

TeSys

> Control > Protect > Power > Active

Catalog 2023

Innovative and connected
solutions for motor starters



Introduction

B9/4

TeSys Giga High power contactors

Type of product	Range		Pages
TeSys Giga High power contactors Advanced version - 3 and 4-poles	3-pole from 115 to 800 A – AC-3 3-pole and 4-pole from 250 to 1050 A – AC-1		B9/10
TeSys Giga High power contactors Standard version - 3 and 4-poles	3-pole from 115 to 800 A – AC-3 3-pole and 4-pole from 250 to 1050 A – AC-1		B9/12
Auxiliary modules, Accessories, Retrofit kits for TeSys Giga High power contactors			B9/14
Spare parts for TeSys Giga High power contactors			B9/20

Technical Data for Designers

B9/23

INDUSTRIAL AUTOMATION

On-line tools to configure your **motor starters**

EcoStruxure™ Motor Control Configurator



Scan or click
on the QR code

Build your starter configuration

- Build your motor starter configuration with different solutions
- Complete offer base suited for different countries.

Enhanced customer's journey

- Easy selection, replacing complex paper catalogs
- Convert into Bill of Materials (BoM) by adding the products to the cart.

Answers to customer needs

- Option to save and re-work your configurations
- Direct access to products documentation in one place
- Possibility with unique configurations ID and share.

Product Selector for TeSys Giga



Scan or click
on the QR code

Offer selection

- Easy selection of **TeSys** Giga Contactor or Overload Relays
- Intuitive tool to configure the devices to suit your needs
- Helps to select the right devices for your application.

Configure your motor starter components

- Options to select auxiliaries and accessories
- Configure reversers and changeover contactors with ease
- Get the extensive bill of material, export it in standard format (PDF, XLS), or drop it into the product cart
- Access to technical information and documentations for every item.

EcoStruxure Motor Management Design



Scan or click
on the QR code

Electrical design calculations for high-power motors

Easily perform basic calculations related to transformer size, short-circuit current and voltage drop, comparing direct-on-line, star-delta, soft-starter, and variable speed drive. Verify starting feasibility from mechanical standpoint and ensure power quality objectives are met, for power factor or harmonic levels. Check energy saving potential of using a variable speed drive for centrifugal pumps and fans.

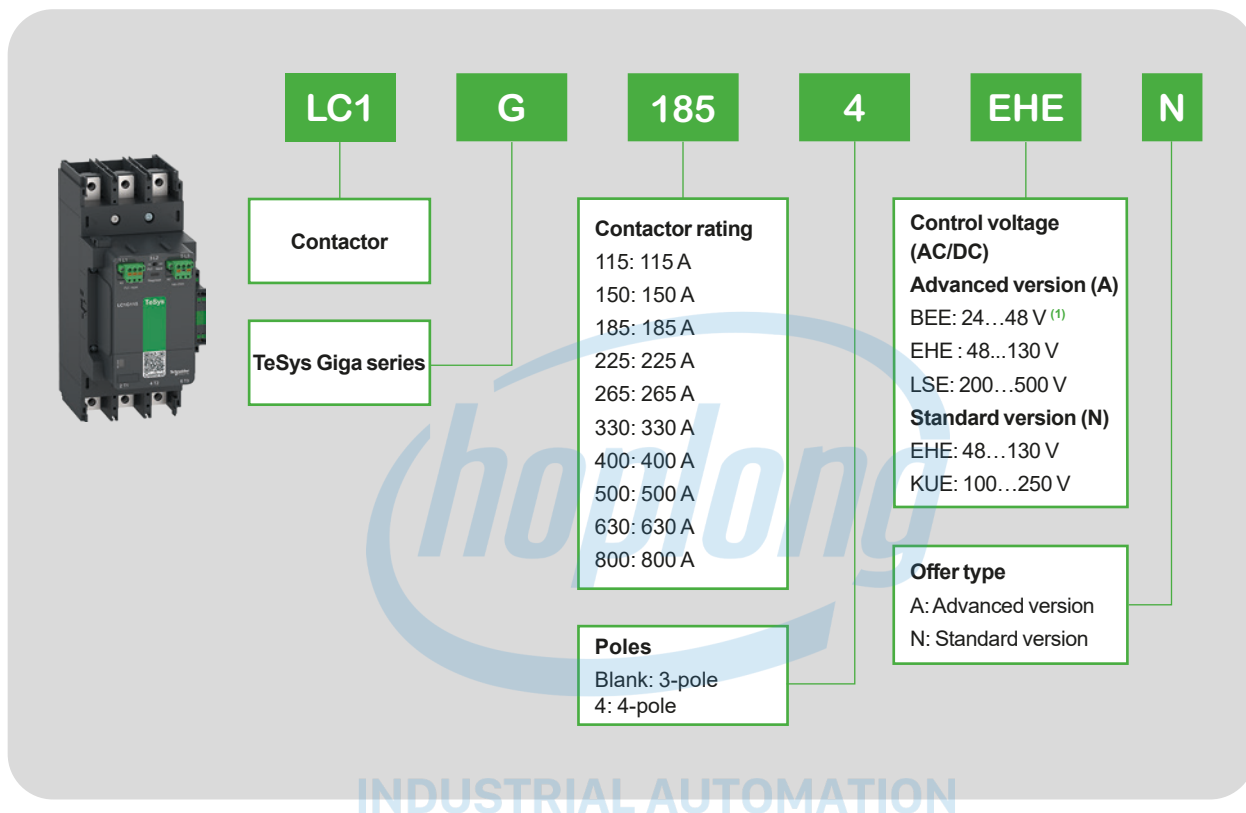
Offer selection and report

Select among latest compatible offers to build a complete motor management solution: circuit breakers, contactors, MCC panels, drives, protection relays, power factor capacitors, active filters, power quality monitoring and services.

Get a summary report with calculations and recommended offers.

Product references – coding principle

> TeSys Giga High power contactors



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.



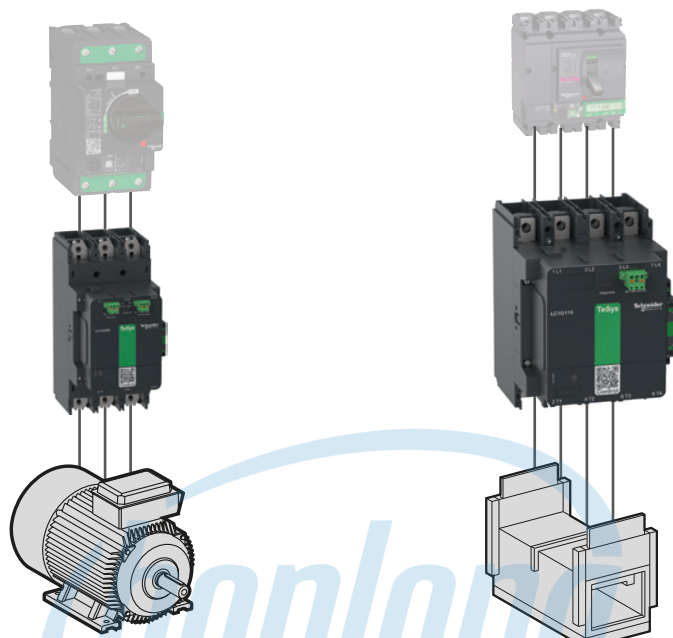
Futuristic ready...

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

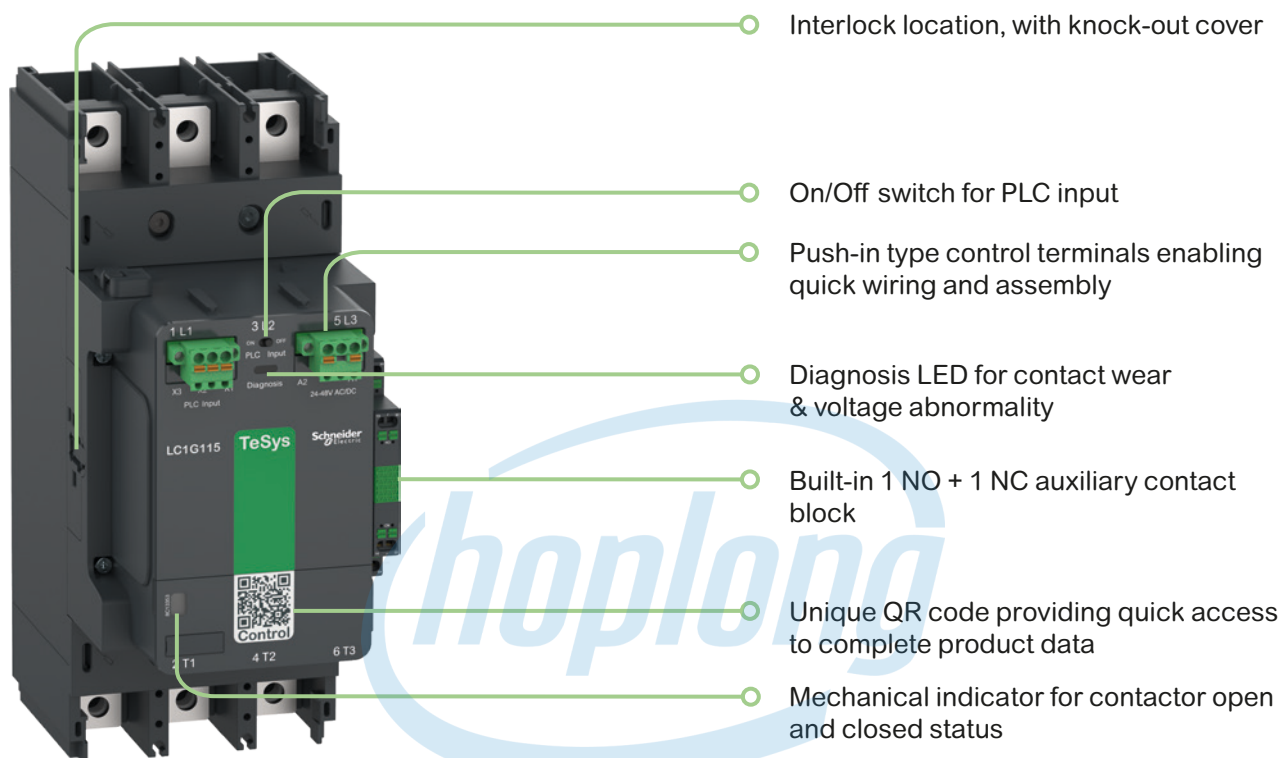


High power contactors

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



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

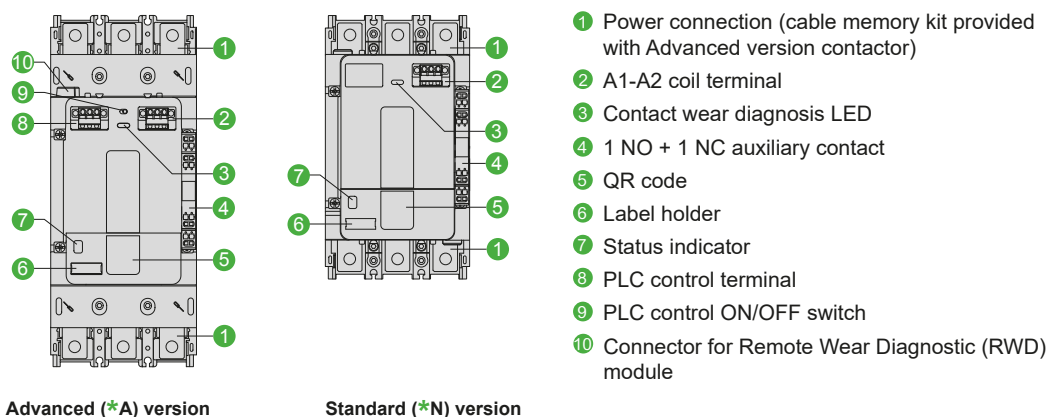
- On-board diagnostics is a new feature in our latest generation of high power contactors. Counting the number of operations as well as monitoring duration of use and pole condition provides numerous benefits for the customer and improves reliability and maintenance planning.

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.



*: contactor references finishing by A or by N.

High power
contactors

Introduction

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

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> 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

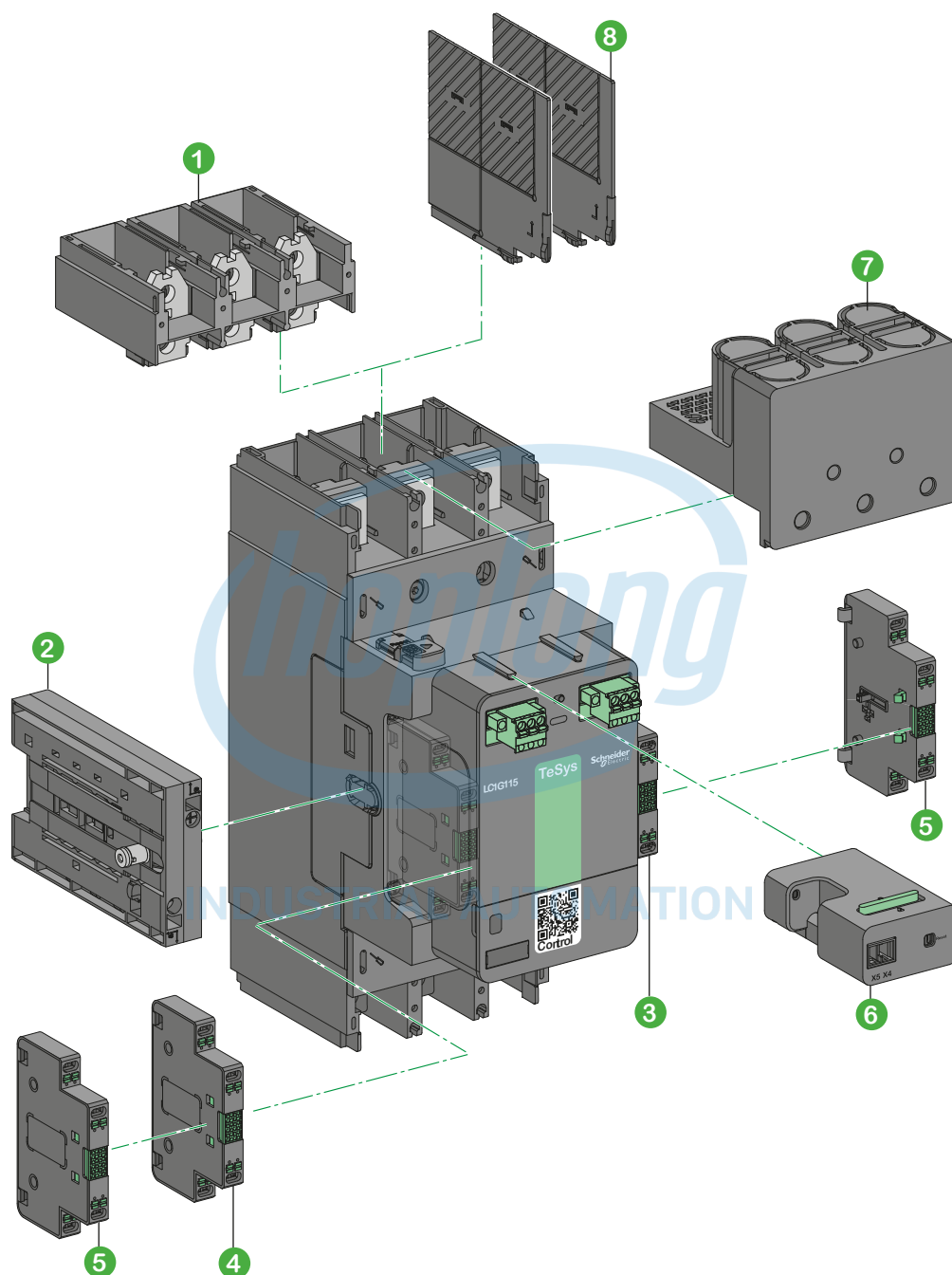
- 48-130 V, 100-250 V AC/DC coils
- Wide voltage range coils (direct coil control)
- Embedded surge-suppressor

Diagnostic

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

Certifications

- Multiple standards
- International certifications



- 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) $\theta \leq 60^\circ\text{C}$

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

COORD.



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



High power contactors

Maximum current (A) ($\theta \leq 40^\circ\text{C}$)	General purpose continuous current (A)	Reference					
IEC	UL	Advanced version contactors					
		AC/DC coil voltage					
AC-1		3-pole			4-pole		
		24...48 V	48...130 V	200...500 V	24...48 V	48...130 V	200...500 V
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

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

COORD.



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High power
contactors

TeSys Control **CÔNG TY CỔ PHẦN CÔNG NGHỆ HỢP LONG**

Giga High power contactors – Standard – 3-pole and 4-pole

Product references

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



Motor ratings (kW) $\theta \leq 60^\circ\text{C}$

IEC

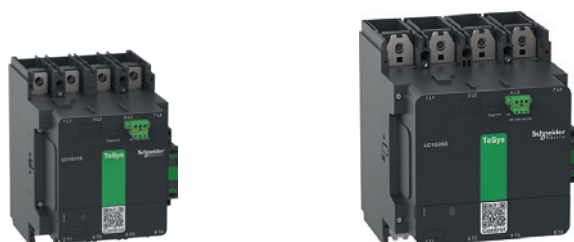
AC-3

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

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



Maximum current (A) ($\theta \leq 40^\circ\text{C}$)	General purpose continuous current (A)	Reference Standard version contactors AC/DC coil voltage			
IEC	UL	3-pole		4-pole	
AC-1		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:
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Characteristics:
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Dimensions:
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Diagrams:
page B9/34

B9/12 **Hotline: 1900.6536 - Website: HOPLONGTECH.COM**

COORD.



High power contactors

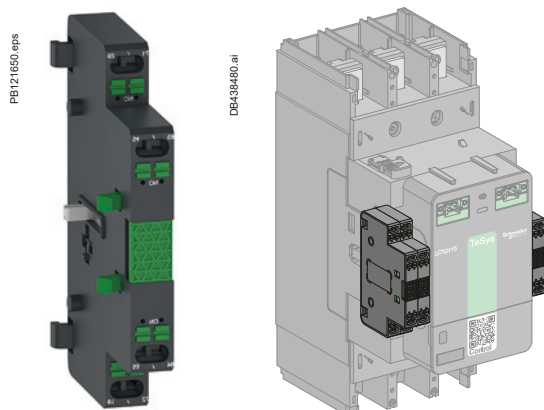
Motor ratings (HP) UL- 3phase				Reference Standard version contactors AC/DC coil voltage 3-pole	
200/208 V	230/240 V	460/480 V	575/600 V	48-130 V	100-250 V
30	40	75	100	LC1G115EHEN	LC1G115KUEN
40	50	100	125	LC1G150EHEN	LC1G150KUEN
50	60	125	150	LC1G185EHEN	LC1G185KUEN
60	75	150	150	LC1G225EHEN	LC1G225KUEN
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

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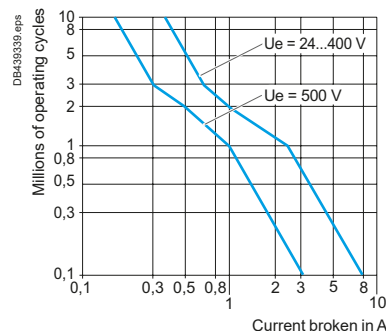
High power
contactors



LAG8N113

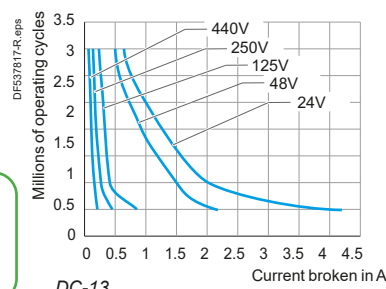
Side mounting –
maximum 2 per side

COORD.



AC-15

High power
contactors



DC-13

Auxiliary contact modules

Auxiliary contacts give an indication of the contactor status. They can be used for remote visual signaling, alarming, electrical locking, relay activation, etc...

Each contactor is equipped with 1 NO + 1 NC auxiliary contact block as standard.

■ Mechanically linked mirror contacts

The NC contact of the auxiliary contact block is mirror contact in conformity to IEC 60947-4-1 and it is mechanically linked to reliably represent the state of the main power contacts and wherever auxiliary contact state reliability is essential. The main power contacts and the NC of the auxiliary contact can't be closed at the same time.

Types of connections:

■ Push-in type.

Wide contactor compatibility

TeSys Giga auxiliary contact module is compatible with the whole range of TeSys Giga High power contactors .

Each TeSys Giga Contactor can be equipped with up to 4 auxiliary contact modules.

Electrical characteristics

Characteristics	
Rated thermal current (A)	10
Minimum load	1 mA at 17 V DC
Contact reliability	Failure rate <10 ⁻⁸

Operational power of contacts conforming to IEC 60947-5-1 - Electrical durability

category AC-15

Operating cycles	V	24	48	115	230	400	500
1 million	VA	60	120	280	560	800	500
2 million	VA	24	48	115	230	400	250
3 million	VA	16	32	80	160	280	150

category DC-13

Operating cycles	V	24	48	125	250	440
0.5 million	W	100	100	105	110	88
1 million	W	48	72	54	54	55
2 million	W	24	36	38	38	39
3 million	W	16	24	25	25	33

Connector characteristics

Push-in connection - Dual input			Min/max c.s.a.
Flexible cable per input	1 conductor with cable end	mm ²	0.75...2.5
	2 conductors with Dual Sleeve	mm ²	0.75...2.5
	Stripping length	mm	10
Solid cable per input	1 conductor	mm ²	0.75...2.5
	Stripping length	mm	12

Auxiliary contact modules

Description	Terminal type	Position	Type of contacts	Sold in lots of	Reference
Auxiliary contact module	Push-in	1 st left or right	1 NO + 1 NC	1	LAG8N113P ⁽¹⁾
			2 NO	1	LAG8N203P
		2 nd left or right	1 NO + 1 NC	1	LAG8N113
			2 NO	1	LAG8N203

⁽¹⁾ Always supplied with TeSys Giga LC1G contactors, fitted to the right side lateral face.

Power terminals

‘Cable Memory’ connection blocks

Cables or busbars can be connected to the contactor by means of the optional cable memory connection blocks. When the contactor is removed for maintenance, the cables or busbars remain connected to these connection blocks, making reinstallation faster and easier.



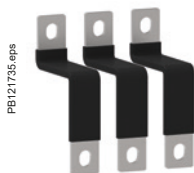
LA9G3101

Cable memory ⁽¹⁾			
Description	Compatible with contactors	Quantity Set of	Reference
'Cable memory' for 3-pole contactors – for holding cables in place	LC1G115...LC1G225	2	LA9G3101
	LC1G265...LC1G500	2	LA9G3102
	LC1G630...LC1G800	2	LA9G3103
'Cable memory' for 4-pole contactors – for holding cables in place	LC1G115...LC1G225	2	LA9G4101
	LC1G265...LC1G500	2	LA9G4102
	LC1G630...LC1G800	2	LA9G4103

(1) 'Cable memory' connection blocks are always supplied with Advanced contactor version.

Flexible terminal extensions

Flexible connecting bars to connect TeSys Giga High power contactors with MCCBs mounted in the same plane and orientation. These bars can be used along with Advanced or Standard version contactors. They help to get a quick and easy connection between contactor and MCCB with saving in installation time.



LA9G3111

'Flexible terminal extensions' for MCCBs				
Description	Compatible with contactors	To connect with NSX/NS MCCBs	Quantity Set of	Reference
Flexible terminal extensions 3-pole	LC1G115...LC1G225	NSX100...NSX250	3	LA9G3111
	LC1G265...LC1G500	NSX400...NSX630	3	LA9G3112
	LC1G630...LC1G800	NS800...NS1250	3	LA9G3113
Flexible terminal extensions 4-pole	LC1G115...LC1G225	NSX100...NSX250	4	LA9G4111
	LC1G265...LC1G500	NSX400...NSX630	4	LA9G4112
	LC1G630...LC1G800	NS800...NS1250	4	LA9G4113

Straight terminal extensions



LA9G3601

Description	Suitable for	Compatible with contactors	Quantity Set of	Reference
Straight terminal extension	3P	LC1G115...LC1G225	3	LA9G3601
		LC1G265...LC1G500	3	LA9G3602
		LC1G630...LC1G800	3	LA9G3603
	4P	LC1G115...LC1G225	4	LA9G4601
		LC1G265...LC1G500	4	LA9G4602
		LC1G630...LC1G800	4	LA9G4603

Right angled terminal extensions



LA9G3682

Description	Suitable for	Compatible with contactors	Quantity Set of	Reference
Right angled side terminal extension	3P	LC1G115...LC1G225	3	LA9G3661
		LC1G265...LC1G500	3	LA9G3662
		LC1G630...LC1G800	3	LA9G3663
Right angled large terminal extension	3P	LC1G115...LC1G225	3	LA9G3671
		LC1G265...LC1G500	3	LA9G3672
		LC1G630...LC1G800	3	LA9G3673
Right angled rear terminal extension	3P	LC1G115...LC1G225	3	LA9G3681
		LC1G265...LC1G500	3	LA9G3682
		LC1G630...LC1G800	3	LA9G3683

Edgewise terminal extensions



LA9G3631

Description	Suitable for	Compatible with contactors	Quantity Set of	Reference
Edgewise terminal extension	3P	LC1G115...LC1G225	3	LA9G3631
		LC1G265...LC1G500	3	LA9G3632
		LC1G630...LC1G800	3	LA9G3633
	4P	LC1G115...LC1G225	4	LA9G4631
		LC1G265...LC1G500	4	LA9G4632
		LC1G630...LC1G800	4	LA9G4633

High power contactors



LA9G3611



LA9G3613



LA9G4711

Power terminals

Spreader kits

Description	Suitable for	Compatible with contactors	Increase of Pole pitch	Quantity Set of	Reference
Spreader kits	3P	LC1G115...LC1G225	35 to 45 mm	3	LA9G3611
		LC1G265...LC1G500	45 to 70 mm	3	LA9G3612
	4P	LC1G115...LC1G225	35 to 45 mm	4	LA9G4611
		LC1G265...LC1G500	45 to 70 mm	4	LA9G4612

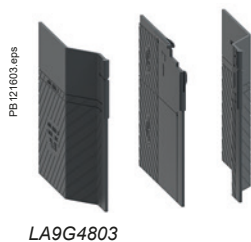
Terminal extensions for larger power connections

Description	Suitable for	Compatible with contactors	Power connection size	Quantity Set of	Reference
Terminal connections	3P	LC1G400...LC1G500	50 mm width	3	LA9G3613
		LC1G630...LC1G800	80 mm width	3	LA9G3614
	4P	LC1G400...LC1G500	50 mm width	4	LA9G4613
		LC1G630...LC1G800	80 mm width	4	LA9G4614

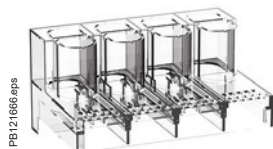
Spreader kits suitable for box type connectors

Description	Suitable for	Compatible with contactors	Increase of Pole pitch	Suitable for box connectors	Quantity Set of	Reference
Spreader kits for box connectors	3P	LC1G115...LC1G225	35 to 45 mm	DZ2 FJ1/FH1 & AL400	3	LA9G3711
		LC1G265...LC1G500	45 to 70 mm	DZ2 FJ1/FK1 & AL400/AL600	3	LA9G3712
		LC1G630...LC1G800	70 to 80 mm	DZ2 FL1/FK1 & Type S/AL600	3	LA9G3714
	4P	LC1G115...LC1G225	35 to 45 mm	DZ2 FJ1/FH1 & AL400	4	LA9G4711
		LC1G265...LC1G500	45 to 70 mm	DZ2 FJ1/FK1 & AL400/AL600	4	LA9G4712
		LC1G630...LC1G800	70 to 80 mm	DZ2 FL1/FK1 & Type S/AL600	4	LA9G4714

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LA9G4803



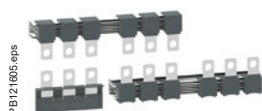
LA9G4701



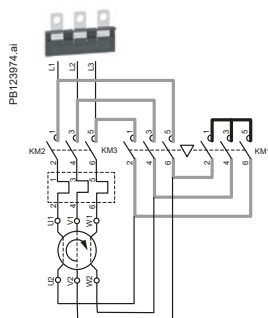
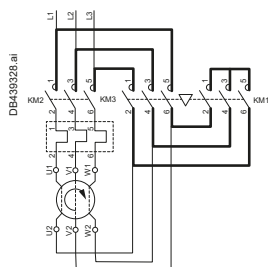
LA9G4707



LV429252



LA9GQQ330



Power terminal accessories

Phase separators

Description	Suitable for	Compatible with contactors	Quantity Set of	Reference
Phase separators ⁽¹⁾	3P	LC1G115...LC1G800	2	LA9G3801
	4P	LC1G115...LC1G800	3	LA9G4801
	3P – with 50/80 mm spreaders	LC1G400...LC1G800	2	LA9G3803 ⁽²⁾
	4P – with 50/80 mm spreaders	LC1G400...LC1G800	3	LA9G4803 ⁽³⁾

Terminal shrouds

Description	Compatible with contactors	Quantity Set of	Reference	
IP 20 Terminal shrouds ⁽¹⁾	LC1G115...LC1G225	1	3P	LA9G3701
	LC1G265...LC1G500	1	4P	LA9G4702
	LC1G630...LC1G800	1		LA9G4703

IP20 Lug cover for connection kits ⁽⁴⁾

Lug covers are used along with IP 20 terminal shrouds and star-delta, reverser and changeover connection kit assemblies to improve insulation of the coupling bars and achieve IP 20 for the complete assembly.

IP20 Lug cover for connection kits

Description	Suitable for	Compatible with contactors	Quantity Set of	Reference
IP 20 Lug cover	3P	LC1G115...LC1G800 ⁽⁴⁾	6	LA9G3707
	4P	LC1G115...LC1G800 ⁽⁴⁾	8	LA9G4707

Lugs for cable set

Description	Compatible with contactors	Cable section	Reference	
Lugs for cable	LC1G115...LC1G225	120 mm ²	Set of 3 for 3P	LV429256
	LC1G115...LC1G225	150 mm ²	Set of 3 for 3P	LV429253
	LC1G115...LC1G225	185 mm ²	Set of 3 for 3P	LV429254
	LC1G265...LC1G500	240 mm ²	Set of 4 for 4P	LV429257
	LC1G265...LC1G500	240 mm ²	Set of 4 for 4P	LV429258
	LC1G265...LC1G500	300 mm ²	Set of 4 for 4P	LV4292501

Star-Delta (Wye-Delta) connection kits ⁽⁵⁾

Description	Suitable for	for Line (KM2) and Delta (KM3) contactor	+ Star contactor (KM1)	Reference
Connection kit: bars for Line-Delta-Star contactor assembly	3P	LC1G115...LC1G225	LC1G115...LC1G225	LA9GQQ330
		LC1G265...LC1G500	LC1G115...LC1G225	LA9GSQ330
		LC1G265...LC1G500	LC1G265...LC1G500	LA9GSS330
		LC1G630...LC1G800	LC1G265...LC1G500	LA9GTS330
		LC1G630...LC1G800	LC1G630...LC1G800	LA9GTT330
	with cable memory kit	LC1G265...LC1G500	LC1G115...LC1G225	LA9GSQ331
		LC1G630...LC1G800	LC1G265...LC1G500	LA9GTS331

Star (Wye) connection kits ⁽⁵⁾

Description	Suitable for	Star contactor (KM1)	Reference
Connection kit for star contactor	3P	LC1G115...LC1G225	LA9GQW601
		LC1G265...LC1G500	LA9GSW601
		LC1G630...LC1G800	LA9GTW601

Note: RE17RMMWS timer to be used for Star-Delta starter application.

⁽¹⁾ Either phase separators or terminal shrouds can only be mounted. Phase separators or terminal shrouds are mandatory for operational voltage, $U_e \geq 690$ V.

⁽²⁾ To be used with LA9G3613 and LA9G3614.

⁽³⁾ To be used with LA9G4613 and LA9G4614.

⁽⁴⁾ LC1G630 & LC1G800 contactors need 2 pcs. of IP20 covers per pole. So 2 x LA9G3707 or 2 x LA9G4707 need to be ordered for these contactor assemblies. Please contact your technical support for more details.

⁽⁵⁾ UL listed.

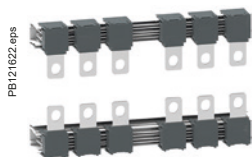
⁽⁶⁾ Maximum 3 auxiliary contacts can be installed between 2 contactors with mechanical interlock kit.



