

# LC1G800KUEN

"High power contactor, TeSys Giga, 3 pole (3NO), AC-3  $\leq 440\text{V}$  800A, standard version, 100...250V wide band AC/DC coil"



## Main

|                                |                                                                                                                                                            |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                          | TeSys                                                                                                                                                      |
| Range of product               | TeSys Giga                                                                                                                                                 |
| Product or component type      | Contacteur                                                                                                                                                 |
| 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 | $\leq 1000\text{ V AC } 50/60\text{ Hz}$<br>$\leq 460\text{ V DC}$                                                                                         |
| [Ie] rated operational current | 1050 A (at $\leq 40\text{ }^{\circ}\text{C}$ ) at $\leq 1000\text{ V AC-1}$<br>800 A (at $\leq 60\text{ }^{\circ}\text{C}$ ) at $\leq 440\text{ V AC-3}$   |
| [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 $\leq 60\text{ }^{\circ}\text{C}$ )<br>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 | 1050 A (at $40\text{ }^{\circ}\text{C}$ )                                                                                  |
| 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 $\leq 440\text{ V}$ for motor<br>630 A aM at $\leq 690\text{ V}$ for motor<br>1250 A gG at $\leq 690\text{ V}$ |
| 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                                 | 300 Hp at 200/208 V 60 Hz<br>350 Hp at 230/240 V 60 Hz<br>700 Hp at 460/480 V 60 Hz<br>800 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                         | 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: 52 x 20 mm<br>Power circuit: lugs-ring terminals 1 185 mm <sup>2</sup><br>Power circuit: bolted connection<br>Control circuit: push-in 1 0.2...2.5 mm <sup>2</sup> - cable stiffness: solid stranded without cable end<br>Control circuit: push-in 1 0.25...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end<br>Control circuit: push-in 2 0.5...1.0 mm <sup>2</sup> with cable end<br>Control circuit: push-in 0.75...2.5 mm <sup>2</sup> - cable stiffness: solid stranded without cable end<br>Control circuit: push-in 0.75...2.5 mm <sup>2</sup> - 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<br>Scheme[RETURN]CCC[RETURN]cULus[RETURN]EAC[RETURN]CE[RETURN]UKCA[RETURN]<br>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

|                                                       |                                                                                                                                                                      |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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             | 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       | S06       |
| 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

|                             |                                                                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status    | Green Premium product                                                                                                             |
| REACH Regulation            |  <a href="#">REACH Declaration</a>             |
| EU RoHS Directive           | Compliant with Exemptions                                                                                                         |
| Mercury free                | Yes                                                                                                                               |
| China RoHS Regulation       |  <a href="#">China RoHS Declaration</a>        |
| RoHS exemption information  |  <a href="#">Yes</a>                           |
| Environmental Disclosure    |  <a href="#">Product Environmental Profile</a> |
| Circularity Profile         |  <a href="#">End Of Life Information</a>       |
| PVC free                    | Yes                                                                                                                               |
| Halogen content performance | Halogen free plastic parts product                                                                                                |







