

# Product data sheet

Specifications



High power contactor, TeSys Giga, 4 pole (4NO), AC-1 <=440V 550A, standard version, 48...130V wide band AC/DC coil

LC1G4004EHEN

## Main

|                                |  |
|--------------------------------|--|
| Range                          | TeSys  |
| Range of product               | TeSys Giga   |
| Product or component type      | Contactor  |
| Device short name              | LC1G   |
| Contactor application          | Power switching  |
| Utilisation category           | AC-1<br>AC-5a<br>AC-5b<br>AC-6a<br>AC-6b<br>DC-1<br>DC-3<br>DC-5                                   |
| Poles description              | 4P   |
| [Ue] rated operational voltage | <= 1000 V AC 50/60 Hz<br><= 460 V DC   |
| [Ie] rated operational current | 550 A (at <40 °C) at <= 1000 V AC-1  |
| [Uc] control circuit voltage   | 48...130 V AC 50/60 Hz<br>48...130 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  |
| [Ith] conventional free air thermal current | 550 A (at 40 °C)   |
| Rated breaking capacity                     | 3480 A at 440 V  |
| [Icw] rated short-time withstand current    | 3.6 kA - 10 s<br>2.4 kA - 30 s<br>1.7 kA - 1 min<br>1.2 kA - 3 min<br>1.0 kA - 10 min    |
| Associated fuse rating                      | 500 A aM at <= 440 V for motor<br>315 A aM at <= 690 V for motor<br>630 A gG at <= 690 V |
| Average impedance                           | 0.0001 Ohm   |
| [Ui] rated insulation voltage               | 1000 V   |

|  |   |
|--|---|
| Power dissipation per pole                     | 30 W AC-1 - lth 550 A   |
| Compatibility code                             | LC1G  |
| Pole contact composition                       | 4 NO  |
| Auxiliary contact composition                  | 1 NO + 1 NC   |
| Irms rated making capacity                     | 5090 A at 440 V   |
| 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)              | 965 VA  |
| Inrush power in W (DC)                         | 760 W   |
| Hold-in power consumption in VA (50/60 Hz, AC) | 17.6 VA   |
| Hold-in power consumption in W (DC)            | 7.8 W   |
| Operating time                                 | 40...70 ms closing<br>15...50 ms opening  |
| Maximum operating rate                         | 300 cyc/h AC-1  |
| Connections - terminals                        | Power circuit: bar 2 - busbar cross section: 32 x 10 mm<br>Power circuit: lugs-ring terminals 1 185 mm <sup>2</sup><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                               | 45 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                              | 35 N.m  |
| Height   | 225 mm  |
| Width  | 185 mm  |
| Depth  | 226 mm  |
| Net weight                                     | 8.2 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             | 27.0 cm   |
| Package 1 Width              | 31.0 cm   |
| Package 1 Length             | 31.0 cm   |
| Package 1 Weight             | 9.386 kg  |
| Unit Type of Package 2       | S06       |
| Number of Units in Package 2 | 4         |
| Package 2 Height             | 75 cm     |
| Package 2 Width              | 60 cm     |
| Package 2 Length             | 80 cm     |
| Package 2 Weight             | 47.544 kg |

### Offer Sustainability

|                             |  |
|-----------------------------|--|
| Sustainable offer status    | Green Premium product  |
| REACH Regulation            | <a href="#">REACH Declaration</a>  |
| EU RoHS Directive           | Compliant<br><a href="#">EU RoHS Declaration</a>   |
| 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   |
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

Installation Videos

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[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 replace control module](#)

[TeSys Giga - How to replace switching modules](#)

[TeSys Giga - How to assemble change-over solution](#)

Recommended replacement(s)