Product data sheet
Characteristics

LC1G630EHEA
High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 630A, 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	<= 1000 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	1050 A (at <40 °C) at <= 1000 V AC-1 630 A (at <60 °C) at <= 440 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 °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	1050 A (at 40 °C)
Rated breaking capacity	5550 A at 440 V
[Icw] rated short-time withstand current	5.05 KA - 10 s 4.4 KA - 30 s 3.4 KA - 1 min 2.2 KA - 3 min 1.6 KA - 10 min
Associated fuse rating	630 A aM at <= 440 V for motor 500 A aM at <= 690 V for motor 1250 A gG at <= 690 V 1000 A UL Type L at <= 600 V

Average impedance	0.000065 Ohm
[Ui] rated insulation voltage	1000 V
Power dissipation per pole	70 W AC-1 - Ith 1050 A 26 W AC-3 - Ith 630 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Motor power kW	180 KW at 230 V AC 50/60 Hz (AC-3e) 315 KW at 400 V AC 50/60 Hz (AC-3e) 335 KW at 415 V AC 50/60 Hz (AC-3e) 355 KW at 440 V AC 50/60 Hz (AC-3e) 375 KW at 500 V AC 50/60 Hz (AC-3e) 500 KW at 690 V AC 50/60 Hz (AC-3e) 450 KW at 1000 V AC 50/60 Hz (AC-3e) 200 KW at 230 V AC 50/60 Hz (AC-3) 335 KW at 400 V AC 50/60 Hz (AC-3) 375 KW at 415 V AC 50/60 Hz (AC-3) 400 KW at 440 V AC 50/60 Hz (AC-3) 400 KW at 500 V AC 50/60 Hz (AC-3) 500 KW at 690 V AC 50/60 Hz (AC-3) 450 KW at 1000 V AC 50/60 Hz (AC-3) 180 KW at 230 V AC 50/60 Hz (AC-4) 315 KW at 400 V AC 50/60 Hz (AC-4) 335 KW at 415 V AC 50/60 Hz (AC-4) 355 KW at 440 V AC 50/60 Hz (AC-4) 375 KW at 500 V AC 50/60 Hz (AC-4) 450 KW at 690 V AC 50/60 Hz (AC-4) 355 KW at 1000 V AC 50/60 Hz (AC-4)
Motor power hp	250 Hp at 200/208 V 60 Hz 300 Hp at 230/240 V 60 Hz 600 Hp at 460/480 V 60 Hz 700 Hp at 575/600 V 60 Hz
Irms rated making capacity	7220 A at 440 V
Coil technology	Built-in bidirectional peak limiting
Safety reliability level	B10d = 100000 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 1800000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	5 Mcycles
Inrush power in VA	560 VA
Inrush power in W	440 W
Hold-in power consumption in VA	12 VA
Hold-in power consumption in W	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 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	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 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[RETURN]CCC[RETURN]cULus[RETURN]EAC[RETURN]CE[RETURN]UKCA[RETU
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	34.000 Cm
Package 1 Width	31.000 Cm
Package 1 Length	51.000 Cm
Package 1 Weight	19.469 Kg
Unit Type of Package 2	S06
Number of Units in Package 2	2
Package 2 Height	75.000 Cm
Package 2 Width	60.000 Cm
Package 2 Length	80.000 Cm
Package 2 Weight	52.800 Kg

Offer Sustainability

Recyclability potential, in %	55
Total lifecycle Carbon footprint	2 060 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	160.0250947842299
Carbon footprint of the manufacturing phase [A1 to A3]	160 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	29.00402569100256
Carbon footprint of the distribution phase [A4]	29 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.24019808395601733
Carbon footprint of the installation phase [A5]	0.2 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1845.407776594411
Carbon footprint of the use phase [B2, B3, B4, B6]	1 845 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	25.478938495414184
Carbon footprint of the end-of-life phase [C1 to C4]	25 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	2060
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	6fbdad13-bb7c-47d4-a6d6-d82dd6f54349
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Styrene and Bisphenol A (BP
Halogen-free status	Halogen free plastic parts product

PVC free	Yes
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

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised