Control Panel Technical Guide

How to quickly design optimized contactor assemblies

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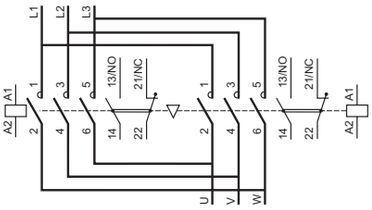
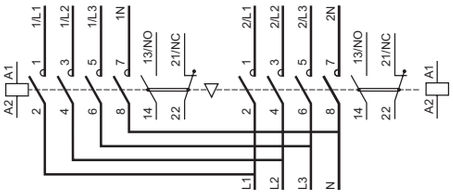
Pre-fabricated assemblies, mounting kits and electrical links make your motor starter assemblies smarter to design, mount and maintain with limited risk of errors.

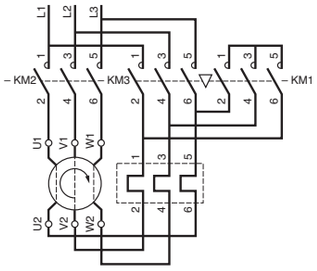
Reverser



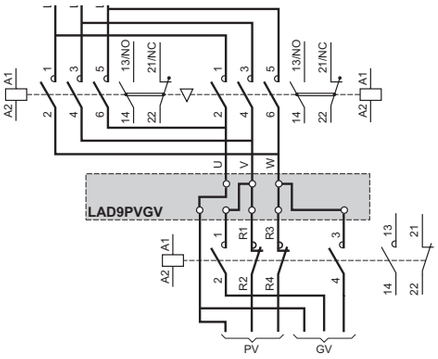
Changeover



Star Delta



Low/High speed

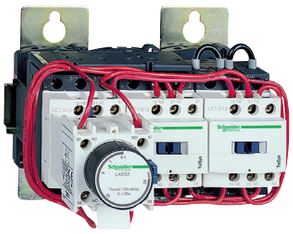


TeSys K, D, F contactor-based solutions

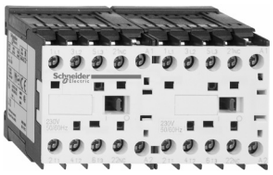
Challenging choice and solutions

Selecting the most appropriate components can be a challenge for designers, especially when they have to deal with strong control panel compactness constraints and assembling time optimization. This guide helps you to choose a TeSys solution, whether fully pre-cabled starters, monoblock assemblies, or contactors with assembling kits.

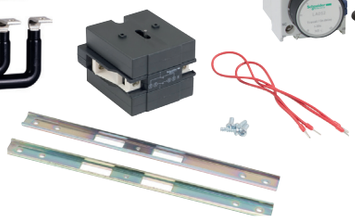
Fully pre cabled solutions



Monoblock assemblies



Components & kits



Find in this guide:

- product selection tables per application (Reverser, Speed selection, Star-Delta, Changeover)
- product technical data, commercial references, tips, for your specific designs.

TeSys K, D, F contactor-based solutions

Recommended designs are based on TeSys K, D or F contactors. The choice of the type will be done according to the project constraints: motor power, panel compactness, required connection mode.

Pre-fabricate assemblies: 2 or 3 contactors are mechanically and electrically pre-assembled in our factories, for simpler choice and time saving.

Components for custom-design: selections of coordinated contactors, accessories, kits, electrical links are recommended for several motor powers and various functions. Assembly is done by customer.

Pre-cabled assemblies

OR

Components for custom-design

TeSys K

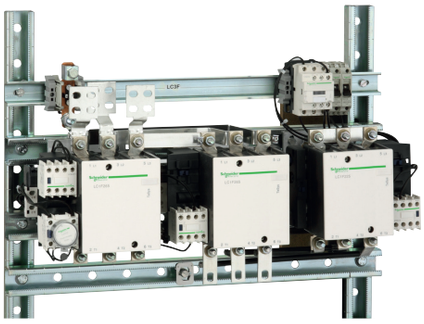
Motors from 2.2 to 7.5 kW

TeSys D

Motors from 4 to 75 kW

TeSys F

Motors from 55 to 560 kW



Summary

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Monoblock reversers & selected components for custom design based on TeSys K, D, F

Motor reversers + Low/High speed control ..... p. 21 — 2
Selected components for custom design based on TeSys D

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Fully prewired Star Delta starters & selected components for custom design based on TeSys K, D, F

Source and load changeover ..... p. 35 — 4
Monoblock changeovers & selected components for custom design based on TeSys K, D , F

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Part A: solutions per application

Motor reversers

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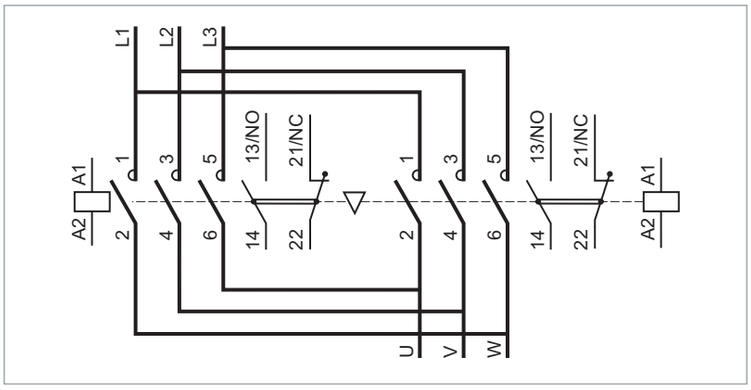
Principle



The motor reversing action is obtained by permutation of 2 power phases.
The motor reverser is composed of 2 identical 3 pole contactors.
Each one can withstand the full motor current.
They are mechanically and electrically interlocked to prevent simultaneous closing which would cause a short circuit.

X1 open - X2 open	>	U = V = W = no voltage	>	Motor stopped
X1 closed - X2 open	>	U = L2; V = L1; W = L3	>	Rotation A
X1 open - X2 closed	>	U = L1; V = L2; W = L3	>	Rotation B
X1 closed - X2 closed	>	not possible		

Notes

Mechanical + electrical contactor interlocking should always be prefered for improved reliability.
Choose contactors with NC auxiliary contacts to achieve electrical interlocking.

Conditions for safe switching from 1 direction of rotation to another are:
• intermediate period of no power on motor terminals
• motor full stop except when reverser is used for motor plug braking
In order to avoid huge mechanical constraints and overcurrents.

2.2 to 7.5 kW (400 V) - **TeSys K**

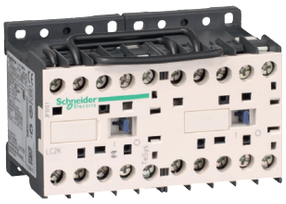
Reversers - screw clamp terminals, spring terminals

Pre-assembled

TeSys K blocks of 2 contactors

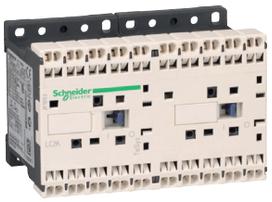
- DIN rail mounting
- built-in auxiliary contacts
- built-in mechanical interlock
- AC or DC coil control
- screw clamp terminals or spring terminals
- pre-assembled power links on screw-clamp type assembly only.

LC2K••••
Screw clamp terminals



LC2K0910B7

LC2K••3••
Spring terminals



LC2K0913P7

Spring-type assembly: power links to be provided and wired by customer.

AC-3 rating	AC-1 rating	Power poles		Auxiliary contacts		Assembly references			
(A)	(A)	NO	NC	NO	NC	Screw clamp terminals		Spring terminals*	
AC coil control						Standard contactors	Silent contactors	Standard contactors	Silent contactors
6	-	3	-	1	-	**LC2K0610••**	(1)	**LC2K06103B7** or **P7** (2)	-
		3	-	-	1	**LC2K0601••**	(1)	**LC2K06013B7** or **P7** (2)	-
9	20(*)	3	-	1	-	**LC2K0910••**	(1)	**LC2K09103B7** or **P7** (2)	-
		3	-	-	1	**LC2K0901••**	(1)	**LC2K09013B7** or **P7** (2)	-
12	20(*)	3	-	1	-	**LC2K1210••**	(1)	**LC2K12103B7** or **P7** (2)	-
		3	-	-	1	**LC2K1201••**	(1)	**LC2K12013B7** or **P7** (2)	-
16	-	3	-	1	-	**LC2K1610••**	-	-	-
		3	-	-	1	**LC2K1601••**	-	-	-
DC coil control						Standard contactors	Low consumption	Standard contactors	Low consumption
6	-	3	-	1	-	**LP2K0610••**	**LP5K0610BW3** (2)	**LP2K06103BD** (2)	**LP5K06103BW3** (2)
		3	-	-	1	**LP2K0601••**	**LP5K0601BW3** (2)	**LP2K06013BD** (2)	**LP5K06013BW3** (2)
9	20(*)	3	-	1	-	**LP2K0910••**	**LP5K0910BW3** (2)	**LP2K09103BD** (2)	**LP5K09103BW3** (2)
		3	-	-	1	**LP2K0901••**	**LP5K0901BW3** (2)	**LP2K09013BD** (2)	**LP5K09013BW3** (2)
12	20(*)	3	-	1	-	**LP2K1210••**	**LP5K1210BW3** (2)	**LP2K12103BD** (2)	**LP5K12103BW3** (2)
		3	-	-	1	**LP2K1201••**	**LP5K1201BW3** (2)	**LP2K12013BD** (2)	**LP5K12013BW3** (2)

(*) AC1 rating limited to 10 A with spring terminals (max. cable: 1.5 mm²)
(1) Possible preassembled reversing contactors: please, contact your local sales representative
(2) For other voltage code, please contact your local sales representative
Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 44).

2.2 to 7.5 kW (400 V) - **TeSys K**

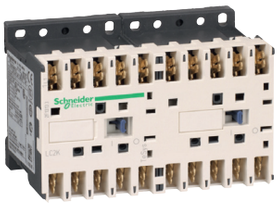
Reversers - Faston terminals, solder pins

Pre-assembled

TeSys K blocks of 2 contactors

- DIN rail mounting
- built-in auxiliary contacts
- built-in mechanical interlock
- AC or DC coil control
- faston or solder pin terminals.

LC2K••7••
Faston terminals



LC2K09107M7

Power links to be provided and wired by customer.

LC2K••5••
Solder pin terminals

LC2K09105B7

AC-3 rating	AC-1 rating	Power poles		Auxiliary contact		Assembly references			
(A)	(A)	NO	NC	NO	NC	Faston terminals		Solder pin terminals	
AC coil control						Standard contactors	Silent contactors	Standard contactors	Silent contactors
6	-	3	-	1	-	**LC2K06107••**	(1)	**LC2K06105••**	**LC8K06105B7** (2)
		3	-	-	1	**LC2K06017••**	(1)	**LC2K06015••**	**LC8K06015B7** (2)
9	20	3	-	1	-	**LC2K09107••**	(1)	**LC2K09105••**	**LC8K09105B7** (2)
		3	-	-	1	**LC2K09017••**	(1)	**LC2K09015••**	**LC8K09015B7** (2)
12	20	3	-	1	-	**LC2K12107••**	(1)	(1)	(1)
		3	-	-	1	**LC2K12017••**	(1)	(1)	(1)
16	-	3	-	1	-	(1)	-	(1)	-
		3	-	-	1	(1)	-	(1)	-
DC coil control						Standard contactors	Low consumption	Standard contactors	Low consumption
6	-	3	-	1	-	**LP2K06107BD** (2)	(1)	**LP2K06105BD** (2)	**LP5K06105BW3** (2)
		3	-	-	1	**LP2K06017BD** (2)	(1)	**LP2K06015BD** (2)	**LP5K06015BW3** (2)
9	20	3	-	1	-	**LP2K09107BD** (2)	(1)	**LP2K09105BD** (2)	**LP5K09105BW3** (2)
		3	-	-	1	**LP2K09017BD** (2)	(1)	**LP2K09015BD** (2)	**LP5K09015BW3** (2)
12	20	3	-	1	-	(1)	(1)	(1)	(1)
		3	-	-	1	(1)	(1)	(1)	(1)

(1) Possible preassembled reversing contactors: please, contact your local sales representative
(2) For other voltage code, please contact your local sales representative
Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 44).

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4 to 75 kW (400 V) - **TeSys D**

Reversers - screw clamp terminals

Pre-assembled

TeSys D contactor blocks with interlocking device, built-in auxiliary contacts.

Blocks of 2 TeSys D contactors

- DIN rail or plate mounting
- built-in auxiliary contacts
- built-in mechanical interlock
- interference filter
- prewired power links
- AC or DC coil control (depending on models)
- screw clamp terminals.

LC2D screw-clamp terminals

LC2D12••

LC2D115••

LC2D••A EverLink® BTR screw clamp terminals

LC2D65A••

AC-3 rating (A)	Product references
9	**LC2D09••** (1)
12	**LC2D12••** (1)
18	**LC2D18••** (1)
25	**LC2D25••** (1)
32	**LC2D32••** (1)
38	**LC2D38••** (1)
40	**LC2D40A••** (2) (4)
50	**LC2D50A••** (2) (4)
65	**LC2D65A••** (2) (4)
80	**LC2D80••** (2)
95	**LC2D95••** (2)
115	**LC2D115••** (3)
150	**LC2D150••** (3)

As a complementary, electrical interlock can be achieved with the built in auxiliary contacts.
(1) Mechanical interlock only; add V for electro-mechanical interlock (eg.: LC2D09P7V)
(2) With mechanical interlock only
(3) With electromechanical interlock
(4) Power connection by EverLink® BTR screw clamp terminals and control by screw clamp terminals
Power links to be added by customer (see components next page).
Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48).

LE2D09P7

Alternative solution

Enclosed Direct-On-Line Reversing starters

- without isolating device 6…65 A : ref. LE2K••••, LE2D•••
- with isolating device (fuses) 6…35 A : ref. LE8K••••, LE8D•••

Please refer to TeSys catalogue ref. MKTED210011 – chapter A1.

4 to 75 kW (400 V) - **TeSys D**

Reversers - screw clamp terminals

Kits for customer assembly

Power links, electrical interlockings, mechanical interlockings for TeSys D contactors.

Kits for 9 to 38 A

LAD9R1
Assembling kit comprising:
- LAD9V5 parallel link
- LAD9V6 inversing link
- LAD9V2 mechanical interlock
- Assembling staple

LAD9R1V
Assembling kit comprising:
- LAD9V5 parallel link
- LAD9V6 inversing link
- LAD9V2 mechanical interlock
- LAD9V1 electrical interlock
- Assembling staple

Kit for 40 to 65 A

LAD9R3
Assembling kit comprising:
- LA9D65A6 parallel link
- LA9D65A9 inverser link
- LAD4CM mechanical interlock

Components for 80, 95 A

LA9D8069
Parallel + inversing links
for 80, 95 A

LA9D4002
AC electro-mechanical
interlocking for 80 A

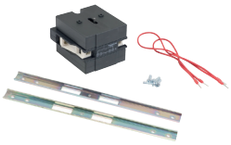
LA9D8002
DC electro-mechanical
interlocking for 80 A

LA9D50978
AC mechanical interlocking
for 95 A

LA9D80978
DC mechanical interlocking
for 95 A

Components for 115, 150 A

LA9D11569
Parallel + inversing links
for 115, 150 A



LA9D11502
Set of electro-mechanical interlocking components
for 115, 150 A

Characteristics	Bill of material (contactors to be completed with…)			
AC-3 rating (A)	Contactors	Set of electrical power links	Mechanical interlocking	Electrical interlocking
9	**2x LC1D09••**	Kits: **LAD9R1**: power links + mechanical interlock or **LAD9R1V**: power link + mechanical interlock + electrical interlock (white power links)		
12	**2x LC1D12••**			
18	**2x LC1D18••**			
25	**2x LC1D25••**			
32	**2x LC1D32••**			
38	**2x LC1D38••**			
40	**2x LC1D40A••**(1)	Kit: **LAD9R3**: power links + mechanical interlock		Customer cabling
50	**2x LC1D50A••**(1)			
65	**2x LC1D65A••**(1)			
80	**2x LC1D80••**	Power links: **LA9D8069**	Mechanical + electrical interlocks: **LA9D4002** for AC - **LA9D8002** for DC Mechanical interlocks: **LA9D50978** for AC / **LA9D80978** for DC	
95	**2x LC1D95••**			
115	**2x LC1D115••**	Power links: **LA9D11569**	Mechanical + electrical interlocks: **LA9D11502**	
150	**2x LC1D150••**			

(1) Power connection by EverLink® BTR screw connectors and control by screw clamp terminals
Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48).

4 to 75 kW (400 V) - **TeSys D**

Reversers - screw terminals for lugs or bars

Pre-assembled

Blocks of 2 TeSys D contactors

- DIN rail or plate mounting
- built-in auxiliary contacts
- mechanical and/or electrical interlock
- interference filter
- AC or DC coil control
- screw terminals for lugs or bars.

Power links to be added by customer (see components next page).

LC2D••5•• screw terminals for lugs or bars

LC2D326••

LC2D1156••

AC-3 rating (A)	Product referwences
9	**LC2D096••** (1)
12	**LC2D126••** (1)
18	**LC2D186••** (1)
25	**LC2D256••** (1)
32	**LC2D326••** (1)
38	**LC2D386••** (1)
40	-
50	-
65	-
80	-
95	-
115	**LC2D1156••** (2)
150	**LC2D1506••** (2)

(1) Mechanical interlock only

(2) Electromechanical interlock

Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48).

