# Product data sheet

Specifications


## High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 800A, standard version, 100…250V wide band AC/DC coil

LC1G800KUEN

## 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-8a<br>AC-8b<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** | 1050 A (at <40 °C) at <= 1000 V AC-1<br>800 A (at <60 °C) at <= 400 V AC-3 |
| **[Uc] control circuit voltage** | 100...250 V AC 50/60 Hz<br>100...250 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

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|---|---|
| **[Uimp] rated impulse withstand voltage** | 8 kV |
| **Overvoltage category** | III |
| **[Ith] conventional free air thermal current** | 1050 A (at 40 °C) |
| **Rated breaking capacity** | 5870 A at 440 V |
| **[Icw] rated short-time withstand current** | 5.5 kA - 10 s<br>4.6 kA - 30 s<br>3.6 kA - 1 min<br>2.6 kA - 3 min<br>1.7 kA - 10 min |
| **Associated fuse rating** | 800 A aM at <= 440 V for motor |

| | |
|---|---|
| | 630 A aM at <= 690 V for motor<br>1250 A gG at <= 690 V |
| **Average impedance** | 0.000065 Ohm |
| **[Ui] rated insulation voltage** | 1000 V |
| **Power dissipation per pole** | 70 W AC-1 - Ith 1050 A<br>42 W AC-3 - Ith 800 A |
| **Compatibility code** | LC1G |
| **Pole contact composition** | 3 NO |
| **Auxiliary contact composition** | 1 NO + 1 NC |
| **Motor power kW** | 200 kW at 230 V AC 50/60 Hz (AC-3e)<br>335 kW at 400 V AC 50/60 Hz (AC-3e)<br>355 kW at 415 V AC 50/60 Hz (AC-3e)<br>375 kW at 440 V AC 50/60 Hz (AC-3e)<br>425 kW at 500 V AC 50/60 Hz (AC-3e)<br>560 kW at 690 V AC 50/60 Hz (AC-3e)<br>450 kW at 1000 V AC 50/60 Hz (AC-3e)<br>250 kW at 230 V AC 50/60 Hz (AC-3)<br>450 kW at 400 V AC 50/60 Hz (AC-3)<br>450 kW at 415 V AC 50/60 Hz (AC-3)<br>450 kW at 440 V AC 50/60 Hz (AC-3)<br>500 kW at 500 V AC 50/60 Hz (AC-3)<br>560 kW at 690 V AC 50/60 Hz (AC-3)<br>450 kW at 1000 V AC 50/60 Hz (AC-3)<br>200 kW at 230 V AC 50/60 Hz (AC-4)<br>375 kW at 400 V AC 50/60 Hz (AC-4)<br>355 kW at 415 V AC 50/60 Hz (AC-4)<br>375 kW at 440 V AC 50/60 Hz (AC-4)<br>400 kW at 500 V AC 50/60 Hz (AC-4)<br>475 kW at 690 V AC 50/60 Hz (AC-4)<br>400 kW at 1000 V AC 50/60 Hz (AC-4) |
| **Motor power hp** | 250 hp at 200/208 V 60 Hz<br>300 hp at 230/240 V 60 Hz<br>600 hp at 460/480 V 60 Hz<br>600 hp at 575/600 V 60 Hz |
| **Irms rated making capacity** | 7640 A at 440 V |
| **Coil technology** | Built-in bidirectional peak limiting |
| **Mechanical durability** | 5 Mcycles |
| **Inrush power in VA (50/60 Hz, AC)** | 800 VA |
| **Inrush power in W (DC)** | 680 W |
| **Hold-in power consumption in VA (50/60 Hz, AC)** | 15.0 VA |
| **Hold-in power consumption in W (DC)** | 9.5 W |
| **Operating time** | 40...70 ms closing<br>15...50 ms opening |
| **Maximum operating rate** | 300 cyc/h AC-1<br>500 cyc/h AC-3<br>500 cyc/h AC-3e<br>150 cyc/h AC-4 |
| **Connections - terminals** | Power circuit: bar 2 - busbar cross section: 52 x 20 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** | 70 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 |
| **Product certifications** | CB Scheme<br>CCC |

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|---|---|
| | cULus<br>EAC<br>CE<br>UKCA<br>EU-RO-MR by DNV-GL |
| **Tightening torque** | 58 N.m |
| **Height** | 284 mm |
| **Width** | 211 mm |
| **Depth** | 266 mm |
| **Net weight** | 14.2 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

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|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 30.000 cm |
| **Package 1 Width** | 34.500 cm |
| **Package 1 Length** | 60.500 cm |
| **Package 1 Weight** | 16.416 kg |
| **Unit Type of Package 2** | P06 |
| **Number of Units in Package 2** | 2 |
| **Package 2 Height** | 75.000 cm |
| **Package 2 Width** | 60.000 cm |
| **Package 2 Length** | 80.000 cm |
| **Package 2 Weight** | 42.832 kg |

## Offer Sustainability

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|---|---|
| **Sustainable offer status** | Green Premium product |
| **REACh Regulation** | REACh Declaration |
| **EU RoHS Directive** | Compliant<br>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 |
| **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 |

# Product data sheet LC1G800KUEN

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 install cable memory kit

TeSys Giga - How to directly mount LR9G overload relay

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

## Recommended replacement(s)