






TeSys D, D Green contactors

Type of product	Range		Pages
AC/DC compatible coil contactors - TeSys D Green AC-3, AC-1, UL CSA	From 9 to 80 A		B8/2
AC-3 applications - 3-pole, 4-pole contactors	From 9 to 150 A		B8/8
AC-1 applications - 3-pole, 4-pole contactors	From 25 to 200 A		B8/9
UL CSA standards - 3-pole contactors	From 25 to 200 A		B8/14
Reversing, changeover pre-assembled contactors	From 9 to 150 A		B8/15
AC/DC compatible coil, reversing contactors - TeSys D Green	From 9 to 80 A		B8/17
Contactors for switching capacitor banks	From 12.5 to 60 kVAR		B8/20
Auxiliary contact blocks – accessories – spare coils for TeSys D, TeSys D Green			B8/22

TeSys SK, K Mini-contactors

Mini-contactors TeSys SK	Up to 6 A		B8/37
Mini-contactors TeSys K	From 6 to 16 A		B8/39
Reversing pre-assembled mini-contactors TeSys K	From 6 to 16 A		B8/43
Auxiliary contact blocks - accessories			B8/48







S207 Contactors for railways applications. Click on image to download.



S335 Contactors for electrodomestic application. Click on image to download.

Contactors for use in modular enclosures / Din rail

Mini-contactors TeSys SKGC	Up to 20 A		B8/51
Modular contactors TeSys GC	From 16 to 100 A		B8/53
Dual tariff contactors TeSys GY	16, 25, 40 or 100 A		B8/54
Impulse relay TeSys GF	Up to 16 A		B8/55
Auxiliary contact blocks - accessories TeSys GC, GY			B8/56

TeSys

TeSys D Contactors

Introduction

TeSys D Green, enriching TeSys D family

TeSys D conventional contactors 9 to 150 A, for motor control and other applications.

TeSys D Green delivers a consistent low consumption range of contactors from 9 A to 80 A, covering control voltage from 24 to 250 V, with same coils for AC and DC.



When implemented with other Schneider Electric products*, TeSys D Green contactors are part of a comprehensive solution that is ideal for all types of industrial machines and processes.

TeSys LR9D

By combining a TeSys D Green contactor with our new TeSys LR9D electronic overload relay, you will have less heat generation, and further reduce energy consumption.



Contactors

* such as PLC I/O type M580, M340, M221 or M241 or extended I/O type Advantys STB range, or in association with electronic overload relays LR9D or TeSys T.

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TeSys D Contactors

Introduction



Highly competitive coil consumption

Small changes can generate big savings. The new TeSys D Green contactor is equipped with an innovative electronic coil. These electronic-coil contactors require **up to 80 % less energy** than electro-mechanical contactors. This innovation results in concrete values: for example, large plants can noticeably reduce their energy bills and heat dissipation in cabinet.

Available in



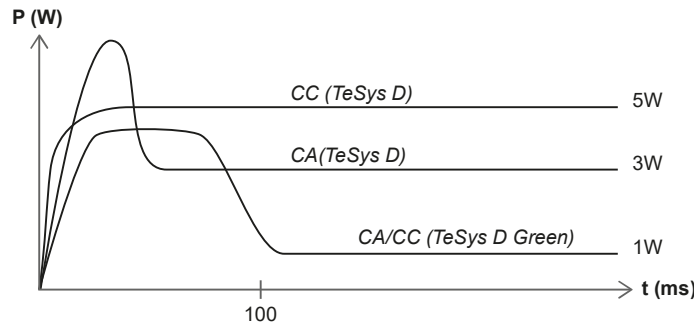
09-12-18 A

25-32-38 A

40-50-65-80 A

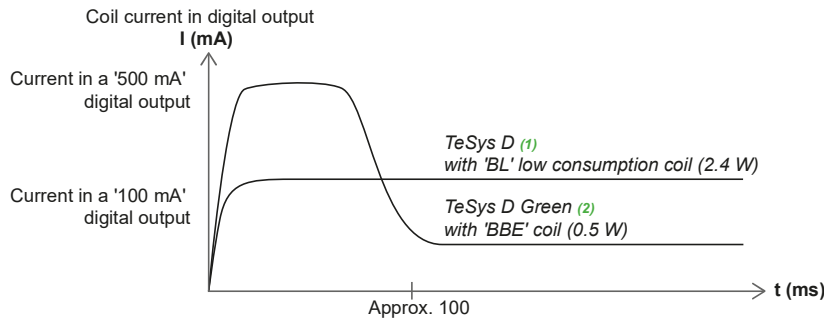
Coil currents comparison

TeSys D Green (AC/DC coil) vs TeSys D (AC, DC coils)



TeSys D Green brings a significant reduction of energy consumption.

TeSys D Green ("BBE" coil) vs TeSys D (low consumption "BL" coil)



(1) Up to 38 A.
(2) 40 to 80 A.