4 to 75 kW (400 V) - **TeSys D**

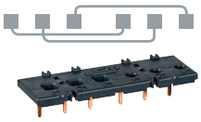
Reversers - screw terminals for lugs or bars

Components for customer assembly

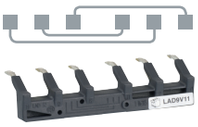
Power links, electrical interlockings, mechanical interlocks for TeSys D contactors.

Sets of power links for LC1D096•• D386 contactors

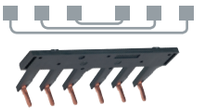
LAD9V10
Upstream parallel power link



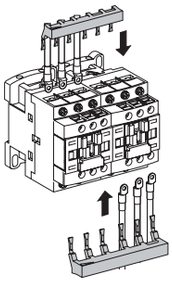
LAD9V5



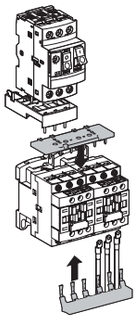
LAD9V11
Downstream inversing power link



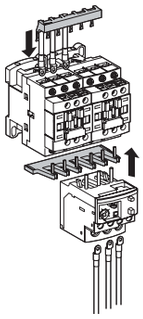
LAD9V6



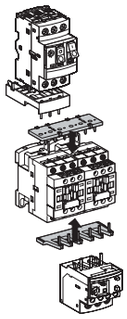
LAD9VP4
= LAD9V10 + LAD9V11



LAD9VP1
= LAD9V5 + LAD9V11



LAD9VP2
= LAD9V10 + LAD9V6



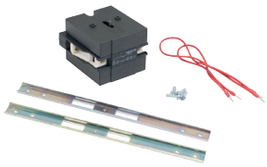
LAD9VP3
= LAD9V5 + LAD9V6

LAD9V2
Mechanical interlock
with assembling staples

LAD4CM
Mechanical interlock

LA9D4002
AC - electro-mechanical
interlocking for 80 -95 A

LA9D8002
DC - electro-mechanical
interlocking for 80 – 95 A



LA9D11502
Set of electro-mechanical
interlocking components

Characteristics	Bill of material (contactors to be completed with…)			
AC-3 rating (A)	Contactors	Set of power links	Mechanical interlocking	Electrical interlocking
9	**2x LC1D096••**	Depending on customer configuration (see diagrams above): **LAD9VP1 / LAD9VP2 / LAD9VP3 / LAD9VP4**	**LAD9V2**	Customer cabling
12	**2x LC1D126••**			
18	**2x LC1D186••**			
25	**2x LC1D256••**			
32	**2x LC1D326••**			
38	**2x LC1D386••**			
40	**2x LC1D40A6••**	Customer cabling	**LAD4CM**	Customer cabling
50	**2x LC1D50A6••**			
65	**2x LC1D65A6••**			
80	**2x LC1D806••**		**LA9D4002** for AC - **LAD8002** for DC	
95	**2x LC1D956••**			
115	**2x LC1D1156••**		**LA9D11502**	
150	**2x LC1D1506••**			

4 to 75 kW (400 V) - **TeSys D**

Reversers - spring terminals

Pre-assembled

Blocks of 2 TeSys D contactors

- DIN rail mounting
- built-in auxiliary contacts
- mechanical interlock
- interference filter
- AC or DC coil control
- spring terminals.

Power links to be added by customer (see components next page).

LC2D••3•• screw terminals for lugs or bars

LC2D093••

AC-3 rating (A)	Product references
9	**LC2D093••(1)**
12	**LC2D123••(1)**
18	**LC2D183••(1)**
25	**LC2D253••(1)**
32	**LC2D323••(1)**
40	**LC2D40A3••(2)**
50	**LC2D50A3••(2)**
65	**LC2D65A3••(2)**

(1) Power and control by spring terminals
(2) Power by EverLink® terminals, control by spring terminals
Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48).

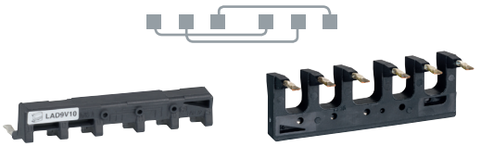
4 to 75 kW (400 V) - **TeSys D**

Reversers - spring terminals

Components for customer assembly

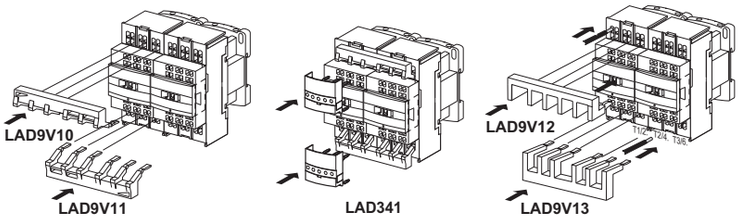
Power links, electrical interlockings, mechanical interlocks for TeSys D contactors.

Power bus bars for LC1D••3•• contactors with spring terminals



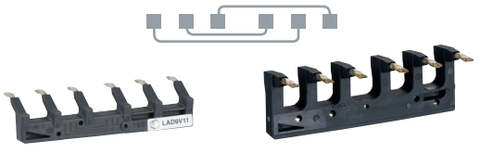
LAD9V10
Upstream parallel power link

LAD9V12
Upstream parallel power link for spring terminals



LADV10, LADV11 allow use of LAD341 power connection module, for quick association with a spring terminal circuit breaker

LADV12, LADV13 for wired connection to circuit breaker



LAD9V11
Downstream inversing power link

LAD9V13
Downstream inversing power link for spring terminals

LAD341
Power connection module between contactor /circuit breaker

LAD9V2
Mechanical interlock with assembling staples

LAD4CM
Mechanical interlock

Characteristics	Bill of material (contactors to be completed with…)			
AC-3 rating (A)	Contactors	Set of power connections	Mechanical interlocking	Electrical interlocking
9	**2x LC1D093••** (3)	Upstream: **LAD9V10** or **LAD9V12** (1) Downstream: **LAD9V11** or **LAD9V13** (2)	**LAD9V2**	Customer cabling
12	**2x LC1D123••** (3)			
18	**2x LC1D183••** (3)			
25	**2x LC1D253••** (3)			
32	**2x LC1D323••** (3)			
40	**2x LC1D40A3••** (4)	Customer cabling	**LAD4CM**	Customer cabling
50	**2x LC1D50A3••** (4)			
65	**2x LC1D65A3••** (4)			

(1) LAD9V10 + LAD9V11 configuration can be used in every case
(2) LAD9V12 + LAD9V13 configuration cannot be used with a LAD341 which ensures a quick link between contactor / GV2 circuit breaker
(3) Power and control by spring terminals
(4) Power by EverLink terminals, control by spring terminals.

4 to 75 kW (400 V) - **TeSys D**

Reversers - Faston terminals

Pre-assembled

Blocks of 2 TeSys D contactors

- DIN rail mounting
- built-in auxiliary contacts
- mechanical interlock
- interference filter
- AC or DC coil control
- faston terminals.

Power links to be added by customer.

LC2D••9••

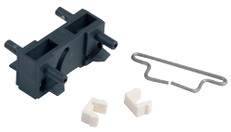
LC2D099••

AC-3 rating (A)	Product references
9	**LC2D099••**
12	**LC2D129••**

Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48).

Components for customer assembly

TeSys D contactors, mechanical interlockings.



LAD9V2
Mechanical interlock with assembling staples

Characteristics	Bill of material (contactors to be completed with…)			
AC-3 rating (A)	Contactors	Mechanical interlocking	Electrical interlocking	Set of power connections
9	**2x LC1D099••**	**LAD9V2**	Customer cabling	Customer cabling
12	**2x LC1D129••**			

Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48).

4 to 75 kW (400 V) - **TeSys F**

Reversers - screw type terminals for lugs or bars

Pre-assembled

Blocks of 2 TeSys F contactors:

- with mounting accessories
- mechanical interlock
- prewired power links.

2 contactor coils, 2 contact blocks (LADN.1) for electrical interlocking, to be ordered separately by customer (refer to TeSys catalogue ref. MKTED210011 – chapter B9).

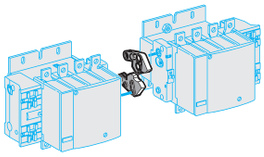
LC2F•••

LC2F115

AC-3 rating (A)	Product references
115	**LC2F115**
150	**LC2F150**
185	**LC2F185**
225	**LC2F225**
265	**LC2F265**

Components for customer horizontal assemblies

TeSys F contactors, power links, mechanical interlocks.



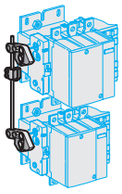
Horizontal assembly: 3-pole contactors with mechanical interlock

LA9FJ970
Mechanical interlocks

LA9FJ976
6 power links

Characteristics	Bill of material (contactors to be completed with…)		
AC-3 rating (A)	Contactors	Set of power connections	Mechanical interlocking
115	**2x LC1F115**	**LA9FF976**	**LA9FF970**
150	**2x LC1F150**	**LA9F15076**	**LA9FF970**
185	**2x LC1F185**	**LA9FG976**	**LA9FG970**
225	**2x LC1F225**	**LA9F22576**	**LA9FG970**
265	**2x LC1F265**	**LA9FH976**	**LA9FJ970**
330	**2x LC1F330**	**LA9FJ976**	**LA9FJ970**
400	**2x LC1F400**	**LA9FJ976**	**LA9FJ970**
500	**2x LC1F500**	**LA9FK976**	**LA9FJ970**
630	**2x LC1F630**	**LA9FL976**	**LA9FL970**
800	**2x LC1F800**	**LA9FL976**	**LA9FL970**

To be ordered as a necessary complement (refer to TeSys catalogue ref. MKTED210011 – chapter B9):
2 contactor coils (AC or DC) - 2 LADN.1 contact blocks for electrical interlocking.



Vertical contactor assembly is also possible.
See page 69.

All power connections are to be made by customer.

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Motor reversers
+ Low/High speed control

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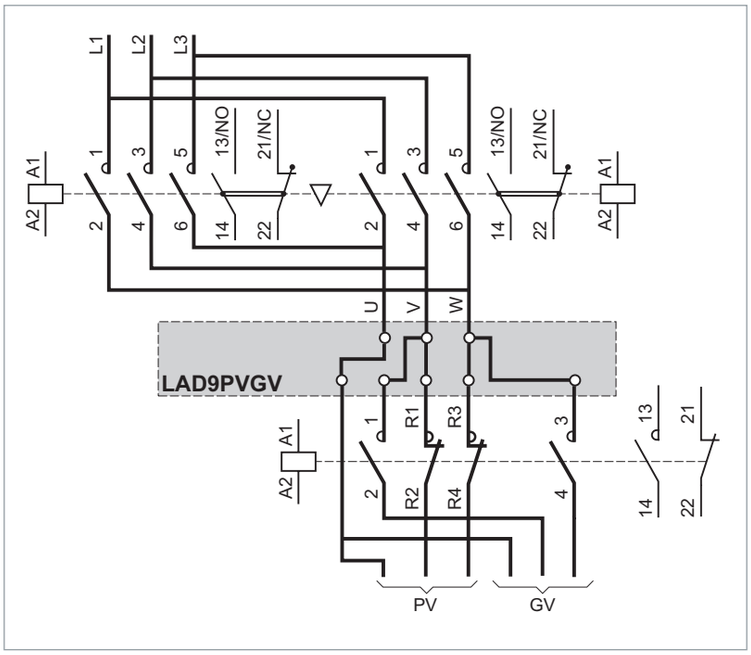
Principle



The motor reversing action is obtained by permutation of 2 power phases.
This function is provided by KM1, KM2.
The 2-speed motor has 2 sets coils: U1-V1-W1 and U2-V2-W2.
Each one is dedicated to a speed.

1 phase is permanently connected to both W1 and W2.

KM3 is dedicated to Low/High speed control:
2 NO + 2 NC contacts are used to switch the remaining phases
to U1/V1 and U2/V2.

Note

Mechanical + electrical contactor interlocking should always be prefered for improved reliability.

4 to 11 kW (400 V) - **TeSys D**

Reverser/controller - screw clamp terminals

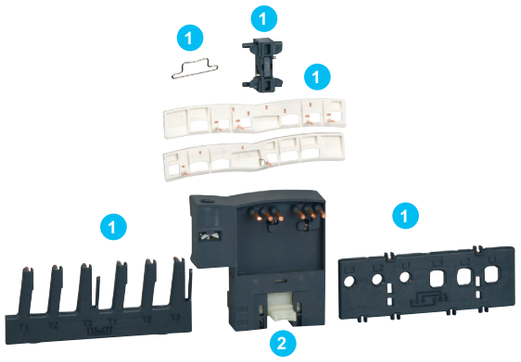
Kit for customer assembly

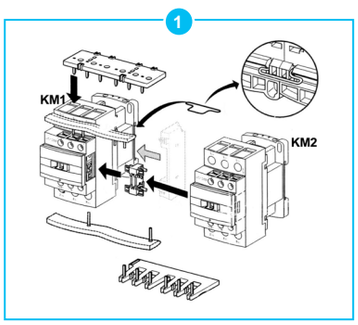
A dedicated kit + 3 contactors allow customer to build a complete motor reversing, Low / High speed assembly.

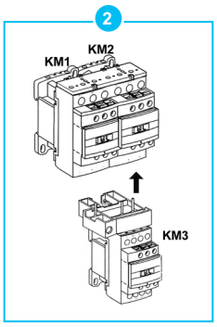
Kit LAD9PVGV

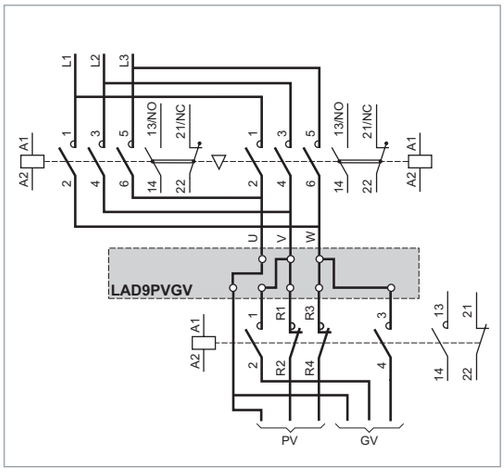
Included:

- power links + electrical / mechanical interlock, full content of LAD9R1V reversing kit
- KM2 / KM3 interconnection block.









Type	Bill of material		
	KM1 - KM2 contactors	KM3 contactor	Reversing, Low/High speed assembling kit
AC-3 rating (A)	3P reversing contactors	4P contactors (2NO, 2NC)	
9	**2x LC1D09••**	**LC1D098••**	**LAD9PVGV**
12	**2x LC1D12••**	**LC1D128••**	
18	**2x LC1D18••**	**LC1D188••**	
25	**2x LC1D25••**	**LC1D258••**	

Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption other codes, see page 48).

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Motor Star-Delta starters

Principle

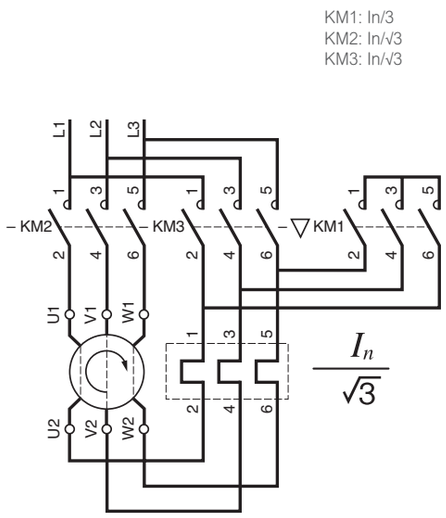
The motor Star-Delta starters are used with high torque asynchronous motors for reducing starting inrush current. The motor is started with Star-coupled windings for a few seconds. The windings are under reduced voltage. After a delay, the coupling is switched to Delta to get a torque with reasonable current. Each winding then is under full voltage.

One line contactor (KM2) is used for main power switching, two are used for coupling windings from Star (KM1) to Delta (KM3). Line and Delta contactors are usually of the same rating. A time delay contact block provides the KM1/KM3 control. A separate thermal overload relay can be wired.

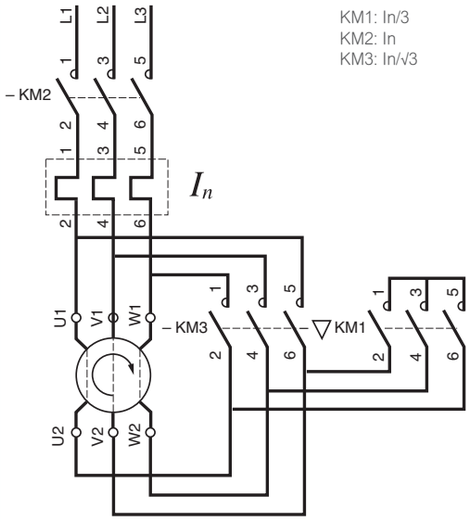
A reverser (pair of contactors) can be wired upstream with the appropriate interlocking circuit.

Star delta, with separate thermal relay

Type 1 coordination



Type 2 coordination



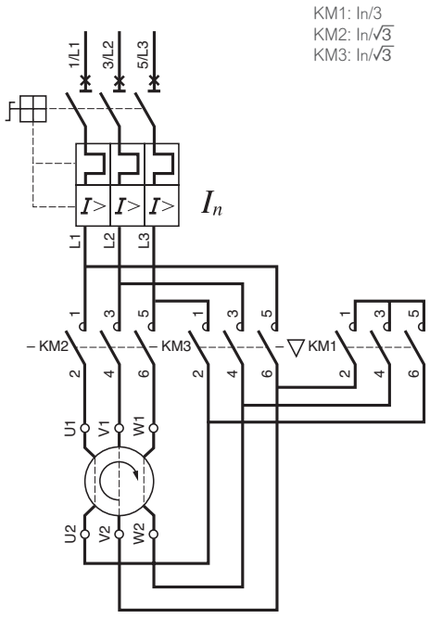
Note

Mechanical + electrical contactor interlocking should always be prefered for improved reliability.