LA9G970

Mechanical interlock

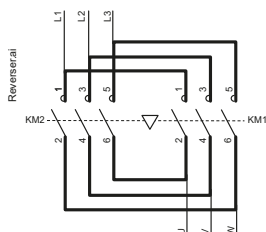
Description	Suitable for	Compatible with contactors Contactor 1	Contactor 2	Reference
Mechanical interlock between contactors ⁽⁶⁾	3P and 4P	LC1G115...225	LC1G115...225	LA9G970
		LC1G265...500	LC1G265...500	LA9G970
		LC1G265...500	LC1G115...225	LA9G971
	3P	LC1G630...800	LC1G265...500	LA9G972
		LC1G630...800	LC1G630...800	LA9G973



LA9G3760

Reverser connection kits

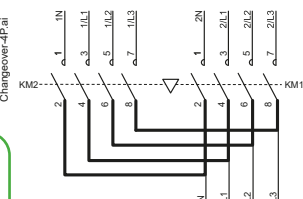
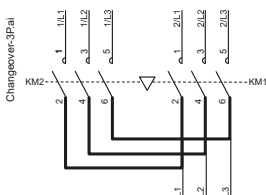
Description	Suitable for	Compatible with contactors	Reference
Connection kit: bars for reverser contactor assembly	3P	LC1G115...LC1G225	LA9G3760
		LC1G265...LC1G500	LA9G3761
		LC1G630...LC1G800	LA9G3762



LA9G3750

Changeover connection kits

Description	Suitable for	Compatible with contactors	Reference
Connection kit: bars for changeover contactor assembly	3P	LC1G115...LC1G225	LA9G3750
		LC1G265...LC1G500	LA9G3751
		LC1G630...LC1G800	LA9G3752
	4P	LC1G115...LC1G225	LA9G4750
		LC1G265...LC1G500	LA9G4751
		LC1G630...LC1G800	LA9G4752



High power contactors



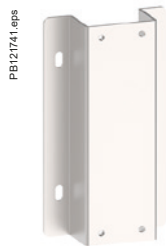
RE17RMMWS

Modular timer relay for star-delta starters

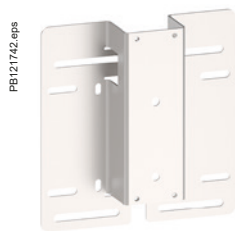
- 8 A, 1 CO, multifunction with spring terminals, 12...240 V AC/DC
- 17.5 mm width same size as a 1-pole circuit breaker
- Covers 0.1 s to 100 h timing
- Transparent cover to protect settings from being tampered
- Multi functional gives flexibility in maintenance

Modular timer relay for star-delta starters

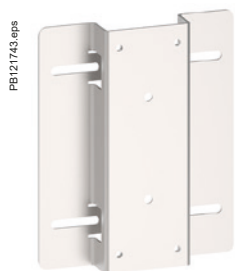
Description	Suitable for	Compatible with contactors	Reference
Harmony, Modular timing relay	3P	LC1G115...LC1G800	RE17RMMWS



LA9GRFB1



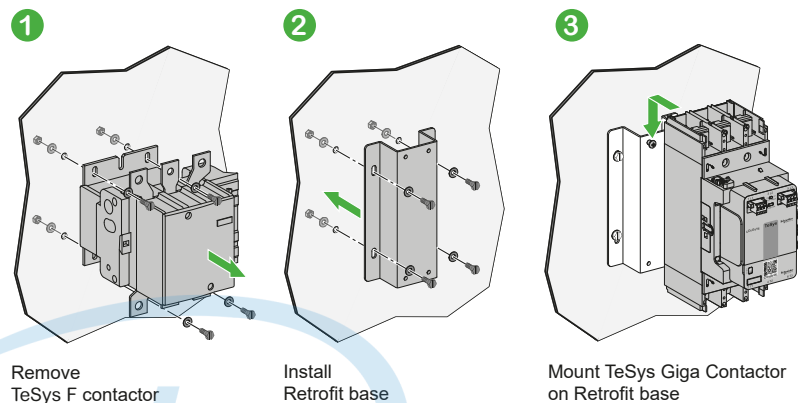
LA9GRFB2



LA9GRFB3

Retrofit bases

- Suitable for 3 pole contactors
- Retrofit bases to replace similar ratings of TeSys F contactors with TeSys Giga High power contactors
- Enables quick and simple replacement in the existing installation
- 3 references to cover ranges from LC1F115 to F800



TeSys Giga retrofit bases are designed for integrating new TeSys Giga High power contactors into installations using TeSys F contactors. The retrofit bases help reduce replacement and reinstallation time when you upgrade your system with the new range of contactors. The bases come in two frame sizes.

Retrofit bases

Description		Reference
Accessory used to replace	LC1F115-225 replaced by LC1G115-225	LA9GRFB1
TeSys F contactors	LC1F265-500 replaced by LC1G265-500	LA9GRFB2
	LC1F630-800 replaced by LC1G630-800	LA9GRFB3

INDUSTRIAL AUTOMATION

High power contactors

Control module

Wide band electronic control
24 V...500 V 50/60 Hz or DC control input
Advanced and standard versions
Accessible from the front for easy and quick replacement

The control module is needed for the operation of the contactor.
 It performs the following functions:

- proper functioning of contactor based on the input control voltage
- monitoring and diagnostics of the pole condition
- generation of signaling commands.

The range of control modules is organized:

- per contactor size and for each rating,
- per control voltage range.

Each module has connectors for connecting:

- the coil control A1, A2 circuit & PLC output control (advanced version)
- pole status and diagnostic signaling circuits.



LX1G3QLSEA



Control module replacement
on a 3-pole contactor

Control modules					
Description	For contactors	References per voltage range (V AC/DC)			
			24 - 48	48 - 130	200 - 500
Control modules for Advanced contactors	3-pole	LC1G115...LC1G225	LX1G3QBEEA	LX1G3QEHEA	LX1G3QLSEA
		LC1G265...LC1G330	LX1G3RBEEA	LX1G3REHEA	LX1G3RLSEA
		LC1G400...LC1G500	LX1G3SBEEA	LX1G3SEHEA	LX1G3SLSEA
		LC1G630...LC1G800	-	LX1G3TEHEA	LX1G3TLSEA
	4-pole	LC1G115...LC1G225	LX1G4QBEEA	LX1G4QEHEA	LX1G4QLSEA
		LC1G265...LC1G330	LX1G4RBEEA	LX1G4REHEA	LX1G4RLSEA
		LC1G400...LC1G500	LX1G4SBEEA	LX1G4SEHEA	LX1G4SLSEA
		LC1G630...LC1G800	-	LX1G4TEHEA	LX1G4TLSEA
Control modules for Standard contactors	3-pole	LC1G115...LC1G225	LX1G3QEHEH	LX1G3QKUEN	
		LC1G265...LC1G330	LX1G3REHEH	LX1G3RKUEN	
		LC1G400...LC1G500	LX1G3SEHEH	LX1G3SKUEN	
		LC1G630...LC1G800	LX1G3TEHEH	LX1G3TKUEN	
	4-pole	LC1G115...LC1G225	LX1G4QEHEH	LX1G4QKUEN	
		LC1G265...LC1G330	LX1G4REHEH	LX1G4RKUEN	
		LC1G400...LC1G500	LX1G4SEHEH	LX1G4SKUEN	
		LC1G630...LC1G800	LX1G4TEHEH	LX1G4TKUEN	

Connector for control module		
Description	Reference	
Push-in terminal connector for control module	LA9G81	

Remote wear diagnostic (RWD) module		
Description	Reference	
Remote wear diagnostic module for TeSys Giga Contactor - 1 NO	LA9GRD10 ⁽¹⁾	
Remote wear diagnostic module for TeSys Giga Contactor - 1 NC	LA9GRD01 ⁽¹⁾	

⁽¹⁾ Remote Wear Diagnostic (RWD) Module, can be installed and used only on Advanced version.



LA9G81



LA9GRD10

Replaceable switching modules

- Innovative contact switching modules for TeSys Giga High power contactors
- Replace worn-out poles with a new switching module in minutes, without having to disassemble the whole product
- No special tools are needed for the replacement.

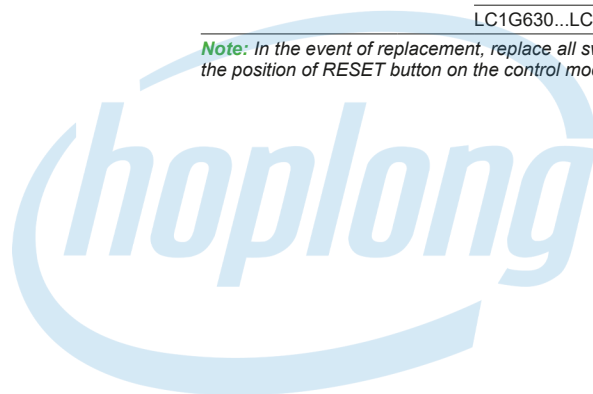
TeSys Giga - Switching modules for TeSys Giga High power contactors , Advanced and Standard versions

Description	For contactors		Quantity Set of	Reference
3 or 4 switching module kits	3-pole	LC1G115...LC1G225	3	LA9G3QA
		LC1G265...LC1G330	3	LA9G3RA
		LC1G400...LC1G500	3	LA9G3SA
		LC1G630...LC1G800	3	LA9G3TA
	4-pole	LC1G115...LC1G225	4	LA9G4QA
		LC1G265...LC1G330	4	LA9G4RA
		LC1G400...LC1G500	4	LA9G4SA
		LC1G630...LC1G800	4	LA9G4TA

Note: In the event of replacement, replace all switching modules. After replacement, change the position of RESET button on the control module from A to B or B to A.



Switching module kits



INDUSTRIAL AUTOMATION

High power
contactors

LA9G3101	LA9G3TA	LA9GTT330	LC1G265BEEA	LC1G800LSEA
LA9G3102	LA9G4101	LAG8N113	LC1G265EHEA	LV429252
LA9G3103	LA9G4102	LAG8N113P	LC1G265EHEN	LV429253
LA9G3111	LA9G4103	LAG8N203	LC1G265KUEN	LV429254
LA9G3112	LA9G4111	LAG8N203P	LC1G265LSEA	LV429256
LA9G3113	LA9G4112	LC1G1154BEEA	LC1G3304BEEA	LV429257
LA9G3601	LA9G4113	LC1G1154EHEA	LC1G3304EHEA	LV429258
LA9G3602	LA9G4601	LC1G1154EHEN	LC1G3304EHEN	LV432500
LA9G3603	LA9G4602	LC1G1154KUEN	LC1G3304KUEN	LV432501
LA9G3611	LA9G4603	LC1G1154LSEA	LC1G3304LSEA	LV432502
LA9G3612	LA9G4611	LC1G115BEEA	LC1G330BEEA	LV432503
LA9G3613	LA9G4612	LC1G115EHEA	LC1G330EHEA	LX1G3QBEEA
LA9G3614	LA9G4613	LC1G115EHEN	LC1G330EHEN	LX1G3QEHEA
LA9G3631	LA9G4614	LC1G115KUEN	LC1G330KUEN	LX1G3QEHEN
LA9G3632	LA9G4631	LC1G115LSEA	LC1G330LSEA	LX1G3QKUEN
LA9G3633	LA9G4632	LC1G1504BEEA	LC1G4004BEEA	LX1G3QLSEA
LA9G3650	LA9G4633	LC1G1504EHEA	LC1G4004EHEA	LX1G3RBEEA
LA9G3651	LA9G4701	LC1G1504EHEN	LC1G4004EHEN	LX1G3REHEA
LA9G3652	LA9G4702	LC1G1504KUEN	LC1G4004KUEN	LX1G3REHEN
LA9G3653	LA9G4703	LC1G1504LSEA	LC1G4004LSEA	LX1G3RKUEN
LA9G3661	LA9G4707	LC1G150BEEA	LC1G400BEEA	LX1G3RLSEA
LA9G3662	LA9G4711	LC1G150EHEA	LC1G400EHEA	LX1G3SBEEA
LA9G3663	LA9G4712	LC1G150EHEN	LC1G400EHEN	LX1G3SEHEA
LA9G3671	LA9G4714	LC1G150KUEN	LC1G400KUEN	LX1G3SEHEN
LA9G3672	LA9G4750	LC1G150LSEA	LC1G400LSEA	LX1G3SKUEN
LA9G3673	LA9G4751	LC1G1854BEEA	LC1G5004BEEA	LX1G3SLSEA
LA9G3681	LA9G4752	LC1G1854EHEA	LC1G5004EHEA	LX1G3TEHEA
LA9G3682	LA9G4801	LC1G1854EHEN	LC1G5004EHEN	LX1G3TEHEN
LA9G3683	LA9G4803	LC1G1854KUEN	LC1G5004KUEN	LX1G3TKUEN
LA9G3701	LA9G4QA	LC1G1854LSEA	LC1G5004LSEA	LX1G3TLSEA
LA9G3702	LA9G4RA	LC1G185BEEA	LC1G500BEEA	LX1G4QBEEA
LA9G3703	LA9G4SA	LC1G185EHEA	LC1G500EHEA	LX1G4QEHEA
LA9G3704	LA9G4TA	LC1G185EHEN	LC1G500EHEN	LX1G4QEHEN
LA9G3705	LA9G81	LC1G185KUEN	LC1G500KUEN	LX1G4QKUEN
LA9G3706	LA9G82	LC1G185LSEA	LC1G500LSEA	LX1G4QLSEA
LA9G3707	LA9G970	LC1G2254BEEA	LC1G6304EHEA	LX1G4RBEEA
LA9G3711	LA9G971	LC1G2254EHEA	LC1G6304EHEN	LX1G4REHEA
LA9G3712	LA9G972	LC1G2254EHEN	LC1G6304KUEN	LX1G4REHEN
LA9G3714	LA9G973	LC1G2254KUEN	LC1G6304LSEA	LX1G4RKUEN
LA9G3750	LA9GQQ330	LC1G2254LSEA	LC1G630EHEA	LX1G4RLSEA
LA9G3751	LA9GRD01	LC1G225BEEA	LC1G630EHEN	LX1G4SBEEA
LA9G3752	LA9GRD10	LC1G225EHEA	LC1G630KUEN	LX1G4SEHEA
LA9G3760	LA9GRFB1	LC1G225EHEN	LC1G630LSEA	LX1G4SEHEN
LA9G3761	LA9GRFB2	LC1G225KUEN	LC1G8004EHEA	LX1G4SKUEN
LA9G3762	LA9GRFB3	LC1G225LSEA	LC1G8004EHEN	LX1G4SLSEA
LA9G3801	LA9GSQ330	LC1G2654BEEA	LC1G8004KUEN	LX1G4TEHEA
LA9G3803	LA9GSQ331	LC1G2654EHEA	LC1G8004LSEA	LX1G4TEHEN
LA9G3QA	LA9GSS330	LC1G2654EHEN	LC1G800EHEA	LX1G4TKUEN
LA9G3RA	LA9GTS330	LC1G2654KUEN	LC1G800EHEN	LX1G4TLSEA
LA9G3SA	LA9GTS331	LC1G2654LSEA	LC1G800KUEN	

TeSys Control - Giga

Technical Data for Designers

INDUSTRIAL AUTOMATION

Contents

TeSys Giga High power contactors:

- > Characteristics.....B9/25 to B9/29
- > DimensionsB9/30 to B9/33
- > DiagramsB9/34

High power
contactors



INDUSTRIAL AUTOMATION

Environment						
Contactor type				LC1G115... 225	LC1G265... 500	LC1G630... 800
Rated insulation voltage (Ui)	Conforming to IEC 60947-4-1. Over-voltage category III, degree of pollution: 3		V	1000	1000	1000
Rated impulse withstand voltage (Uimp)	Coil not connected to the power circuit		kV	8	8	8
Conforming to standards				IEC/EN 60947-4-1, UL 60947-4-1, CSA C22.2 n° 60947-4-1, JIS C 8201-4-1, GB/T 14048.4, IEC 60721-3-3 3C3		
Product certifications				CB scheme, CCC, cULus, UKCA, EAC, EU-RO-MR by DNV		
Electromagnetic compatibility				IEC 60947-4-1		
Immunity				Following IEC 60947-4-1 Table 16		
Emission				Environment A according to IEC 60947-4-1		
Immunity to radiated electromagnetic interference				20V/m according to IEC/EN 61000-4-3		
Voltage sag immunity (in complete product as well)				Conforming to SEMI-F47		
Degree of protection	Conforming to IEC 60529 / VDE 0106			IP2x with terminal shrouds LA9G37●●/ LA9G47●●		
Climatic withstand				According to IACS E10		
Ambient air temperature around the device	Storage		°C	-60...+80		
	Operation		°C	-25...+60		
	Permissible at Uc		°C	-40...+70		
Net weight	Standard	3P	kg	3.6	7.5	14.2
		4P	kg	4.4	8.2	18
	Advanced	3P	kg	4.1	8.2	17.3
		4P	kg	5.1	8.7	22
Maximum operating altitude	Without derating		m	3000		
Operating positions	Without derating			<div><div>DF510765.eps</div><div></div></div> <div><div>DF510764.eps</div><div></div></div>		
	With derating ⁽¹⁾			<div><div>DF537814.eps</div><div></div></div> <div><div>DF537815.eps</div><div></div></div>		
Shock resistance 1/2 sine wave = 11 ms Conforming to IEC 60068-2-7	Contactor open			10 gn	10 gn	10 gn
	Contactor closed			15 gn	15 gn	15 gn
Vibration resistance 5...300 Hz Conforming to IEC 60068-2-6	Contactor open			2 gn	2 gn	2 gn
	Contactor closed			4 gn	4 gn	4 gn

⁽¹⁾ For derating details, please contact technical support.

