Product data sheet
Characteristics

LC1G4004EHEA
High power contactor, TeSys Giga, 4 pole (4NO), AC-1 <=440V 550A, advanced version, 48…130V wide band AC/DC coil

Green Premium™

Main

Range	TeSys
Range of product	TeSys Giga
Product or component type	Contactor
Device short name	LC1G
Contactor application	Power switching
Utilisation category	AC-3 AC-3e AC-1 AC-5a AC-5b AC-6a AC-6b DC-1 DC-3 DC-5
Poles description	4P
[Ue] rated operational voltage	<= 1000 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	400 A (at <60 °C) at <= 440 V AC-3 550 A (at <40 °C) at <= 1000 V AC-1
[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	550 A (at 40 °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 <= 440 V for motor 315 A aM at <= 690 V for motor 630 A gG at <= 690 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	4 NO
Auxiliary contact composition	1 NO + 1 NC
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

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)	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
Connections - terminals	Power circuit: bar 2 - busbar cross section: 32 x 10 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	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 UL 60335-1 UL 60335-2-40:Annex JJ
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	185 mm
Depth	226 mm
Net weight	8.7 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

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
RoHS exemption information	Yes

China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information