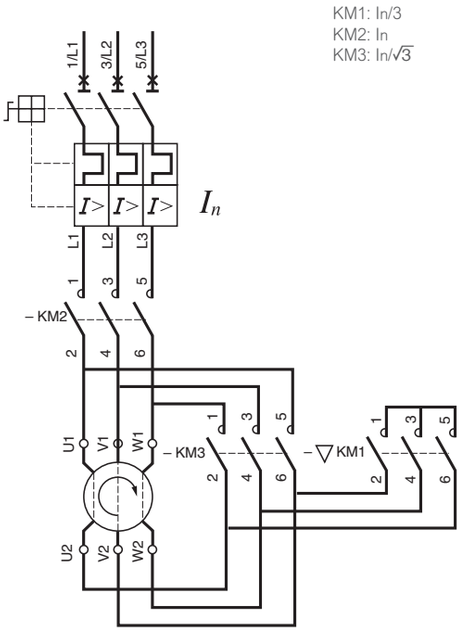
Principle

Star delta, with thermal magnetic circuit breaker

Type 1 coordination

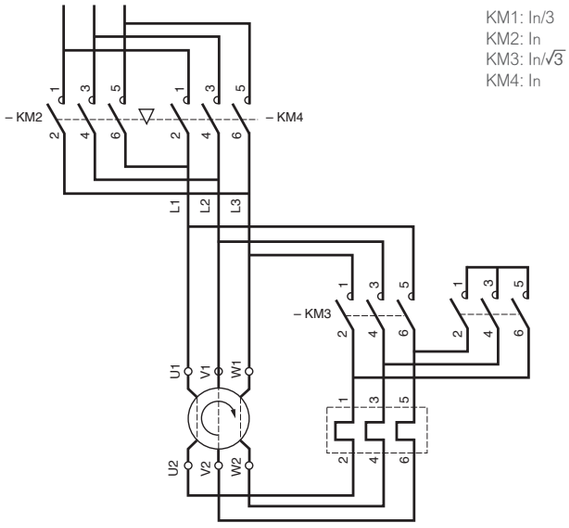


Type 2 coordination



Star delta + reversing, with separate thermal relay

Type 1 coordination



5.5 to 7.5 kW - **TeSys K**

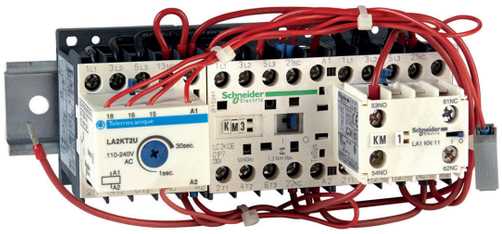
Star-Delta starters - on DIN rail

Pre-assembled, pre-wired

TeSys K blocks of contactors on DIN rail (star and delta contactors cannot be separeted)

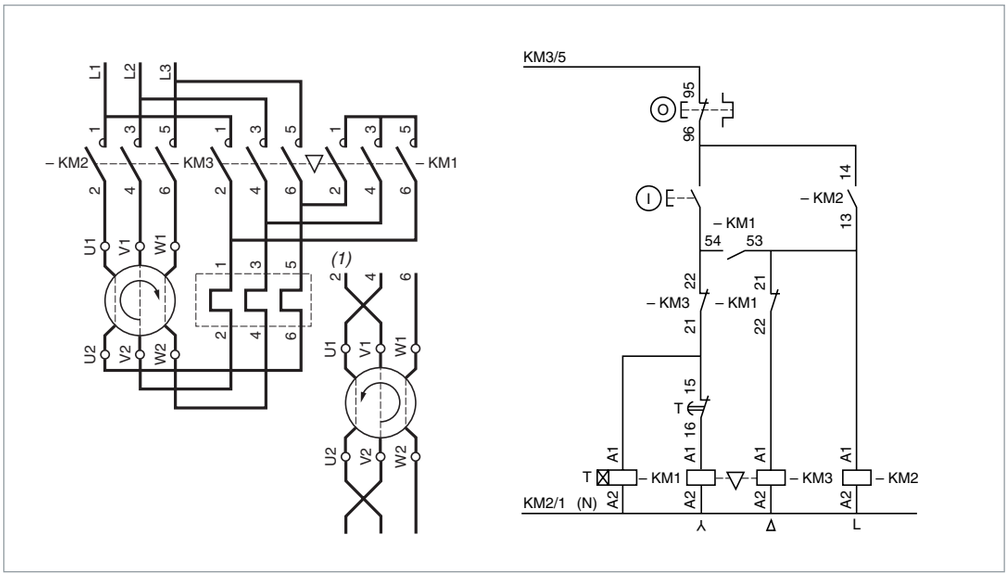
- built-in mechanical interlock
- timer (30'' max. starting time)
- built-in auxiliary contacts
- AC coil control
- screw clamp terminals.

LC3K••



3P 400 V motor rating	Contactor types			Assembly references
(kW)	Line	Delta	Star	
5.5	**LC1K06••**	**LC1K06••**	**LC1K06••**	**LC3K06••**
7.5	**LC1K09••**	**LC1K09••**	**LC1K09••**	**LC3K09••**

Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 44).



4 to 75 kW (400 V) - **TeSys D**

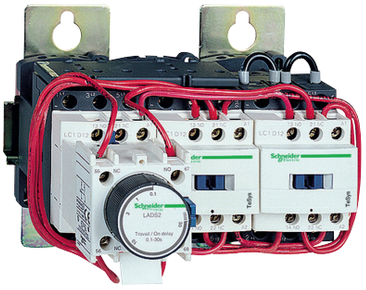
Star-Delta starters - on DIN rail

Pre-assembled, pre-wired

TeSys D blocks of contactors on DIN rail or plate

- with ou without mechanical interlock (depending on model)
- timer (30'' max. starting time)
- built-in auxiliary contacts
- AC coil control
- screw clamp terminals.

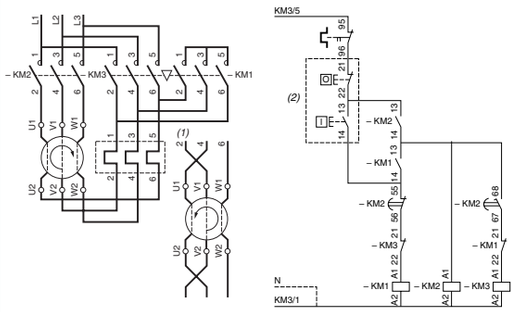
LC3D••



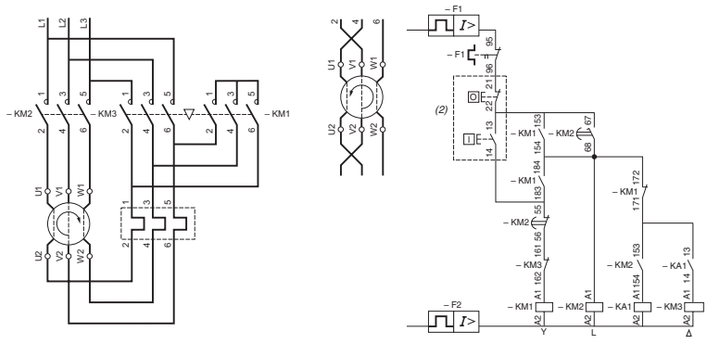
3P 400 V motor rating	Contactor types			Mechanical interlock included	Assembly references	
(kW)	Line	Delta	Star		Plate mounted	Rail mounted
7.5	**LC1D09**	**LC1D09**	**LC1D09**	Yes	**LC3D09A••**	**LC3D090A••**
11	**LC1D12**	**LC1D12**	**LC1D09**	Yes	**LC3D12A••**	**LC3D120A••**
18.5	**LC1D18**	**LC1D18**	**LC1D09**	Yes	**LC3D18A••**	**LC3D180A••**
25	**LC1D32**	**LC1D32**	**LC1D32**	Yes	**LC3D32A••**	**LC3D320A••**
75	**LC1D80**	**LC1D80**	**LC1D50**	No	**LC3D80••**	**-**
			LC1D80	Yes	**LC3D80••A64**	**-**
110	**LC1D115**	**LC1D115**	**LC1D80**	No	**LC3D115••**	**-**
			LC1D115	Yes	**LC3D115••A64**	**-**
132	**LC1D150**	**LC1D150**	**LC1D115**	No	**LC3D150••**	**-**
			LC1D150	Yes	**LC3D150••A64**	**-**

Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48).

From LC3D09A to D80 and LC3D090A to D320A



From LC3D115 to 150



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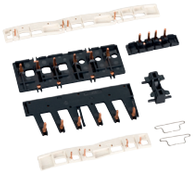
4 to 75 kW (400 V) - **TeSys D**

Star-Delta starters

Kits for customer assemblies

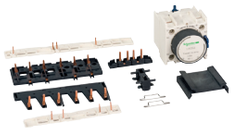
TeSys D contactors, kits with power links, electrical interlockings, mechanical interlockings, time delays.



LAD91218*

LAD91217

LAD93218



LAD93217*

LAD912GV

LAD9SD3

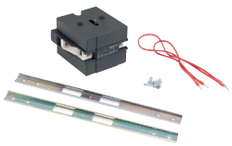
LA9D8017

LA9D8018

LA9D11517

LA9D15017

* Video tutorial: please scan QR code



LA9D11502

3P 400 V motor rating	Bill of material					
	Contactors			Kits (with or without interlocking devices) Separate interlocking devices		
(kW)	Line	Delta	Star	Electrical power links	Interlocking devices	
				Parellel / Reverse / Star	Mechanical	Electrical
7.5	**LC1D09**	**LC1D09**	**LC1D09**	**LAD91218 / LAD91217 / LAD912GV** (1) (2)		
11	**LC1D12**	**LC1D12**	**LC1D09**	**LAD91218 / LAD91217 / LAD912GV** (1) (2)		
	LC1D18	**LC1D18**	**LC1D12**			
18.5	**LC1D18**	**LC1D12**	**LC1D09**	**LAD91218 / LAD91217 / LAD912GV** (1) (2)		
		LC1D18	**LC1D09**			
			LC1D12			
			LC1D18			
	LC1D25	**LC1D25**	**LC1D09**	**LAD93218 / LAD93217** (1)		
			LC1D12			
			LC1D18			
			LC1D25	**LAD91218 / LAD91217** (1)		
25	**LC1D32**	**LC1D32**	**LC1D18**	**LAD93218 / LAD93217** (1)		
			LC1D25	**LAD91218 / LAD91217** (1)		
			LC1D32			
	LC1D38	**LC1D38**	**LC1D38**	**LAD91218 / LAD91217**		
	LC1D40A	**LC1D40A**	**LC1D40A**	**LAD9SD3**		Customer cabling
	LC1D50A	**LC1D50A**	**LC1D40A**			
			LC1D50A			
	LC1D65A	**LC1D65A**	**LC1D40A**			
			LC1D50A			
			LC1D65A			
75	**LC1D80**	**LC1D80**	**LC1D50**	**LA9D8017**	-	Customer cabling
			LC1D65			
			LC1D80	**LA9D8018**		Customer cabling
	LC1D95	**LC1D95**	**LC1D80**	**LA9D8018**		Customer cabling
			LC1D95			
110	**LC1D115**	**LC1D115**	**LC1D80**	**LA9D11517**	-	Customer cabling
			LC1D95			
			LC1D115	**LA9D15017**	**LA9D11502**	
132	**LC1D150**	**LC1D150**	**LC1D115**	**LA9D15017**	**LA9D11502**	
			LC1D150			

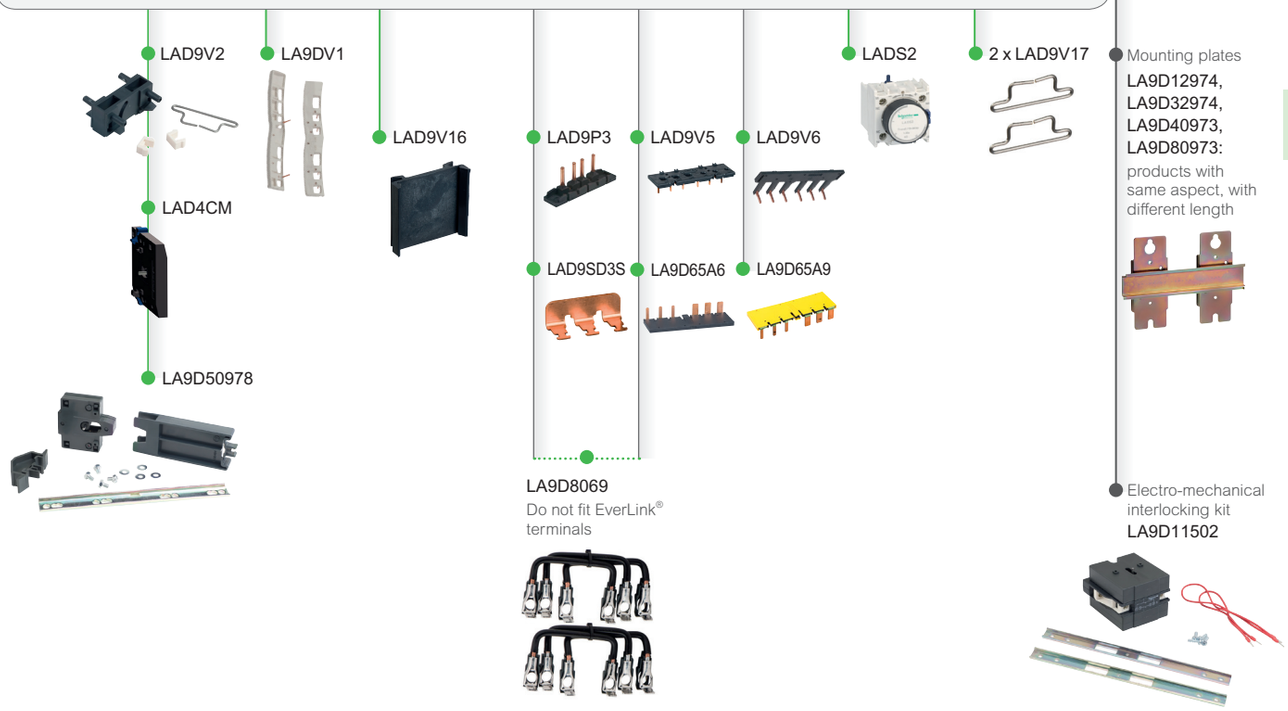
(1) LAD91218 if time delay not needed, LAD91217 if time delay needed (both kits to compose a block of 3 contactors)
(2) LAD912GV if time delay needed (this kit to compose a block of 1 GV2 circuit breaker + 3 contactors).

4 to 75 kW (400 V) - **TeSys D**

Star-Delta starters

Kits composition

Kit composition >	Mechanical interlocking	Electrical interlocking	Raising adaptor, to align contactor front face	Power links			Time delay auxiliary contact block	Hardware to fix contactor on mounting plate	To be ordered separately
				Short circuit	Parallel connection	Reverser connection			
LAD91217 >	**LAD9V2**	**LAD9V1**	-	**LAD9P3**	**LAD9V5**	**LAD9V6**	**LADS2**	**2 x LAD9V17**	**LA9D12974**
LAD91218 >	**LAD9V2**	**LAD9V1**	-	**LAD9P3**	**LAD9V5**	**LAD9V6**	-	**2 x LAD9V17**	**LA9D12974**
LAD93217 >	**LAD9V2**	**LAD9V1**	**LAD9V16**	**LAD9P3**	**LAD9V5**	Yes	**LADS2**	**2 x LAD9V17**	**LA9D32974**
LAD93218 >	**LAD9V2**	**LAD9V1**	**LAD9V16**	**LAD9P3**	**LAD9V5**	Yes	-	**2 x LAD9V17**	**LA9D32974**
LAD9SD3 >	**LAD4CM**	-	-	**LAD9SD3S**	**LA9D65A6**	**LA9D65A9**	**LADS2**	-	-
LA9D5017 >	-	-	-	Yes	Yes	Yes	**LADS2**	Yes	**LA9D40973**
LA9D5018 >	**LA9D50978**	-	-	Yes	Yes	Yes	**LADS2**	Yes	**LA9D40973**
LA9D8017 >	-	-	-	Yes	Yes	Yes	**LADS2**	Yes	**LA9D80973**
LA9D8018 >	Yes	-	-	**LA9D8069**		Yes	**LADS2**	Yes	-
LA9D11517 >	Set of power links								-
LA9D15017 >	Set of power links								**LA9D11502**



85 to 315 kW (400 V) - **TeSys F**

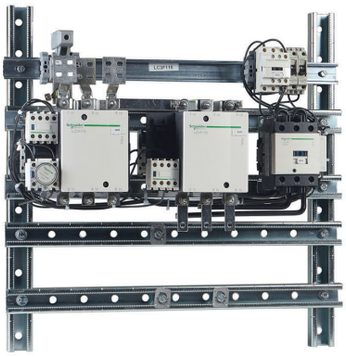
Star-Delta starters - on chassis for lugs or bars

Pre-assembled, pre-wired

TeSys F contactors on DIN rail chassis

- with (A64 version) or without mechanical interlock
- timer (20 or 30'' (A64 version) max. starting time)
- AC coil control
- screw type terminals for bars, lugs, cables.