Pole characteristics								
Contactor type					LC1G115	LC1G150	LC1G185	LC1G225
Number of poles					3 or 4	3 or 4	3 or 4	3 or 4
Rated operational current (Ie)	Ue ≤ 440 V	3P	In AC-3 / AC-3e, θ ≤ 60 °C	A	115 / 115	150 / 145	185 / 177	225 / 209
	Ue ≤ 1000 V	3P & 4P	In AC-1, θ ≤ 40 °C	A	250	275	305	330
Rated operational voltage (Ue)		Up to		V	1000 ⁽¹⁾	1000	1000	1000
Rated frequency (f) ⁽²⁾				Hz	50 / 60	50 / 60	50 / 60	50 / 60
Frequency operating limits		With derating ⁽³⁾		Hz	16 2/3 ...400	16 2/3 ...400	16 2/3 ...400	16 2/3 ...400
Conventional thermal current		θ ≤ 40 °C		A	250	275	305	330
Rated making capacity		I rms conforming to IEC 60947-4-1		A	Making current: 10 x I in AC-3 or 12 x I in AC-4 Making current: 13 x I in AC-3e			
Rated breaking capacity		I rms conforming to IEC 60947-4-1		A	Making and breaking current: 8 x I in AC-3 or 10 x I in AC-4 Making and breaking current: 8.5 x I in AC-3e			
Maximum permissible current No current flowing for previous 60 minutes, at θ ≤ 40 °C	For 10 s			A	1100	1200	1500	1800
	For 30 s			A	640	700	920	1000
	For 1 min			A	520	600	740	850
	For 3 min			A	400	450	500	560
	For 10 min			A	320	350	400	440
Short-circuit protection by fuses	Fuses for motor: type aM - Ue ≤ 440 V			A	125	160	200	250
	Fuses for motor: type aM - Ue ≤ 690 V			A	125	160	160	200
	Fuses for general application: type gG - Ue ≤ 690 V			A	315	315	315	400
Average impedance per pole		At Ith and 50 Hz		mΩ	0.18	0.18	0.17	0.15
Power dissipation per pole for the above operational currents	AC-3 / AC-3e			W	3	5	6	8
	AC-1			W	10	10	20	20
Connection					Maximum c.s.a.			
	Bar	Number of bars			2	2	2	2
		Bar		mm	25 x 6	25 x 6	25 x 6	25 x 6
	Cable with lug			mm²	185	185	185	185
	Cable with connector			mm²	185	185	185	185
	Bolt diameter			mm	Ø8.5	Ø8.5	Ø8.5	Ø8.5
Tightening torque		Power circuit connections		N.m	18	18	18	18

(1) Ue ≤ 1000 V for AC-1 / Ue ≤ 690 V for AC-3 / AC-3e / AC-4.

(2) Please consult your technical support team for application with frequencies other than 50/60 Hz.





(3) For derating details, please contact technical support.

Pole characteristics					
LC1G265	LC1G330	LC1G400	LC1G500	LC1G630	LC1G800
3 or 4	3 or 4	3 or 4	3 or 4	3 or 4	3 or 4
265 / 255	330 / 294	400 / 391	500 / 437	630 / 555	800 / 587
385	440	550	700	1050	1050
1000	1000	1000	1000	1000	1000
50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
16 2/3...400	16 2/3...400	16 2/3...400	16 2/3...400	16 2/3...400	16 2/3...400
385	440	550	700	1050	1050
Making current: 10 x I in AC-3 or 12 x I in AC-4					
Making current: 13 x I in AC-3e					
Making and breaking current: 8 x I in AC-3 or 10 x I in AC-4					
Making and breaking current: 8.5 x I in AC-3e					
2200	2650	3600	4000	5050	5500
1230	1800	2400	2800	4400	4600
950	1300	1700	2200	3400	3600
620	900	1200	1500	2200	2600
480	750	1000	1200	1600	1700
315	400	500	500	630	800
250	250	315	400	500	630
400	500	630	800	1250	1250
0.144	0.144	0.1	0.08	0.065	0.065
11	16	16	20	26	42
20	30	30	40	70	70
Maximum c.s.a.					
2	2	2	2	2	2
32 x 10	32 x 10	32 x 10	32 x 10	52 x 20	52 x 20
240	2 x 150	2 x 185	2 x 240	-	-
240	-	-	-	-	-
Ø10.6	Ø10.6	Ø10.6	Ø10.6	Ø13	Ø13
35	35	35	35	58	58





COORD.

Ref.

High power
contactors

TeSys Giga High power contactors - Advanced version - Control circuit characteristics with AC/DC coils										
Contactor type					LC1G115...225		LC1G265...330		LC1G400...500	LC1G630...800
Rated control circuit voltage (Uc)				V	24...48 AC/DC, 48...130 AC/DC, 200...500 AC/DC ⁽¹⁾					
Control voltage limits (θ ≤ 60 °C)	AC input (50/60 Hz) /DC input	Operation			0.8 Uc Min...1.1 Uc Max					
		Drop-out			0.1 Uc Max...0.45 Uc Min					
Inputs compatibility PLC digital output 24 V DC Type 3 IEC61131-2		Off-state		V DC	0...5					
		On-state		V DC	11...30					
Average consumption at 20 °C and at Uc (3 and 4-pole contactors)	24...48 V AC/DC coil (BEE)	Inrush	50/60 Hz coil	VA	290	540	490	-		
			DC	W	220	380	350	-		
		Sealed	50/60 Hz coil	VA	10	17.9	17.9	-		
			DC	W	5.7	6.4	6	-		
	48...130 V AC/DC coil (EHE)	Inrush	50/60 Hz coil	VA	260	430	450	560		
			DC	W	190	360	360	440		
		Sealed	50/60 Hz coil	VA	8.9	11.7	11.7	12		
			DC	W	5	9	8.3	8.8		
	200...500 V AC/DC coil (LSE)	Inrush	50/60 Hz coil	VA	295	530	535	670		
			DC	W	215	300	300	390		
		Sealed	50/60 Hz coil	VA	13	16.1	15.4	17		
			DC	W	8	9	8.6	11		
Heat dissipation				W	4...5	5...6	5...6	5...6		
Operating time	Closing "C"			ms	40...70	40...70	40...70	40...70		
	Opening "O"			ms	15...50	15...50	15...50	15...50		
Mechanical durability at Uc	In millions of operating cycles (max)				8	8	8	5		
Maximum operating rate at ambient temperature ≤ 60 °C	In operating cycles per hour	AC-1			300	300	300	300		
		AC-3			600	600	600	600		
		AC-4			150	150	60	60		
Coil control and PLC input connection (Push-in type)					Min/max c.s.a.					
Flexible cable	1 conductor with cable end		mm² 	0.25...2.5	0.25...2.5	0.25...2.5	0.25...2.5			
	2 conductors with Dual Sleeve		mm² 	0.5...1	0.5...1	0.5...1	0.5...1			
Solid cable	1 conductor		mm² 	0.2...2.5	0.2...2.5	0.2...2.5	0.2...2.5			
	Stripping length		mm 	12	12	12	12			

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

TeSys Giga High power contactors - Standard version control circuit characteristics with AC/DC coils										
Contactor type					LC1G115...225	LC1G265...330	LC1G400...500	LC1G630...800		
Rated control circuit voltage (Uc)				V	48...130 AC/DC, 100...250 AC/DC					
Control voltage limits (θ ≤ 60 °C)	AC input (50/60 Hz) /DC input	Operation			0.8 Uc Min...1.1 Uc Max ⁽¹⁾					
		Drop-out			0.1 Uc Max...0.45 Uc Min					
Average consumption at 20 °C and at Uc (3 and 4-pole contactors)	48...130 V AC/DC coil (EHE)	Inrush	50/60 Hz coil	VA	640	780	965	990		
			DC	W	445	695	760	790		
		Sealed	50/60 Hz coil	VA	18.7	17.6	17.6	18.7		
			DC	W	7.8	7.8	7.8	9.5		
	100...250 V AC/DC coil (KUE)	Inrush	50/60 Hz coil	VA	540	700	750	800		
			DC	W	380	645	660	680		
		Sealed	50/60 Hz coil	VA	12.4	15	15.5	15		
			DC	W	7.8	9.1	9.3	9.5		
	Heat dissipation				W	5...6	6...7	6...7	6...7	
	Operating time	Closing "C"		ms	40...70	40...70	40...70	40...70		
		Opening "O"		ms	15...50	15...50	15...50	15...50		
	Mechanical durability at Uc		In millions of operating cycles (max)			8	8	8	5	
Maximum operating rate at ambient temperature ≤ 60 °C	In operating cycles per hour	AC-1			300	300	300	300		
		AC-3			600	600	600	600		
		AC-4			150	150	60	60		
Coil control connection (Push-in type)					Min/max c.s.a.					
Flexible cable	1 conductor with cable end		mm²		0.25...2.5	0.25...2.5	0.25...2.5	0.25...2.5		
	2 conductors with Dual Sleeve		mm²		0.5...1	0.5...1	0.5...1	0.5...1		
Solid cable	1 conductor		mm²		0.2...2.5	0.2...2.5	0.2...2.5	0.2...2.5		
	Stripping length		mm		12	12	12	12		

(1) 0.7 Uc Min for 110 V DC input (with KUE coil).

COORD.

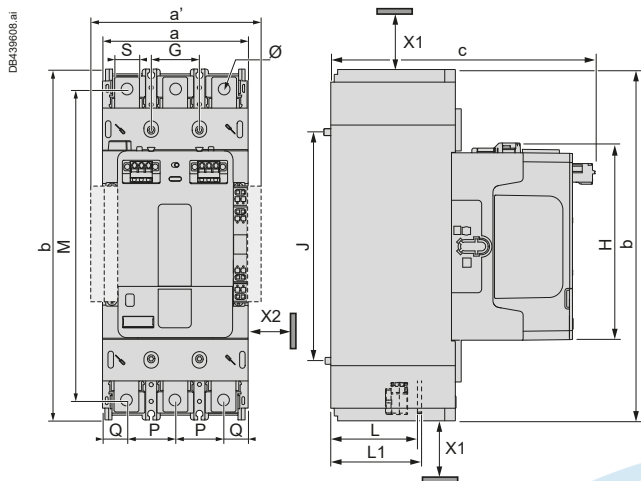
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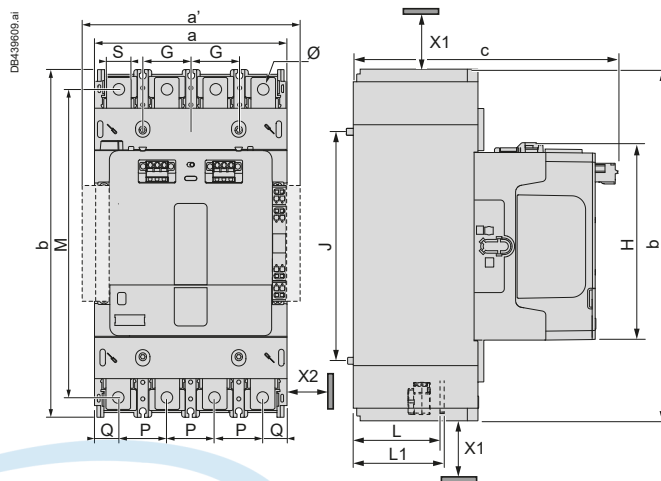
High power contactors

Advanced LC1G115...225 TeSys Giga High power contactors

3-pole



4-pole



All dimensions are in mm.

a	b	c	G	J	M	H	L	L1	P	Q	S	Ø
107.7	254.7	192.9	35	166	225.7	144.1	63.9	66.9	35	18.9	18	8.5

All dimensions are in mm.

a	b	c	G	J	M	H	L	L1	P	Q	S	Ø
142.7	254.7	192.9	35	166	225.7	144.1	63.9	66.9	35	18.9	18	8.5

X1 (mm) = Minimum electrical clearance.

LC1G115...800, up to 1000 V: 40 mm

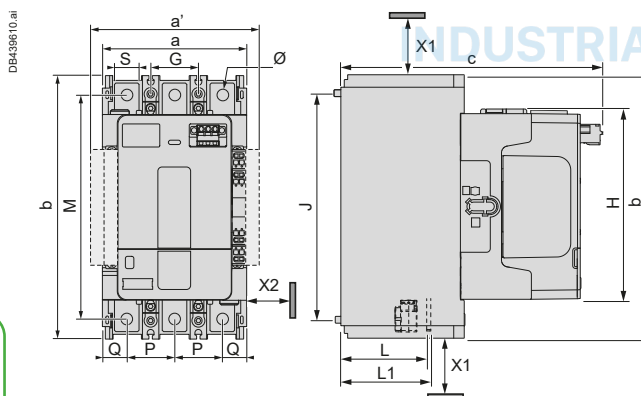
X2 (mm) = Minimum electrical clearance according to operating voltage inside metallic cabinets / adjacent installation of contactors.

LC1G115...800: 5 mm.

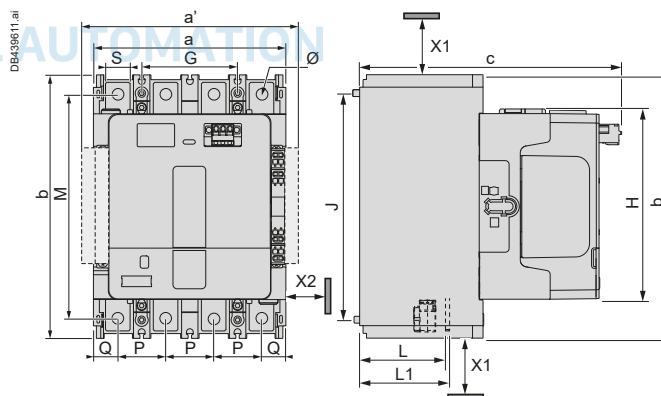
a' = a + 20 mm with additional auxiliary contact blocks on both sides (externally).

Standard LC1G115...225 TeSys Giga High power contactors

3-pole



4-pole



All dimensions are in mm.

a	b	c	G	J	M	H	L	L1	P	Q	S	Ø
107.7	193	192.9	35	166	164.1	139.4	66.9	69.9	35	18.9	18	8.5

All dimensions are in mm.

a	b	c	G	J	M	H	L	L1	P	Q	S	Ø
142.7	193	192.9	35	166	164.1	139.4	66.9	69.9	35	18.9	18	8.5

X1 (mm) = Minimum electrical clearance.

LC1G115...800, up to 1000 V: 40 mm

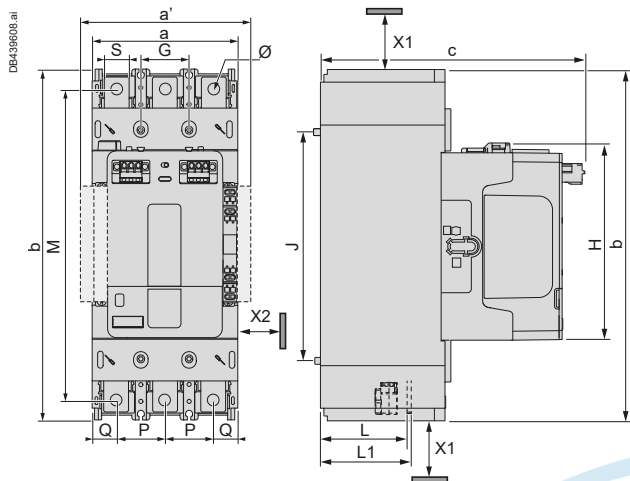
X2 (mm) = Minimum electrical clearance according to operating voltage inside metallic cabinets / adjacent installation of contactors.

LC1G115...800: 5 mm.

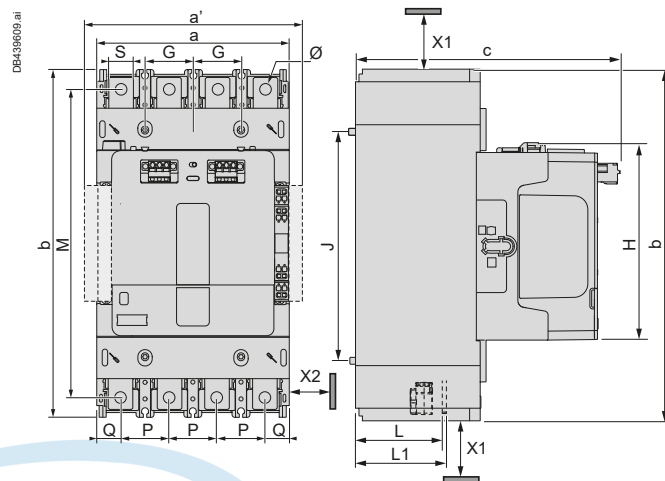
a' = a + 20 mm with additional auxiliary contact blocks on both sides (externally).

Advanced LC1G265...500 TeSys Giga High power contactors

3-pole



4-pole



All dimensions are in mm.

a	b	c	G	J	M	H	L	L1	P	Q	S	Ø
140	290	225.5	45	187	261.6	166.7	72.8	78.8	45	25	30	10.6

X1 (mm) = Minimum electrical clearance.

LC1G115...800, up to 1000 V: 40 mm.

X2 (mm) = Minimum electrical clearance according to operating voltage inside metallic cabinets / adjacent installation of contactors.

LC1G115...800: 5 mm.

