# Product data sheet
## Characteristics

# LC1G800KUEN
## High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 800A, 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<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><= 300 V DC |
| [Ie] rated operational current | 1050 A (at <40 °C) at 440 V AC-1<br>800 A (at <60 °C) at 440 V AC-3 |
| [Uc] control circuit voltage | 100...250 V AC/DC 50/60 Hz |
| Colour | Dark grey |

## 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<br>630 A aM at 690 V<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 |
| Network frequency | 50/60 Hz<br>16.67...400 Hz |

| | |
|---|---|
| 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 |
| Control circuit voltage limits | Operational: 0.8...1.1 Uc AC/DC (at 60 °C)<br>Drop-out: 0.1...0.45 Uc AC/DC (at 60 °C) |
| Coil technology | Built-in bidirectional peak limiting |
| Mechanical durability | 5 Mcycles<br>8 Mcycles with sub-assembly substitution |
| 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 | 45...60 ms closing<br>15...45 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<br>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 |
| 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 Weight | 16.1 kg |
| Package 1 Height | 33.4 cm |
| Package 1 width | 29.4 cm |
| Package 1 Length | 49.6 cm |
| Unit Type of Package 2 | S06 |
| Number of Units in Package 2 | 2 |
| Package 2 Weight | 47.6 kg |
| Package 2 Height | 73.5 cm |
| Package 2 width | 60 cm |
| Package 2 Length | 80 cm |

## Offer Sustainability

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|---|---|
| Sustainable offer status | Green Premium product |
| REACh Regulation | REACh Declaration |
| EU RoHS Directive | Compliant EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| PVC free | Yes |
| Halogen content performance | Halogen free plastic parts product |