TeSys D Green is well adapted to direct control by PLC static outputs, even in its high ratings.

Contactors

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TeSys D Green Contactors

Product references



LC1D09●●●



LC1D40A●●●

TeSys D Green contactors have a dark grey casing and a 3-character code voltage.

3-pole contactors - Motor control up to 37 kW / 400 V - Category AC-3

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 (θ ≤ 60 °C)						Rated operational current in AC-3 440 V up to	Instan- taneous auxiliary contacts	Basic reference, to be completed by adding the control voltage code	Weight	
220 V 230 V	380 V 400 V	415 V	440 V	500 V	660 V 690 V					
kW	kW	kW	kW	kW	kW	A		Fixing ⁽¹⁾	kg	
Connection by screw clamp terminals										
2.2	4	4	4	5.5	5.5	9		LC1D09●●●	0.368	
3	5.5	5.5	5.5	7.5	7.5	12	1	1	LC1D12●●●	0.373
4	7.5	9	9	10	10	18	1		LC1D18●●●	0.378
5.5	11	11	11	15	15	25	1	1	LC1D25●●●	0.433
7.5	15	15	15	18.5	18.5	32	1	1	LC1D32●●●	0.438
9	18.5	18.5	18.5	18.5	18.5	38			LC1D38●●●	0.442
Power connections by EverLink® BTR ⁽²⁾ screw connectors and control by screw clamp terminal										
11	18.5	22	22	22	30				LC1D40A●●●	0.992
15	22	25	30	30	33	5			LC1D50A●●●	0.997
18.5	30	37	37	37	3				LC1D65A●●●	1.002
22	37	37	37	37	37	6			LC1D80A●●●	1.002
Connection for lugs or bars ⁽⁴⁾										

For LC1D40A to LC1D80A, insert a figure 6 before the voltage code.

Example: LC1D40A●●● becomes LC1D40A6●●●

Auxiliary contact blocks and add-on modules

See pages B8/22 to B8/28.

Control voltage codes

AC/DC or 24 V DC supply

Volts	24 (DC only)	24-60	48-130	100-250
LC1D09 ... D38, LC1D40A ... D80A				
U 0.85...1.1 Uc		BNE	EHE	KUE
LC1D09 ... D38				
U 0.8 ... 1.2 Uc	BNE			
LC1D40A ... D80A				
U 0.8...1.2 Uc	BBE			

⁽¹⁾ LC1D09 to D80A: clip-on mounting on 35 mm rail NSYSDR or screw fixing.

⁽²⁾ BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LADALLEN4, see B8/28).

⁽³⁾ Please consult your Regional Sales Office.



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TeSys D Green Contactors

Product references



LC1D09●●●



LC1D40●●●



LC1DT60●●●

TeSys D Green contactors have a dark grey casing and a 3-character code voltage.

3-pole contactors - Load control from 25 to 80 A - Category AC-1

Non inductive loads maximum current ($\theta \leq 60^\circ\text{C}$) utilisation category AC-1	Number of poles	Instantaneous auxiliary contacts		Partial reference, to be completed by adding the control voltage code	Weight
				Fixing ⁽¹⁾	

A **kg**

Connection by screw clamp terminals

25	3	1	1	LC1D09●●● or LC1D12●●●	0.368 0.373
32	3	1		LC1D18●●●	0.378
40	3	1		LC1D25●●●	0.433
50	3	1		LC1D32●●● or LC1D38●●●	0.438 0.442

Connection by EverLink®, BTR ⁽²⁾ screw connectors

60	3	1	1	LC1D40A●●●	0.992
80	3	1		LC1D50A●●● or LC1D65A●●● ⁽³⁾ or LC1D80A●●● ⁽³⁾	0.997 1.002 1.002

Connection for lugs or bars

For LC1D40A to LC1D80A, insert a figure 6 before the voltage code.

Example: LC1D40A●●● becomes LC1D40A6●●●

4-pole contactors

Connection by EverLink®, BTR ⁽²⁾ screw connectors

60	4	1	1	LC1DT60A●●●	1.230
80	4	1		LC1DT80A●●●	1.290

Connection for lugs or bars

For LC1DT60A to LC1DT80A, insert a figure 6 before the voltage code.

Example: LC1DT60A●●● becomes LC1DT60A6●●●

4-pole changeover contactors

Connection by EverLink®, BTR ⁽²⁾ screw connectors

60	4	1	1	LC2DT60A●●●	2.460
80	4	1		LC2DT80A●●●	2.580

Control voltage codes

AC/DC 24 V DC supply

Volts	24 (DC only)	24-60	48-130	100-250
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LC1D09...D80A and LC●DT60A...DT80A

U 0.85 ... 1.1 Uc		BNE	EHE	KUE
-------------------	--	-----	-----	-----

LC1D09 ... D38

U 0.8 ... 1.2 Uc	BNE			
------------------	-----	--	--	--

LC1D40 to LC1D80A, LC●DT60A to LC●DT80A

U 0.8 ... 1.2 Uc	BBE			
------------------	-----	--	--	--

⁽¹⁾ LC1D09 to D80A, LC●DT60A and LC●DT80A: clip-on mounting on 35 mm \perp rail NSYS DR or screw fixing.

