Product references – coding principle

> TeSys Giga High power contactors

LC1	G	185	4	EHE	N
Contactor	TeSys Giga series	**Contactor rating** 115: 115 A 150: 150 A 185: 185 A 225: 225 A 265: 265 A 330: 330 A 400: 400 A 500: 500 A 630: 630 A 800: 800 A	**Poles** Blank: 3-pole 4: 4-pole	**Control voltage (AC/DC)** **Advanced version (A)** BEE: 24…48 V (1) EHE : 48...130 V LSE: 200…500 V **Standard version (N)** EHE: 48…130 V KUE: 100…250 V	**Offer type** A: Advanced version N: Standard version

Example:

LC1G400LSEA TeSys Giga Contactor Advanced version 400 A, 3-pole, 200...500 V AC/DC coil, with PLC control.

LC1G1854EHEN TeSys Giga Contactor Standard version 185 A, 4-pole, 48...130 V AC/DC coil, without PLC control.

(1) 24...48 V AC/DC control voltage option is available for LC1G115...LC1G500 ratings.

> Quality and Performance as high priority

TeSys Giga
A new Generation series with digital innovation

Over more than 4 decades, the **TeSys F** range of contactors has built a high reputation for performance, reliability, and quality. The **TeSys F** range set the industrial standard for high power contactors with an installed base of millions of products. **TeSys F** contactors were the first choice of many OEMs, control panel builders and industrial users.

But industry requirements have evolved to demand process performance monitoring through data networks and online expert services.

TeSys Giga is Schneider Electric's new range of contactors that answer these evolving needs. TeSys Giga High power contactors support the evolution of processes and offer new services to reduce non-production time to a minimum. Replacing **TeSys F** Contactors, TeSys Giga High power contactors address a wide range of demanding applications with built-in advanced features and functionalities.

Futuristic ready…

TeSys Giga High power contactors are designed to work with components and accessories with advanced performance. The characteristics of robustness and longevity are maintained, both in the connectors and in the switching.

Continuous local and remote monitoring of contact wear optimizes predictive maintenance by allowing you to replace contacts only when necessary, facilitated by diagnostic visual indicator.

Every customer will benefit from the innovative design and feature, including the compact size, wideband electronic coils, embedded auxiliary contact blocks, ergonomic design, or flexibility in connections.

> Applications

AC-3/AC-3e utilization category

AC-1 utilization category

- TeSys Giga High power contactors provide robust control solutions for AC-3/AC-3e applications up to 800 A and AC-1 applications up to 1050 A.
- TeSys Giga High power contactors can be part of a direct-on-line motor starter, reversing motor starter or a star-delta motor starter and power switching application.
- TeSys Giga High power contactors provide contact wear diagnostic and wideband AC/DC control.
- Suitable for type 2 coordination as per IEC60947-4-1.

> Right choice for a wide range of demanding applications

TeSys Giga High power contactors ' unique design meets the common requirements of demanding high power applications:

- Conform to multi standards to suit global needs
- Long life expectancy in harsh environments
- Suitable for high efficiency motors
- Very good resistance to vibrations
- High uptime thanks to predictive maintenance
- Optimized installation and maintainability.

> Intelligent design for greater advantages

- Interlock location, with knock-out cover
- On/Off switch for PLC input
- Push-in type control terminals enabling quick wiring and assembly
- Diagnosis LED for contact wear & voltage abnormality
- Built-in 1 NO + 1 NC auxiliary contact block
- Unique QR code providing quick access to complete product data
- Mechanical indicator for contactor open and closed status

Higher flexibility

TeSys Giga High power contactors can be mounted in different orientation without derating, providing high flexibility of your panel design.

Control wiring, auxiliary contacts and control module are accessible from the front.

Contact wear diagnostic and predictive maintenance

Contact wear is monitored by a dedicated module and shown in the front panel through LED, therefore the, predictive maintenance can be planned for replacing the complete set of switching modules, thus avoiding break-down maintenance. Switching modules (1) can be replaced quickly and easily thanks to their Plug and Play design.

(1) Refer to page B9/21 for details on switching modules.

> Key features

Advanced contactor control

- The electronic control module provides wideband AC/DC coil control voltage, from 24 V to 500 V, allowing quick adaptation of existing industrial processes as well as new projects.
- The low power consumption of the coils could lead to significant savings on automation equipment. It's now possible to use interface relays with a lower rating, resulting in lower heat emission in the panel.
- The low power consumption of the coils also takes up less space in the panel and simplifies the diagrams by connecting these coils directly to the output cards of the PLCs.

