Hp at 460/480 V 60 Hz 400 hp at 575/600 V 60 Hz
Irms rated making capacity	5090 A at 440 V
Coil technology	Built-in bidirectional peak limiting
Mechanical durability	8 Mcycles
Inrush power in VA (50/60 Hz, AC)	450 VA
Inrush power in W (DC)	360 W
Hold-in power consumption in VA (50/60 Hz, AC)	11.7 VA
Hold-in power consumption in W (DC)	8.3 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: 32 x 10 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	45 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	35 N.m
Height	290 mm
Width	140 mm
Depth	226 mm
Net weight	8.2 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	31.0 cm
Package 1 Width	23.0 cm
Package 1 Length	37.0 cm
Package 1 Weight	8.944 kg
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Height	75.0 cm
Package 2 Width	60.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	48.8 kg

Offer Sustainability

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