⁽²⁾ BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LADALLEN4, see page B8/28).

⁽³⁾ Coordination tables according to the number of operation cycles, consult online datasheets for values.



Contactors

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TeSys D Green Contactors

Product references

PB110659.eps



LC1D09●●●

PB110657.eps



LC1D40A●●●



Contactors

TeSys D Green contactors have a dark grey casing and a 3-character code voltage.

3-pole contactors conforming to UL and CSA standards (North American market) - 25 to 80 A

Standard power ratings of motors 50/60 Hz						Associated cable type 75 °C-Cu	Continuous current	Type of contactor required Partial reference, to be completed by adding the control voltage code Fixing, connection ⁽¹⁾
Single-phase 1 Ø		3-phase 3 Ø						
115 V	230 V	200 V	230 V	460 V	575 V			
	240 V	208 V	240 V	480 V	600 V			
HP	HP	HP	HP	HP	HP		A	

Connection by screw clamp terminals

1/3	1	2	2	5	7.5	WG 18 - 10	25	LC1D09●●●
0.5	2	3	3	7.5	10	AWG 18 - 10	25	LC1D12●●●
1	3	5	5	10	15	AWG 18 - 8	32	LC1D18●●●
2	3	7.5	7.5	15	20	AWG 14 - 6	40	LC1D25●●●
2	5	10	10	20	25	AWG 14 - 6	50	LC1D32●●●

Power connections by EverLink® BTR ⁽²⁾ screw connectors and control by spring terminals

3	5	10	10	30	3	WG 16 - 2	60	LC1D40A●●●
3	7.5	15	15	40	40	WG 16 - 2	70	LC1D50A●●●
5	10	20	20	40	50	WG 16 - 2	80	LC1D65A●●●
5	10	20	20	40	50	WG 16 - 2	80	LC1D80A●●●

Connection for lugs or bars

For LC1D40A to LC1D80A, insert a figure 6 before the voltage code.

Example: LC1D40A●●● becomes LC1D40A6●●●

Applications with High-Fault Short-Circuit Current ratings

High-fault short-circuit current ratings are: 100 kA at 600 V with Class J fuses and 85 kA (D09-38), 100 kA (D40A-65A) at 480 V and 50 kA at 600 V with circuit breakers.

Control voltage codes

AC/DC 24 V DC supply

Volts	24 (DC only)	24-60	48-130	100-250
LC1D09 ... D32, LC1D40A ... D80A				
U 0.85 ... 1.1 Uc		BNE	EHE	KUE
LC1D09 ... D38				
U 0.8 ... 1.2 Uc		BNE		
LC1D40A ... D80A				
U 0.8...1.2 Uc		BBE		

(1) LC1D09 to D80: clip-on mounting on 35 mm rail NSYS DR or screw fixing.

(2) BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LADALLEN4, see page B8/28).

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TeSys D Green Contactors

Product references

TeSys D Green contactors - Coordination with PLC output modules (static/relay/triac)

Selection of PLC coordinated contactors

Laboratory tests have been carried out in order to validate trouble free contactor closings and openings with different PLC output modules.

The coil must be defined according to the contactor rating range and output module. See selection table below.

The PLC your are using				>>>	Compatible contactors ⁽¹⁾	Coil code
PLC type	Output type	Output I (A)	Output module commercial reference			
M221 / M241 / M251	Static output: 24 V DC	0.5	TM3DQ8●●● and Q16●●● (T, TG, U, UG)	>>>	LC1D09●● to LC1D38●●, LC1D40A●●● to LC1D80A, LC1DT60A●●● to LC1DT80A●●●	BL, BNE BBE
		0.3 (sealed) 0.8 (inrush)	TM3XTYS4	>>>	LC1D40A●●● to LC1D80A, LC1DT60A●●● to LC1DT80A●●●	BBE, BD, BNE
		0.1	TM3DQ16●● and Q32●● (TK, UK)	>>>	LC1D09●● to LC1D38●●	BL
	Relay output: 24 V DC / 230 V AC	2	TM3DQ8 and DQ16 (R, RG), TM3DM8 and DM24 (R, RG)	>>>	LC1D09●● to LC1D38●●, LC1D40A●●● to LC1D80A, LC1DT60A●●● to LC1DT80A●●●	Code of any DC coil up to 24 V or any AC coil up to 230 V
M340 / M580	Static output: 24 V DC	0.5	BMXDDO1602 and DM16022	>>>	LC1D09●● to LC1D38●●, LC1D40A●●● to LC1D80A, LC1DT60A●●● to LC1DT80A●●●	BL, BNE BBE
		0.1	BMXDDO3202, BMXDDM3202K, BMXDDO6402K	>>>	LC1D09●● to LC1D38●●	BL
	Relay output: 24 V DC / 230 V AC	2	BMXDRA0805 and DM16025	>>>	LC1D09●● to LC1D38●●, LC1D40A●●● to LC1D80A, LC1DT60A●●● to LC1DT80A●●●	Code of any DC coil up to 24 V or any AC coil up to 230 V
	Triac output: 230 V AC	0.6	BMXDAO1605	>>>	LC1D09●● to LC1D38●●, LC1D40●●● to LC1D80A●●●, LC1DT60A●●● to LC1DT80A●●●	Code of any AC coil up to 230 V (P7 code = 230 V)
ADVANTYS	Static output: 24 V DC	0.5	STBDDO3200	>>>	LC1D09●● to LC1D38●●, LC1D40A●●● to LC1D80A, LC1DT60A●●● to LC1DT80A●●●	BL, BNE BBE
	Triac output: 230 V AC	2	STBDAO8210	>>>	LC1D09●● to LC1D38●●, LC1D40A●●● to LC1D80A, LC1DT60A●●● to LC1DT80A●●●	Code of any AC coil up to 230 V (P7 code = 230 V AC)