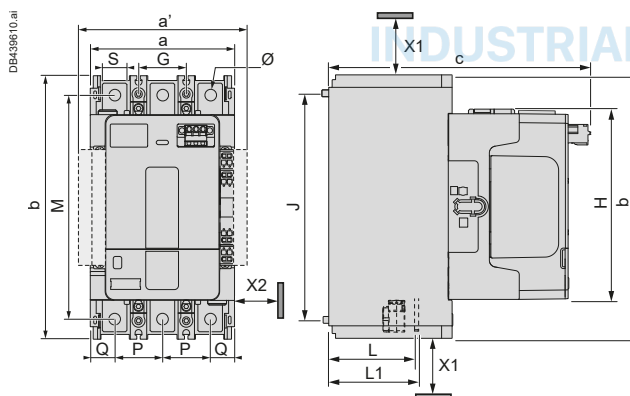
a' = a + 20 mm with additional auxiliary contact blocks on both sides (externally).

All dimensions are in mm.

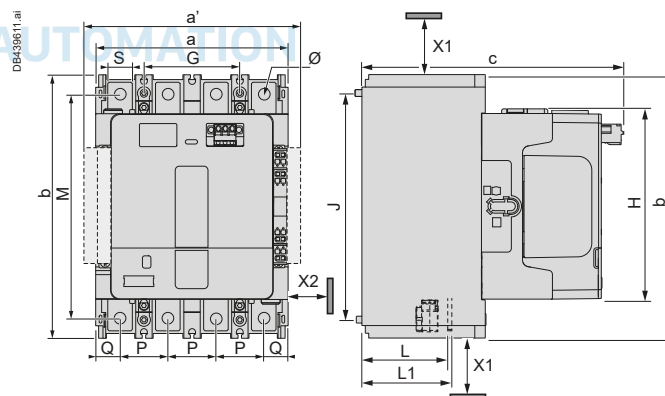
a	b	c	G	J	M	H	L	L1	P	Q	S	Ø
185	290	225.5	45	187	261.6	166.7	72.8	78.8	45	25	30	10.6

Standard LC1G265...500 TeSys Giga High power contactors

3-pole



4-pole



All dimensions are in mm.

a	b	c	G	J	M	H	L	L1
140	225	225.5	45	187	197	161.8	78.8	LC1G265-330: 81.8
								LC1G400: 82.8
								LC1G500: 83.8

P	Q	S	Ø
45	25	30	10.6

X1 (mm) = Minimum electrical clearance.

LC1G115...800, up to 1000 V: 40 mm.

X2 (mm) = Minimum electrical clearance according to operating voltage inside metallic cabinets / adjacent installation of contactors.

LC1G115...800: 5 mm.

a' = a + 20 mm with additional auxiliary contact blocks on both sides (externally).

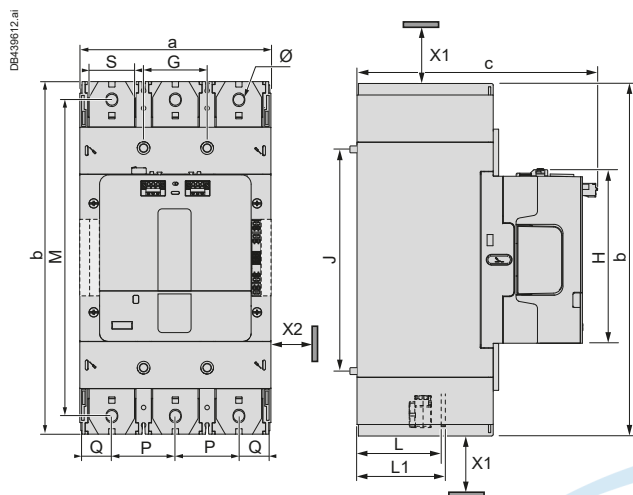
All dimensions are in mm.

a	b	c	G	J	M	H	L	L1
185	225	225.5	45	187	197	161.8	78.8	LC1G265-330: 81.8
								LC1G400: 82.8
								LC1G500: 83.8

P	Q	S	Ø
45	25	30	10.6

Advanced LC1G630...800 TeSys Giga High power contactors

3-pole



All dimensions are in mm.

a	b	c	G	J	M	H	L	L1	P	Q	S	Ø
210.6	388.5	265.6	70	242	348.5	192.1	99	107	70	35.3	48	13

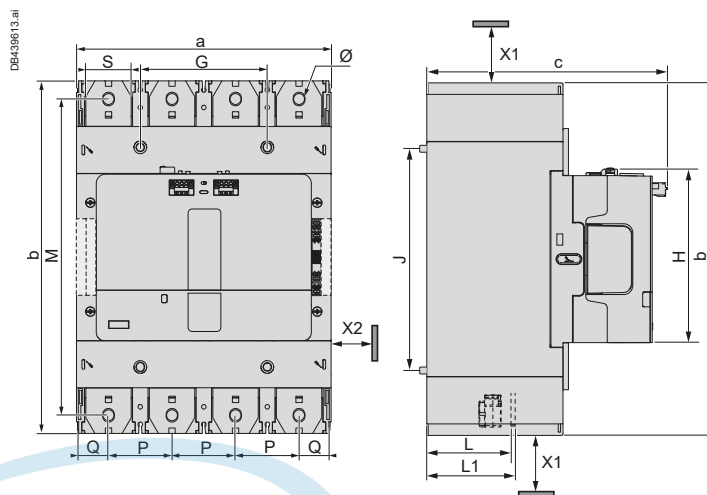
X1 (mm) = Minimum electrical clearance.

LC1G115...800, up to 1000 V: 40 mm.

X2 (mm) = Minimum electrical clearance according to operating voltage inside metallic cabinets / adjacent installation of contactors.

LC1G115...800: 5 mm.

4-pole



All dimensions are in mm.

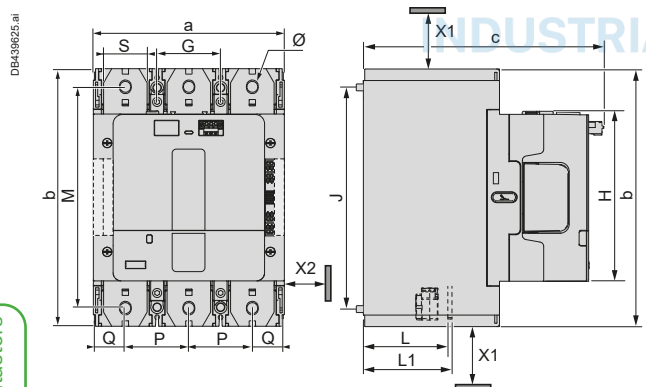
a	b	c	G	J	M	H	L	L1	P	Q	S	Ø
280.6	388.5	265.6	70	242	348.5	192.1	99	107	70	35.3	48	13

Ref.



Standard LC1G630...800 TeSys Giga High power contactors

3-pole



All dimensions are in mm.

a	b	c	G	J	M	H	L	L1	P	Q	S	Ø
210.6	284	265.6	70	242	244	187.4	107	113	70	35.3	48	13

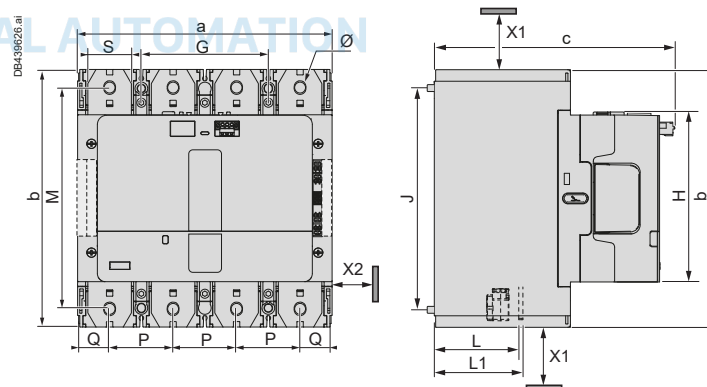
X1 (mm) = Minimum electrical clearance.

LC1G115...800, up to 1000 V: 40 mm.

X2 (mm) = Minimum electrical clearance according to operating voltage inside metallic cabinets / adjacent installation of contactors.

LC1G115...800: 5 mm.

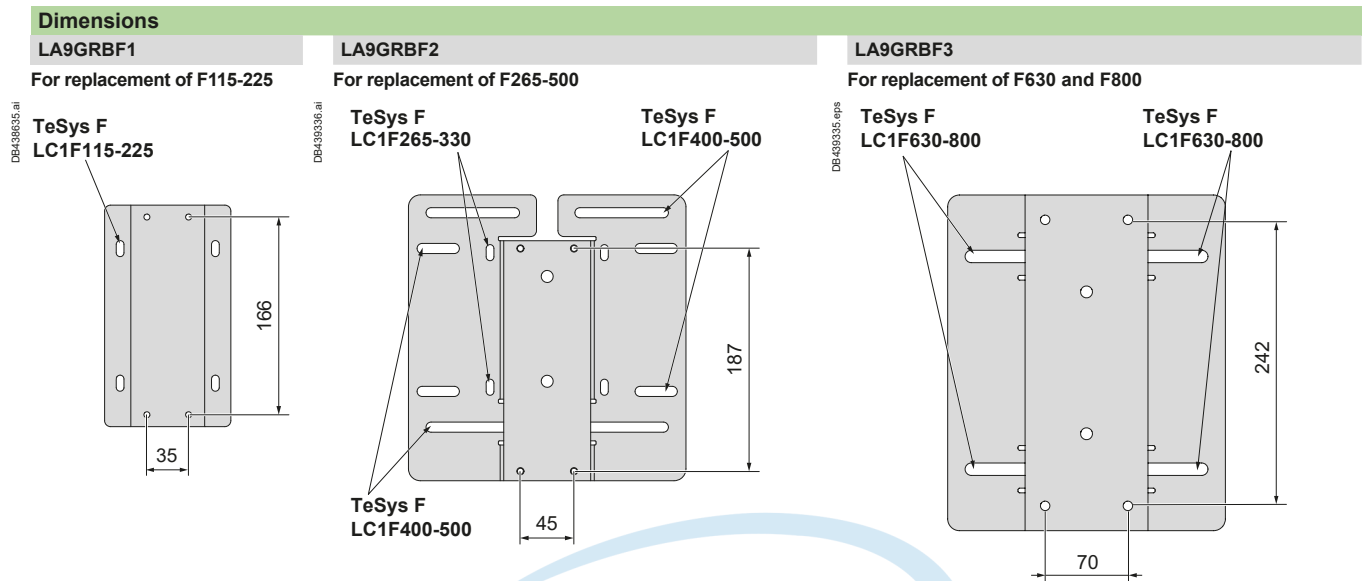
4-pole



All dimensions are in mm.

a	b	c	G	J	M	H	L	L1	P	Q	S	Ø
280.6	284	265.6	70	242	244	187.4	107	113	70	35.3	48	13

High power contactors



Note: All dimensions are in mm.



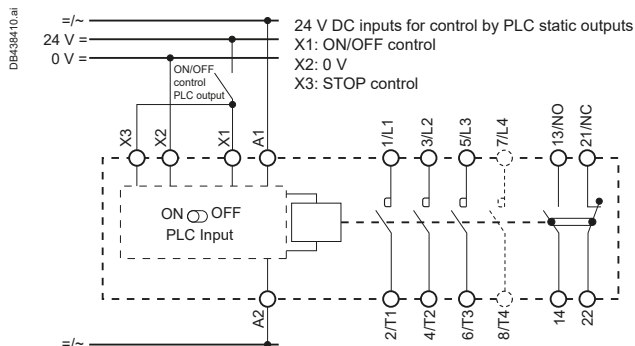
INDUSTRIAL AUTOMATION

Ref.

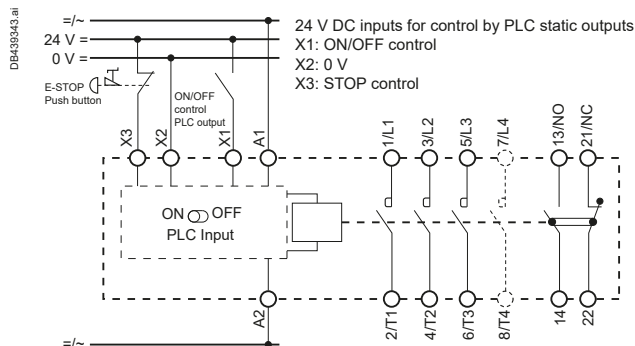
High power
contactors

TeSys Giga High power contactors

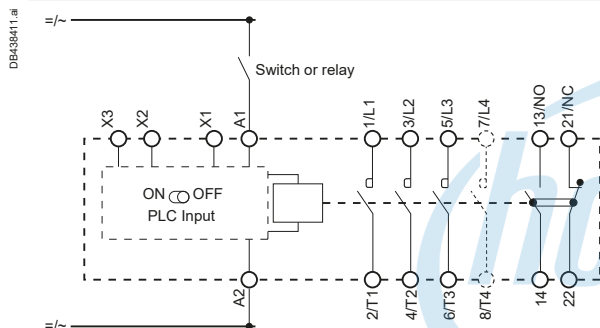
Advanced version - ON/OFF control by PLC



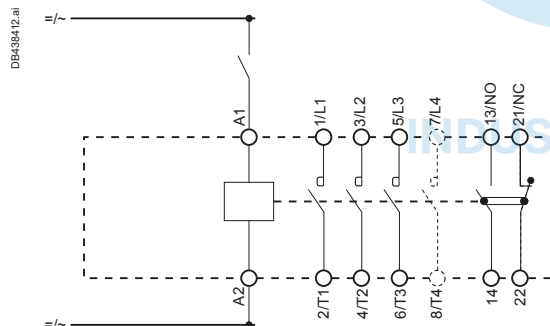
Advanced version - ON/OFF control by PLC in safety application



Advanced version - Control by switch



Standard version

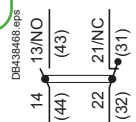


Add-on blocks

Instantaneous auxiliary contacts

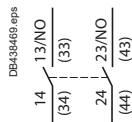
1 N/O + 1 N/C

LAG8N113P
mirror contacts



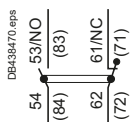
2 N/O

LAG8N203P



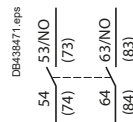
1 N/O + 1 N/C

LAG8N113
mirror contacts








2 N/O

LAG8N203



(1) Terminal numbers in brackets refer to blocks when mounted upside down, on left-hand side of contactor.

TeSys F, FG, CR1F, V Contactors

Type of product	Range		Pages
TeSys F Contactors for AC-3 applications	780 and 1000 A		B10/2
TeSys F Contactors for AC-1 applications	From 1200 A to 2600 A		B10/3
TeSys FG Shockproof contactors (to be discontinued)	From 150 to 630 A - AC-3		B10/4
TeSys CR1F Magnetic latching contactors	From 150 to 630 A - AC-3		B10/5
TeSys F Auxiliary contact blocks, accessories, spare parts, delayed opening devices			B10/6
TeSys F Coils			B10/11
Accessories, coils for shockproof and magnetic latching contactors TeSys FG (to be discontinued), TeSys CR1F			B10/15
TeSys V Vacuum contactors – 1500 V	From 160 to 610 A - AC-3 From 160 to 630 A - AC-1		B10/22

Technical Data for Designers

B10/25

High power
contactors



LC1F780



LC1F1000



3-pole contactors - Motors 780 to 1000 A / 440 V Category AC-3 - a.c. or d.c. coils

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3							Rated operational current in AC-3	Basic reference, to be completed by adding the voltage code ⁽¹⁾	Weight
220 V	380 V	415 V	440 V	500 V	660 V	1000 V	440 V up to		
kW	kW	kW	kW	kW	kW	kW	A		kg
220	400	425	425	450	475	450	780	LC1F780●●	39.500
315	560	630	670	—	—	—	1000	LC1F1000●●	31.000

Note: auxiliary contact blocks, modules and accessories: see pages B10/6 to B10/15.

(1) Please check the availability of your variant in the index page B10/24. The SEARCH function of your viewer can be used.

Volts ~	24	48	110	115	120	208	220	230	240	380	400	415	440
LC1F780													
40...400 Hz (coil LX1)	—	—	F7	FE7	F7	L7	M7	P7	U7	Q7	V7	N7	R7
LC1F1000													
40...400 Hz (coil LX1F)	—	—	F7	—	G7	—	M7	P7	U7	Q7	V7	N7	R7
Volts ⋮	24	48	110	125	220	230	250	400	440				
LC1F780, LC1F1000													
(coil LX4F)	—	—	FD	GD	MD	—	UD	—	RD				

INDUSTRIAL AUTOMATION

PB107573.eps



LC1F1250

PB107575.eps



LC1F1700...2100

PB114511.eps



LC1F2600

3 or 4-pole contactors - Loads 1200 to 2600 A / 440 V Category AC-1 - a.c. or d.c. coils

Maximum current in AC-1 ($\theta \leq 40^\circ\text{C}$)	Number of poles	Basic reference, to be completed by adding the voltage code ⁽¹⁾ Screw fixing, cabling	Weight
A			kg
1200	3	LC1SF1200KUE	13.400
1260	3	LC1F1250●●	19.000
1400	3	LC1F1400●●	29.000
1600	3	LC1F780●●	39.500
	4	LC1F7804●●	48.000
1700	3	LC1F1700●●	30.000
2100 ⁽²⁾	3	LC1F2100●●	31.000
2600 ⁽³⁾	3	LC1F2600●●	36.000

Note: auxiliary contact blocks, modules and accessories: see pages B10/6 to B10/15.

