# Product datasheet

Specifications

## High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 225A, advanced version, 200…500V wide band AC/DC coil

LC1G225LSEA

## Main

| | |
|---|---|
| **Range** | TeSys |
| **Range of product** | TeSys Giga |
| **Product or component type** | Contactor |
| **Device short name** | LC1G |
| **Contactor application** | Power switching<br>Motor control |
| **Utilisation category** | AC-1<br>AC-3<br>AC-3e<br>AC-4<br>AC-5a<br>AC-5b<br>AC-6a<br>AC-6b<br>AC-8b<br>AC-8a<br>DC-1<br>DC-3<br>DC-5 |
| **Poles description** | 3P |
| **[Ue] rated operational voltage** | <= 1000 V AC 50/60 Hz<br><= 460 V DC |
| **[Ie] rated operational current** | 330 A (at <40 °C) at <= 1000 V AC-1<br>225 A (at <60 °C) at <= 440 V AC-3 |
| **[Uc] control circuit voltage** | 200...500 V AC 50/60 Hz<br>200...500 V DC |
| **Control circuit voltage limits** | Operational: 0.8 Uc Min...1.1 Uc Max (at <60 °C)<br>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** | 2050 A at 440 V |
| **[Icw] rated short-time withstand current** | 1.8 kA - 10 s<br>1.0 kA - 30 s<br>0.85 kA - 1 min<br>0.56 kA - 3 min<br>0.44 kA - 10 min |
| **Associated fuse rating** | 250 A aM at <= 440 V for motor<br>200 A aM at <= 690 V for motor<br>400 A gG at <= 690 V |
| **Average impedance** | 0.00015 Ohm |

| | |
|---|---|
| **[Ui] rated insulation voltage** | 1000 V |
| **Power dissipation per pole** | 20 W AC-1 - Ith 330 A<br>8 W AC-3 - Ith 225 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)<br>110 kW at 400 V AC 50/60 Hz (AC-3e)<br>110 kW at 415 V AC 50/60 Hz (AC-3e)<br>132 kW at 440 V AC 50/60 Hz (AC-3e)<br>132 kW at 500 V AC 50/60 Hz (AC-3e)<br>160 kW at 690 V AC 50/60 Hz (AC-3e)<br>132 kW at 1000 V AC 50/60 Hz (AC-3e)<br>55 kW at 230 V AC 50/60 Hz (AC-3)<br>110 kW at 400 V AC 50/60 Hz (AC-3)<br>110 kW at 415 V AC 50/60 Hz (AC-3)<br>132 kW at 440 V AC 50/60 Hz (AC-3)<br>132 kW at 500 V AC 50/60 Hz (AC-3)<br>160 kW at 690 V AC 50/60 Hz (AC-3)<br>132 kW at 1000 V AC 50/60 Hz (AC-3)<br>55 kW at 230 V AC 50/60 Hz (AC-4)<br>110 kW at 400 V AC 50/60 Hz (AC-4)<br>110 kW at 415 V AC 50/60 Hz (AC-4)<br>129 kW at 440 V AC 50/60 Hz (AC-4)<br>132 kW at 500 V AC 50/60 Hz (AC-4)<br>132 kW at 690 V AC 50/60 Hz (AC-4)<br>110 kW at 1000 V AC 50/60 Hz (AC-4) |
| **Motor power hp** | 60 hp at 200/208 V 60 Hz<br>75 hp at 230/240 V 60 Hz<br>150 hp at 460/480 V 60 Hz<br>150 hp at 575/600 V 60 Hz |
| **Coil technology** | Built-in bidirectional peak limiting |
| **Safety reliability level** | B10d = 400000 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>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)** | 295 VA |
| **inrush power in W (DC)** | 215 W |
| **hold-in power consumption in VA (50/60 Hz, AC)** | 13.0 VA |
| **hold-in power consumption in W (DC)** | 8.0 W |
| **Operating time** | 40...70 ms closing<br>15...50 ms opening |
| **Maximum operating rate** | 600 cyc/h AC-3<br>600 cyc/h AC-3e<br>300 cyc/h AC-1<br>150 cyc/h AC-4 |
| **Connections - terminals** | Power circuit: bar 2 - busbar cross section: 25 x 6 mm<br>Power circuit: lugs-ring terminals 1 185 mm²<br>Power circuit: bolted connection<br>Control circuit: push-in 1 0.2…2.5 mm² - cable stiffness: solid stranded without cable end<br>Control circuit: push-in 1 0.25…2.5 mm² - cable stiffness: flexible with cable end<br>Control circuit: push-in 2 0.5…1.0 mm² with cable end<br>Control circuit: push-in 0.75…2.5 mm² - cable stiffness: solid stranded without cable end<br>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<br>EN/IEC 60947-5-1<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>JIS C8201-4-1<br>JIS C8201-5-1<br>IEC 60335-1:Clause 30.2<br>IEC 60335-2-40:Annex JJ<br>UL 60335-1<br>UL 60335-2-40:Annex JJ |
| **Product certifications** | CB Scheme<br>CCC<br>cULus<br>EAC<br>CE<br>UKCA<br>EU-RO-MR by DNV-GL |
| **Tightening torque** | 18 N.m |
| **Height** | 255 mm |
| **Width** | 108 mm |
| **Depth** | 193 mm |
| **Net weight** | 4.1 kg |

## Environment

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|---|---|
| **IP degree of protection** | IP2X front face with shrouds conforming to IEC 60529<br>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<br>Vibrations 5…300 Hz 4 gn contactor closed<br>Shocks 10 gn 11 ms contactor open<br>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** | 25.500 cm |
| **Package 1 Width** | 17.500 cm |
| **Package 1 Length** | 32.000 cm |
| **Package 1 Weight** | 5.050 kg |
| **Unit Type of Package 2** | S06 |
| **Number of Units in Package 2** | 12 |
| **Package 2 Height** | 75.000 cm |
| **Package 2 Width** | 60.000 cm |
| **Package 2 Length** | 80.000 cm |
| **Package 2 Weight** | 73.732 kg |

## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

### Environmental footprint

| | |
|---|---|
| Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) | **882** |
| Environmental Disclosure | **Product Environmental Profile** |

## Use Better

### Materials and Substances

| | |
|---|---|
| EU RoHS Directive | **Compliant with Exemptions** |
| REACh Regulation | **REACh Declaration** |
| Halogen content performance | **Halogen free plastic parts product** |
| PVC free | **Yes** |

## Use Again

### Repack and remanufacture

| | |
|---|---|
| Circularity Profile | **End of Life Information** |
| Take-back | **No** |

## Installation

### Installation Videos

TeSys Giga - How to install the auxiliary contact block
TeSys Giga - How to install and remove remote wear diagnosis module
TeSys Giga - How to install mechanical interlock kit
TeSys Giga - How to replace control module
TeSys Giga - How to replace switching modules
TeSys Giga - How to assemble reverser solution
TeSys Giga - How to assemble change-over solution
TeSys Giga - How to assemble star-delta starter solution New