Coils consumption characteristics

Coil type	Uc DC - min -max	Average consumption at Uc DC / 20 °C	
		Inrush	Sealed
BL	24 V - 0.8 Uc to 1.1 Uc	2.4 W - 2.4 VA	2.4 W - 2.4 VA
BNE		14 W - 14 VA	0.7 W - 0.7 VA
BBE		11 W - 11 VA	0.5 W - 0.5 VA

(1) Replace dot by coil code. Ex LC1D09●● becomes LC1D09BL.

Contactor's

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TeSys D Contactors

Product references

PB121549.eps



LC1D09●●

PB121350.eps



LC1D25●●

PB120909.eps



LC1D80A●●



PB121351.eps



LC1D95●●

PB121352.eps



LC1D115●●

Contactors

3-pole contactors - Motor control up to 75 kW at 400 V, in category AC-3

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 ($\theta \leq 60^\circ\text{C}$)							Rated operational current in AC-3 440 V up to	Instan- taneous auxiliary contacts	Basic reference, to be completed by adding the control voltage code	Weight (²)	
220 V 230 V	380 V 400 V	415 V	440 V	500 V	660 V 690 V	1000 V					
kW	kW	kW	kW	kW	kW	kW	A		Fixing (¹)	kg	
Connection by screw clamp terminals											
2.2	4	4	4	5.5	5.5	-	9	1	1	LC1D09●●	0.320
3	5.5	5.5	5.5	7.5	7.5	-	12	1	1	LC1D12●●	0.325
4	7.5	9	9	10	10	-	18	1	1	LC1D18●●	0.330
5.5	11	11	11	15	15	-	25	1	1	LC1D25●●	0.370
7.5	15	15	15	18.5	18.5	-	32	1	1	LC1D32●●	0.375
9	18.5	18.5	18.5	18.5	18.5	-	38	1	1	LC1D38●●	0.380
Power connections by EverLink® BTR screw connectors (³) and control by screw clamp terminal											
11	18.5	22	22	22	30	-	40	1	1	LC1D40A●●	0.850
15	22	25	30	30	33	-	50	1	1	LC1D50A●●	0.855
18.5	30	37	37	37	37	-	65	1	1	LC1D65A●●	0.860
22	37	37	37	37	37	-	66	1	1	LC1D80A●●	0.860
Connection by screw clamp terminals or connectors											
22	37	45	45	55	45	4				LC1D80●●	1.590
25	45	45	45	55	45	4				LC1D95●●	1.610
30	55	59	59	75	80	6				LC1D115●●	2.500
40	75	80	80	90	100	75	150	1	1	LC1D150●●	2.500

Connection by lugs or bars

In the references selected above, insert a figure 6 before the voltage code.
Example: LC1D09●● becomes LC1D096●●.

Separate components

Auxiliary contact blocks and add-on modules: see pages B8/22 to B8/28.

- (1) LC1D09 to D80A: clip-on mounting on 35 mm rail NSYSR or screw fixing.
- LC1D80 to D95: clip-on mounting on 35 mm rail NSYSR or 75 mm rail AM1DL or screw fixing.
- LC1D80 to D95: clip-on mounting on 75 mm rail AM1DL or screw fixing.
- LC1D115 and D150: clip-on mounting on 2 x 35 mm rails NSYSR or screw fixing.