Simplified wiring

- The pole pitch of the power terminals allows direct mounting and connection to **TeSys** Giga Electronic Overload Relays. Standardization of panel mounting and assembly reduces costs and assembly time.
- Push-in connection for control terminals provides flexibility, ease of connections, and reduced assembly and installation time.

Enhanced durability

- Durability is a top priority. **TeSys** Giga High power contactors are designed to offer uncompromising robustness and maintenance accessibility to site technicians. The duration of production down-time is reduced, resulting in improved profitability on your investment.

Advanced diagnostic features

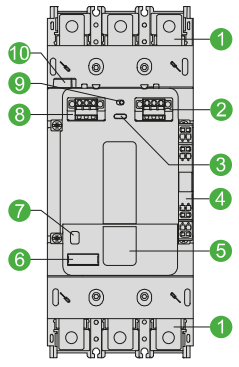
- On-board diagnostics is a new feature in our latest generation of high power contactors. Counting the number of operations as well as monitoring duration of use and pole condition provides numerous benefits for the customer and improves reliability and maintenance planning.

Compact size

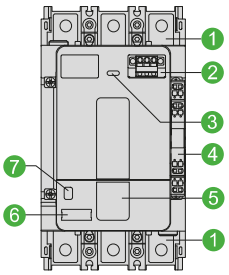
- Compact size provides easy access to power connections for connecting cables and busbars.

Easy maintenance

- The poles are designed as replaceable switching modules, so the performance of a used contactor can be fully restored. The modular design allows a quick and long-lasting replacement.
- Coils are accessible from the front and maintained with very low down times.



Advanced (*A) version



Standard (*N) version

1. Power connection (cable memory kit provided with Advanced version contactor)
2. A1-A2 coil terminal
3. Contact wear diagnosis LED
4. 1 NO + 1 NC auxiliary contact
5. QR code
6. Label holder
7. Status indicator
8. PLC control terminal
9. PLC control ON/OFF switch
10. Connector for Remote Wear Diagnostic (RWD) module

*: contactor references finishing by A or by N.

A comprehensive range of TeSys Giga High power contactors that are available in 'Advanced' and 'Standard' versions, in 3 sizes, covering several ratings.
A common range of auxiliary contacts and accessories, enabling high flexibility and simplicity.

> **TeSys** Giga High power contactors – Advanced version

115…225 A

265…500 A

630…800 A

Power & control
- 3 or 4 power poles
- 115 to 800 A (AC-3)
- 250 to 1050 A (AC-1)
- Embedded 1 NO + 1 NC auxiliary contacts
- Push-in type terminals for coils & control

Remote control
- 24-48 V, 48-130 V, 200-500 V AC/DC coils
- Low consumption coils
- Wide voltage range coils (direct coil control)
- Digital control input (PLC output digital coil control)
- Embedded surge suppressor

Diagnostic
- Embedded wear diagnostic
- Embedded control voltages diagnostic
- Self diagnosis function
- Local alarm signaling (LED)
- Remote wear diagnostic signaling kit (accessory)

Mounting
- 'Cable memory' adapter enables maintenance without removing power cables and busbar connections.

Standards and Certifications
- Multiple standards
- International certifications

> **TeSys** Giga High power contactors – Standard version

115…225 A

265…500 A

630…800 A

Power & control
- 3 or 4 power poles
- 115 to 800 A (AC-3)
- 250 to 1050 A (AC-1)
- Embedded 1 NO + 1 NC auxiliary contacts
- Push-in type terminals for coils & control

Remote control
- 48-130 V, 100-250 V AC/DC coils
- Wide voltage range coils (direct coil control)
- Embedded surge-suppressor

Diagnostic
- Embedded wear diagnostic
- Embedded control voltages diagnostic
- Self diagnosis function
- Local alarm signaling (LED)