LC3F115… 225



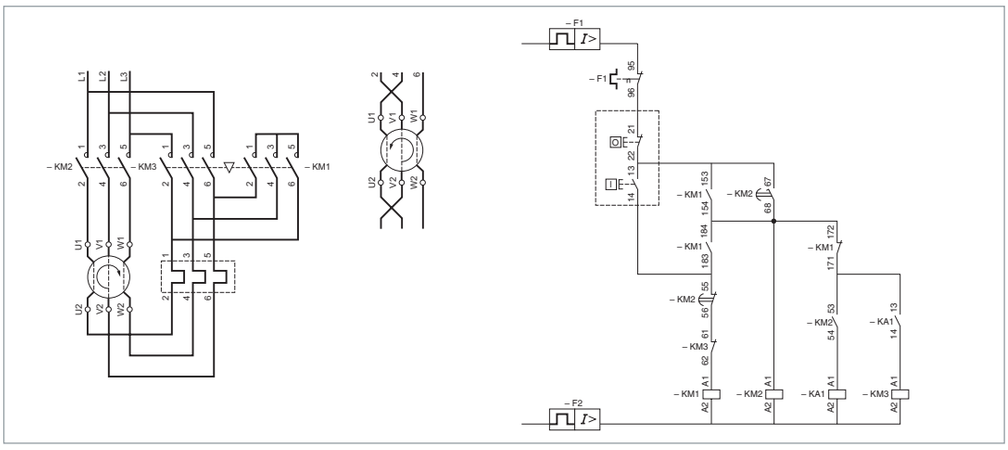
LC3F265… 400

WARNING:
Remember that electrical AND mechanical interlocking should always be preferred to ensure assembly reliability.

WARNING:
When no mechanical interlock is available, beware to add an electrical interlock with sufficient time delay to avoid short-circuit.

Motor Star-Delta starters pre-assembled on chassis

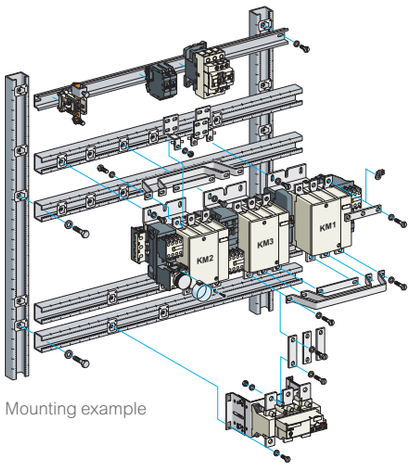
3P 400 V motor rating	Contactor types			Mechanical interlock included	Assembly references
(kW)	Line	Delta	Star		
85	**LC1F115**	**LC1F115**	**LC1F80**	No	**LC3F115••**
135	**LC1F150**	**LC1F150**	**LC1F115**	No	**LC3F150••**
160	**LC1F185**	**LC1F185**	**LC1F150**	No	**LC3F185••**
			LC1F185	Yes	**LC3F185••A64**
200	**LC1F225**	**LC1F225**	**LC1F185**	No	**LC3F225••**
			LC1F225	Yes	**LC3F225••A64**
220	**LC1F265**	**LC1F265**	**LC1F185**	No	**LC3F265••**
			LC1F265	Yes	**LC3F265••A64**
280	**LC1F330**	**LC1F330**	**LC1F265**	No	**LC3F330••**
			LC1F330	Yes	**LC3F330••A64**
315	**LC1F400**	**LC1F400**	**LC1F265**	No	**LC3F400••**
			LC1F400	Yes	**LC3F400••A64**



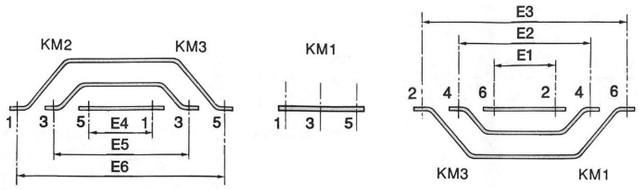
85 to 315 kW (400 V) - **TeSys F**

Star-Delta starters - screw terminals for lugs or bars

Components for customer assemblies



Mounting example



Power links dimensions for 3 identical contactors							
3 x LC1-		E1 (mm)	E2 (mm)	E3 (mm)	E4 (mm)	E5 (mm)	E6 (mm)
F115	LA9-FF600	77	151	225	112	186	260
F150	LA9-F15000	71	151	231	102	182	262
F185	LA9-FG600	78	158	238	102	182	262
F225	LA9-F22500	62	158	254	86	182	278
F265	LA9-FH600	100	196	292	120	216	312
F330/400	LA9-FJ600	107	203	299	127	223	319
F500	LA9-FK600	112	222	332	132	242	352
F630	LA9-FL600	137	297	457	157	317	477

WARNING:
Remember that electrical AND mechanical interlocking should always be preferred to ensure assembly reliability.

WARNING:
When no mechanical interlock is available, beware to add an electrical interlock with sufficient time delay to avoid short-circuit.

Components for 3P customer assemblies				
Contactor types			Mechanical interlock included	Mechanical horizontal interlock
Line	Delta	Star		
LC1F115	**LC1F115**	**LC1D80**	**LA9FF610**	-
		LC1F115	**LA9FF600**	**LA9FF970**
LC1F150	**LC1F150**	**LC1F115**	**LA9FG610**	**LA9FF970**
		LC1F150	**LA9F15000**	**LA9FF970**
LC1F185	**LC1F185**	**LC1F150**	**LA9F18517**	-
		LC1F150	**LA9FG610**	-
		LC1F185	**LA9FG600**	**LA9FG970**
LC1F225	**LC1F225**	**LC1F185**	**LA9F22510**	**LA9FG970**
		LC1F225	**LA9F22500**	**LA9FG970**
LC1F265	**LC1F265**	**LC1F185**	**LA9FH610**	-
		LC1F265	**LA9FH600**	**LA9FJ970**
LC1F330	**LC1F330**	**LC1F265**	**LA9FJ610**	**LA9FJ970**
		LC1F330	**LA9FJ600**	**LA9FJ970**
LC1F400	**LC1F400**	**LC1F265**	**LA9FJ610**	-
		LC1F330	**LA9FJ600**	-
		LC1F400	**LA9FJ600**	**LA9FJ970**
LC1F500	**LC1F500**	**LC1F500**	**LA9FK600**	**LA9FJ970**
LC1F630	**LC1F630**	**LC1F630**	**LA9FL600**	**LA9FJ970**

LA9FF610

LA9FG610

LA9F18517

LA9FF600, **G, H, K**,…
LA9F**L**600
LA9F15000

LA9F22510,
LA9F**H**610, LA9F**J**610

LA9FF970..LA9FL970
Mechanical horizontal interlocks

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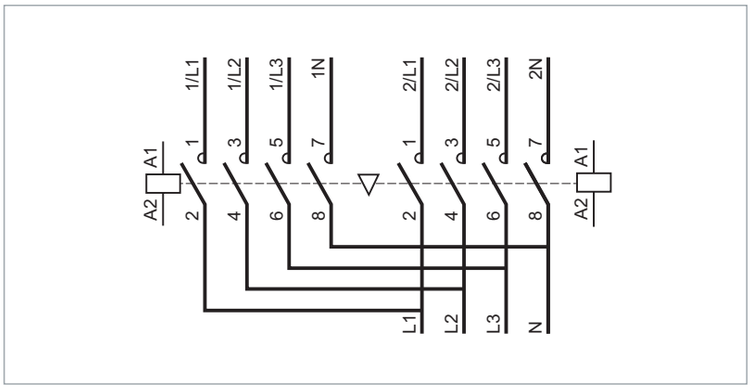
Source or load changeover

Principle



The changeover contactor assembly can be used for alternatingly switching a load circuit from a main to a secondary source. Loads permutation on a single source can also be achieved with the same assembly.

The changeover is composed of 2 identical 4-pole contactors when each of them must withstand the full load current. They are mechanically and electrically interlocked to prevent from simultaneous closing.

Note

Mechanical + electrical contactor interlocking should always be prefered for improved reliability.

Up to 20 A AC-1 - **TeSys K**

4-pole changeovers - screw clamp, spring terminals, Faston or solder pins

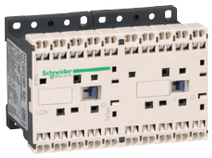
Pre-assembled

Blocks of TeSys K contactors on DIN rail (they cannot be separated)

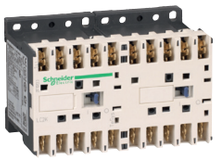
- 4 NO power poles (AC-1 applications only)
- built-in mechanical interlock (LC2K contactor blocks only)
- AC or DC coil control
- standard or silent contactors
- screw clamp with electrical power links, spring, Faston or solder pins terminals.

LC2K••4
LC2K12004P7
Screw clamp terminals

LC2K••43••
LC2K090043E7
Spring terminals



LC2K••47••
LC2K120047B7
Faston connectors



LC2K••45••
LC2K120045P7
Solder pins

AC-1 rating *	Terminals references							
(A)	Screw clamp with electrical power links		Spring*		Faston (1 x 6.35 or 2 x 2.8)		Solder pins for printed circuitboard	
	Standard contactor	Silent contactor	Standard contactor	Silent contactor	Standard contactor	Silent contactor	Standard contactor	Silent contactor
AC coil control								
20	**LC2K09004••**	(1)	(1)	-	(1)	(1)	(1)	(1)
	LC2K12004••	(1)	(1)	-	(1)	(1)	(1)	(1)
DC coil control								
20	**LP2K09004••**	**LP5K09004BW3** (2)	(1)	(1)	(1)	(1)	(1)	(1)
	LP2K12004••	**LP5K12004BW3** (2)	(1)	(1)	(1)	(1)	(1)	(1)

(*) AC-1 rating limited to 10 A with spring terminals, 1.5 mm^2 cable max.
(1) Factory assembly on request
(2) For other voltage code, please contact your local sales representative
Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 44).

20 to 200 A AC-1 - **TeSys D**

4-pole changeovers - screw clamp terminals

Pre-assembled

LC2DT••

Delivered with:

- 4-pole contactors
- mechanical interlock.

AC-1	Terminals references
(A)	Assemblies with pre-wired electrical links
20	**LC2DT20••**(1)
25	**LC2DT25••**(1)
32	**LC2DT32••**(1)
40	**LC2DT40••**(1)
60	-
80	-
125	**LC2D80004••**(1) (2)
200	**LC2D115004••**(3)

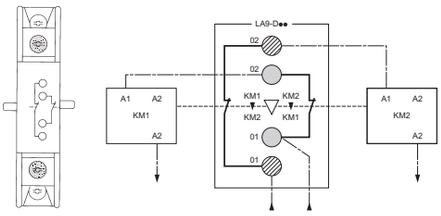
(1) Mechanical interlock without electrical interlocking
(2) Order separately 2 auxiliary contact blocks LADN.1 to obtain electrical interlocking between the 2 contactors
(3) Mechanical interlock with integral, pre-wired electrical interlocking
Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48).

Components for customer assemblies

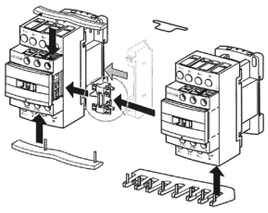
Contactors + dedicated kits for building complete load or source changeover assemblies.

Bill of material				
AC-1 rating	4 poles (NO) contactors	Kits (with or without interlocking devices) Separate interlocking devices		
(A)		Electrical power links	Interlocking devices	
			Mechanical	Electrical
20	**2x LC1DT20••**	Assembling kits: **LADT9R1** electrical interlock not included or **LADT9R1V** electrical interlock (white power link) included		
25	**2x LC1DT25••**			
32	**2x LC1DT32••**			
40	**2x LC1DT40••**			
60	**2x LC1DT60A••**	Customer cabling	**LAD4CM**	Customer cabling
80	**2x LC1DT80A••**			
125	**2x LC1D80004••** (~ coil) or **2x LP1D80004••** (= coil)	**LA9D8070**	**LA9D4002** (for LC1) **LA9D8002** (for LP1)	
200	**2x LC1D115004••**	**LA9D11570**	**LA9D11502**	

Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48).

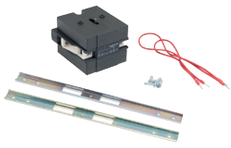


LA9D4002 - LA9D8002: interlocking module / wiring diagram



LADT9R1V Mechanical + electrical interlocking kit

LAD4CM
Mechanical interlock



LA9D11502
Electro-mechanical interlocking

LA9D4002
Electro-mechanical interlocking for AC

LA9D8002
Electro-mechanical interlocking for DC

LADT9R1

LADT9R1V

LA9D11570

LA9D8070

20 to 200 A AC-1 - **TeSys D**

4-pole changeovers - screw terminals for lugs spring terminals

Pre-assembled

LC2DT256••

LC2DT203••

LC2DT••

Delivered with:

- 4-pole contactors
- mechanical interlock.

AC-1	Terminals references	
(A)	Screw for lugs	Spring
20	**LC2DT206••**(1)	**LC2DT203••**(1) (2)
25	**LC2DT256••**(1)	
32	**LC2DT326••**(1)	
40	**LC2DT406••**(1)	

(1) Mechanical interlock without electrical interlocking
(2) Power and control by Spring terminals
Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48).

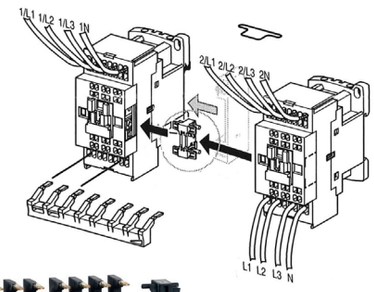
Components for customer assemblies

Contactors + dedicated kits for building complete load or source changeover assemblies.

Bill of material

AC-1 rating	4 poles (NO) contactors		Kits (with or without interlocking devices) Separate interlocking devices		
(A)	Terminal type		Electrical power links	Interlocking devices	
	Screw for lugs or bars	Spring		Mechanical	Electrical
20	**2x LC1DT206••**	**2x LC1DT203••**(2)	**LADT3R1** Kit for spring terminals only, with power link (LAD9V9), mechanical interlocking (LAD9V2) and assembling staple (LAD9V7)		Customer cabling
25	**2x LC1DT256••**	**2x LC1DT253••**(2)			
32	**2x LC1DT326••**	**2x LC1DT323••**(2)			
40	**2x LC1DT406••**	**2x LC1DT403••**(2)			
60	**2x LC1DT60A6••**	**2x LC1DT60A3••**(1)	Customer cabling	**LAD4CM**	Customer cabling
80	**2x LC1DT80A6••**	**2x LC1DT80A3••**(1)			
125	**2x LC1D800046••** (~) **2x LP1D800046••** (DC)	-	Customer cabling	**LA9D4002** (AC) / **LA9D8002** (DC)	
200	**2x LC1D1150046••**	-	Customer cabling	**LA9D11502**	

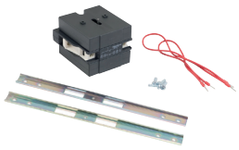
(1) Power connection by EverLink® BTR screw connector's and control by spring terminals
(2) Power and control by Spring terminals.



LADT3R1 (for spring terminals only)
Mechanical + electrical interlocking kit

LA9D8002
Electro-mechanical interlocking for DC

LA9D4002
Electro-mechanical interlocking for AC



LA9D11502
Electro-mechanical interlocking

LAD4CM
Mechanical interlock

60 to 200 A AC-1 - **TeSys D**

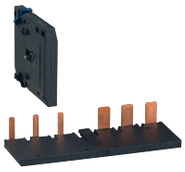
3-pole changeovers - screw clamp terminals

Components for customer assemblies

2 identical contactors + dedicated kits for building complete load or source changeover assemblies.

Characteristics	Bill of material (contactors to be completed with…)			
AC-3 rating (A)	Contactors	Set of electrical power links	Mechanical interlocking	Electrical interlocking
40	**2x LC1D40A••**(1)	Kit: **LAD9R3S**: power links + mechanical interlock		Customer cabling
50	**2x LC1D50A••**(1)			
65	**2x LC1D65A••**(1)			
80	**2x LC1D80••**	Power links: **LA9D80691**	Mechanical + electrical interlocks: **LA9D4002** for AC - **LA9D8002** for DC	
95	**2x LC1D95••**			
115	**2x LC1D115••**	Power links: **LA9D11571**	Mechanical + electrical interlocks: **LA9D11502**	
150	**2x LC1D150••**			

(1) Power connection by EverLink® BTR screw connectors and control by screw clamp terminals
Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48).



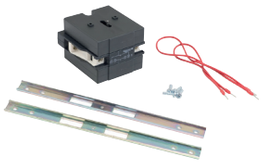
LAD9R3S
Kit with mechanical interlock and 3P 65 A AC-3 power links

LA9D80691
3P 95 A AC-3 power links

LA9D11571
3P 150 A AC-3 power links

LA9D4002
Electro-mechanical interlocking for 80-95 A AC-3

LA9D8002
Electro-mechanical interlocking for 80-95 A AC-3



LA9D11502
Electro-mechanical interlocking

200 to 1000 A AC-1 - **TeSys F**

3-pole, 4-pole changeovers - screw terminals for lugs or bars

Pre-assembled

LC2DF••

Delivered with:

- 4-pole contactors
- mechanical interlock
- pre-wired power connections.