(1) Please check the availability of your variant in the index page B10/24. The SEARCH function of your viewer can be used.

(2) With set of right-angled connectors LA9F2100 (see page B10/9).

(3) With set of right-angled connectors LA9F2600 (see page B10/9).

INDUSTRIAL AUTOMATION

Volts ~	24	48	110	115	120	208	220	230	240	380	400	415	440
LC1F1250 40...400 Hz (coil LX1)	—	E7	F7	FE7	G7	L7	M7	P7	U7	Q7	V7	N7	R7
LC1F1400, F1700, F2100,F2600 40...400 Hz (coil LX1F)	—	—	F7	—	G7	—	M7	P7	U7	Q7	V7	N7	R7
Volts ∴	24	48	110	125	220	230	250	400	440				
LC1F1250 (coil LX4F)	—	ED	FD	GD	MD	—	UD	—	RD				
LC1F1400, F1700, F2100, F2600 (coil LX4F)	—	—	FD	GD	MD	—	UD	—	RD				
Volts ~/∴	100...250												
LC1SF1200, LC1F1250, F2600 (coil LXE + ECM LA4EM)	KUE												





LC1FG150



LC1FG185



LC1FG265

Important notice: LC1FG range is planned for discontinuation without replacement.
Before ordering, please consult your regional sales office for availability.

3-pole shockproof contactors - Motors 150 to 630 A / 440 V AC-3, loads 250 to 1000 A / 440 V / AC-1 - a.c. coil

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3							Rated operational current in cat. AC-3, 440 V/AC-1 up to	Basic reference, to be completed by adding the voltage code ⁽¹⁾ Screw fixing, cabling ⁽²⁾	Weight
220 V 230 V	380 V 400 V	415 V	440 V	500 V	660 V 690 V	1000 V			
kW	kW	kW	kW	kW	kW	kW	A		kg
40	75	80	80	90	100	65	150/250	LC1FG150●●	3.430
55	90	100	100	110	110	100	185/275	LC1FG185●●	4.650
75	132	140	140	160	160	147	265/350	LC1FG265●●	7.440
110	200	220	250	257	280	185	400/500	LC1FG400●●	9.100
147	250	280	295	355	335	335	500/700	LC1FG500●●	11.350
200	335	375	400	400	450	450	630/1000	LC1FG630●●	18.600

Note: these contactors have instantaneous auxiliary contact blocks with 2 N/O contacts, 1 N/C contact and one coil maintaining contact.

- (1) Please check the availability of your variant in the index page B10/24. The SEARCH function of your viewer can be used.
(2) Power terminals can, if required, be protected against direct finger contact by the addition of shrouds, to be ordered separately.

INDUSTRIAL AUTOMATION



CR1F1854



CR1F500

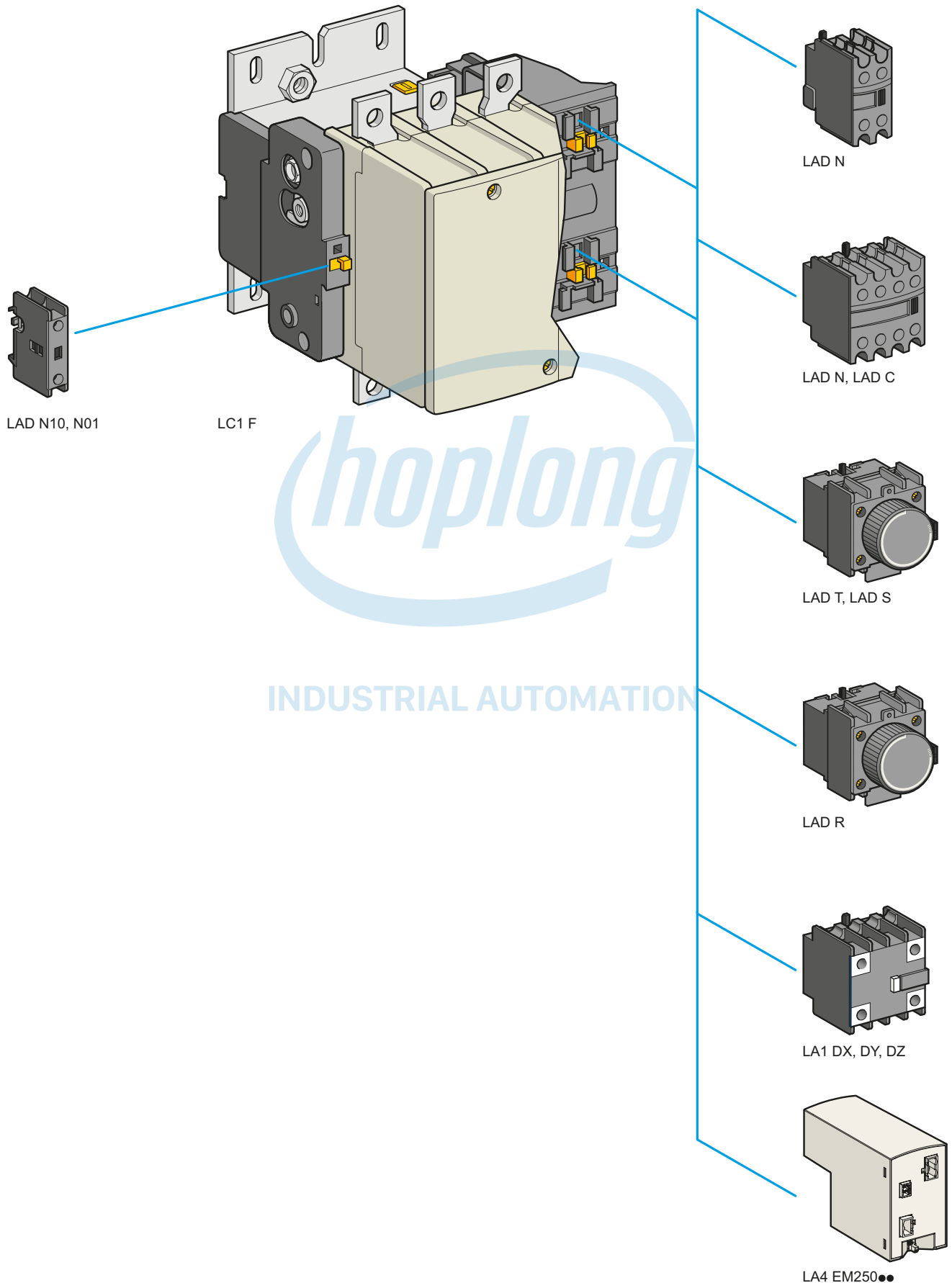
3, 4 pole - Motors 150 to 630 A / 440 V / AC-3, loads 250 to 1000 A / 440 V AC-1 - a.c. or d.c. coils

Maximum thermal current in category AC-1 40 °C	Rated operational current in category AC-3 (440 V max)	Number of poles	Instantaneous auxiliary contacts		Basic reference, to be completed by adding the voltage code ⁽¹⁾	Weight
A	A					kg
250	150	3	—	—	CR1F150●●	3.500
		4	—	—	CR1F1504●●	3.800
275	185	3	—	—	CR1F185●●	4.600
		4	—	—	CR1F1854●●	5.400
350	265	3	—	—	CR1F265●●	7.400
		4	—	—	CR1F2654●●	8.500
500	400	3	—	—	CR1F400●●	9.100
		4	—	—	CR1F4004●●	10.200
700	500	3	—	—	CR1F500●●	11.300
		4	—	—	CR1F5004●●	12.900
1000	630	3	—	—	CR1F630●●	18.600
		4	—	—	CR1F6304●●	21.500

Note: accessories, replacement parts and spare coils, see pages B10/19 to B10/21.





(1) Standard control circuit voltages: see page B10/20. Please check the availability of your variant in the index page B10/24. The SEARCH function of your viewer can be used.

INDUSTRIAL AUTOMATION



Instantaneous auxiliary contact blocks

For use in normal operating environments

Number of contacts	Maximum number of blocks per contactor Clip-on mounting	Composition				Reference
						
1	1	–	–	1	–	LADN10
		–	–	–	1	LADN01
2	2	–	–	1	1	LADN11
		–	–	2	–	LADN20
		–	–	–	2	LADN02
4	2	–	–	2	2	LADN22
		–	–	1	3	LADN13
		–	–	4	–	LADN40
		–	–	–	4	LADN04
		–	–	3	1	LADN31
		–	–	2	2 ⁽¹⁾	LADC22

With terminal referencing conforming to EN 50012





2	2	–	–	1	1	LADN11P
		–	–	1	1	LADN11G
4	2	–	–	2	2	LADN22P
		–	–	2	2	LADN22G

Instantaneous auxiliary contact blocks for connection by lugs

This type of connection is not possible for blocks with 1 contact or blocks with dust and damp protected contacts. For all other instantaneous auxiliary contact blocks, add the figure 6 to the end of the references selected above. Example: LADN11 becomes LADN116.

Instantaneous auxiliary contact blocks with dust and damp protected contacts

Recommended for use in particularly harsh industrial environments

Number of contacts	Maximum number of blocks per contactor Clip-on mounting	Composition				Reference
						
2	2	2	–	–	–	LA1DX20
		2	2 ⁽²⁾	–	–	LA1DY20
4	2	2	–	2	–	LA1DZ40
		2	–	1	1	LA1DZ31

Time delay auxiliary contact blocks

Number of contacts	Maximum number of blocks per contactor Clip-on mounting	Time delay		Reference
		Type	Range s	
1 N/O + 1 N/C	2	On-delay	0.3 ⁽³⁾	LADT0
			1...30	LADT2
			10...180	LADT4
		Off-delay	1...30 ⁽⁴⁾	LADS2
			0.3 ⁽³⁾	LADR0
			1...30	LADR2
			10...180	LADR4

(1) Including 1 N/O + 1 N/C make before break.

(2) Device fitted with 4 earth screen continuity terminals.

(3) With extended scale from 0.1 to 0.6 s.

(4) With switching time of 40 ms ±15 ms between opening of the N/C contact and closing of the N/O contact.

PB11612.eps



LA9D09981

PB123967.tif



LA4F...

Suppressor blocks ⁽¹⁾

RC circuits (resistor-capacitor)

- Effective protection for circuits highly sensitive to "high frequency" interference. For use only in cases where the voltage is virtually sinusoidal, i.e. less than 5 % total harmonic distortion.
- Voltage limited to 3 Uc max. and oscillating frequency limited to 400 Hz max.
- Slight increase in drop-out time (1.1 to 1.3 times the normal time).

Mounting	Uc		Reference
Clip-on mounting on all ratings and all a.c. coils.	~	24...48 V	LA4FRCE
		50...110 V	LA4FRCF
		127...240 V	LA4FRCP
		265...415 V	LA4FRCV
Suppressor block bracket			LA9D09981

Varistors (peak limiting)

- Protection provided by limiting the transient voltage to 2 Uc max.
- Maximum reduction of transient voltage peaks.

Clip-on mounting on all ratings and all coils.	~ or ---	24...48 V	LA4FVE
		50...110 V	LA4FVF
		127...240 V	LA4FVP
		265...415 V	LA4FVV

Diodes

- No overvoltage or oscillating frequencies.
- Increase in drop-out time (3 to 4 times the normal time).
- Polarised component.

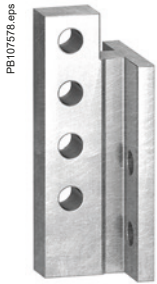
Clip-on mounting on all ratings and all d.c. coils.	---	24...48 V	LA4FDE
		55...110 V	LA4FDF
		280...440 V	LA4FDV

Bidirectional peak limiting diodes (transil)

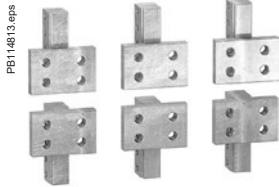
- Protection provided by limiting the transient voltage to between 2 and 2.5 times Uc max.
- Maximum reduction of transient voltage peaks.

Clip-on mounting on all ratings and all coils.	~ or ---	24...48 V	LA4FTE
		50...110 V	LA4FTF
		127...240 V	LA4FTP
		265...415 V	LA4FTV

⁽¹⁾ Order 2 x LA4F... for F780, F1000, F1400, F1700, F2100 & F2600 contactors and connect one suppressor block across each coil.



LA9F2100 (set of 6)



LA9F2600 (set of 6)

Right-angled connectors

For contactors or thermal overload relays

For use with Contactors	With connector plates		Set of 6 connectors	
	Width	Type	Set reference	Weight kg
LC1F1000, F1400, F1700, F2100	60 mm	Rear	LA9F2100	9.550
LC1F2600	100 mm	Rear	LA9F2600	4.380



INDUSTRIAL AUTOMATION



High power
contactors



LA9F801



LA4EM250FK

Phase separators

For use on	No. of barriers	Set reference
3-pole contactors		
LC1F1400, F1700 F2100 and F2600	4	LA9F801

Electronic Control Module (ECM) ⁽¹⁾

For use on	With coil	ECM reference
3 and 4-pole contactors	reference	
LC1SF1200	LXEFK250	LA4EM250FK
LC1F1250	LXEFL250	LA4EM250FL
LC1F2600	LXEFL2502	LA4EM250FL2

⁽¹⁾ ECM enables wider coil operating voltage for the F range of contactors.

Note: Refer to page number B10/31 for detailed technical information.

Sets of contacts

Per pole: 2 fixed contacts, 1 moving contact, 2 deflectors, 1 back-plate, clamping screws and washers.

For contactor	Type	Replacement for	Reference	Weight kg
3-pole	LC1F780	1 pole	LA5F780801 ⁽¹⁾	4.700
		3 poles	LA5F780803	13.200
4-pole	LC1F7804	1 pole	LA5F780801 ⁽¹⁾	4.700
		4 poles	LA5F780804	17.300

⁽¹⁾ Comprising 2 identical items per pole.



Control Panel Technical Guide:

Description and product reference of all mounting kits and wiring accessories for D, K, F - Star Delta, reverser, low-high speed control motor starters and changeover applications.

> Ref. Document: CPTG011_EN



> Click on QR code
to download



LXEFK250

Coils for a.c./ d.c. wide band control voltage

Operates on AC or DC voltage inputs.

Low sealed consumption.

High tolerance to inrush voltage drops.

Control circuit voltage Uc	Average resistance at 20 °C ±10 %		Voltage code	Reference
	Inrush	Sealed		
V	Ω	Ω		
For contactor LC1SF1200				
100...250	8	8	KUE	LXEFK250

Specifications

Average consumption at 20 °C; 50 Hz/ 60 Hz; cos φ = 0.5-0.6:

■ inrush: 550 VA max

■ sealed: 8 VA max.

Heat dissipation: 5.5 W max.

Operating time at Uc: closing = 40...80 ms, opening = 6...54 ms.

Operating cycles/hour (θ ≤ 55 °C): 1200.

Embedded PLC input according IEC 61131-2 type 2:

■ Off state: 0...5 V DC

■ On state: 11...30 V DC.

Control circuit voltage Uc	Average resistance at 20 °C ±10 %		Voltage code	Reference
	Inrush	Sealed		
V	Ω	Ω		
For contactor LC1F1250				
100...250	4.78	4.78	KUE	LXEFL250

Specifications

Average consumption at 20 °C; 50 Hz/ 60 Hz; cos φ = 0.5-0.6:

■ inrush: 680 VA max

■ sealed: 10 VA max.

Heat dissipation: 5.5 W max.

Operating time at Uc: closing = 40...80 ms, opening = 6...54 ms.

Operating cycles/hour (θ ≤ 55 °C): 1200.

Embedded PLC input according IEC 61131-2 type 2:

■ Off state: 0...5 V DC

■ On state: 11...30 V DC.

Control circuit voltage Uc	Average resistance at 20 °C ±10 %		Voltage code	Reference
	Inrush	Sealed		
V	Ω	Ω		
For contactor LC1F2600				
100...250	2.27	2.27	KUE	LXEFL2502

Specifications

Average consumption at 20 °C; 50 Hz/ 60 Hz; cos φ = 0.5-0.6:

■ inrush: 2400 VA max

■ sealed: 24.5 VA max.

Heat dissipation: 5.5 W max.

Operating time at Uc: closing = 54...88 ms, opening = 20...28 ms.

Operating cycles/hour (θ ≤ 55 °C): 600.

