Product data sheet
Characteristics

LC1G500LSEA
High power contactor. TeSys Giga. 3 pole (3NO). AC-3 <=440V 500A. advanced version. 200…500V 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	700 A (at <40 °C) at <= 1000 V AC-1 500 A (at <60 °C) at <= 440 V AC-3
[Uc] control circuit voltage	200...500 V AC 50/60 Hz 200...500 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
Rated breaking capacity	4600 A at 440 V
[Icw] rated short-time withstand current	4.0 KA - 10 s 2.8 KA - 30 s 2.2 KA - 1 min 1.5 KA - 3 min 1.2 kA - 10 min
Associated fuse rating	500 A aM at <= 440 V for motor 400 A aM at <= 690 V for motor 800 A gG at <= 690 V
Average impedance	0.00008 Ohm
[Ui] rated insulation voltage	1000 V
Power dissipation per pole	40 W AC-1 - Ith 700 A 20 W AC-3 - Ith 500 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC

Motor power kW	147 KW at 230 V AC 50/60 Hz (AC-3e) 250 KW at 400 V AC 50/60 Hz (AC-3e) 250 KW at 415 V AC 50/60 Hz (AC-3e) 280 KW at 440 V AC 50/60 Hz (AC-3e) 315 KW at 500 V AC 50/60 Hz (AC-3e) 355 KW at 690 V AC 50/60 Hz (AC-3e) 335 KW at 1000 V AC 50/60 Hz (AC-3e) 160 KW at 230 V AC 50/60 Hz (AC-3) 250 KW at 400 V AC 50/60 Hz (AC-3) 250 KW at 415 V AC 50/60 Hz (AC-3) 315 KW at 440 V AC 50/60 Hz (AC-3) 355 KW at 500 V AC 50/60 Hz (AC-3) 355 KW at 690 V AC 50/60 Hz (AC-3) 335 KW at 1000 V AC 50/60 Hz (AC-3) 150 KW at 230 V AC 50/60 Hz (AC-4) 250 KW at 400 V AC 50/60 Hz (AC-4) 250 KW at 415 V AC 50/60 Hz (AC-4) 295 KW at 440 V AC 50/60 Hz (AC-4) 295 KW at 500 V AC 50/60 Hz (AC-4) 355 KW at 690 V AC 50/60 Hz (AC-4) 280 kW at 1000 V AC 50/60 Hz (AC-4)
Motor power hp	150 Hp at 200/208 V 60 Hz 200 Hp at 230/240 V 60 Hz 400 Hp at 460/480 V 60 Hz 450 hp at 575/600 V 60 Hz
Coil technology	Built-in bidirectional peak limiting
Mechanical durability	8 Mcycles
Inrush power in VA (50/60 Hz, AC)	535 VA
Inrush power in W (DC)	300 W
Hold-in power consumption in VA (50/60 Hz, AC)	15.4 VA
Hold-in power consumption in W (DC)	8.6 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 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
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	31.000 cm
Package 1 Width	22.800 cm
Package 1 Length	37.200 cm
Package 1 Weight	9.176 kg
Unit Type of Package 2	S06
Number of Units in Package 2	4
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	46.704 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