Certifications
- Multiple standards
- International certifications

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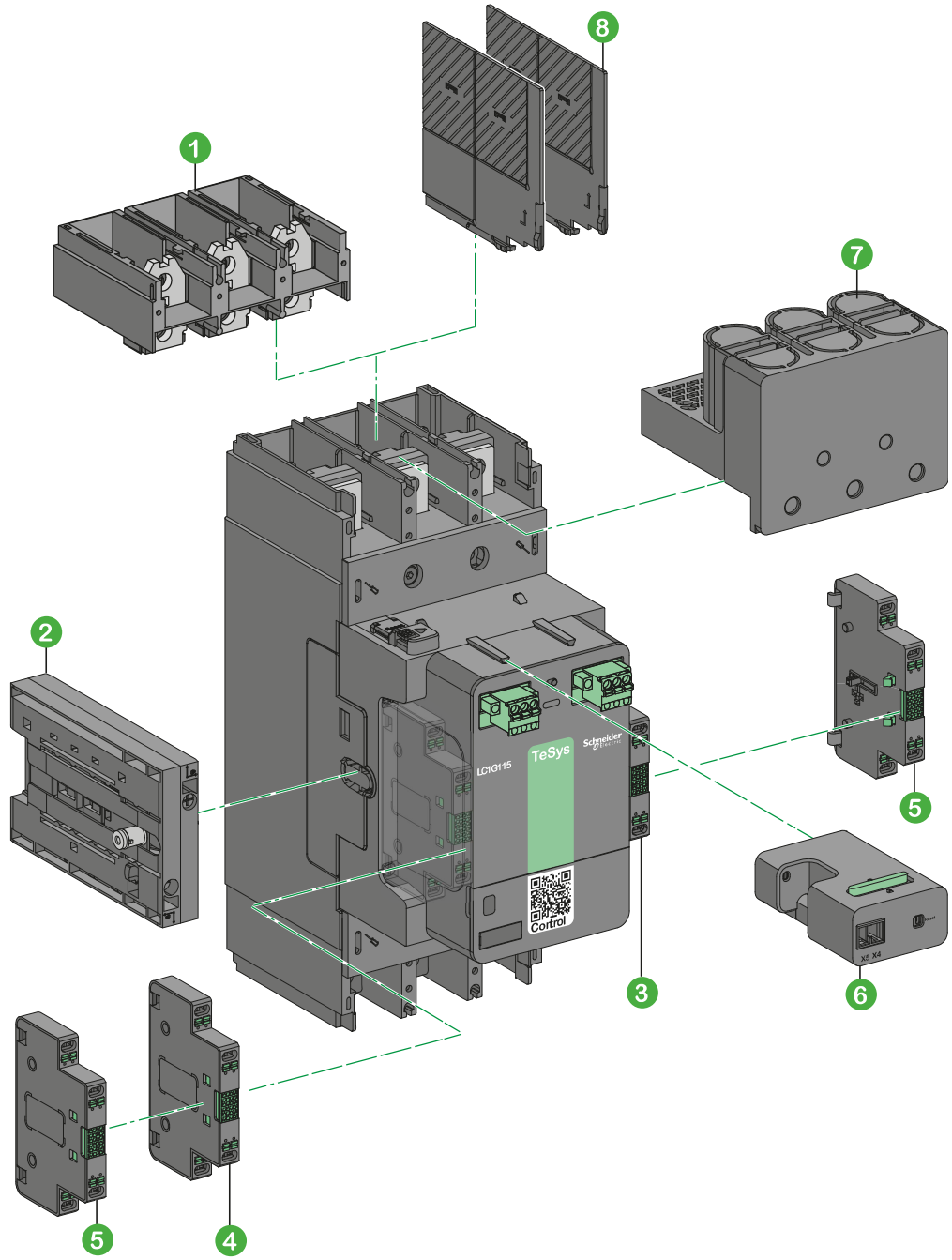

1 Cable memory kit **LA9G3102,** is always supplied along with Advanced version, and it's an optional accessory for Standard version.
2 Mechanical interlock **LA9G970**, can be installed on either side of the contactor.
3 Auxiliary contact module **LAG8N113P** (1 NO + 1 NC) supplied with LC1G contactor.
4 Auxiliary contact modules **LAG8N113P/ LAG8N203P,** can be installed on the contactor lateral faces (1)
5 Auxiliary contact modules **LAG8N113 / LAG8N203**, can be installed on either side as 2nd set of contacts.
6 Remote Wear Diagnostic (RWD) Module **LA9GRD01/ LA9GRD10**, can be installed and used only in Advanced version.
7 IP 20 terminal shroud **LA9G3701.**
8 Phase separators **LA9G3801**, please refer to pages B9/14 to B9/18 for complete details of available accessories.

Note: *a maximum of 2 auxiliary contact modules can be mounted on each side of the contactor.*
(1) Does not increase the contactor dimensions when fitted on both sides.

