

Product data sheet

Characteristics

LC1G1854EHEN

High power contactor, TeSys Giga, 4 pole (4NO), AC-1 $\leq 440\text{V}$ 305A, 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
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	$\leq 1000\text{ V AC 50/60 Hz}$ $\leq 460\text{ V DC}$
[Ie] rated operational current	185 A (at $<60\text{ }^{\circ}\text{C}$) at $\leq 440\text{ V AC-3}$ 305 A (at $<40\text{ }^{\circ}\text{C}$) at $\leq 1000\text{ V AC-1}$
[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 $<60\text{ }^{\circ}\text{C}$) Drop-out: 0.1 Uc Max...0.45 Uc Min (at $<60\text{ }^{\circ}\text{C}$)

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	305 A (at $40\text{ }^{\circ}\text{C}$)
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 $\leq 440\text{ V}$ for motor 160 A aM at $\leq 690\text{ V}$ for motor 315 A gG at $\leq 690\text{ V}$
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	4 NO
Auxiliary contact composition	1 NO + 1 NC
Irms rated making capacity	2310 A at 440 V
Coil technology	Built-in bidirectional peak limiting
Mechanical durability	8 Mcycles
Inrush power in VA (50/60 Hz, AC)	640 VA
Inrush power in W (DC)	445 W

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Hold-in power consumption in VA (50/60 Hz, AC)	18.7 VA
Hold-in power consumption in W (DC)	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
Connections - terminals	Power circuit: bar 2 - busbar cross section: 25 x 6 mm Power circuit: lugs-ring terminals 1 185 mm ² Control circuit: push-in 1 0.2...2.5 mm ² - cable stiffness: solid stranded without cable end Control circuit: push-in 1 0.25...2.5 mm ² - cable stiffness: flexible with cable end Control circuit: push-in 2 0.5...1.0 mm ² with cable end Control circuit: push-in 0.75...2.5 mm ² - cable stiffness: solid stranded without cable end Control circuit: push-in 0.75...2.5 mm ² - 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
Product certifications	CB Scheme[RETURN]CCC[RETURN]cULus[RETURN]EAC[RETURN]CE[RETURN]UKCA[RETURN] RO-MR by DNV-GL
Tightening torque	18 N.m
Height	193 mm
Width	143 mm
Depth	193 mm
Net weight	4.4 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	25.000 cm
Package 1 Width	27.000 cm
Package 1 Length	38.500 cm
Package 1 Weight	5.713 kg
Unit Type of Package 2	S06
Number of Units in Package 2	6
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	45.250 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

