

# LC1G500BEEA

"High power contactor, TeSys Giga, 3 pole (3NO), AC-3  $\leq 440$  V 500 A, advanced version, 24...48 V wide band AC/DC coil"



## Main

|                                |  |
|--------------------------------|--|
| Range                          | TeSys  |
| Range of product               | TeSys Giga   |
| Product or component type      | Contacteur   |
| Device short name              | LC1G   |
| Contacteur 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 | $\leq 1000$ V AC 50/60 Hz<br>$\leq 460$ V DC   |
| [Ie] rated operational current | 700 A (at $\leq 40$ °C) at $\leq 1000$ V AC-1<br>500 A (at $\leq 60$ °C) at $\leq 440$ V AC-3                  |
| [Uc] control circuit voltage   | 24...48 V AC 50/60 Hz<br>24...48 V DC  |
| Control circuit voltage limits | Operational: 0.8 Uc Min...1.1 Uc Max (at $\leq 60$ °C)<br>Drop-out: 0.1 Uc Max...0.45 Uc Min (at $\leq 60$ °C) |

## Complementary

|   |  |
|---|--|
| [Uimp] rated impulse withstand voltage      | 8 kV   |
| Overvoltage category                        | III  |
| [Ith] conventional free air thermal current | 700 A (at 40 °C)   |
| Rated breaking capacity                     | 4600 A at 440 V  |
| [Icw] rated short-time withstand current    | 4.0 kA - 10 s<br>2.8 kA - 30 s<br>2.2 kA - 1 min<br>1.5 kA - 3 min<br>1.2 kA - 10 min                |
| Associated fuse rating                      | 500 A aM at $\leq 440$ V for motor<br>400 A aM at $\leq 690$ V for motor<br>800 A gG at $\leq 690$ V |
| Average impedance                           | 0.00008 Ohm  |
| [Ui] rated insulation voltage               | 1000 V   |
| Power dissipation per pole                  | 40 W AC-1 - Ith 700 A<br>20 W AC-3 - Ith 500 A   |
| Compatibility code                          | LC1G   |
| Pole contact composition                    | 3 NO   |
| Auxiliary contact composition               | 1 NO + 1 NC  |

|  |  |
|--|--|
| Motor power kW                                 | 147 kW at 230 V AC 50/60 Hz (AC-3e)<br>250 kW at 400 V AC 50/60 Hz (AC-3e)<br>250 kW at 415 V AC 50/60 Hz (AC-3e)<br>280 kW at 440 V AC 50/60 Hz (AC-3e)<br>315 kW at 500 V AC 50/60 Hz (AC-3e)<br>355 kW at 690 V AC 50/60 Hz (AC-3e)<br>335 kW at 1000 V AC 50/60 Hz (AC-3e)<br>160 kW at 230 V AC 50/60 Hz (AC-3)<br>250 kW at 400 V AC 50/60 Hz (AC-3)<br>250 kW at 415 V AC 50/60 Hz (AC-3)<br>315 kW at 440 V AC 50/60 Hz (AC-3)<br>355 kW at 500 V AC 50/60 Hz (AC-3)<br>355 kW at 690 V AC 50/60 Hz (AC-3)<br>335 kW at 1000 V AC 50/60 Hz (AC-3)<br>150 kW at 230 V AC 50/60 Hz (AC-4)<br>250 kW at 400 V AC 50/60 Hz (AC-4)<br>250 kW at 415 V AC 50/60 Hz (AC-4)<br>295 kW at 440 V AC 50/60 Hz (AC-4)<br>295 kW at 500 V AC 50/60 Hz (AC-4)<br>355 kW at 690 V AC 50/60 Hz (AC-4)<br>280 kW at 1000 V AC 50/60 Hz (AC-4) |
| Motor power hp                                 | 150 Hp at 200/208 V 60 Hz<br>200 Hp at 230/240 V 60 Hz<br>400 Hp at 460/480 V 60 Hz<br>450 hp at 575/600 V 60 Hz   |
| Irms rated making capacity                     | 5090 A at 440 V  |
| Coil technology                                | Built-in bidirectional peak limiting   |
| Mechanical durability                          | 8 Mcycles  |
| Inrush power in VA (50/60 Hz, AC)              | 490 VA   |
| Inrush power in W (DC)                         | 350 W  |
| Hold-in power consumption in VA (50/60 Hz, AC) | 17.9 VA  |
| Hold-in power consumption in W (DC)            | 6.0 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: 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  |
| 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<br>Scheme[RETURN]CCC[RETURN]cULus[RETURN]EAC[RETURN]CE[RETURN]UKCA[RETURN]<br>RO-MR by DNV-GL   |
| Tightening torque                              | 35 N.m   |
| Height   | 290 mm   |
| Width  | 140 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 U <sub>c</sub>  |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 22.0 cm  |
| Package 1 Width              | 31.0 cm  |
| Package 1 Length             | 37.5 cm  |
| Package 1 Weight             | 9.178 kg |
| Unit Type of Package 2       | S06      |
| Number of Units in Package 2 | 4        |
| Package 2 Height             | 75.0 cm  |
| Package 2 Width              | 60.0 cm  |
| Package 2 Length             | 80.0 cm  |
| Package 2 Weight             | 50.5 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  |