Standard control circuit voltages (for other voltages, please consult your Regional Sales Office)

a.c. supply	24	42	48	110	115	220	230	240	380	400	415	440	500
LC1D09...D150 (D115 and D150 coils with built-in suppression as standard, by bi-directional peak limiting diode)													
50/60 Hz	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7	S7
LC1D09...D65 (not available with "connection for lugs or bars")													
50 Hz	B5	D5	E5				P5						
LC1D80...D115													
50 Hz	B5	D5	E5	F5	FE5	M5	P5	U5	Q5	V5	N5	R5	S5
60 Hz	B6	-	E6	F6	-	M6	-	U6	Q6	-	-	R6	-
d.c. supply													
Volts	12	24	36	48	60	72	110	125	220	250	440		
LC1D09...D38 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.7...1.25 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD		
LC1D40A...D65A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.75...1.25 Uc	JD	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	RD		
LC1D80...D95													
U 0.85...1.1 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD		
U 0.75...1.2 Uc	JW	BW	CW	EW	-	SW	FW	-	MW	-	-		
LC1D115 and D150 (coil with built-in suppression device as standard)													
U 0.75...1.2 Uc	-	BD	-	ED	ND	SD	FD	GD	MD	UD	RD		
Low consumption													
Volts	5	12	20	24	48	110	220	250					
LC1D09...D38 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.8...1.25 Uc	AL	JL	ZL	BL	EL	FL	ML	UL					

a.c. / d.c. supply - low consumption

See TeSys D Green, page B8/4

For other voltages between 5 and 690 V, see pages B8/31 to B8/34.

- (2) The weights indicated are for contactors with a.c. control circuit. For d.c. or low consumption control circuit, add 0.160 kg from LC1D09 to D38, 0.075 kg from LC1D40A to D80A and 1 kg for LC1D80 and D95.
- (3) BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LADALLEN4, see page B8/28).
- (4) For these coil voltages, choose from TeSys D Green contactors. Same product ref. radical, just add BBE coil voltage code for 24 V DC, BNE for 24-60V AC/DC, EHE for 48-130 V AC/DC, KUE for 100-250 V AC/DC. Example: LC1D40ABBE.

Characteristics:
pages B8/59 to B8/65

Dimensions:
pages B8/72 to B8/75

Schemes:
pages B8/79 to B8/80

Click [HERE](#) for access to online contactor selector

TeSys

TeSys D Contactors

Product references



LC1D123●●



LCD80A3●●

3-pole contactors - Motor control up to 30 kW at 400 V, in category AC-3

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 ($\theta \leq 60^\circ\text{C}$)							Rated operational current in AC-3 440 V up to	Instan- taneous auxiliary contacts	Basic reference, to be completed by adding the control voltage code
220 V	380 V	415 V	440 V	500 V	660 V	1000 V		Fixing ⁽¹⁾	
230 V	400 V				690 V				

kW	kW	kW	kW	kW	kW	kW	A			
2.2	4	4	4	5.5	5.5		9	1	1	LC1D093●●
3	5.5	5.5	5.5	7.5	7.5		12	1	1	LC1D123●●
4	7.5	9	9	10	10		18	1		LC1D183●●
5.5	11	11	11	15	15		25	1	1	LC1D253●●
7.5	15	15	15	18.5	18.5		32 ⁽²⁾	1	1	LC1D323●●

Power connections by EverLink [®] BTR screw connectors ⁽³⁾ and control by spring terminals										
11	18.5	22	22	22	30		40	1	1	LC1D40A3●●
15	22	25	30	30	3					LC1D50A3●●
18.5	30	37	37	37	37		65	1	1	LC1D65A3●●
22	37	37	37	37	37		66	1	1	LC1D80A3●●

Connection by Faston connectors

These contactors are fitted with Faston connectors: 2 x 6.35 mm on the power poles and 1 x 6.35 mm on the coil and auxiliary terminals.

For contactors LC1D09 and LC1D12 only, replace the figure 3 with a 9 in the references selected above.
Example: LC1D093●● becomes LC1D099●●.

Separate components

Auxiliary contact blocks and add-on modules: see pages B8/22 to B8/28.

⁽¹⁾ LC1D09 to D32: clip-on mounting on 35 mm rail NSYS DR or screw fixing.

Standard control circuit voltages (for other voltages, please consult your Regional Sales Office)

a.c. supply													
Volts	24	42	48	110	115	220	230	240	380	400	415	440	
LC1D09...D80A													
50/60 Hz		B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7
d.c. supply													
Volts	12	24	36	48	60	72	110	125	220	250	440		
LC1D09...D32 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.7...1.25 U _c		JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD	
LC1D40A...D65A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.75...1.25 U _c		JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD	
Low consumption													
Volts ---	5	12	20	24	48	110	220	250					
LC1D09...D32 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.8...1.25 U _c		AL	JL	ZL	BL	EL	FL	ML	UL				

For other voltages between 5 and 690 V, see pages B8/31 to B8/34.

⁽²⁾ Must be wired with 2 x 4 mm² cables in parallel on the upstream side. On the downstream side, outgoing terminal block LAD331 may be used (Quickfit technology, see page B1/18). When wired with a single cable, the product is limited to 25 A (11 kW/400 V motors).

⁽³⁾ BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LADALLEN4, see page B8/28).



Contactors

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TeSys D Contactors

Product references

PB121354.eps



LC1D09●●

PB120691.eps



LC1D80A●●



Contactors

For other voltages between 5 and 690 V, see pages B8/31 to B8/34.

