

# Schneider Service Manual

LC1G2654KUEN

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## 1. Description

LC1G2654KUEN High power contactor, TeSys Giga,

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## 3. Product Information

LC1G2654KUEN High power contactor, TeSys Giga,  
4 pole (4NO), AC-1  $\leq 440\text{V}$  385A,  
standard version, 100...250V 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  $\leq 1000\text{ V AC } 50/60\text{ Hz}$   
 $\leq 460\text{ V DC}$   
[Ie] rated operational current 265 A (at  $\leq 60\text{ }^{\circ}\text{C}$ ) at  $\leq 440\text{ V AC-3}$   
385 A (at  $\leq 40\text{ }^{\circ}\text{C}$ ) at  $\leq 1000\text{ V AC-1}$   
[Uc] control circuit voltage 100...250 V AC 50/60 Hz  
100...250 V DC  
Control circuit voltage limits Operational: 0.8 Uc Min...1.1 Uc Max (at  $\leq 60\text{ }^{\circ}\text{C}$ )  
Drop-out: 0.1 Uc Max...0.45 Uc Min (at  $\leq 60\text{ }^{\circ}\text{C}$ )  
Complementary  
[Uimp] rated impulse withstand  
voltage  
8 kV  
Overvoltage category III  
[Ith] conventional free air thermal  
current  
385 A (at  $40\text{ }^{\circ}\text{C}$ )  
Rated breaking capacity 2380 A at 440 V  
[Icw] rated short-time withstand  
current  
2.2 kA - 10 s  
1.23 kA - 30 s  
0.95 kA - 1 min  
0.62 kA - 3 min  
0.48 kA - 10 min  
Associated fuse rating 315 A aM at  $\leq 440\text{ V}$  for motor  
250 A aM at  $\leq 690\text{ V}$  for motor  
400 A gG at  $\leq 690\text{ V}$   
Average impedance 0.000144 Ohm  
[Ui] rated insulation voltage 1000 V  
Power dissipation per pole 20 W AC-1 - Ith 385 A  
11 W AC-3 - Ith 265 A  
Compatibility code LC1G  
Pole contact composition 4 NO  
Auxiliary contact composition 1 NO + 1 NC  
Irms rated making capacity 3320 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) 700 VA

inrush power in W (DC) 645 W

hold-in power consumption in VA

(50/60 Hz, AC)

15.0 VA

hold-in power consumption in W

(DC)

9.1 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 mm<sup>2</sup>

Control circuit: push-in 1 0.2...2.5 mm<sup>2</sup> - cable stiffness: solid stranded without cable

end

Control circuit: push-in 1 0.25...2.5 mm<sup>2</sup> - cable stiffness: flexible with cable end

Control circuit: push-in 2 0.5...1.0 mm<sup>2</sup> with cable end

Control circuit: push-in 0.75...2.5 mm<sup>2</sup> - cable stiffness: solid stranded without cable

end

Control circuit: push-in 0.75...2.5 mm<sup>2</sup> - 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

CCC

cULus

EAC

CE

UKCA

EU-RO-MR by DNV-GL

Tightening torque 35 N.m

Height 225 mm

Width 185 mm

Depth 226 mm

Net weight 8.2 kg

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