Embedded PLC input according IEC 61131-2 type 2:

■ Off state: 0...5 V DC

■ On state: 11...30 V DC.

Coils for a.c., 40...400 Hz control voltage

Low sealed consumption.

Operate on networks with harmonic numbers ≤ 7 .

Control circuit voltage U_c	Average resistance at 20 °C ± 10 %		Inductance of closed circuit H	Voltage code	Reference	Weight kg
	Inrush Ω	Sealed Ω				
V	Ω	Ω	H			kg
For contactor LC1SF1200						
220	35.5	915	4.55	M7	LX1FK220	1.150
230	35.5	915	4.55	P7	LX1FK220	1.150



LX1FK...



LX1FL...

Specifications

Average consumption at 20 °C for 50 or 60 Hz, $\cos \varphi = 0.9$:

■ inrush: 1050...1150 VA,

■ sealed: 16...20 VA.

Operating cycles/hour ($\theta \leq 55$ °C): ≤ 2400 .

Heat dissipation: 18 W.

Operating time at U_c : closing = 40...75 ms, opening = 100...170 ms.

For contactor LC1F1250						
110/120	6.45	165	1.85	F7	LX1FL110	1.500
115	6.45	165	1.85	FE7	LX1FL110	1.500
200/208	20.5	605	2.65	L7	LX1FL200	1.500
220	25.5	730	3.35	M7	LX1FL220	1.500
230	25.5	730	3.35	P7	LX1FL220	1.500
240	25.5	730	3.35	U7	LX1FL220	1.500
265/277	31	900	4.1	W7	LX1FL260	1.500
380	78	2360	10.5	Q7	LX1FL380	1.500
400	78	2360	10.5	V7	LX1FL380	1.500
415	96	2960	13	N7	LX1FL415	1.500
440	96	2960	13	R7	LX1FL415	1.500

Specifications

Average consumption at 20 °C for 50 or 60 Hz, $\cos \varphi = 0.9$:

■ inrush: 1500...1730 VA,

■ sealed: 20...25 VA.

Operating cycles/hour ($\theta \leq 55$ °C): 1200.

Heat dissipation: 20 W.

Operating time at U_c : closing = 40...80 ms, opening = 100...200 ms.

Coils for a.c., 40...400 Hz control voltage

Low sealed consumption.

Operate on networks with harmonic numbers ≤ 7 .

Control circuit voltage Uc	Average resistance at 20 °C ± 10 %		Inductance of closed circuit	Voltage code	Reference	Weight
	Inrush	Sealed				
V	Ω	Ω	H			kg
For contactor LC1F780						
110/120	4.95 ⁽²⁾	230 ⁽²⁾	0.21	F7	LX1FX110 ⁽¹⁾	3.000
115	4.95 ⁽²⁾	230 ⁽²⁾	0.21	FE7	LX1FX110 ⁽¹⁾	3.000
220	19.5 ⁽²⁾	920 ⁽²⁾	0.82	M7	LX1FX220 ⁽¹⁾	3.000
230	19.5 ⁽²⁾	920 ⁽²⁾	0.82	P7	LX1FX220 ⁽¹⁾	3.000
240	19.5 ⁽²⁾	920 ⁽²⁾	0.82	U7	LX1FX220 ⁽¹⁾	3.000
265/277	29.8 ⁽²⁾	1330 ⁽²⁾	1.25	W7	LX1FX280 ⁽¹⁾	3.000
415/480	74.3 ⁽²⁾	3340 ⁽²⁾	2.8	N7	LX1FX415 ⁽¹⁾	3.000
440	74.3 ⁽²⁾	3340 ⁽²⁾	2.8	R7	LX1FX415 ⁽¹⁾	3.000

Specifications

Average consumption at 20 °C for 50 or 60 Hz, $\cos \varphi = 0.9$:

■ inrush: 1900...2300 VA, sealed: 44...55 VA.

Operating cycles/hour ($\theta \leq 55$ °C): 600.

Heat dissipation: 2 x 22 W.

Operating time at Uc: closing = 40...80 ms, opening = 130...230 ms.

Control circuit voltage Uc	Average resistance at 20 °C ± 10 %		Inductance of closed circuit	Voltage code	Reference	Weight
	Inrush	Sealed				
V	Ω	Ω	H			kg
For contactor LC1F1000						
110	4.718	98.4	0.63	F7	LX1FK055 ⁽³⁾	1.150
For contactors LC1F1400, LC1F1700 and LC1F2100						
120	5.92	106	0.72	G7	LX1FK070 ⁽³⁾	1.150
For contactors LC1F1000, LC1F1400, LC1F1700 and LC1F2100						
220	9.55	260	1.25	M7	LX1FK110 ⁽³⁾	1.150
230	9.55	260	1.25	P7	LX1FK110 ⁽³⁾	1.150
277	16.5	420	2.25	W7	LX1FK140 ⁽³⁾	1.150
415	35.5	915	4.55	N7	LX1FK220 ⁽³⁾	1.150
440	35.5	915	4.55	R7	LX1FK220 ⁽³⁾	1.150
500	44.5	1160	5.75	S7	LX1FK240 ⁽³⁾	1.150

Specifications

Average consumption at 20 °C for 50 or 60 Hz, $\cos \varphi = 0.9$:

■ inrush: 1600...2400 VA, sealed: 29...37 VA.

Operating cycles/hour ($\theta \leq 55$ °C): 600.

Heat dissipation: 2 x 18 W.

Operating time at Uc: closing = 40...75 ms, opening = 100...170 ms.

Control circuit voltage Uc	Average resistance at 20 °C ± 10 %		Inductance of closed circuit	Voltage code	Reference	Weight
	Inrush	Sealed				
V	Ω	Ω	H			kg
For contactors LC1F2600						
110	2.05	41	0.18	F7	LX1FL065 ⁽³⁾	1.150
120	2.05	41	0.18	G7	LX1FL065 ⁽³⁾	1.150
220	6.45	165	0.76	M7	LX1FL110 ⁽³⁾	1.150
230	6.45	165	0.76	P7	LX1FL110 ⁽³⁾	1.150
277	10.2	317	1.45	W7	LX1FL140 ⁽³⁾	1.150
380	20.5	605	2.65	Q7	LX1FL200 ⁽³⁾	1.150
400	20.5	605	2.65	V7	LX1FL200 ⁽³⁾	1.150
415	25.5	730	3.35	N7	LX1FL220 ⁽³⁾	1.150
440	25.5	730	3.35	R7	LX1FL220 ⁽³⁾	1.150
500	30.8	901	4.13	S7	LX1FL260 ⁽³⁾	1.150

Specifications

Average consumption at 20 °C for 50 or 60 Hz, $\cos \varphi = 0.9$:

■ inrush: 2200...2700 VA, sealed: 37.4...50.6 VA.

Operating cycles/hour ($\theta \leq 55$ °C): 600.

Heat dissipation: 2 x 25 W.

Operating time at Uc: closing = 40...80 ms, opening = 100...200 ms.



LX1FX...



LX1FK...



LX1FL...

(1) Reference of set of 2 identical coils, to be connected in series.

(2) Value for the 2 coils in series.

(3) Order 2 coils and connect them in series.



LX4FK...

LX4FK specifications

Average consumption:

■ inrush: 990...1220 W,

■ sealed: 4.54...8 W.

Operating cycles/hour ($\theta \leq 55^\circ\text{C}$): 2400.

Operating time at U_c : closing = 50...60 ms,

opening = 45...60 ms.

LXE specifications

Average consumption:

■ inrush 50/60 Hz: 280...730 VA rms

DC: 270...680 W,

■ sealed: 50/60 Hz: 4.5...10 VA rms

DC: 2.5...5.5 W.

Heat Dissipation: 2.5...5.5 W

Operating cycles/hour ($\theta \leq 55^\circ\text{C}$): < 2400.

Operating time at U_c : closing = 40...80 ms,

opening = 6...54 ms.

Embedded PLC input according IEC 61131-2 type 2:

■ Off state: 0...5 V DC

■ On state: 11...30 V DC.

LX4FL specifications

Average consumption:

■ inrush: 1420...1920 W,

■ sealed: 6.5...12.5 W.

Operating cycles/hour ($\theta \leq 55^\circ\text{C}$): 1200.

Operating time at U_c : closing = 60...70 ms,

opening = 40...50 ms.

LX4FX specifications

Average consumption:

■ inrush: 1960...2420 W

■ sealed: 42...52 W.

Operating cycles/hour ($\theta \leq 55^\circ\text{C}$): 600.

Operating time at U_c : closing = 70...80 ms,

opening = 100...130 ms.

LX4FK specifications

with LC1F1000, 1400, 1700, 2100

Average consumption:

■ inrush: 2000...2200 W,

■ sealed: 8...10 W.

Operating cycles/hour ($\theta \leq 55^\circ\text{C}$): 600.

Operating time at U_c : closing = 50...60 ms,

opening = 45...60 ms.

LX4FL specifications with LC1F2600

Average consumption:

■ inrush: 2130...2880 W

■ sealed: 13...25 W.

Operating cycles/hour ($\theta \leq 55^\circ\text{C}$): 600.

Operating time at U_c : closing = 60...70 ms,

opening = 40...50 ms.

Coils for d.c. control voltage

Low sealed consumption.

Control circuit voltage U_c	Average resistance at $20^\circ\text{C} \pm 10\%$		Inductance of closed circuit	Voltage code	Reference	Weight
	Inrush	Sealed				
V	Ω	Ω	H			kg
For contactor LC1SF1200						
110	11.5	2450	280	FD	LX4FK110	1.080
220	44	8150	1080	MD	LX4FK220	1.080

For contactor LC1F1250 ⁽¹⁾

For contactors LC1F115 and LC1F150

100...380 ---

For contactor LC1SF1200

100...250 ~ 8 - - - - - KUE LXEFK250 1.100

110 and 220 ---

For contactor LC1F1250

100...250 ~ 4.78 - - - - - KUE LXEFL250 1.100

100...380 ---

For contactor LC1F1250

110 8.1 1680 180 FD LX4FL110 1.450

220 31 5160 650 MD LX4FL220 1.450

For contactor LC1F780

110 6.1 ⁽³⁾ 280 ⁽³⁾ 0.26 FD LX4FX110 ⁽²⁾ 3.000

125 7.7 ⁽³⁾ 410 ⁽³⁾ 0.33 GD LX4FX125 ⁽²⁾ 3.000

250 29.8 ⁽³⁾ 1330 ⁽³⁾ 1.25 UD LX4FX250 ⁽²⁾ 3.000

440 92 ⁽³⁾ 4180 ⁽³⁾ 3.5 RD LX4FX440 ⁽²⁾ 3.000

For contactors LC1F1000, LC1F1400, LC1F1700 and LC1F2100

125 3.73 916 122 GD LX4FK065 ⁽⁴⁾ 1.080

220 11.5 2450 280 MD LX4FK110 ⁽⁴⁾ 1.080

440 44 8150 1080 RD LX4FK220 ⁽⁴⁾ 1.080

For contactor LC1F2600

110 2.05 481 64 FD LX4FL055 ⁽⁴⁾ 1.080

125 2.53 603 80 GD LX4FL065 ⁽⁴⁾ 1.080

220 11.5 2450 280 MD LX4FL110 ⁽⁴⁾ 1.080

250 15 2930 400 UD LX4FL125 ⁽⁴⁾ 1.080

440 44 8150 1080 RD LX4FL220 ⁽⁴⁾ 1.080

⁽¹⁾ LXE coil to be used along with suitable Electronic Control Module (ECM) Ref. LA4EM.....

For details, please refer to page B10/10.

⁽²⁾ Reference of set of 2 identical coils, to be connected in series.

⁽³⁾ Value for the 2 coils in series.

⁽⁴⁾ Order 2 coils and connect them in series.



LADN●●








LADT●

Auxiliary contact blocks for LC1FG 3-pole shockproof contactors

Instantaneous auxiliary contact blocks

For use in normal operating environments

Number of contacts	Max. number of blocks per contactor Clip-on mounting	Composition	Reference	
		   		
1	1	– – 1 –	LADN10	(1)
		– – – 1	LADN01	(1)
4	1	– – 2 2	LADN22	(1)
		– – 4 –	LADN40	(1)
		– – – 4	LADN04	(1)
		– – 3 1	LADN31	(1)

Time delay auxiliary contact blocks

Number of contacts	Max. number of blocks per contactor Clip-on mounting	Time delay	Reference	
		Type	Range	
			s	
1 N/O	1	On-delay	0...3 (2)	LADT0
+			1...30	LADT2
1 N/C			10...180	LADT4
			1...30 (3)	LADS2
		Off-delay	0...3 (2)	LADR0
			1...30	LADR2
			10...180	LADR4

(1) Device approved by the DCN (French naval shipyard department) and authorised for on-board use.

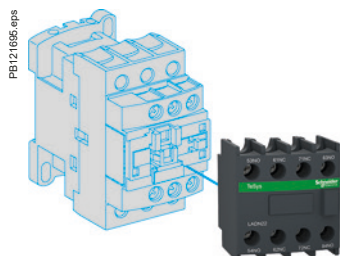
(2) With extended scale from 0.1 to 0.6 s.

(3) With switching time of 40 ms ±15 ms between opening of the N/C contact and closing of the N/O contact.



INDUSTRIAL AUTOMATION

High power
contactors



LADN



LA9F103



LA9F70●

Accessories for contactors CR1F

Description	Number of contacts or shrouds	For use on	Reference
Instantaneous auxiliary contacts	(1)	CR1F	LADN●●, LADX●●, LADY●●, LADZ●● (1)
Time delay auxiliary contacts	(1)	CR1F	LADT●, LADS●, LADR● (1)
Contact blocks with protected terminals for 3-pole contactors (for mounting on contactors with closed arc chamber)	Set of 2 blocks	CR1F150 and CR1F185	LA9F103
Power terminal protection shrouds	Set of 6 shrouds for 3-pole contactors	CR1F150 and CR1F185	LA9F702
		CR1F265 to CR1F500	LA9F703
		CR1F630	LA9F704
	Set of 8 shrouds for 4-pole contactors	CR1F1504 and CR1F1854	LA9F707
		CR1F2654 to CR1F5004	LA9F708
		CR1F6304	LA9F709
Description	Application	Reference	
Mechanical interlock and power connections	For assembly of reversing contactors and changeover contactor pairs	See pages B10/17 and B10/18	

(1) For maximum number per contactor and complete reference, see page B10/7.

INDUSTRIAL AUTOMATION



Control Panel Technical Guide:

Description and product reference of all mounting kits and wiring accessories for D, K, F - Star Delta, reverser, low-high speed control motor starters and changeover applications.

> Ref. Document: CPTG011_EN



> Click on QR code to download

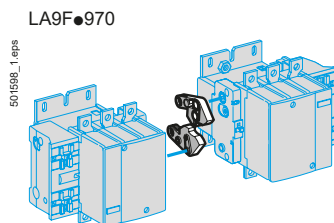
Reversing and changeover assemblies with CR1F magnetic latching contactors

Horizontally mounted

Mechanical interlocks

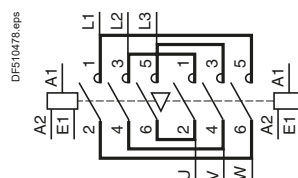
Reversers assembled using 2 contactors of identical rating, type:

CR1F150
CR1F185
CR1F265
CR1F400
CR1F500
CR1F630

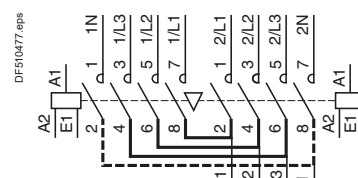


Sets of power connections

Reversing contactors
LA9F●976



3 or 4-pole changeover contactor pairs
LA9F●977 or LA9F●982



Vertically mounted

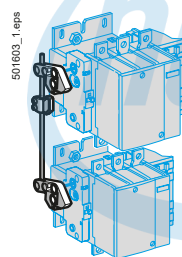
Mechanical interlocks

Reversers assembled using 2 contactors of identical rating, type:

CR1F150
CR1F185
CR1F265
CR1F400
CR1F500
CR1F630

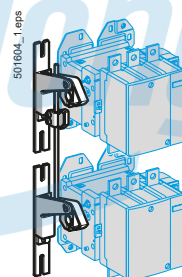
LA9FF4F
LA9FG4G

Assembly A



LA9FH4H
LA9FJ4J
LA9FL4L

Assembly C

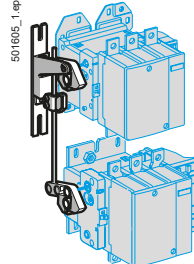


Reversers assembled using 2 contactors of different ratings, type:

CR1F150
CR1F185
CR1F265
CR1F400
CR1F500
CR1F630

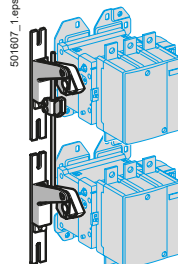
LA9FH4F
LA9FJ4F
LA9FH4G
LA9FJ4G
LA9FL4G

Assembly B



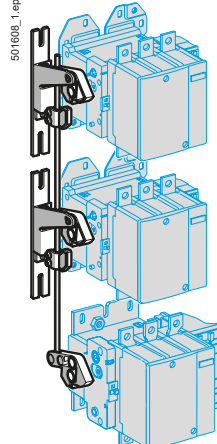
LA9FJ4H
LA9FK4H
LA9FL4H
LA9FK4J
LA9FL4J

Assembly C

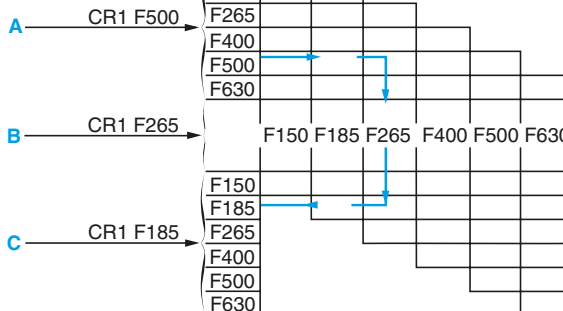


Reversers assembled using 3 contactors of identical or different ratings

LA9F●4●4●



DF565822 eps



Warning: the contactor ratings must be in decreasing size from top to bottom.