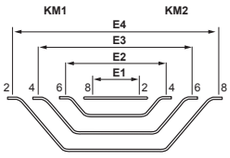
Contactor types (pair of 2 identical)	References
LC1F115	**LC2F1154**
LC1F150	**LC2F1504**
LC1F185	**LC2F1854**
LC1F225	**LC2F2254**
LC1F265	**LC2F2654**

Coils to be ordered separately – see commercial references in TeSys catalogue chapter B9.

Components for customer horizontal assemblies

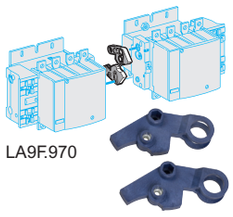
Bill of material

Contactor types	3-pole contactors assemblies			4-pole contactors assemblies		
(pair of 2 identical)	Contactors	Set of electrical power links	Horizontal mechanical interlock	Contactors	Set of electrical power links	Horizontal mechanical interlock
LC1F115	**2x LC1F115**	**LA9FF982**	**LA9FF970**	**2x LC1F1154**	**LA9FF977**	**LA9FF970**
LC1F150	**2x LC1F150**	**LA9F15082**		**2x LC1F1204**	**LA9F15077**	
LC1F185	**2x LC1F185**	**LA9FG982**	**LA9FG970**	**2x LC1F1854**	**LA9FG977**	**LA9FG970**
LC1F225	**2x LC1F225**	**LA9F22582**		**2x LC1F2254**	**LA9F22577**	
LC1F265	**2x LC1F265**	**LA9FH982**	**LA9FJ970**	**2x LC1F2654**	**LA9FH977**	**LA9FJ970**
LC1F330	**2x LC1F330**	**LA9FJ982**		**2x LC1F3304**	**LA9FJ977**	
LC1F400	**2x LC1F400**	**LA9FJ982**		**2x LC1F4004**		
LC1F500	**2x LC1F500**	**LA9FK982**		**2x LC1F5004**	**LA9FK977**	
LC1F630	**2x LC1F630**	**LA9FL982**	**LA9FL970**	**2x LC1F6304**	**LA9FL977**	**LA9FL970**
LC1F800	**2x LC1F800**	**LA9FL982**		**-**	**-**	**-**



KM1 = KM2		E1	E2	E3	E4
LC1F1154	LA9FF977	77	151	225	299
LC1F1504	LA9F15077	71	151	231	311
LC1F1854	LA9FG977	78	158	238	318
LC1F2254	LA9F22577	54	150	246	342
LC1F2654	LA9 FH977	100	196	292	388
LC1F3304/4004	LA9FJ977	107	203	299	395
LC1F5004	LA9FK977	112	222	332	442
LC1F6304	LA9FL977	137	297	457	617

LA9FJ977



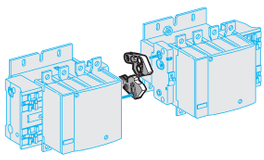
LA9F.970

Vertical customer assembly

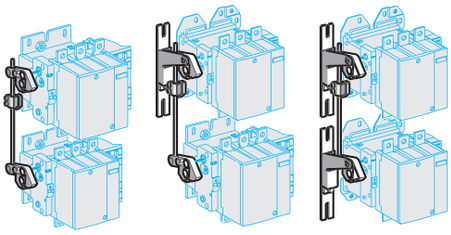
The vertical mechanical interlocks must be substituted by horizontal. Electrical power and interlocking circuits shall be wired by customer (no pre-fabricated links available).

Customer assembly of pairs of contactors of different ratings

Contactors of different ratings (3 or 4 poles) can be only vertically assembled. Selection tables of appropriate mechanical interlocks (no pre-fabricated links available) can be found in the TeSys catalogue ref. MKTED210011EN - chapter B9 (page 38-39 of 2017-2018 edition).



Mechanical interlocks for horizontal assembling of identical contactors.



Interlocks are different, depending on the ratings to be associated (only vertically).

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Part B: contactors & accessories

B

TeSys K 5

TeSys D 6

TeSys F 7

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TeSys K

Simple, robust and compact contactors,
3 or 4 poles, from 6 to 16 A AC-3, 20 A AC-1
(10 A AC-1 with spring terminals)

With screw clamp terminals

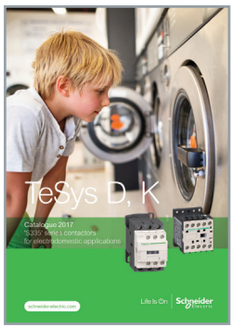
With spring terminals

With Faston connectors

With solder pins

With screws for lugs

Electrodomestic applications:
TeSys D, K 'S335' series contactors



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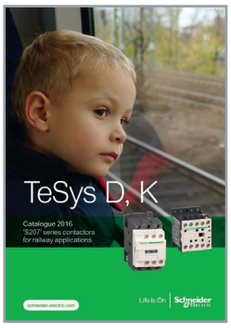
Railways applications:
TeSys D, K 'S207' series contactors



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Commercial references coding

K

Contactor type

LC1: 3P – AC coil
LC2: Reverser (2 contactor assembly) – 3P – AC coil
LC3: Star-Delta (3 contactor assembly) – 3PLC7: 3P – silent AC coil
LC8: Reverser (2 contactor assembly) – 3P– silent AC coil
LP1: 3P – AC coil
LP2: Reverser (2 contactor assembly) – 3P – DC coil
LP4: 3 or 4P – Low consumption DC coil
LP5: Reverser (2 contactor assembly) – 3 or 4P – Low consumption DC coil

AC-3 rating (A)

06, 09, 12 or 16

Instantaneous auxiliary contacts

00	No auxiliary contacts
10	1 NO
01	1 NC

Number of power poles

Not specified	3 NO
4	4 NO
8	2 NO + 2 NC

Terminal type

Not specified	screws clamp terminals
3	spring terminals
5	solder pins for printed circuit boards
6	screws for lugs
7	Faston terminals

Coil voltage code

a.c. supply

Contactors LC1 K (0.8… 1.15 Uc) (0.85… 1.1 Uc)

Volts	12	20	24[3]	36	42	48	110	115	120	127	200/208	-	220/230	230	230/240
50/60 Hz	J7	Z7	B7	C7	D7	E7	F7	FE7	G7	FC7	L7		M7	P	U7
Volts	256	277	380/400	-	400	400/415	-	440	480	500	575	600	660/690	-	-
50/60 Hz	W7	UE7	Q7	-	V7	N7	-	R7	T7	S7	SC7	X7	Y7	-	-

Up to and including 240 V, coil with integral suppression device available: add 2 to the code required. Example: J72

Contactors LC7 K (0.8… 1.1 Uc)

Volts	24	42	48	110	115	220	230/240
50/60 Hz	B7	D7	E7	F7	FE7	M7	U7

d.c. supply

Contactors LP1 K (0.8… 1.15 Uc)

Volts	12	20	24[2]	36	48	60	72	100	110	125	155	174	200	220	230	240	250
Code	JD	ZD	BD	CD	ED	ND	SD	KD	FD	GD	PD	QD	LD	MD	MPD	MUD	UD

Coil with integral suppression device available: add 2 to the code required. Example: JD3

Low consumption

Contactors LP4 K (0.7… 130 Uc)

Volts	12	20	24	48	72	110	120
Code	JW3	ZW3	BW3	EW3	SW3	FW3	GW3

Commercial references per terminal type

TeSys K contactors fulfill a large variety of customer's needs thanks to their compacity and multiple declinations:

- 5 terminal types
- AC, DC, low consumption DC coils (for control by PLC output)
- standard or silent contactors.

Check for details and variant availabilities in TeSys catalogue ref. MKTED210011– chapter B8.

3 and 4 pole TeSys K contactors

Screw clamp terminals

LC1K0901.••

Spring terminals

LC1K09013••

Faston connectors

LC1K09017••

Solder pins

LC1K09015••

Screws for lugs

LC1K9016••

AC3 rating	AC1 rating	Power contacts		Auxiliary contacts		Screw clamp connections		Spring terminals		Faston connectors (1 x 6.35 or 2 x 2.8)		Solder pins for printed circuitboard		Lugs
(A)		NO	NC	NO	NC									
AC supply of control circuit						General purpose	Silent contactor	General purpose	Silent contactor	General purpose	Silent contactor	General purpose	Silent contactor	General purpose
6	-	3	-	1	-	LC1K0610	LC7K0610••	LC1K06103••	-	LC1K06107••	LC7K06107••	LC1K06105••	LC7K06105••	LC1K06106••
	-	3	-	-	1	LC1K0601••	LC7K0601••	LC1K06013••	-	LC1K06017••	LC7K06017••	LC1K06015••	LC7K06015••	LC1K06016••
9	20*	3	-	1	-	LC1K0910••	LC7K0910••	LC1K09103••	-	LC1K09107••	LC7K09107••	LC1K09105••	LC7K09105••	LC1K09106••
	20*	3	-	-	1	LC1K0901••	LC7K0901••	LC1K09013••	-	LC1K09017••	LC7K09017••	LC1K09015••	LC7K09015••	LC1K09016••
-	20*	4	-	-	-	LC1K09004••	LC7K09004••	LC1K090043••	-	LC1K090047••	LC7K090047••	LC1K090045••	LC7K090045••	-
	20*	2	2	-	-	LC1K09008••	LC7K09008••	LC1K090083••	-	LC1K090087••	LC7K090087••	LC1K090085••	LC7K090085••	-
12	20*	3	-	1	-	LC1K1210••	LC7K1210••	LC1K12103••	-	LC1K12107••	LC7K12107••	LC1K12105••	LC7K12105••	LC1K12106••
	20*	3	-	-	1	LC1K1201••	LC7K1201••	LC1K12013••	-	LC1K12017••	LC7K12017••	LC1K12015••	LC7K12015••	LC1K12016••
-	20*	4	-	-	-	LC1K12004••	LC7K12004••	-	-	LC1K120047••	LC7K120047••	LC1K120045••	LC7K120045••	-
16	-	3	-	1	-	LC1K1610••	-	-	-	LC1K16107••	-	LC1K16105••	-	LC1K16106••
	-	3	-	-	1	LC1K1601••	-	-	-	LC1K16017••	-	LC1K16015••	-	LC1K16016••
DC supply of control circuit						General purpose	Low consumption	General purpose	Low consumption	General purpose	Low consumption	General purpose	Low consumption	General purpose
6	-	3		1		LP1K0610••	LP4K0610••	LP1K06103••	LP4K06103••	LP1K06107••	LP4K06107••	LP1K06105••	LP4K06105••	LP1K06106••
	-	3			1	LP1K0601••	LP4K0601••	LP1K06013••	LP4K06013••	LP1K06017••	LP4K06017••	LP1K06015••	LP4K06015••	LP1K06016••
9	20*	3		1		LP1K0910••	LP4K0910••	LP1K09103••	LP4K09103••	LP1K09107••	LP4K09107••	LP1K09105••	LP4K09105••	LP1K09106••
	20*	3			1	LP1K0901••	LP4K0901••	LP1K09013••	LP4K09013••	LP1K09017••	LP4K09017••	LP1K09015••	LP4K09015••	LP1K09016••
-	20*	4	-	-	-	LP1K09004••	LP4K09004••	LP1K090043••	LP4K090043••	LP1K090047••	LP4K090047••	LP1K090045••		-
	20*	2	2	-	-	LP1K09008••	LP4K09008••	LP1K090083••	LP4K090083••	LP1K090087••	LP4K090087••	LP1K090085••		-
12	20*	3		1		LP1K1210••	LP4K1210••	LP1K12103••	LP4K12103••	LP1K12107••	LP4K12107••	LP1K12105••	LP4K12105••	LP1K12106••
	20*	3			1	LP1K1201••	LP4K1201••	LP1K12013••	LP4K12013••	LP1K12017••	LP4K12017••	LP1K12015••	LP4K12015••	LP1K12016••
-	20*	4	-	-	-	LP1K12004••	LP4K12004••	LP1K120043••	LP4K120043••	LP1K120047••	LP4K120047••	LP1K120045••	LP4K120045••	-

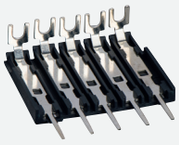
* AC1 rating limited to 10 A with spring terminals (max. cable: 1.5 mm²).

Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 44)

Connection accessories

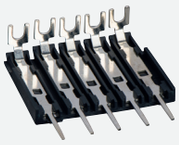
Terminal adaptors - Pole interconnection links

For
LC1K06... LC1K16
LC7K06... LC7K12
LP1K06... LP1K12
LP4K06... LP4K12



Solder pins adaptor for top terminals
LA9K105S

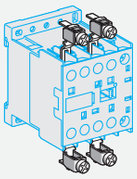
Lot of 100



Solder pins adaptor for bottom terminals
LA9K105I

Lot of 100

For 4P contactors with screw terminals for lugs. Solder pins allow every terminal to be linked to a printed circuit board or to an individual cable.



2-pole parallel link
LA9E1

Lot of 4

For contactors with screw clamp terminals. Connects 2 poles in parallel. Can be used for increasing the current switching capability.

Used to make/break a current higher than the pole rated capacity.

4-pole parallel link
LA9E2

Lot of 4

For contactors with screw clamp terminals. Connects 4 poles in parallel. Can be used for increasing the current switching capability.

Used to make/break a current higher than the pole rated capacity.

Parallel + reverser links kit
LA9K0969

For 3P contactors with screw clamp terminals. Used for motor reverser starter.

B

5

TeSys D

Reliable and long-lasting contactors,
3 or 4 poles, from 6 to 16 A AC-3, 20 A AC-1
(10 A AC-1 with spring terminals)

A choice of terminal types

Screw clamp terminals

EverLink® terminals,
with constant tightening

Screw terminals,
for lugs or bars

Faston terminals

Different size, according to rating:

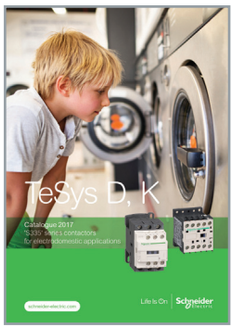
9 to 38 A AC-3:
LC1D09, D12, D18, D25,
D32, D38

40 to 65 A AC-3:
LC1D40, D50, D65
LC1DT60A, DT80A

80 to 95 A AC-3:
LC1D80, D95
LC1D80004, LC1D80008,
LC1D4008, LC1D65008

115 to 150 A AC-3:
LC1D115, D150
LC1D115005

Electrodomestic applications:
TeSys D, K 'S335' series contactors



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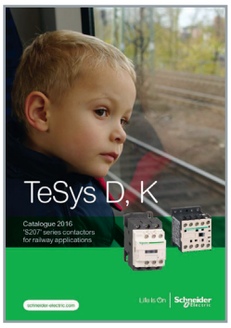
Railways applications:
TeSys D, K 'S207' series contactors



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Commercial references coding

L C

Number of contactor

1	contactor: 1 direction
2	contactors: reversing

Number of poles

D	3 or 4 poles
DT	4-pole

D4000	4-pole 60 A AC-1
D6500	4-pole 80 A AC-1
D8000	4-pole 125 A AC-1
D11500	4-pole 200 A AC-1
4	4 NO poles
8	2 NO + 2 NC poles

Rating (A)

09… 150 A AC-3 for 3-pole contactors
20... 200 A AC-1 for 4-pole contactors

Terminals

-	Screw clamp*
A	EverLink® screw clamp
3	Spring
6	Screw for lug or bar
9	Faston

Safety cover

-	Without safety cover*
5	With safety cover

Coil voltage:

A to Z – Coil voltage (see table)

Volts	5	12	20	24	36	42	48	60	72	110	115	125	220	230	240	250	380	400	415	440	500
a.c. supply																					
50/60 Hz				B		D	E			F	FE		M	P	U		Q	V	N	R	S
50 Hz				B		D	E			F	FE		M	P	U		Q	V	N	R	S
60 Hz				B			E			F			M		U		Q			R	
d.c. supply																					
d.c.		J		B	C		E	N	S	F		G	M			U				R	
d.c low cons	A	J	Z	B			E			F			M			U					

** No specific code displayed in the reference.*

Coil supply frequency

D	d.c.
W	d.c. wide voltage range
L	d.c. low consumption
5	a.c. 50 Hz
6	a.c. 60 Hz
7	a.c. 50/60 Hz

B

6

Exemples

LC 1 D 40 A - BD

1 contactor • 3-pole • 40 A • EverLink® screw clamp terminals • Without safety cover • 24 V • dc coil
Corresponding reference: LC1D40ABD

LC 1 D8000 4 - - P7

1 contactor • 4-pole • 125 A • Screw clamp terminals • Without safety cover • 230 V • 50/60 Hz ac coil
Corresponding reference: LC1D80004P7

Note

Contactors exist for most of possible combinations.
Check for availability before ordering.

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Commercial references per terminal type

TeSys D contactors fulfill a large variety of customer's needs thanks to their multiple declinations, accessories and auxiliaries:

- 5 terminal types
- AC, DC, Low Consumption DC coils, electronic coils (TeSys D Green for control by PLC output).

Check for details, accessories, auxiliaries in TeSys catalogue ref. MKTED210011– chapter B.

