

# Product data sheet

Specifications



High power contactor, TeSys Giga,  
3 pole (3NO), AC-3  $\leq 440\text{V}$  330A,  
advanced version, 200...500V wide  
band AC/DC coil

LC1G330LSEA

## 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                                                                                                                                  |
| [Ie] rated operational current | 440 A (at $\leq 40^\circ\text{C}$ ) at $\leq 1000\text{ V AC-1}$<br>330 A (at $\leq 60^\circ\text{C}$ ) at $\leq 440\text{ V AC-3}$ |
| [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 $\leq 60^\circ\text{C}$ )<br>Drop-out: 0.1 Uc Max...0.45 Uc Min (at $\leq 60^\circ\text{C}$ ) |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|

## Complementary

|                                          |                                                                                                                           |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| [Uimp] rated impulse withstand voltage   | 8 kV                                                                                                                      |
| Overvoltage category                     | III                                                                                                                       |
| Rated breaking capacity                  | 2940 A at 440 V                                                                                                           |
| [Icw] rated short-time withstand current | 2.65 kA - 10 s<br>1.8 kA - 30 s<br>1.3 kA - 1 min<br>0.9 kA - 3 min<br>0.75 kA - 10 min                                   |
| Associated fuse rating                   | 400 A aM at $\leq 440\text{ V}$ for motor<br>250 A aM at $\leq 690\text{ V}$ for motor<br>500 A gG at $\leq 690\text{ V}$ |
| Average impedance                        | 0.000144 Ohm                                                                                                              |
| [Ui] rated insulation voltage            | 1000 V                                                                                                                    |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Power dissipation per pole</b>                     | 30 W AC-1 - lth 440 A<br>16 W AC-3 - lth 330 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Compatibility code</b>                             | LC1G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Pole contact composition</b>                       | 3 NO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Auxiliary contact composition</b>                  | 1 NO + 1 NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Motor power kW</b>                                 | 90 kW at 230 V AC 50/60 Hz (AC-3e)<br>160 kW at 400 V AC 50/60 Hz (AC-3e)<br>160 kW at 415 V AC 50/60 Hz (AC-3e)<br>185 kW at 440 V AC 50/60 Hz (AC-3e)<br>200 kW at 500 V AC 50/60 Hz (AC-3e)<br>220 kW at 690 V AC 50/60 Hz (AC-3e)<br>185 kW at 1000 V AC 50/60 Hz (AC-3e)<br>90 kW at 230 V AC 50/60 Hz (AC-3)<br>160 kW at 400 V AC 50/60 Hz (AC-3)<br>160 kW at 415 V AC 50/60 Hz (AC-3)<br>200 kW at 440 V AC 50/60 Hz (AC-3)<br>200 kW at 500 V AC 50/60 Hz (AC-3)<br>220 kW at 690 V AC 50/60 Hz (AC-3)<br>185 kW at 1000 V AC 50/60 Hz (AC-3)<br>90 kW at 230 V AC 50/60 Hz (AC-4)<br>160 kW at 400 V AC 50/60 Hz (AC-4)<br>160 kW at 415 V AC 50/60 Hz (AC-4)<br>185 kW at 440 V AC 50/60 Hz (AC-4)<br>200 kW at 500 V AC 50/60 Hz (AC-4)<br>220 kW at 690 V AC 50/60 Hz (AC-4)<br>185 kW at 1000 V AC 50/60 Hz (AC-4) |
| <b>Motor power hp</b>                                 | 100 hp at 200/208 V 60 Hz<br>125 hp at 230/240 V 60 Hz<br>250 hp at 460/480 V 60 Hz<br>300 hp at 575/600 V 60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Coil technology</b>                                | Built-in bidirectional peak limiting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Safety reliability level</b>                       | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Mechanical durability</b>                          | 8 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>inrush power in VA (50/60 Hz, AC)</b>              | 530 VA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>inrush power in W (DC)</b>                         | 300 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>hold-in power consumption in VA (50/60 Hz, AC)</b> | 16.1 VA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>hold-in power consumption in W (DC)</b>            | 9.0 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Operating time</b>                                 | 40...70 ms closing<br>15...50 ms opening                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Maximum operating rate</b>                         | 600 cyc/h AC-3<br>600 cyc/h AC-3e<br>300 cyc/h AC-1<br>150 cyc/h AC-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Connections - terminals</b>                        | Power circuit: bar 2 - busbar cross section: 32 x 10 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                                                                                                                                                                       |
| <b>Connection pitch</b>                               | 45 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Mounting support</b>                               | 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      | 35 N.m                                                                                                                                                                                                         |
| Height                 | 290 mm                                                                                                                                                                                                         |
| Width                  | 140 mm                                                                                                                                                                                                         |
| Depth                  | 226 mm                                                                                                                                                                                                         |
| Net weight             | 7.8 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             | 31.000 cm  |
| Package 1 Width              | 22.700 cm  |
| Package 1 Length             | 37.000 cm  |
| Package 1 Weight             | 8.637 kg   |
| Unit Type of Package 2       | S06        |
| Number of Units in Package 2 | 4          |
| Package 2 Height             | 105.000 cm |
| Package 2 Width              | 60.000 cm  |
| Package 2 Length             | 80.000 cm  |
| Package 2 Weight             | 44.548 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 |                                               |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Total lifecycle Carbon footprint                                                                          | 1448                                          |
| Environmental Disclosure                                                                                  | <a href="#">Product Environmental Profile</a> |

Use Better

|  Materials and Substances |                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard                                                                     | Yes                                                                                                                                                                                                                                                                                                                                                |
| Packaging without single use plastic                                                                       | No                                                                                                                                                                                                                                                                                                                                                 |
| <a href="#">EU RoHS Directive</a>                                                                          | Compliant with Exemptions                                                                                                                                                                                                                                                                                                                          |
| SCIP Number                                                                                                | 6fbdad13-bb7c-47d4-a6d6-d82dd6f54349                                                                                                                                                                                                                                                                                                               |
| REACH Regulation                                                                                           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                                                                                  |
| 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> |
| Halogen-free status                                                                                        | Halogen free plastic parts product                                                                                                                                                                                                                                                                                                                 |
| PVC free                                                                                                   | No                                                                                                                                                                                                                                                                                                                                                 |

Use Again

|  Repack and remanufacture |                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| End of life manual availability                                                                              | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| Take-back                                                                                                    | No                                                                                                                                                                                                              |
| WEEE Label                                                                                                   |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Installation

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 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](#)

Technical Illustration

Assembly's dimensions

