

Product data sheet

Specifications



Contactor, high power, TeSys Giga, advanced version, AC-3, <= 440V, 185A, 3 pole/NO, 48-130VAC/DC coil

LC1G185EHEA

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 104 °F (40 °C)) <= 1000 V AC-1 185 A 140 °F (60 °C)) <= 400 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 140 °F (60 °C)) Drop-out 0.1 Uc Max...0.45 Uc Min 140 °F (60 °C))

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	305 A 104 °F (40 °C)
Rated breaking capacity	1610 A 440 V
[Icw] rated short-time withstand current	1.5 kA - 10 s 0.92 kA - 30 s 0.74 kA - 1 min

* Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

	0.5 kA - 3 min 0.4 kA - 10 min
Associated fuse rating	200 A aM <= 440 V motor 160 A aM <= 690 V motor 315 A gG <= 690 V
Average impedance	0.00017 Ohm
[Ui] rated insulation voltage	1000 V
Power dissipation per pole	20 W AC-1 - lth 305 A 6 W AC-3 - lth 185 A
Compatibility code	LC1G
Pole contact composition	3 NO
Auxiliary contact composition	1 NO + 1 NC
Motor power kW	55 kW 230 V AC 50/60 Hz AC-3e) 90 kW 400 V AC 50/60 Hz AC-3e) 90 kW 415 V AC 50/60 Hz AC-3e) 110 kW 440 V AC 50/60 Hz AC-3e) 110 kW 500 V AC 50/60 Hz AC-3e) 110 kW 690 V AC 50/60 Hz AC-3e) 75 kW 1000 V AC 50/60 Hz AC-3e) 55 kW 230 V AC 50/60 Hz AC-3) 90 kW 400 V AC 50/60 Hz AC-3) 90 kW 415 V AC 50/60 Hz AC-3) 110 kW 440 V AC 50/60 Hz AC-3) 110 kW 500 V AC 50/60 Hz AC-3) 110 kW 690 V AC 50/60 Hz AC-3) 75 kW 1000 V AC 50/60 Hz AC-3) 55 kW 230 V AC 50/60 Hz AC-4) 90 kW 400 V AC 50/60 Hz AC-4) 90 kW 415 V AC 50/60 Hz AC-4) 100 kW 440 V AC 50/60 Hz AC-4) 110 kW 500 V AC 50/60 Hz AC-4) 110 kW 690 V AC 50/60 Hz AC-4) 75 kW 1000 V AC 50/60 Hz AC-4)
Maximum Horse Power Rating	50 hp 200/208 V at 60 Hz 60 hp 230/240 V at 60 Hz 125 hp 460/480 V at 60 Hz 150 hp 575/600 V at 60 Hz
Irms rated making capacity	2310 A 440 V
Coil technology	Built-in bidirectional peak limiting
Mechanical durability	8 Mcycles
Inrush power in VA (50/60 Hz, AC)	260 VA
Inrush power in W (DC)	190 W
Hold-in power consumption in VA (50/60 Hz, AC)	8.9 VA
Hold-in power consumption in W (DC)	5.0 W
Operating time	40...70 ms closing 15...50 ms opening
Maximum operating rate	300 cyc/h AC-1 500 cyc/h AC-3 500 cyc/h AC-3e 150 cyc/h AC-4
Connections - terminals	Power circuit bar 2 25 x 6 mm Power circuit lugs-ring terminals 1 0.29 in² (185 mm²) Power circuit bolted connection Control circuit push-in 1 0.00...0.00 in² (0.2...2.5 mm²) solid stranded without cable end Control circuit push-in 1 0.00...0.00 in² (0.25...2.5 mm²) flexible with cable end Control circuit push-in 2 0.00...0.00 in² (0.5...1.0 mm²) with cable end Control circuit push-in 0.00...0.00 in² (0.75...2.5 mm²) solid stranded without cable end Control circuit push-in 0.00...0.00 in² (0.75...2.5 mm²) flexible with cable end
Connection pitch	1.38 in (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

Product Certifications	CB Scheme CCC cULus EAC CE UKCA EU-RO-MR by DNV-GL
Tightening torque	159.31 lbf.in (18 N.m)
Height	10.04 in (255 mm)
Width	4.25 in (108 mm)
Depth	7.60 in (193 mm)
Net Weight	9.04 lb(US) (4.1 kg)

Environment

IP degree of protection	IP2X front face with shrouds IEC 60529 IP2X front face with shrouds VDE 0106
Ambient Air Temperature for Operation	-13...140 °F (-25...60 °C)
Ambient Air Temperature for Storage	-76...176 °F (-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
Color	Dark grey
Protective treatment	TH
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °C) at Uc

Ordering and shipping details

Category	22329-TESYS GIGA CONTACTORS
Discount Schedule	I12
GTIN	3606481922342
Returnability	Yes

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.25 in (23.5 cm)
Package 1 Width	10.04 in (25.5 cm)
Package 1 Length	15.16 in (38.5 cm)
Package 1 Weight	11.59 lb(US) (5.258 kg)
Unit Type of Package 2	S06
Number of Units in Package 2	6
Package 2 Height	29.53 in (75.0 cm)
Package 2 Width	23.62 in (60.0 cm)
Package 2 Length	31.50 in (80.0 cm)
Package 2 Weight	98.67 lb(US) (44.758 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Styrene, which is known to the State of California to cause cancer, and Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
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

Recommended replacement(s)