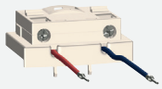
3 and 4-pole TeSys D contactors

AC3 rating	AC1 rating	Power contacts		Auxiliary contacts		Screw clamp terminals or EverLink® connectors	Lugs or bars	Spring terminals	Faston connectors
(A)		NO	NC	NO	NC				
9	16	3	-	1	1			LC1D093••(4)	
	25	3	-	1	1	LC1D09••(1)	LC1D096••		LC1D099••(6)
	20	4	-	1	1	LC1DT20••(1)	LC1DT206••	LC1DT203••(4)	
		2	2	1	1	LC1D098••(1)	LC1D0986••	LC1D0983••(4)	
12	16	3	-	1	1			LC1D123••(4)	
	25	3	-	1	1	LC1D12••(1)	LC1D126••		LC1D129••(6)
		4	-	1	1	LC1DT25••(1)	LC1DT256••	LC1DT253••(4)	
		2	2	1	1	LC1D128••(1)	LC1D1286••	LC1D1283••(4)	
18	25	3	-	1	1			LC1D183••(4)	
	32	3	-	1	1	LC1D18••(1)	LC1D186••		-
		4	-	1	1	LC1DT32••(1)	LC1DT326••	LC1DT323••(4)	
		2	2	1	1	LC1D188••(1)	LC1D1886••	LC1D1883••(4)	
25	25	3	-	1	1			LC1D253••(4)	
	40	3	-	1	1	LC1D25••(1)	LC1D256••		-
		4	-	1	1	LC1DT40••(1)	LC1DT406••	LC1DT403••(4)	
		2	2	1	1	LC1D258••(1)	LC1D2586••	LC1D2583••(4)	
32	25	3	-	1	1			LC1D323••(4)	
	50	3	-	1	1	LC1D32••(1)	LC1D326••		-
38	38	3	-	1	1			LC1D383 (4)	
	50	3	-	1	1	LC1D38••(1)	LC1D386••		-
40	60	3	-	1	1	LC1D40A••(2)	LC1D40A6••	LC1D40A3••(5)	-
	60	4	-	1	1	LC1DT60A••(2)	LC1DT60A6••	LC1DT60A3••(5)	
		2	2	1	1	LC1D40008•• (~ coil) LP1D40008•• (= coil)	LC1D400086•• (~ coil) LP1D400086•• (= coil)		
50	80	3	-	1	1	LC1D50A••(2)	LC1D50A6••	LC1D50A3••(5)	-
65	80	3	-	1	1	LC1D65A••(2)	LC1D65A6••	LC1D65A3••(5)	-
	80	4	-	1	1	LC1DT80A••(2)	LC1DT80A6••	LC1DT80A3••(5)	
		2	2	1	1	LC1D65008•• (~ coil) LP1D65008•• (= coil)	LC1D650086•• (~ coil) LP1D650086•• (= coil)		
80	125	3	-	1	1	LC1D80••(3)	LC1D806••	-	-
	125	4	-	1	1	LC1D80004•• (~ coil) LP1D80004•• (= coil)(3)	LC1D800046•• (~ coil) LP1D800046•• (= coil)		
		2	2	1	1	LC1D80008•• (~ coil) LP1D80008•• (= coil)	LC1D800086•• (~ coil) LP1D800086•• (= coil)		
95	125	3	-	1	1	LC1D95••(3)	LC1D956••	-	-
115	200	3	-	1	1	LC1D115••(3)	LC1D1156••	-	-
-	200	4	-	1	1	LC1D115004••(3)	LC1D1150046••		
150	200	3	-	1	1	LC1D150••(3)	LC1D1506••	-	-

Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; BD = 24 V DC; BW3 = 24 V DC low consumption; other codes, see page 48)
(1) Connection by screw clamp terminals
(2) Power connection by EverLink® BTR screw connectors and control by screw clamp terminals
(3) Connection by screw clamp terminal or connectors
(4) Power and control by spring terminals
(5) Power connection by EverLink® BTR screw connectors and control by spring terminals
(6) Contactors fitted with 2 x 6.35 mm Faston connectors on power poles and 1 x 6.35 mm on coil and auxiliary terminals.

Connection accessories

Terminal adaptors for 3P contactors

For LC1D09... D38		Terminal adaptor for 25 mm² cables **LA9D3260**	Lot of 1	To be inserted into 3P contactor screw clamp or screw type terminals. Keeps wires in the right order when removing/reinstalling a contactor.
		Terminals for parallel connection **LA9D1261**	Lot of 10	For connecting one single cable into 2 terminals in parallel.
For LC1D40A... D65A		EverLink® terminal block **LAD96560**	Lot of 1	Spare EverLink® terminal for compatible contactors.
For LC1D40A... D80A		Wiring adaptor **LAD4BB3**	Lot of 1	Used when an old contactor must be replaced by today's TeSys D. The existing coil top wiring is generally too short, this adaptor provides extra length to allow new front coil connection.
For LC1D40A6... D65A6		3P terminal protective cover **LAD96570**	Lot of 1	To be inserted on screw type terminal (for lugs) of contactors. Prevents contact with live parts.
For LC1D80... D95		Control circuit take-off from main pole **LA9D8067**	Lot of 10	To be inserted into a power screw clamp terminal, it provides a smaller terminal for a control circuit connected to the same voltage.
For LC1D115... D150		Control circuit take-off from main pole **LA9D11567**	Lot of 10	To be inserted into a power screw clamp terminal, it provides a smaller terminal for a control circuit connected to the same voltage
		Terminal blocks for 120 mm² cables **LA9D115603**	Lot of 2	For changing contactors with simple screw-type terminals into screw clamp terminals
For LC1D115... D150		Connector blocks for lug terminals **LA9D115503**	Lot of 2	Hold the ring lugs in place when connected to a contactor with simple screw-type terminals.
		Spreaders for power poles **GV7AC03**	Lot of 3	To be connected to a contactor with screw type terminals (for lugs), for increasing pole pitch to 45 mm.
		Terminal protective covers **LA9D115703**	Lot of 6	To be inserted on screw the type terminals (for lugs) of contactors. 1 cover per pole. Prevent contact with live parts.

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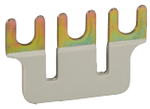
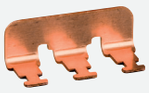
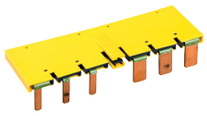
Connection accessories

Terminal interconnection links for 3P contactors

For LC1D09… D38		3P parallel links **LA9D1262**	Lot of 10	Used for linking 3 poles of a contactor used in a star/delta starter, as an example.
		3P parallel links **LAD9P3**	Lot of 10	Used for linking 3 poles of a contactor used in a star/delta starter, as an example.
For LC1D40… D65		2P parallel links **LA9D40961**	Lot of 2	For connecting one single cable with a ring lug into 2 contactor terminals in parallel.
		2P parallel link **LAD9P32**	Lot of 1	For connecting one single cable with a ring lug into 2 contactor terminals in parallel.
		3P parallel link with warning cover **LAD9SD3S**	Lot of 1	Used for linking 3 poles of a contactor used in a star/delta starter, as an example.
		3P parallel link **LAD9P33**	Lot of 1	For connecting one single cable with a ring lug into 3 contactor terminals in parallel.
For LC1D80… D95		2P parallel link **LA9D80961**	Lot of 2	For connecting one single cable with a ring lug into 2 contactor terminals in parallel.
		3P parallel link **LA9D80962**	Lot of 1	For connecting one single cable with a ring lug into 3 contactor terminals in parallel.

Connection accessories

Pole interconnection links for a pair of 3P contactors

For LC1D09... D38 screw clamp terminals		Compact parallel link between 2 contactors **LAD9V5**	Used upstream in reverser starters – High compactness, leaves a space for inserting a cable in each terminal.
		Reverser link between 2 contactors **LAD9V6**	Used downstream in reverser starters – High compactness.
For LC1D09... D38 screw clamp or spring terminals		Compact parallel link between 2 contactors **LAD9V10**	Used upstream in reverser starters with spring or screw clamp terminal contactors. Must be used when a Quick power connection module - LAD341- is used to connect their top terminals to a circuit breaker.
For LC1D09... D38 spring terminals		Parallel link between 2 contactors **LAD9V12**	Used upstream in reverser starters, without Quick power connection module - LAD341.
		Compact reverser link between 2 contactors **LAD9V11**	Used downstream in reverser starters with spring terminal contactors. Must be used when a Quick power connection module - LAD341- is used to connect their terminals to a circuit breaker.
		Reverser link between 2 contactors **LAD9V13**	Used downstream in reverser starters. For reverser connection of 2 contactors with spring terminals, without Quick power connection module - LAD341.
For LC1D40A... D65A screw clamp terminals		Compact parallel link between 2 contactors **LA9D65A6**	Used upstream in reverser starters. Molded electrical link goes into a contactor cavity for better compactness.
		Compact reverser link between 2 contactors **LA9D65A9**	Used downstream in reverser starters. Molded electrical link goes into a contactor cavity for better compactness.

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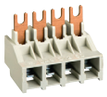
Quick electrical link finder

Type	Screw clamp terminals	Spring terminals	EverLink® terminal
3-pole contactors	LC1D09… LC1D38	LC1D09… LC1D38	LC1D40A… LC1D65A
Parallel link		**LAD9V12**	
Parallel compact link	**LAD9V5** and **LAD9V10**	**LAD9V10**	**LA9D65A6**
Reverser link		**LAD9V13**	
Reverser compact link	**LAD9V6**	**LAD9V11**	**LA9D65A9**

Connection accessories

Terminal adaptors - Pole interconnection links for 4P contactors

For LC1DT20... DT25		Terminal adaptor for 10 mm² cables **LA9D1260**	Lot of 1	To be inserted into 4P contactor screw clamp or screw type terminals. 90° connection angle between cable and contactor terminal.
		1 terminal adaptor for 10 mm² cables **LA9D2560**	Lot of 1	To be inserted into 4P contactor screw clamp or screw type terminals. Straight connection between cable and connector terminal.
		Terminal for 2P parallel connection **LA9D1261**	Lot of 10	For connecting one single cable into 2 terminals in parallel.
		1 terminal for parallel connection **LA9D1263**	Lot of 2	For connecting one single cable with a ring lug into 4 terminals in parallel.
		1 terminal for 2P parallel connection **LA9D2561**	Lot of 10	For connecting one single cable into 2 terminals in parallel.
		1 terminal for 4P parallel connection **LA9D2563**	Lot of 1	For connecting one single cable into 4 terminals in parallel.
For LC1DT40... DT65		2P parallel links **LA9D40961**	Lot of 2	For connecting one single cable with a ring lug into 2 terminals in parallel.
		4P parallel links **LA9D40963**	Lot of 2	For connecting one single cable with a ring lug into 4 terminals in parallel.
For LC1D60A6... D80A6		4P terminal protective cover **LAD96580**	Lot of 1	To be inserted on screw type terminal (for lugs) of contactors. Prevents from direct contact with live lugs.
For LC1DT80... DT95		Control circuit take-off from main pole **LA9D8067**	Lot of 10	To be inserted into a power screw clamp terminal, it provides a smaller terminal for a control circuit connected to the same voltage.

Connection accessories

Terminal adaptors - Pole interconnection links for 4P contactors

For LP1D80		2P parallel links **LA9D80961**	Lot of 2	For connecting one single cable with a ring lug into 2 terminals in parallel.
		4P parallel links **LA9D80963**	Lot of 2	For connecting one single cable with a ring lug into 4 terminals in parallel.
For LC1D80004, LC1D80008, LC1D115004		Control circuit take-off from main pole **LA9D11567**	Lot of 10	To be inserted into a power screw clamp terminal, it provides a smaller terminal for a control circuit connected to the same voltage.
For LC1D115… D150		4P terminal blocks for 120 mm² cables **LA9D115604**	Lot of 2	For changing contactors with simple screw-type terminals into screw clamp terminals.
For LC1D1156… D1506		4P terminal blocks for ring lugs **LA9D115504**	Lot of 2	Hold the ring lugs in place when connected to a contactor with simple screw-type terminals.
		1P terminal protective cover **LA9D115704**	Lot of 8	To be inserted on screw the type terminals (for lugs) of contactors. 1 cover per pole.

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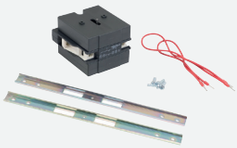
Connection accessories

Pole interconnection kits for a pair of contactors - Motor reverser

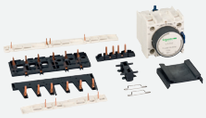
For LC1D09... D38		Motor reverser / Load changeover electrical interlocking links **LAD9V1**	To be used with 2 contactors of same dimensions aligned on a single rail. Connect auxiliary contacts and coils circuits.
		Motor reverser assembling kit (with mechanical interlock only) **LAD9R1**	To be used with 2 contactors.
		Motor reverser assembling kit (with mechanical and electrical interlock) **LAD9R1V**	To be used with 2 contactors.
For LC1D40A, 50A... 65A		Motor reverser assembling kit (with mechanical interlock only) **LAD9R3**	To be used with 2 contactors.
For LC1D80... D95		Motor reverser cabling kit **LA9D8069**	To be used with 2 contactors.
		Motor reverser mechanical interlocking kit **LA9D50978**	To be used with 2 AC coil contactors.
		Motor reverser mechanical interlocking kit **LA9D80978**	To be used with 2 DC coil contactors.
		Motor reverser mechanical and electrical interlocking kit **LA9D4002**	To be used with 2 AC coil contactors.
		Motor reverser mechanical and electrical interlocking kit **LA9D8002**	To be used with 2 DC coil contactors.
For LC1D115... D150		Motor reverser cabling kit **LA9D11569**	To be used with 2 contactors.
		Motor reverser mechanical and electrical interlocking kit **LA9D11502**	To be used with 2 contactors.

Connection accessories

Pole interconnection kit for a pair of contactors - Motor reverser + 2 speed control

For LC1D09… D25		Motor reverser + 2 speed assembling kit (with mechanical and electrical interlock) **LAD9PVGV**	Provides the front faces alignment of a D09… D12. To be used with 3 contactors.

Pole interconnection kits for 3 contactors - Star Delta starter

For LC1D09… D38 **Line contactor** (all contactors of same dimensions)		Motor Star Delta starter assembling kit (without timer) Mechanical + electrical interlocks **LAD91218**	To be used with 3 contactors of same dimensions aligned on a single rail.
		Motor Star Delta starter assembling kit (with timer) Mechanical + electrical interlocks **LAD91217**	To be used with 3 contactors of same dimensions aligned on a single rail.
		Motor Star Delta starter assembling kit (with timer) Mechanical + electrical interlocks **LAD912GV**	The starter is one block composed of GV2 circuit breaker + 1 contactor on the top row, and 2 contactors on the bottom row.
		Motor Star Delta starter Electrical interlocking links **LAD9V14**	To be used with 3 contactors of same dimensions aligned on a single rail. Connect auxiliary contacts and coils circuits.
For LC1D25… D32 **Line contactor** (smaller Star contactor (depth))		Motor Star Delta starter assembling kit (without timer) Mechanical + electrical interlocks **LAD93218**	To be used with 3 contactors aligned on a single rail. A raiser adaptor is provided for the Star contactor, smaller than other contactors.
		Motor Star Delta starter assembling kit (with timer) Mechanical + electrical interlocks **LAD93217**	To be used with 3 contactors aligned on a single rail. A raiser adaptor is provided for the Star contactor, smaller than other contactors.
For LC1D40A… D65A **Line contactor**		Motor Star Delta starter assembling kit (with timer) Mechanical interlock **LAD9SD3**	To be used with 3 contactors with EverLink terminals, aligned on a single rail.
For LC1D80 **Line contactor** With LCD60 or D65 as Star contactor		Motor Star Delta starter assembling kit (with timer) **LA9D8017**	To be used with 3 contactors aligned on a single rail. No interlock provided, additional electrical interlocking circuit must be wired by customer.
For LC1D80, D95 **Line contactor**		Motor Star Delta starter assembling kit (with timer) Mechanical interlock **LA9D8018**	To be used with 3 contactors aligned on a single rail. Additional electrical interlocking circuit must be wired by customer.

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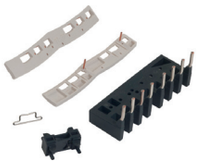
Connection accessories

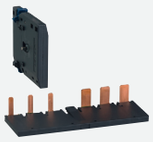
Pole interconnection kits for 3 contactors - Star Delta starter (see allocation table page 30)

For LC1D115 Line contactor		Motor Star Delta starter cabling kit **LA9D11517**	To be used with 3 contactors of same dimensions aligned on a single rail provided. Additional electrical interlocking circuit must be cabled by customer.
For LC1D150 Line contactor		Motor Star Delta starter cabling kit **LA9D15017**	To be used with 3 contactors of same dimensions aligned on a single rail provided. Possible addition of LA9D11502 mechanical + electrical interlocking kit.

Pole interconnection kits for a pair of 4-pole contactors - Load/Source changeover

For LC1DT20, DT25, DT32, DT40		Changeover assembling kit with mechanical interlock **LADT9R1**	To be used with 2 contactors of same dimensions aligned on a single rail provided. Additional electrical interlocking circuit must be wired by customer.
		Changeover assembling kit with mechanical + electrical interlocks **LADT9R1V**	To be used with 2 contactors of same dimensions aligned on a single rail provided.

Pole interconnection kits for a pair of 3-pole contactors - Load/source changeover

For LC1D40A, 50A, 65A		Kit with mechanical interlock and 3P 65 A AC-3 power links **LA9DR3S**	Pole parallel connection (L1 connected to L1, L2 to L2…)
For LC1D80, LC1D95		3P changeover 95 A AC-3 power link **LA9D80691**	Pole parallel connection (L1 connected to L1, L2 to L2…)
For LC1D115, LC1D150		3P changeover 150 A AC-3 power link **LA9D11571**	Pole parallel connection (L1 connected to L1, L2 to L2…)

3-pole, 4-pole contactors - Electrical interlocking kit

For LC1DT20, DT25, DT32, DT40		Motor reverser / Load changeover electrical interlocking links **LAD9V1**	To be used with 2 contactors of same dimensions aligned on a single rail. Connect auxiliary contacts and coils circuits.