- (1) **LC1D09 to D80A**: clip-on mounting on 35 mm \perp rail NSYS DR or screw fixing.
LC1D80 and D95: clip-on mounting on 35 mm \perp rail NSYS DR or 75 mm \perp rail AM1DL or screw fixing.
LC1 or LP1D80 to D95: clip-on mounting on 75 mm \perp rail AM1DL or screw fixing.
LC1D115 and D150: clip-on mounting on 2 x 35 mm \perp rails NSYS DR or screw fixing.
- (2) The weights indicated are for contactors with a.c. control circuit. For d.c. or low consumption control circuit, add 0.160 kg from **LC1D09 to D38**, 0.075 kg from **LC1D40A to D80A** and 1 kg for **LC1D80 and D95**.
- (3) BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 Insulated Allen key must be used (reference **LADALLEN4**, see page B8/28).
- (4) Coordination tables according to the number of operating cycles, see AC-1 curve, page A6/40.
- (5) 32 A with 2 x 4 mm² cables connected in parallel.
- (6) For these coil voltages, choose from TeSys D Green contactors. Same product ref. radical, just add BBE coil voltage code for 24 V DC, BNE for 24-60 V AC/DC, EHE for 48-130 V AC/DC, KUE for 100-250 V AC/DC. Example: **LC1D40ABBE**.

3-pole contactors - Load control from 25 to 200 A in category AC-1

Non inductive loads maximum current ($\theta \leq 60^\circ\text{C}$) utilisation category AC-1	Number of poles	Instantaneous auxiliary contacts	Basic reference, to be completed by adding the control voltage code	Weight ⁽²⁾
			Fixing ⁽¹⁾	

A **kg**

Connection by screw clamp terminals

25	3	1	LC1D09●● or LC1D12●●	0.320 0.325
32	3	1 1	LC1D18●●	0.330
40	3	1	LC1D25●●	0.370
50	3	1 1	LC1D32●● or LC1D38●●	0.375 0.380

Connection by EverLink®, BTR screw connectors ⁽³⁾

60	3	1 1	LC1D40A●●	0.850
80	3	1	LC1D50A●● or LC1D65A●● ⁽⁴⁾ or LC1D80A●● ⁽⁴⁾	0.855 0.860 0.860

Connection by screw clamp terminals or connectors

125	3	1 1	LC1D80●● or LC1D95●● ⁽⁴⁾	1.590 1.610
200	3	1 1	LC1D115●● or LC1D150●● ⁽⁵⁾	2.500 2.500

3-pole contactors for connection by lugs

In the references selected above, insert a figure 6 before the voltage code.

Example: **LC1D09●●** becomes **LC1D096●●**.

Standard control circuit voltages

(for other voltages, please consult your Regional Sales Office)

a.c. supply

Volts	24	42	48	110	115	220	230	240	380	400	415	440	500
LC1D09...D150 (LC1D115 and D150 coils with built-in suppression device as standard)													
50/60 Hz	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7	S7
LC1D09...D65 (not available with "connection for lugs or bars")													
50 Hz	B5	D5	E5				P5						

LC1D80...D150

50 Hz	B5	D5	E5	F5	FE5	M5	P5	U5	Q5	V5	N5	R5	S5
60 Hz	B6	-	E6	F6	-	M6	-	U6	Q6	-	-	R6	-

d.c. supply

Volts	12	24	36	48	60	72	110	125	220	250	440	
LC1D09...D38 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)												
U 0.7...1.25 Uc		JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
LC1D40A...D65A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)												
U 0.75...1.25 Uc		JD	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	RD	
LC1 or LP1D80 and D95												
U 0.85...1.1 Uc		JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
U 0.75...1.2 Uc		JW	BW	CW	EW	-	SW	FW	-	MW	-	-
LC1D115 and D150 (coils with built-in suppression device fitted as standard)												
U 0.75...1.2 Uc		-	BD	-	ED	ND	SD	FD	GD	MD	UD	RD

Low consumption

Volts	5	12	20	24	48	110		
LC1D09...D38 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)								
U 0.8...1.25 Uc	AL	JL	ZL	BL	EL	FL	ML	UL

TeSys

TeSys D Contactors

Product references



LC1D123●●



LC1D80A3●●

3-pole contactors - Load control from 16 to 80 A in category AC-1

Non inductive loads maximum current ($\theta \leq 60^\circ\text{C}$) utilisation category AC-1	Number of poles	Instantaneous auxiliary contacts	Basic reference, to be completed by adding the control voltage code	Weight ⁽²⁾
			Fixing ⁽¹⁾	

A				kg
Connection by spring terminals				
16			LC1D093●● ⁽³⁾	0.320
			or LC1D123●● ⁽³⁾	0.325
25	3	1	LC1D183●● ⁽⁴⁾	0.335
			or LC1D253●● ⁽⁵⁾	0.325
			or LC1D323●● ⁽⁵⁾	0.325

Power connections by EverLink® BTR screw connectors ⁽⁶⁾ and control by spring terminals				
60	3	1	LC1D40A3●●	0.850
80	3	1	LC1D50A3●● ⁽⁷⁾	0.855
			or LC1D65A3●● ⁽⁷⁾	0.860
			or LC1D80A3●● ⁽⁷⁾	0.860

3-pole contactors for connection by Faston connectors

These contactors are fitted with Faston connectors: 2 x 6.35 mm on the power poles and 1 x 6.35 mm on the coil terminals. For contactors LC1D09 and LC1D12 only, in the references selected from the previous page, insert a figure **9** before the voltage code. Example: **LC1D09●●** becomes **LC1D099●●**.