TeSys Giga 3-pole Advanced contactors – For motor control (115 to 800 A)

Motor ratings (kW) θ ≤ 60 °C																						
IEC																						
AC-3								AC-3e [1]							AC-4							
230 V	400 V	415 V	440 V	500 V	690 V	1000 V	230 V	400 V	415 V	440 V	500 V	690 V	1000 V	230 V	400 V	415 V	440 V	500 V	690 V	1000 V		
kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW		
30	55	55	75	75	75	-	30	55	55	75	75	75	-	30	55	55	65	65	75	-		
37	75	75	90	90	90	75	37	75	75	90	90	90	75	37	75	75	80	90	90	75		
55	90	90	110	110	110	75	55	90	90	110	110	110	75	55	90	90	100	110	110	75		
55	110	110	132	132	160	132	55	110	110	132	132	160	132	55	110	110	129	132	132	110		
75	132	132	160	160	200	160	75	132	132	160	160	200	160	75	132	132	150	160	160	160		
90	160	160	200	200	220	185	90	160	160	185	200	220	185	90	160	160	185	200	220	185		
110	200	200	250	250	315	220	110	200	200	250	250	315	220	110	200	200	220	250	315	220		
160	250	250	315	355	355	335	147	250	250	280	315	355	335	150	250	250	295	295	355	280		
200	335	375	400	400	500	450	180	315	335	355	375	500	450	180	315	335	355	375	450	355		
250	450	450	450	500	560	450	200	335	355	375	425	560	450	200	375	355	375	400	475	400		

Double Page Table

TeSys Giga 3-pole and 4-pole Advanced contactors for load control only (non motor) – (250 to 1050 A)

Maximum current (A) (θ ≤ 40 °C)	General purpose continuous current (A)	Reference					
		Advanced version contactors					
		AC/DC coil voltage					
		3-pole			4-pole		
IEC	UL	24…48 V	48…130 V	200…500 V	24…48 V	48…130 V	200…500 V
AC-1							
250	210	LC1G115BEEA	LC1G115EHEA	LC1G115LSEA	LC1G1154BEEA	LC1G1154EHEA	LC1G1154LSEA
275	230	LC1G150BEEA	LC1G150EHEA	LC1G150LSEA	LC1G1504BEEA	LC1G1504EHEA	LC1G1504LSEA
305	250	LC1G185BEEA	LC1G185EHEA	LC1G185LSEA	LC1G1854BEEA	LC1G1854EHEA	LC1G1854LSEA
330	290	LC1G225BEEA	LC1G225EHEA	LC1G225LSEA	LC1G2254BEEA	LC1G2254EHEA	LC1G2254LSEA
385	340	LC1G265BEEA	LC1G265EHEA	LC1G265LSEA	LC1G2654BEEA	LC1G2654EHEA	LC1G2654LSEA
440	390	LC1G330BEEA	LC1G330EHEA	LC1G330LSEA	LC1G3304BEEA	LC1G3304EHEA	LC1G3304LSEA
550	490	LC1G400BEEA	LC1G400EHEA	LC1G400LSEA	LC1G4004BEEA	LC1G4004EHEA	LC1G4004LSEA
700	630	LC1G500BEEA	LC1G500EHEA	LC1G500LSEA	LC1G5004BEEA	LC1G5004EHEA	LC1G5004LSEA
1050	850	-	LC1G630EHEA	LC1G630LSEA	-	LC1G6304EHEA	LC1G6304LSEA
1050	900	-	LC1G800EHEA	LC1G800LSEA	-	LC1G8004EHEA	LC1G8004LSEA

(1) Switching of IE3/IE4 high efficiency squirrel-cage motors.

Coordination tables: pages A5/7 to A5/42
Characteristics: pages B9/25 to B9/29
Dimensions: pages B9/30 to B9/32
Diagrams: page B9/34

Product references

Motor ratings (HP) UL - 3phase				Reference Advanced version contactors AC/DC coil voltage 3-pole		
200/208 V	230/240 V	460/480 V	575/600 V	24-48 V	48-130 V	200-500 V
30	40	75	100	**LC1G115BEEA**	**LC1G115EHEA**	**LC1G115LSEA**
40	50	100	125	**LC1G150BEEA**	**LC1G150EHEA**	**LC1G150LSEA**
50	60	125	150	**LC1G185BEEA**	**LC1G185EHEA**	**LC1G185LSEA**
60	75	150	150	**LC1G225BEEA**	**LC1G225EHEA**	**LC1G225LSEA**
75	100	200	200	**LC1G265BEEA**	**LC1G265EHEA**	**LC1G265LSEA**
100	125	250	300	**LC1G330BEEA**	**LC1G330EHEA**	**LC1G330LSEA**
125	150	300	400	**LC1G400BEEA**	**LC1G400EHEA**	**LC1G400LSEA**
150	200	400	450	**LC1G500BEEA**	**LC1G500EHEA**	**LC1G500LSEA**
250	300	600	700	-	**LC1G630EHEA**	**LC1G630LSEA**
300	350	700	800	-	**LC1G800EHEA**	**LC1G800LSEA**