Connection accessories

3 and 4-pole contactors - Mechanical assembly components

LC1D09… D12		Wedge for D09… D12 contactor **LAD9V16**	Allows front face alignment of a smaller contactor (LC1D09… D12) with a bigger contactor (LC1D25… D38).
LC1D09… D38		Mechanical interlock with staples **LAD9V2**	To be mounted between 2 contactors. Staples allow 2 contactors to be assembled in one block.
		Staple **LAD9V17**	For assembling 2 contactors in one block (reverser and other applications).
LC1D40A… D65A **LC1DT60A… DT80A**		Mechanical interlock **LAD4CM**	To be mounted between 2 contactors.

Quick interlocking kit finder

	LC1D09	LC1D12	LC1D18	LC1D25	LC1D32	LC1D38	LC1D40A	LC1D50A	LC1D65A	LC1D80	LC1D95	LC1D115	LC1D150
LC1D09	Elec.: LAD9V1 Mecha.: LAD9V2			Elec.: LAD9V1 Mecha.: LAD9V2 + wedge LAD9V16									
LC1D12													
LC1D18													
LC1D25	Elec.: LAD9V1 Mecha.: LAD9V2 + wedge LAD9V16			Elec.: LAD9V1 Mecha.: LAD9V2									
LC1D32													
LC1D38													
LC1D40A							Meca.: LAD4CM						
LC1D50A													
LC1D65A													
LC1D80										Meca.: LA9D50978 (~) / LA9D80978 (DC) Electro-Meca.: LA9D4002 (~) / LAD8002 (DC)			
LC1D95													
LC1D115												Electro-Meca.: LA9D11502	
LC1D150													

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TeSys F

Very high power handling and long-lasting contactors, 3 or 4 poles, from 115 to 1 000 A AC-3, 200 to 2600 A AC-1

LC1F630
630 A AC-3, 3 poles

Different size, according to rating and number of poles

500 A AC-1, 2 poles
LC1F4002

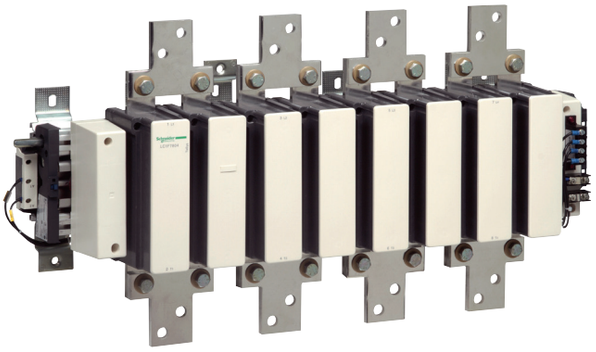
225 A AC-3 , 3 poles
LC1F225

1 000 A AC-3 , 3 poles
LC1F1700

1 000 A AC-3, 3 poles
LC1F2600

700 A AC-1, 4 poles
LC1F5004

1 000 A AC-1, 4 poles
LC1F6304



1 600 A AC-1, 4 poles
LC1F7804

Commercial reference coding

> 2, 3, 4 pole contactors for AC-3, AC-1 applications – screw-type terminals

L C _ F _ _ _ _ _ _

OR

_ _ _

Contactor type

1	Single contactor
2	Reverser (2 contactor assembly)*
3	Star-Delta (3 contactor assembly)

** Coil control voltage does not appear as coils must be ordered separately. See TeSys catalogue MKTED21001_EN – chapter B9.*

Rating (A): depends on application

With AC-1 applications

Valid values:	*… means:*
115	200 A - 3P
1154	200 A - 4P
150	250 A - 3P
1504	250 A - 4P
185	275 A - 3P
1854	275 A - 4P
225	315 A - 3P
2254	315 A - 4P
330	350 A - 3P
3304	350 A - 4P
400	500 A - 3P
4002	500 A - 2P
4004	500 A - 4P
500	700 A - 3P
5002	700 A - 2P
5004	700 A - 4P
630	1000 A - 3P
6302	1000 A - 2P
6304	1000 A - 4P
780	1600 A – 3P
7804	1600 A – 4P
(LCS1F) 1200 (KUE)	1200 A - 3P
1250	1260 A – 3P
1400	1400 A – 3P
1700	1700 A - 3P
2100	2100 A – 3P
2600	2600 A - 3P

With AC-3 applications

Valid values:	*… means:*
115	115 A - 3P
150	150 A - 3P
185	185 A - 3P
225	225 A - 3P
265	265 A - 3P
330	330 A - 3P
400	400 A - 3P
500	500 A - 3P
630	630 A - 3P
780	780 A - 3P
800	800 A - 3P
1000	1000 A - 3P

Coil control voltage codes

(no code for reverser assembly product references)

Volts ≂	24	48	110	115	120	208	220	230	240	380	400	415	440
LC1F115…F225													
50 Hz (coil LX1)	B5	E5	F5	FE5	-	-	M5	P5	U5	Q5	V5	N	-
60 Hz (coil LX1)	-	E6	F6	-	G6	L6	M6	-	U6	Q6	-	-	R6
40…400 Hz (coil LX9)	-	E7	F7	FE7	G7	L7	M7	P7	U7	Q7	V7	N7	R7
LC1F265…F330													
40…400 Hz (coil LX1)	B7	E7	F7	FE7	G7	L7	M7	P7	U7	Q7	wV7	N7	R7
LC1F400…F630, F1250													
40…400 Hz (coil LX1)	-	E7	F7	FE7	G7(1)	L7	M7	P7	U7	Q7	V7	N7	R7
LC1F780													
40…400 Hz (coil LX1)	-	-	F7	FE7	F7	L7	M7	P7	U7	Q7	V7	N7	R7
LC1F800													
40…400 Hz (coil LX4)(2)	-	-	FW	FW	FW	-	MW	MW	MW	QW	QW	QW	-
LC1F1000, F1400, F1700, F2100, F2600													
40…400 Hz (coil LX1F)	-	-	F7	-	G7	-	M7	P7	U7	Q7	V7	N7	R7

Volts ⎓	24	48	110	115	220	230	250	400	440
LC1F115…F330									
(coil LX4 F)	BD	ED	FD	GD	MD	MD	UD	-	RD
LC1F400…F330, F1250									
(coil LX4 F)	-	ED	FD	GD	MD	-	UD	-	RD
LC1F780, LC1F1000, F1400, F1700, F2100, F2600									
(coil LX4 F)	-	-	FD	GD	MD	-	UD	-	RD
LC1F800									
(coil LX4 F)	-	-	FW	FW	MW	MW	-	QW	-

(1)** F7 for **LC1F630
***(2)** Coil LX4 F8•• + rectifier DR5TE••.*

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Exemples

LC1F 115 M7

Single contactor • 115 A AC-3 rated current • 220V AC coil • screw-type terminals

LC1F 1250 MD

Single contactor • 1260 A AC-1 rated current • 220V DC coil

LC2F 265

Reverser contactor assembly • 265 A AC-3 rated current (add 2 x LX1FH2202 coils for 230V AC control)

Commercial references

TeSys F contactors offer great performance for large motor starting and resistive loads applications.

- screw-type terminals for lugs or bars
- AC, DC coils, low consumption electronic DC coils for direct control from PLC output.

Check for details, accessories, auxiliaries in TeSys catalogue ref. MKTED210011EN – chapter B9.

2, 3 and 4 NO pole TeSys F contactors

AC3 (1) rating (A)	AC1 rating (A)	2 poles	3 poles	4 poles
(up to 440 V)	(≤1000 V)			
115	200		**LC1F115••**	**LC1F1154••**
150	200		**LC1F150••**	**LC1F1504••**
185	275		**LC1F185••**	**LC1F1854••**
225	315		**LC1F225••**	**LC1F2254••**
265	350		**LC1F265••**	**LC1F2654••**
330	400		**LC1F330••**	**LC1F3304••**
400	500	**LC1F4002•**	**LC1F400••**	**LC1F4004••**
500	700	**LC1F5002••**	**LC1F500••**	**LC1F5004••**
630	1000	**LC1F6302••**	**LC1F630••**	**LC1F6304••**
780	1600		**LC1F780••**	**LC1F7804••**
800	1000		**LC1F800••**	
1000	1250		**LC1F1000••**	
	1260		**LC1F1250••** (2)	
	1400		**LC1F1400••**	
	1700		**LC1F1700••**	
	2100		**LC1F2100••**	
	2600		**LC1F2600••**	

Coil voltage: replace 2 dots at end of commercial references by voltage code (P7 = 230 V 50-60 Hz; other codes, see page 61)
(1) AC3 rating is defined for 3P contactors only
(2) ≤ 690 V.

Connection accessories

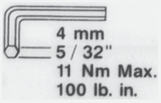
Terminal adaptors

For contactors:
LC1F115, 150, 185

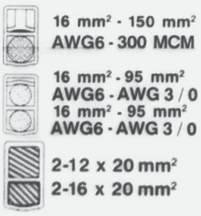
Insulated terminal blocks
LA9F103

Lot of 2

Tightening: with hex key (through front round hole)



Acceptable conductors.



For contactors:
LC1F115
LC1F150, 185
LC1F225, 265, 330, 400, 500
LC1F630, 800

Power terminal protection shrouds
LA9F701
LA9F702
LA9F703
LA9F704

Lot of 6

Prevent from contact with live terminals.

LA9F701	> LC1F115
LA9F702	> LC1F150, 185
LA9F703	> LC1F225…500
LA9F704	> LC1F630, 800

Control circuit take-off
DZ3FA3
DZ3GA3
DZ3HA3
DZ3JA3

Lot of 10

Ring to be placed under the head of terminal screw.

DZ3FA3: for M6 bolt	> LC1F115
DZ3GA3: for M8 bolt	> LC1F150, 185
DZ3HA3: for M10 bolt	> LC1F225…500
DZ3JA3: for M12 bolt	> LC1F630, 800

For contactors:
LC1F 1400 to 2600

Phase separators
LA9F801

Lot of 4

Reinforce insulation between terminals.

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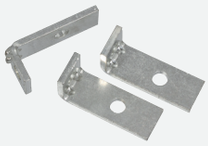
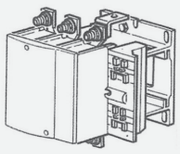
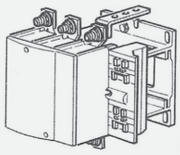
Connection accessories

Terminal adaptors

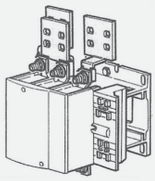
For contactors:
LC1F115
LC1F150, 185
LC1F225, 265, 330, 400
LC1F500
LC1F630, 800

Right angle, 2 holes connection adaptor (set of 3)	For use when cables come from rear of contactor terminals
LA9FF981	15 mm width
LA9FG981	20 mm width
LA9FJ981	25 mm width
LA9FK981	30 mm width
LA9FL981	40 mm width



Large surface 4 holes connection adaptor (set of 3)	For use when cables come from side of contactor terminals
LA9FF979	15 mm width
LA9FG979	20 mm width
LA9FJ979	25 mm width
LA9FK979	30 mm width
LA9FL979	40 mm width



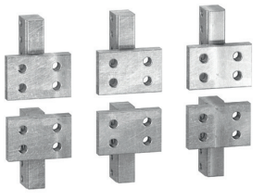
Large surface 5 holes connection adaptor (set of 3)	For use when cables come from top of contactor terminals
LA9FF980	15 mm width
LA9FG980	20 mm width
LA9FJ980	25 mm width
LA9FK980	30 mm width
LA9FL980	40 mm width

Set of connection links (set of 3)	For connection of a LC1F contactor to LR9F overload thermal relay **LA7F… compatibility**
LA7F401	401: LC1F115 with LR9F5.57, 63, 67, 69, F69, F71
LA7F402	402: LC1F150, 185 with LR9F5.57, 63
LA7F407	407: LC1F185 with LR9F5.71, LR9F71
LA7F403	403: LC1F225, 265 with LR9F5.71, LR9F71
LA7F404	404: LC1F225…400 with LR9F7.75, 79, LR9F75, F79
LA7F405	404: LC1F400 with LR9F7.81, LR9F81
LA7F406	405: LC1F500 with LR9F7.75, 79, 81, LR9F75, 79, 81
	406: LC1F630, 800 with LR9F7.81, LR9F81

For contactors:
LC1F1250
LC1F1000, 1400, 1700, 2100, 2600

LA9F1250
(6 pieces)

LA9F2100
(6 pieces)


LA9F2600

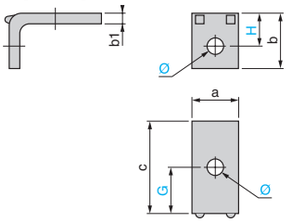
Right-angled, connection adaptor (set of 6)	
LA9F1250	LA9F1250 - 60 mm width for LC1F1250
LA9F2100	LA9F2100 - 60 mm width for LC1F1000, 1400, 1700, 2100
LA9F2600	LA9F2600 - 100 mm width for LC1F2600

Connection accessories

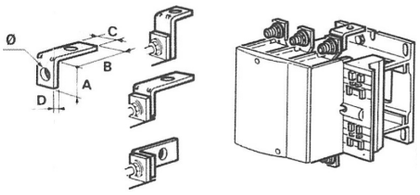
Dimensions

1 hole connector

Right-angled connectors LA9 F•981 (set of 3) for rear connection

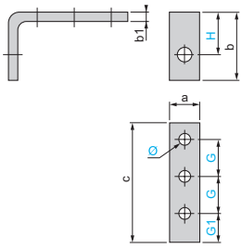


LA9	FF981	FG981	FJ981	FK981	FL981
a	15	20	25	30	40
b	18	23	29	35	48
b1	3	3	4	5	8
c	42	45	55	52	86
G	24	26	32.5	26	45
H	10.5	13	16.5	20	28
Ø	6.5	9	11	11	13

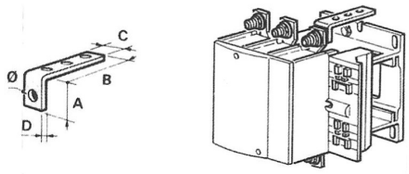


3 hole connector

Right-angled connectors LA9 F•979 (set of 3) for side connection

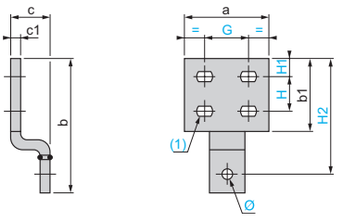


LA9	FF979	FG979	FJ979	FK979	FL979
a	15	20	25	30	40
b	54	58	63.5	68	117
b1	5	5	6	6	10
c	80	92	120	120	130
G	24	28	37	37	37.5
G1	20	22	29	29	35
H	36	39	41	42	76
Ø	6.5	9	11	11	13

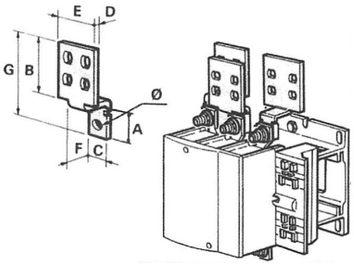


Large surface area connector

Right-angled connectors LA9 •980 with large surface area (set of 3)

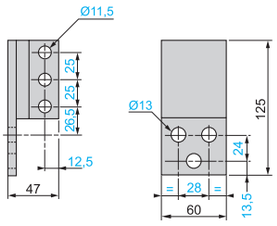


LA9	FF980	FG980	FJ980	FK980	FL980
a	35	40	50	60	100
b	70.5	82.5	98.5	114	154
b1	40	45	55	65	85
c	29	29	33	33	43
c1	3	3	5	5	10
G	18	20	25	29	53
H	18	20	22	26	40
H1	10	12	14	17	20
H2	60.5	72.5	84.5	97	132
Ø	6.5	9	11	11	13
(1)	Ø7 x 10	Ø9 x 12	Ø11 x 14	Ø12.5 x 15	Ø12.5 x 15

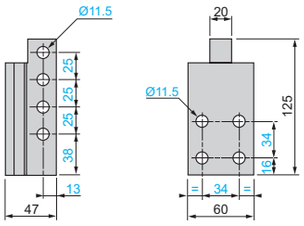


Right-angled connectors

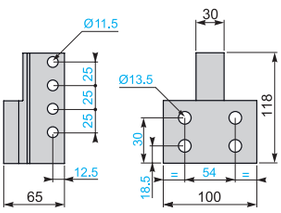
Right-angled connectors LA9 F1250 (set of 6)

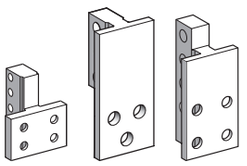


Right-angled connectors LA9 F2100 (set of 6) for rear connection



Right-angled connectors LA9 F2600 (set of 6) for rear connection





LA9 F2600 LA9 F1250 LA9 F2100

Connectors for mounting a thermal overload relay beneath a reversing contactor or star-delta contactors

	LA7F401	LA7F402	LA7F403	LA7F404	LA7F405	LA7F406		LA7F407	
Number of parts	3x	3x	3x	3x	3x	2x	1x	2x	1x
Longitudinal center to center distance	38.5	36	49.5	48	44	55.9	55.9	25	25
Transversal center to center distance						25		8	
Overall length	48.5	56	77.5	76	74	93.9	93.9	47	46.5
Overall width						60		30.5	
Thickness	3	3	4	4	6	6	6	3	3