High power contactors

Reversing and changeover assemblies with CR1F magnetic latching contactors.

Reversers assembled using 2 contactors of identical rating

Contactor type	Set of power connections		Mechanical interlock	
	3-pole Reference	Weight kg	Kit reference	Weight kg
For assembly of 3-pole reversing contactors for motor control ⁽¹⁾				
Horizontally mounted				
CR1F150	LA9FF976	0.600	LA9FF970	0.060
CR1F185	LA9FG976	0.780	LA9FG970	0.060
CR1F265	LA9FH976	1.500	LA9FH970	0.140
CR1F400	LA9FJ976	2.100	LA9FJ970	0.140
CR1F500	LA9FK976	2.350	LA9FJ970	0.140
CR1F630	LA9FL976	3.800	LA9FL970	0.150
Vertically mounted				
CR1F150	⁽²⁾	–	LA9FF4F	0.345
CR1F185	⁽²⁾	–	LA9FG4G	0.350
CR1F265	⁽²⁾	–	LA9FH4H	1.060
CR1F400	⁽²⁾	–	LA9FJ4J	1.200
CR1F630	⁽²⁾	–	LA9FL4L	1.220

For assembly of 4-pole changeover contactor pairs

Horizontally mounted				
CR1F2654	LA9FH982	1.200	LA9FJ970	0.140
CR1F4004	LA9FJ982	1.800	LA9FJ970	0.140
CR1F5004	LA9FK982	2.300	LA9FJ970	0.140
Vertically mounted				
CR1F1504	⁽²⁾	–	LA9FF4F	0.345
CR1F1854	⁽²⁾	–	LA9FG4G	0.350
CR1F2654	⁽²⁾	–	LA9FH4H	1.060
CR1F4004	⁽²⁾	–	LA9FJ4J	1.200
CR1F6304	⁽²⁾	–	LA9FL4L	1.220

Reversers assembled using 2 contactors of different ratings

Contactor type			Mechanical interlock	
	At bottom	At top	Kit reference	Weight kg
For assembly of 3 or 4-pole changeover contactor pairs				
Vertically mounted ⁽³⁾				
CR1F150 or F1504		CR1F265 or F2654	LA9FH4F	0.870
		CR1F400 or F4004	LA9FJ4F	0.930
CR1F185 or F1854		CR1F265 or F2654	LA9FH4G	0.860
		CR1F400 or F4004	LA9FJ4G	0.940
		CR1F630 or F6304	LA9FL4G	0.950
CR1F265 or F2654		CR1F400 or F4004	LA9FJ4H	1.130
		CR1F500 or F5004	LA9FK4H	1.130
		CR1F630 or F6304	LA9FL4H	1.140
CR1F400 or F4004		CR1F500 or F5004	LA9FK4J	1.200
		CR1F630 or F6304	LA9FL4J	1.210

For assembly of 3 or 4-pole reversing contactors ⁽⁴⁾

Using 3 contactors (vertically mounted) of identical or different ratings		Mechanical interlock
		Kit reference ⁽⁵⁾
The contactor ratings must be in decreasing size from top to bottom.		LA9F●4●4●

Contactors	CR1F150	CR1F185	CR1F265	CR1F400	CR1F500	CR1F630
Code	F	G	H	J	K	L

Example: mechanical interlock for reversing contactor made up of 3 different contactors:
CR1F500 top, CR1F265 middle and CR1F185 bottom: **LA9FK4H4G**.

- (1) A 3-pole reversing contactor for motor control can be converted into a 3-pole changeover contactor pair by removing the upper connecting links.
- (2) All power connections are to be made by the customer.
- (3) With identical or different number of poles. Power connections to be made by the customer.
- (4) Closing of one of the 3 contactors prevents closing of the other 2 contactors.
- (5) Complete the reference by replacing the first dot with the code for the upper contactor, the second dot with the code for the middle contactor and the third dot with the code for the bottom contactor.



PB121414.gps



LA5FG431

References

Description	For contactor	Reference	Weight kg
Complete sets of contacts for 3 or 4 poles ⁽¹⁾	3-pole	CR1F150	LA5FF431 0.270
		CR1F185	LA5FG431 0.350
		CR1F265	LA5FH431 0.660
		CR1F400	LA5F400803 0.660
		CR1F500	LA5F500803 0.660
		CR1F630	LA5F630803 0.660
	4-pole	CR1F1504	LA5FF441 0.360
		CR1F1854	LA5FG441 0.465
		CR1F2654	LA5FH441 0.880
		CR1F4004	LA5F400804 0.465
		CR1F5004	LA5F500804 0.465
		CR1F6304	LA5F630804 0.465

⁽¹⁾ Set containing the following (per pole): 2 fixed contacts, 1 moving contact, 2 deflectors, 1 back-plate, clamping screws and washers.

INDUSTRIAL AUTOMATION

High power
contactors

PB121413.eps



LX0FH007

PB121412.eps



LX0FK007

Standard coils for a.c. or d.c. control voltage

Usual voltages		Resistance of winding at $\theta = 20\text{ }^{\circ}\text{C}$		Reference	Voltage code	Weight
50...400 Hz 50 Hz, 60 Hz or ---		Latching	Unlatching			
V	V	Ω	Ω			kg
For contactors CR1F150						
48	—	1.98	230.8	LX0FF005	E7	0.440
127	—	11.61	1788	LX0FF007	G7	0.440
—	415	139.50	16 717	LX0FF011	N7	0.440
For contactors CR1F185						
48	—	1.42	220	LX0FG005	E7	0.560
208	—	21.30	3169	LX0FG020	L7	0.560
—	415	102.30	14 305	LX0FG011	N7	0.560
For contactors CR1F265						
48	—	1.34	183.4	LX0FH005	E7	0.780
127	—	8.56	1325	LX0FH007	G7	0.780
208	—	20.20	2654	LX0FH020	L7	0.780
—	380/400	78.39	11 803	LX0FH010	Q7	0.780
—	415	102.9	15 006	LX0FH011	N7	0.780
For contactors CR1F400						
208	—	24.40	2643	LX0FJ020	L7	1.120
—	380/400	94.80	9380	LX0FJ010	Q7	1.120
—	415	121.10	11 763	LX0FJ011	N7	1.120
For contactors CR1F500						
48	—	1.57	166	LX0FK005	E7	1.220
127	—	9.56	1159	LX0FK007	G7	1.220
208	—	23.60	2981	LX0FK020	L7	1.220
—	415	112.06	13 256	LX0FK011	N7	1.220
For contactors CR1F630						
48	—	0.87	204	LX0FL005	E7	1.460
127	—	6.45	1830	LX0FL007	G7	1.460
208	—	20.20	2961	LX0FL020	L7	1.460
—	415	77.97	13 003	LX0FL011	N7	1.460

INDUSTRIAL AUTOMATION



Special coils for a.c. or d.c. control voltage

Coils with two windings with common point, allowing the use of two separate power sources for latching and unlatching.

Coil voltages at 50 Hz, 60 Hz, 400 Hz or ---		Resistance of winding at $\theta = 20^\circ\text{C}$		Reference	Voltage code	Weight kg
Latching	Unlatching	Latching	Unlatching			
V	V	Ω	Ω			

For contactors CR1F150

220	24	29.5	39.5	LX0FF224	MB7	0.440
-----	----	------	------	----------	-----	-------

For contactors CR1F185

220	24	26.5	19	LX0FG224	MB7	0.560
-----	----	------	----	----------	-----	-------

For contactors CR1F265

220	24	26	29.5	LX0FH224	MB7	0.780
-----	----	----	------	----------	-----	-------

For contactors CR1F400

220	24	30	23	LX0FJ224	MB7	1.120
-----	----	----	----	----------	-----	-------

For contactors CR1F500

220	24	29	26	LX0FK224	MB7	1.220
-----	----	----	----	----------	-----	-------

For contactors CR1F630

220	24	26	41	LX0FL224	MB7	1.460
-----	----	----	----	----------	-----	-------

Coils with low inrush consumption for d.c. control voltage

Usual voltages ---	Resistance of winding at $\theta = 20^\circ\text{C}$		Reference	Voltage code	Weight kg
	Latching	Unlatching			
V	Ω	Ω			

For contactors CR1F150

48	4.56	140.56	LX0FF055	EZ7	0.440
220	89.85	3342.51	LX0FF058	MZ7	0.440

For contactors CR1F185

48	5.19	106.54	LX0FG055	EZ7	0.570
127	32.75	732.64	LX0FG057	GZ7	0.570

For contactors CR1F265

110	25	364.61	LX0FH056	FZ7	0.800
220	97.89	1344.46	LX0FH058	MZ7	0.800

For contactors CR1F400

127	31.86	221.20	LX0FJ057	GZ7	1.150
220	98.19	648.79	LX0FJ058	MZ7	1.150

For contactors CR1F630

48	3.94	59.17	LX0FL055	EZ7	1.500
110	19.36	365.33	LX0FL056	FZ7	1.500



LC1V320

Vacuum contactors - Motors 160 to 610 A / 400 V - a.c. coils											
Standard power ratings 50/60 Hz in category AC-3					Rated operational current le		Instan- taneous auxiliary contacts		Control circuit voltage (50/60 Hz)	Basic reference ⁽¹⁾	Weight
230 V 400 V 525 V 690 V 1000 V					AC-3 400 V up to	AC-1					
kW	kW	kW	kW	kW	A	A					kg
45	75	110	150	200	160	160	2	1	(1)	LC1V160●●	3.800
90	160	220	280	400	320	320	1	1	(1)	LC1V320●●	10.500
160	300	400	560	800	610	630	1	1	(1)	LC1V610●●	13.000

Reversing vacuum contactors

The reversing contactor range comprises :

- for 160 A rating, a kit with set of power connections allowing assembly of the starter
- for 320 and 610 A ratings, a complete starter, ready for use.

⁽¹⁾ Basic reference; add code indicating control circuit voltage.

Standard control circuit voltages:

Volts 50/60 Hz	110...120	220...240	380...415	440...480	550...600
Item	FE7	P7	V7	R7	X7

Please check the availability of your variant in the index page B10/24. The SEARCH function of your viewer can be used.

INDUSTRIAL AUTOMATION



High power
contactors



LA1VN11



LX1V320..

Instantaneous auxiliary contact blocks ⁽¹⁾			
Number of contacts	Maximum number of blocks per contactor	Auxiliary contacts	Reference
2	4	1 1	LA1VN11
		2 -	LA1VN20
		1 1	LA1VN11X ⁽²⁾

50/60 Hz coils		
Rated voltage	Voltage code	Reference
V		
For contactors LC1V160		
380...415	V7	LX1V160V7
440...480	R7	LX1V160R7
550...600	X7	LX1V160X7
For contactors LC1V320		
440...480	R7	LX1V320R7
For contactors LC1V610		
220...240	P7	LX1V610P7
380...415	V7	LX1V610V7
440...480	R7	LX1V610R7

⁽¹⁾ **LC1V160**: auxiliary contact blocks mounted at the top of the contactor, with no change to the overall dimensions.

LC1V320 or **LC1V610**: 2 auxiliary contact blocks mounted on the RH and LH side of the contactor, with no change to the overall dimensions.

⁽²⁾ For **LC1V160**: 1 N/C contact for the coil + 1 N/O contact.

INDUSTRIAL AUTOMATION

CR1F150F7	LA4EM250FK	LA9F703	LA9FK982	LC1F780G7
CR1F150M7	LA4EM250FL2	LA9F704	LA9FL4G	LC1F780M7
CR1F150U7	LA4FDE	LA9F705	LA9FL4H	LC1F780P7
CR1F185F7	LA4FDF	LA9F706	LA9FL4J	LC1F780Q7
CR1F185G7	LA4FRCE	LA9F707	LA9FL4L	LC1FG265R7
CR1F185M7	LA4FRCF	LA9F708	LA9FL970	LC1FG500N7
CR1F185Q7	LA4FRCP	LA9F709	LA9FL976	LC1SF1200KUE
CR1F185U7	LA4FRCV	LA9F801	LA9FL980	LC1SF1200M7
CR1F2654F7	LA4FTE	LA9F980	LA9FX990M	LC1SF1200P7
CR1F265F7	LA4FTF	LA9FF4F	LA9FX991F	LC1V160FE7
CR1F265G7	LA4FTP	LA9FF601	LA9FX991Q	LC1V160P7
CR1F265GD31S003	LA4FVE	LA9FF970	LC1D115004L6	LC1V160P7SC
CR1F265M7	LA4FVF	LA9FF976	LC1F1250	LC1V320FE7
CR1F265U7	LA4FVP	LA9FF981	LC1F1250F7	LC1V320P7
CR1F4004MZ7	LA4FVV	LA9FG4F4F	LC1F1250KUE	LC1V610FE7
CR1F400F7	LA5D11550	LA9FG4G	LC1F1250M7	LC1V610P7
CR1F400FZ7	LA5F400802	LA9FG601	LC1F1250MD	LX1D8FE7
CR1F400M7	LA5F400803	LA9FG610	LC1F1250P7	LX1D8L7
CR1F400Q7	LA5F400804	LA9FG970	LC1F1250Y	LX1D8N7
CR1F500F7	LA5F500803	LA9FG976	LC1F1400	LX1D8R7
CR1F500GD31S003	LA5F500804	LA9FG979	LC1F1400MD	LX1D8V7
CR1F500M7	LA5F630803	LA9FG980	LC1F1400P7	LX1FK220
CR1F500Q7	LA5F630804	LA9FH4F	LC1F1700	LX1FL110
CR1F630F7	LA5F780801	LA9FH4G	LC1F1700F7	LX1FL200
CR1F630M7	LA5F780803	LA9FH4H	LC1F1700M7	LX1FL220
CR1F630MZ7	LA5F780804	LA9FH4H4F	LC1F1700MD	LX1FL2206
DR5TE4S	LA5F800803	LA9FH4H4H	LC1F1700P7	LX1FL260
DR5TE4U	LA5FF431	LA9FH601	LC1F2100	LX1FL380
DR5TF4V	LA5FF441	LA9FH602	LC1F2100F7	LX1FL415
DZ2FF1	LA5FG431	LA9FH610	LC1F2100LD	LX1FX110
DZ2FF6	LA5FG441	LA9FH976	LC1F2100LDBR	LX1FX220
DZ2FG1	LA5FH431	LA9FH982	LC1F2100M7	LX1FX415
DZ2FG6	LA5FH441	LA9FJ4G	LC1F2100MD	LX1V610P7
DZ2FJ1	LA5FJ431	LA9FJ4H	LC1F2100P7	LX4D8MD
DZ2FJ6	LA5FK431	LA9FJ4J	LC1F2100V7	LX4FK110
DZ2FK1	LA5FL431	LA9FJ4J4J	LC1F2600	LX4FK220
DZ2FK6	LA9D11517	LA9FJ610	LC1F2600KUE	LX4FL110
DZ2FL1	LA9D115604	LA9FJ970	LC1F2600MD	LX4FL125
DZ2FL2	LA9D115692	LA9FJ974	LC1F2600P7	LX4FL220
DZ2FL3	LA9D11570	LA9FJ976	LC1F780	LX4FX110
DZ2FL6	LA9D115704	LA9FJ980	LC1F7804	LXEFF250
DZ2FR1	LA9D730	LA9FJ982	LC1F7804F7	LXEFJ250
DZ2FX1	LA9F103	LA9FK4H	LC1F7804M7	LXEFH250
DZ2FX6	LA9F2100	LA9FK4J	LC1F7804MD	LXEFJ250
LA1VN11	LA9F2600	LA9FK4K	LC1F7804P7	LXEFK250
LA1VN11X	LA9F701	LA9FK4K4K	LC1F780F7	LXEFL250
LA1VN20	LA9F702	LA9FK976	LC1F780FE7	LXEFL2502