Coordination tables: pages A5/7 to A5/42
Characteristics: pages B9/25 to B9/28
Dimensions: pages B9/30 to B9/32
Diagrams: page B9/34

TeSys Giga 3-pole Standard contactors – For motor control – (115 to 800 A)

Motor ratings (kW) θ ≤ 60 °C IEC																						
AC-3							AC-3e [1]							AC-4								
230 V	400 V	415 V	440 V	500 V	690 V	1000 V	230 V	400 V	415 V	440 V	500 V	690 V	1000 V	230 V	400 V	415 V	440 V	500 V	690 V	1000 V		
kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW		
30	55	55	75	75	75	-	30	55	55	75	75	75	-	30	55	55	65	65	75	-		
37	75	75	90	90	90	75	37	75	75	90	90	90	75	37	75	75	80	90	90	75		
55	90	90	110	110	110	75	55	90	90	110	110	110	75	55	90	90	100	110	110	75		
55	110	110	132	132	160	132	55	110	110	132	132	160	132	55	110	110	129	132	132	110		
75	132	132	160	160	200	160	75	132	132	160	160	200	160	75	132	132	150	160	160	160		
90	160	160	200	200	220	185	90	160	160	185	200	220	185	90	160	160	185	200	220	185		
110	200	200	250	250	315	220	110	200	200	250	250	315	220	110	200	200	220	250	315	220		
160	250	250	315	355	355	335	147	250	250	280	315	355	335	150	250	250	295	295	355	280		
200	335	375	400	400	500	450	180	315	335	355	375	500	450	180	315	335	355	375	450	355		
250	450	450	450	500	560	450	200	335	355	375	425	560	450	200	375	355	375	400	475	400		

Double Page Table

TeSys Giga 3-pole and 4-pole Standard contactors for load control only (non motor) – (250 to 1050 A)

Maximum current (A) (θ ≤ 40 °C)	General purpose continuous current (A)	Reference Standard version contactors AC/DC coil voltage			
		3-pole		4-pole	
IEC AC-1	UL	48…130 V	100…250 V	48…130 V	100…250 V
250	210	LC1G115EHEN	LC1G115KUEN	LC1G1154EHEN	LC1G1154KUEN
275	230	LC1G150EHEN	LC1G150KUEN	LC1G1504EHEN	LC1G1504KUEN
305	250	LC1G185EHEN	LC1G185KUEN	LC1G1854EHEN	LC1G1854KUEN
330	290	LC1G225EHEN	LC1G225KUEN	LC1G2254EHEN	LC1G2254KUEN
385	340	LC1G265EHEN	LC1G265KUEN	LC1G2654EHEN	LC1G2654KUEN
440	390	LC1G330EHEN	LC1G330KUEN	LC1G3304EHEN	LC1G3304KUEN
550	490	LC1G400EHEN	LC1G400KUEN	LC1G4004EHEN	LC1G4004KUEN
700	630	LC1G500EHEN	LC1G500KUEN	LC1G5004EHEN	LC1G5004KUEN
1050	850	LC1G630EHEN	LC1G630KUEN	LC1G6304EHEN	LC1G6304KUEN
1050	900	LC1G800EHEN	LC1G800KUEN	LC1G8004EHEN	LC1G8004KUEN

(1) Switching of IE3/IE4 high efficiency squirrel-cage motors.

Coordination tables: pages A5/7 to A5/42
Characteristics: pages B9/25 to B9/29
Dimensions: pages B9/30 to B9/32
Diagrams: page B9/34

Product references

Motor ratings (HP) UL- 3phase				Reference Standard version contactors AC/DC coil voltage 3-pole	
200/208 V	230/240 V	460/480 V	575/600 V	48-130 V	100-250 V
30	40	75	100	**LC1G115EHEN**	**LC1G115KUEN**
40	50	100	125	**LC1G150EHEN**	**LC1G150KUEN**
50	60	125	150	**LC1G185EHEN**	**LC1G185KUEN**
60	75	150	150	**LC1G225EHEN**	**LC1G225KUEN**
75	100	200	200	**LC1G265EHEN**	**LC1G265KUEN**
100	125	250	300	**LC1G330EHEN**	**LC1G330KUEN**
125	150	300	400	**LC1G400EHEN**	**LC1G400KUEN**
150	200	400	450	**LC1G500EHEN**	**LC1G500KUEN**
250	300	600	700	**LC1G630EHEN**	**LC1G630KUEN**
300	350	700	800	**LC1G800EHEN**	**LC1G800KUEN**

Coordination tables: pages A5/7 to A5/42
Characteristics: pages B9/25 to B9/27 and B9/29
Dimensions: pages B9/30 to B9/32
Diagrams: page B9/34