Product data sheet
Characteristics

LC1G185EHEN
High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 185A, standard 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	305 A (at <40 °C) at <= 1000 V AC-1 185 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	305 A (at 40 °C)
Rated breaking capacity	1610 A at 440 V
[Icw] rated short-time withstand current	1.5 KA - 10 s 0.92 KA - 30 s 0.74 KA - 1 min 0.5 KA - 3 min 0.4 KA - 10 min
Associated fuse rating	200 A aM at <= 440 V for motor 160 A aM at <= 690 V for motor 315 A gG at <= 690 V 300 A UL Type J at <= 600 V

Average impedance	0.00017 Ohm
[Ui] rated insulation voltage	1000 V
Power dissipation per pole	20 W AC-1 - Ith 305 A 6 W AC-3 - Ith 185 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Motor power kW	55 KW at 230 V AC 50/60 Hz (AC-3e) 90 KW at 400 V AC 50/60 Hz (AC-3e) 90 KW at 415 V AC 50/60 Hz (AC-3e) 110 KW at 440 V AC 50/60 Hz (AC-3e) 110 KW at 500 V AC 50/60 Hz (AC-3e) 110 KW at 690 V AC 50/60 Hz (AC-3e) 75 KW at 1000 V AC 50/60 Hz (AC-3e) 55 KW at 230 V AC 50/60 Hz (AC-3) 90 KW at 400 V AC 50/60 Hz (AC-3) 90 KW at 415 V AC 50/60 Hz (AC-3) 110 KW at 440 V AC 50/60 Hz (AC-3) 110 KW at 500 V AC 50/60 Hz (AC-3) 110 KW at 690 V AC 50/60 Hz (AC-3) 75 KW at 1000 V AC 50/60 Hz (AC-3) 55 KW at 230 V AC 50/60 Hz (AC-4) 90 KW at 400 V AC 50/60 Hz (AC-4) 90 KW at 415 V AC 50/60 Hz (AC-4) 100 KW at 440 V AC 50/60 Hz (AC-4) 110 KW at 500 V AC 50/60 Hz (AC-4) 110 KW at 690 V AC 50/60 Hz (AC-4) 75 KW at 1000 V AC 50/60 Hz (AC-4)
Motor power hp	50 Hp at 200/208 V 60 Hz 60 Hp at 230/240 V 60 Hz 125 Hp at 460/480 V 60 Hz 150 Hp at 575/600 V 60 Hz
Irms rated making capacity	2310 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	640 VA
Inrush power in W	445 W
Hold-in power consumption in VA	18.7 VA
Hold-in power consumption in W	7.8 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: 25 x 6 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	35 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	18 N.M
Height	193 Mm

Width	108 Mm
Depth	193 Mm
Net weight	3.5 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	26 Cm
Package 1 Width	17.5 Cm
Package 1 Length	32 Cm
Package 1 Weight	4.549 Kg
Unit Type of Package 2	P06
Number of Units in Package 2	8
Package 2 Height	75 Cm
Package 2 Width	60 Cm
Package 2 Length	80 Cm
Package 2 Weight	44.892 Kg

Offer Sustainability

Recyclability potential, in %	55
Total lifecycle Carbon footprint	740 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	39.176010870068204
Carbon footprint of the manufacturing phase [A1 to A3]	39 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	7.10052399768008
Carbon footprint of the distribution phase [A4]	7 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.058803294325296185
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	687.5048579469374
Carbon footprint of the use phase [B2, B3, B4, B6]	688 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	6.237541510598823
Carbon footprint of the end-of-life phase [C1 to C4]	6 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	740
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
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