LA7F401... 403 LA7F407

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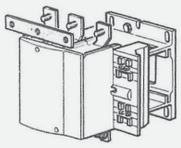
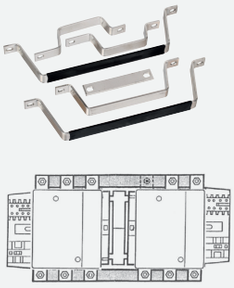
Connection accessories

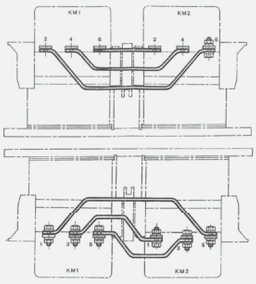
Pole interconnections links for 3P contactors

For contactors:
LC1F115... 800

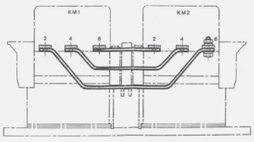


Short circuit link	For use in Star-Delta application (1 needed)
LA9FF601	15 mm width for LC1F115
LA9FG601	20 mm width for LC1F150, 185
LA9FH601	25 mm width for LC1F 225…400
LA9FK601	30 mm width for LC1F500
LA9FL601	40 mm width for LC1F630, 800





Parallel + reversing link kit	For use in motor reverser starter application
LA9FF976	for > LC1F115
LA9F15076	> LC1F150
LA9FG976	> LC1F185
LA9F22576	> LC1F225
LA9FH976	> LC1F265
LA9FJ976	> LC1F330, 400
LA9FK976	> LC1F500
LA9FL976	> LC1F630, 800

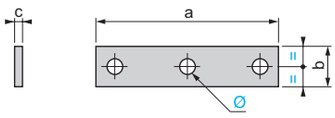


Reversing links	For use in motor reverser starter application
LA9FF982	for > LC1F115
LA9F15082	> LC1F150
LA9FG982	> LC1F185
LA9F22582	> LC1F225
LA9FH982	> LC1F265
LA9FJ982	> LC1F330, 400
LA9FK982	> LC1F500
LA9FL982	> LC1F630, 800

Dimensions

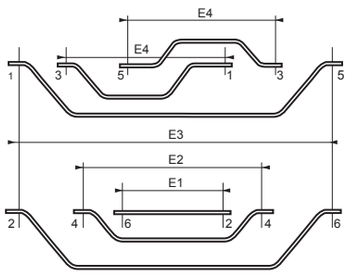
Short circuit link

Links for "star" connection of 3 poles - **LA9 F•601**



LA9	FF601	FG601	FH601	FK601	FL601
a	69	100	121	140	200
b	15	20	20	30	40
c	3	3	5	5	8
Ø	6.5 x 8.5	8.5 x 10.5	10.5 x 13	11	13

Parallel / reversing bars



		LA9FF976	LA9F15076	LA9FG976	LA9F22576	LA9FH976	LA9FJ976	LA9FK976	LA9FL976
Bars' thickness (mm)		3	3	3	4	4	5	6	8
E1		77	71	78	62	100	107	112	137
E2		151	151	158	158	196	203	222	297
E3		225	231	238	254	292	299	332	457
E4		114	111	118	110	148	155	167	217
Overall height	6-2	3	3	3	4	4	5	6	8
	4-4	44	44	44	49	50.5	48	49	57
	2-6	61	61	61	69	70	67	70	78.5
	5-3	33	33	38	39	39	42	45	56
	3-1	33	33	38	39	39	42	45	56
	1-5	61	61	61	69	70	67	70	78.5

Connection accessories

Terminal adaptors for 3P contactors

For contactors: LC1F4002, 5002, 6302

Power terminal protection shrouds (Set of 6)

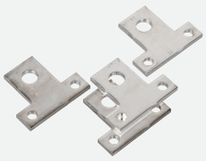
LA9F703

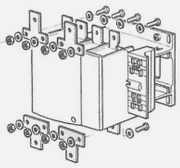
LA9F704

Prevent from contact with lives terminals
LA9F703 > for LC1F4002, 5002
LA9F704 > for LC1F6302

Interconnection pole links for 4P contactors

For contactors: LC1F1154... 6304





Parallel pole link (set of 4)	For connecting a pair of poles in parallel on a single contactor
LA9FF602	for > LC1F1154
LA9FG602	> LC1F1504, 1854
LA9FH602	> LC1F2254, 2654, 3304, 4004
LA9FK602	> LC1F5004
LA9FL602	> LC1F6304

Parallel links (set of 4)	For use in changeover app. (4P contactors -downstream parallel connection of poles)
LA9FF976	for > LC1F1154
LA9F15076	> LC1F1504
LA9FG976	> LC1F1854
LA9F22576	> LC1F2254
LA9FH976	> LC1F2654
LA9FJ976	> LC1F3304, 4004
LA9FK976	> LC1F5004
LA9FL976	> LC1F6304

Power terminal protection shroud (set of 8)	For use in motor reverser starter application
LA9F706	for > LC1F1154
LA9F707	> LC1F1504, 1854
LA9F708	> LC1F2254, 2654, 3304, 4004, 5004
LA9F709	> LC1F6304

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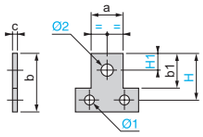
Dimensions

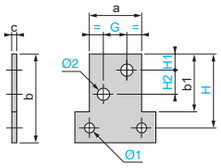
Parallel connection of poles

Paralleling links (lot of 4)

LA9 FF602, FG602, FH602

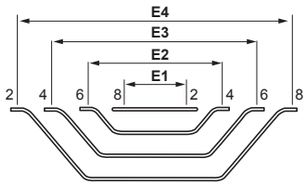


LA9 FK602, FL602



LA9	FF602	FG602	FH602	FK602	FL602
a	25	30	40	50	60
b	45	55	60	85	100
b1	30	35	40	55	65
c	4	5	8	10	10
G	–	–	–	22	26
H	37.5	45	52.5	70	85
H1	12.5	15	15	14	17
H2	–	–	–	22	26
Ø1	6.5	9	11	11	13
Ø2	11	11	13	11	14

Parallel links



	LA9FF977	LA9F15077	LA9FG977	LA9F22577	LA9FH977	LA9FJ977	LA9FK977	LA9FL977
Bars' thickness (mm)								
	3	3	3	4	4	5	6	8
Width								
E1	77	71	78	54	100	107	112	137
E2	151	151	158	150	196	203	222	297
E3	225	231	238	246	292	299	332	457
E4	299	311	318	342	388	395	442	617
Overall height								
4-8	3	3	3	4	4	5	6	8
3-7	44	44	44	49	50.5	48	49	57
2-6	61	61	61	69	70	67	70	78.5
1-5	78	78	78	89	91	87	91	105

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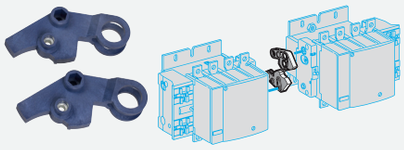
Mechanical interlocking accessories

Mechanical interlocks for a pair of 3-4P contactors - horizontally mounted

For contactors:
LC1F115 ... LC1F800



Set of 2 mechanical horizontal interlocks.

LA9FF970
LA9FG970
LA9FJ970
LA9FL970

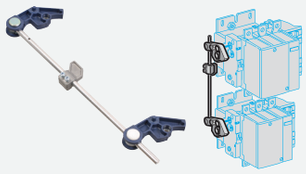
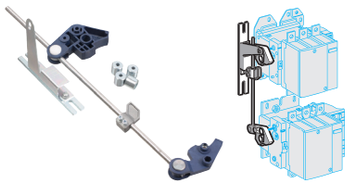
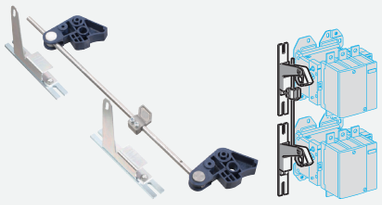
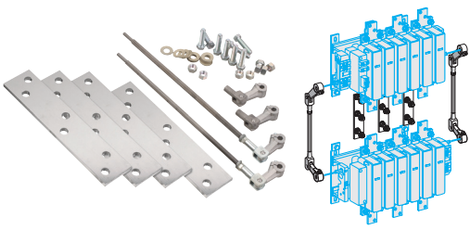
Fixing screws enclosed.
Top to tail mounting
See contactors allocation table below.

Quick interlocking finder

	LC1F115 LC1F1154	LC1F150 LC1F1504	LC1F185 LC1F1854	LC1F225 LC1F2254	LC1F265 LC1F2654	LC1F330 LC1F3304	LC1F400 LC1F4004	LC1F500 LC1F5004	LC1F630 LC1F630	LC1F780 LC1F7804	LC1F800
LC1F115 LC1F1154	**LA9FF970**	**LA9FF970**	-	-	-	-	-	-	-	-	-
LC1F150 LC1F1504	**LA9FF970**	**LA9FF970**	-	-	-	-	-	-	-	-	-
LC1F185 LC1F1854	-	-	**LA9FG970**	**LA9FG970**	-	-	-	-	-	-	-
LC1F225 LC1F2254	-	-	**LA9FG970**	**LA9FG970**	-	-	-	-	-	-	-
LC1F265 LC1F2654	-	-	-	-	**LA9FJ970**	**LA9FJ970**	-	-	-	-	-
LC1F330 LC1F3304	-	-	-	-	**LA9FJ970**	**LA9FJ970**	-	-	-	-	-
LC1F400 LC1F4004	-	-	-	-	-	-	**LA9FJ970**	-	-	-	-
LC1F500 LC1F5004	-	-	-	-	-	-	-	**LA9FJ970**	-	-	-
LC1F630 LC1F630	-	-	-	-	-	-	-	-	**LA9FL970**	-	**LA9FL970**
LC1F780 LC1F7804	-	-	-	-	-	-	-	-	-	-	-
LC1F800	-	-	-	-	-	-	-	-	**LA9FL970**	-	**LA9FL970**

Mechanical interlocking accessories

Mechanical interlocks for a pair of 3-4P contactors - vertically mounted (biggest on top)

For contactors: **LC1F115 to LC1F2254** **with** **LC1F115 to LC1F2254**		Mechanical horizontal interlocks. **LA9FF4F** **LA9FG4F** **LA9FG4G**	Fixing screws enclosed. Top to tail mounting See contactors allocation table below.
For contactors: **LC1F115 to LC1F2254** **with** **LC1F265 to LC1F630** **or with LC1F800**		**LA9FH4F** **LA9FH4G** **LA9FJ4F** **LA9FJ4G** **LA9FK4F** **LA9FK4G** **LA9FL4F** **LA9FL4G**	1 square angled mechanical mounting included, for contactor with rating from 265 to 800, except 780.
For contactors: **LC1F265 to LC1F630** **With LC1F265 to LC1F630 or with LC1F800**		**LA9FH4H** **LA9FJ4H** **LA9FJ4J** **LA9FK4H** **LA9FK4J** **LA9FK4K** **LA9FL4H** **LA9FL4J** **LA9FL4K** **LA9FL4L**	2 square angled mechanical mountings included.
For contactors: **LC1F780, 7804** **with** **LC1F780, 7804**		**LA9FX970**	

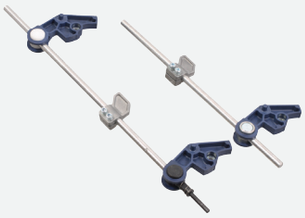
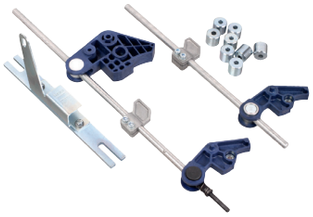
Quick interlocking finder

	LC1F115 LC1F1154	LC1F150 LC1F1504	LC1F185 LC1F1854	LC1F225 LC1F2254	LC1F265 LC1F2654	LC1F330 LC1F3304	LC1F400 LC1F4004	LC1F500 LC1F5004	LC1F630 LC1F630	LC1F780 LC1F7804	LC1F800
LC1F115 LC1F1154	**LA9FF4F**	**LA9FF4F**	**LA9FG4F***	**LA9FG4F***	**LA9FH4F***	**LA9FH4F***	**LA9FJ4F***	**LA9FK4F***	**LA9FL4F***	-	**LA9FL4F***
LC1F150 LC1F1504	**LA9FF4F**	**LA9FF4F**	**LA9FG4F***	**LA9FG4F***	**LA9FH4F***	**LA9FH4F***	**LA9FJ4F***	**LA9FK4F***	**LA9FL4F***	-	**LA9FL4F***
LC1F185 LC1F1854	**LA9FG4F***	**LA9FG4F***	**LA9FG4G**	**LA9FG4G**	**LA9FH4G***	**LA9FH4G***	**LA9FJ4G***	**LA9FK4G***	**LA9FL4G***	-	**LA9FL4G***
LC1F225 LC1F2254	**LA9FG4F***	**LA9FG4F***	**LA9FG4G**	**LA9FG4G**	**LA9FH4G***	**LA9FH4G***	**LA9FJ4G***	**LA9FK4G***	**LA9FL4G***	-	**LA9FL4G***
LC1F265 LC1F2654	**LA9FH4F***	**LA9FH4F***	**LA9FH4G***	**LA9FH4G***	**LA9FH4H**	**LA9FH4H**	**LA9FJ4H***	**LA9FK4H***	**LA9FL4H***	-	**LA9FL4H***
LC1F330 LC1F3304	**LA9FH4F***	**LA9FH4F***	**LA9FH4G***	**LA9FH4G***	**LA9FH4H**	**LA9FH4H**	**LA9FJ4H***	**LA9FK4H***	**LA9FL4H***	-	**LA9FL4H***
LC1F400 LC1F4004	**LA9FJ4F***	**LA9FJ4F***	**LA9FJ4G***	**LA9FJ4G***	**LA9FJ4H***	**LA9FJ4H***	**LA9FJ4J**	**LA9FK4J**	**LA9FL4J***	-	**LA9FL4J***
LC1F500 LC1F5004	**LA9FK4F***	**LA9FK4F***	**LA9FK4G***	**LA9FK4G***	**LA9FK4H***	**LA9FK4H***	**LA9FK4J***	**LA9FK4K**	**LA9FL4K***	-	**LA9FL4K***
LC1F630 LC1F630	**LA9FL4F***	**LA9FL4F***	**LA9FL4G***	**LA9FL4G***	**LA9FL4H***	**LA9FL4H***	**LA9FL4J***	**LA9FL4K***	**LA9FL4L**	-	**LA9FL4L**
LC1F780 LC1F7804	-	-	-	-	-	-	-	-	-	**LA9FX970 (3P)** **LA9FX971 (4P)**	-
LC1F800	**LA9FL4F***	**LA9FL4F***	**LA9FL4G***	**LA9FL4G***	**LA9FL4H***	**LA9FL4H***	**LA9FL4J***	**LA9FL4K***	**LA9FL4L**	-	**LA9FL4L**

* Biggest on top.

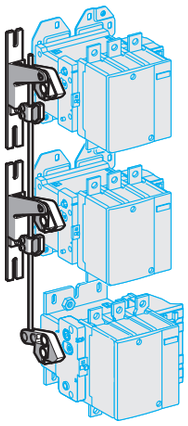
Mechanical interlocking accessories

Mechanical interlocks for 3 x 3-4P contactors - vertically mounted (biggest on top)

For contactors: LC1F415 to LC1F5005 with LC1F115 to LC1F5004 and with LC1F115 to LC1F5004		Vertical interlocking kit for 3 contactors **LA9FF4F4F to LA9FK4K4K** See reference coding principle below.	1 square angled mechanical mounting included per driven contactor LC1F265 to 5004.
For contactors: LC1F630 to LC1F8004 withLC1F630 to LC1F8004 and with LC1F630 to LC1F8004		Vertical interlocking kit for 3 contactors **LA9FL4F4F to LA9FL4L4L** See reference coding principle below.	1 square angled mechanical mounting included per driven contactor LC1F265 to 8004.

Interlocking kit: reference coding principle

L A 9 F _ 4 _ 4 _



Top contactor code
(the biggest contactor)

Middle contactor code

Bottom contactor code
(the smallest contactor)

Code	Contactor
F	LC1F115 - LC1F1154
	LC1F150 - LC1F1504
G	LC1F185 - LC1F1854
	LC1F225 - LC1F2254
H	LC1F265 - LC1F2654
	LC1F330 - LC1F3304
J	LC1F400 - LC1F4004
K	LC1F500 - LC1F5004
L	LC1F630 - LC1F6304
	LC1F800 - LC1F8004

Example

Top: LC1F630
Middle: LC1F330
Bottom: LC1F115

Corresponding kit: **LA9FL4H4F**

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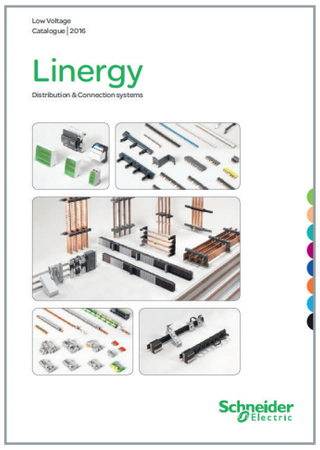

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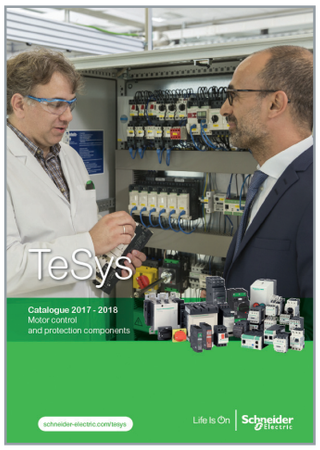

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