Separate components

Auxiliary contact blocks and add-on modules: see pages B8/22 to B8/28.

Standard control circuit voltages (for other voltages, please consult your Regional Sales Office)

a.c. supply													
Volts	24	42	48	110	115	220	230	240	380	400	415	440	500
LC1D09...D80A													
50/60 Hz	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7	S7
d.c. supply													
Volts	12	24	36	48	60	72	110	125	220	250	440		
LC1D09...D32 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.7...1.25 U _c	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD		
LC1D40A...D65A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.75...1.25 U _c	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD		
Low consumption													
Volts ---	5	12	20	24	48	110							
LC1D09...D32 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.8...1.25 U _c	AL	JL	ZL	BL	EL	FL	ML	UL					

- For other voltages between 5 and 690 V, see pages B8/31 to B8/34.
- LC1D09 to D80A:** clip-on mounting on 35 mm rail **NSYSDR** or screw fixing.
 - The weights indicated are for contactors with a.c. control circuit. For d.c. or low consumption control circuit, add 0.160 kg from **LC1D09 to D38** and 0.075 kg from **LC1D40A to D80A**.
 - 20 A with 2 x 2.5 mm² cables connected in parallel.
 - 32 A with 2 x 4 mm² cables connected in parallel.
 - 40 A with 2 x 4 mm² cables connected in parallel.
 - BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference **LADALLEN4**, see page B8/28).
 - Coordination tables according to the number of operating cycles, see AC-1 curve, page A6/40.



Contactors

TeSys

TeSys D Contactors

Product references



LC1DT20●●



LC1DT80●●



LC1D6500●●



Contactors

4-pole contactors - Load control, 20 to 200 A in category AC-1

Non inductive loads maximum current ($\theta \leq 60^\circ\text{C}$) utilisation category AC-1	Number of poles	Instantaneous auxiliary contacts	Basic reference, to be completed by adding the control voltage code Fixing ⁽¹⁾	Weight ⁽²⁾

A **kg**

Connection by screw clamp terminals

20	4	–	1	1	LC1DT20●●	0.365
	2	2	1	1	LC1D098●●	0.365
25	4	–	1	1	LC1DT25●●	0.365
	2	2	1	1	LC1D128●●	0.365
32	4	–	1	1	LC1DT32●●	0.425
	2	2	1	1	LC1D188●●	0.425
40	4	–	1	1	LC1DT40●●	0.425
	2	2	1	1	LC1D258●●	0.425

Connection by EverLink®, BTR screw connectors

60	4	–	1	1	LC1DT60A●●	1.090
80	–	–	1	1	LC1DT80A●●	1.150

Connection by screw clamp terminals or connectors

60	2	2	–	–	LC1D40008●●	1.440
					or LP1D40008●●	2.210
80	2	2	–	–	LC1D65008●●	1.450
					or LP1D65008●●	2.220
125	4	–	–	–	LC1D80004●●	1.760
					or LP1D80004●●	2.685
	2	2	–	–	LC1D80008●●	1.840
					or LP1D80008●●	2.910
200	4	–	–	–	LC1D115004●●	2.860

4-pole contactors for connection by lugs or bars

In the references selected above, insert a figure 6 before the voltage code.
Example: LC1DT20●● becomes LC1DT206●●.

Standard control circuit voltages (for other voltages, please consult your Regional Sales Office)

a.c. supply

Volts	24	42	48	110	115	220	230	240	380	400	415	440	500
LC1D09...D150 and LC1DT20...DT80A (LC1D115 and D150 coils with built-in suppression device as standard)													
50/60 Hz	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7	–
LC1D80...D115													
50 Hz	B5	D5	E5	F5	FE5	M5	P5	U5	Q5	V5	N5	R5	S5
60 Hz	B6	–	E6	F6	–	M6	–	U6	Q6	–	–	R6	–

d.c. supply

Volts	12	24	36	48	60	72	110	125	220	250	440
LC1D09...D25 and LC1DT20...DT40 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)											
U 0.75...1.25 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
LC1DT60A...DT80A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)											
U 0.75...1.25 Uc	JD	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	RD
LP1D40...D80											
U 0.85...1.1 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
U 0.75...1.2 Uc	JW	BW	CW	EW	–	SW	FW	–	MW	–	–
LC1D115 (coil with built-in suppression device as standard)											
U 0.75...1.2 Uc	–	BD	–	ED	ND	SD	FD	GD	MD	UD	RD

Low consumption

Volts	5	12	20	24	48	110	220	250
LC1D09...D25 and LC1DT20...DT40 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)								
U 0.8...1.25 Uc	AL	JL	ZL	BL	EL	FL	ML	UL

For other voltages between 5 and 690 V, see pages B8/31 to B8/34.

(1) LC1D09 to D38 and LC1DT20 to DT80A: clip-on mounting on 35 mm \perp rail NSYS DR or screw fixing.

LC1D80 \sim : clip-on mounting on 35 mm \perp rail NSYS DR or 75 mm \perp rail AM1DL or screw fixing.

LC1 or LP1D80 \equiv : clip-on mounting on 75 mm \perp rail AM1DL or screw fixing.

LC1D115 and D150: clip-on mounting on 2 x 35 mm \perp rails NSYS DR or screw fixing.

(2) The weights indicated are for contactors with a.c. control circuit. For d.c. or low consumption control circuit, add 0.160 kg from LC1D09 to D38, 0.075 kg from LC1DT60A and D80A and 1 kg for LC1D80.

(3) For these coil voltages, choose from TeSys D Green contactors. Same product ref. radical, just add BBE coil voltage code for 24 V DC, BNE for 24-60 V AC/DC, EHE for 48-130 V AC/DC, KUE for 100-250 V AC/DC. Example: LC1DT60ABBE.

TeSys

TeSys D Contactors

Product references



LC1DT253●●



LC1DT80A3●●

4-pole contactors - Load control, 20 to 80 A in category AC-1

Non inductive loads maximum current ($\theta \leq 60^\circ\text{C}$) utilisation category AC-1	Number of poles	Instantaneous auxiliary contacts	Basic reference, to be completed by adding the voltage code	Weight ⁽²⁾
			Fixing ⁽¹⁾	

A					kg	
Connection by spring terminals						
20	4	-	1	1	LC1DT203●●	0.380
	2	2	1	1	LC1D0983●●	0.380
25	4	-	1	1	LC1DT253●●	0.380
	2	2	1	1	LC1D1283●●	0.380
32	4	-	1	1	LC1DT323●●	0.425
	2	2	1	1	LC1D1883●●	0.425
40		-	1	1	LC1DT403●●	0.425
	2	2	1	1	LC1D2583●●	0.425

Connection by EverLink®, BTR screw connectors and control circuit by spring terminals

60	4	-	1	1	LC1DT60A3●●	1.090
80	4	-	1	1	LC1DT80A3●●	1.150

Separate components

Auxiliary contact blocks and add-on modules: see pages B8/22 to B8/28.

Standard control circuit voltages (for other voltages, please consult your Regional Sales Office)

a.c. supply	24	42	48	110	115	220	230	240	380	400	415	440	500
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LC1D09...D25 and LC1DT20...DT80A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

50/60 Hz	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7	-
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d.c. supply	12	24	36	48	60	72	110	125	220	250	440
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LC1D09...D25 and LC1DT20...DT40 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

U 0.7...1.25 U _c	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
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LC1DT60A...80A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

U 0.75...1.25 U _c	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
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Low consumption	5	12	20	24	48	110	220	250
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LC1D09...D25 and LC1DT20...DT40 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

U 0.8...1.25 U _c	AL	JL	ZL	BL	EL	FL	ML	UL
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For other voltages between 5 and 690 V, see pages B8/31 to B8/34.

(1) LC1D09 to D38 and LC1DT20 to DT80A: clip-on mounting on 35 mm rail NSYSR or screw fixing.

(2) The weights indicated are for contactors with a.c. control circuit. For d.c. or low consumption control circuit, add 0.160 kg from LC1D09 to D38, 0.075 kg for LC1DT60A and DT80A.



Contactors

TeSys

TeSys D Contactors

Product references

PB121549.eps



LC1D09●●

PB121350.eps



LC1D25●●



PB120009.eps



LC1D80A●●

Contactors

PB121351.eps



LC1D95●●

Contactors conforming to UL and CSA standards (North American market) - 25 to 160 A

Standard power ratings of motors 50/60 Hz						Associated cable type 75 °C-Cu	UL continuous current	Type of contactor required Basic reference, to be completed Fixing, connection ⁽¹⁾
Single-phase 1 Ø		3-phase 3 Ø						
120 V	240 V	208 V	240 V	480 V	600 V		A	
HP	HP	HP	HP	HP	HP			

Connection by screw clamp terminals

1/3	1	2	2	5	7.5	WG 18 - 10	25	LC1D09●●
0.5	2	3	3	7.5	1	WG 18 - 10	25	LC1D12●●
1	3	5	5	10	15	AWG 18 - 8	32	LC1D18●●
2	3	7.5	7.5	15	20	WG 14 - 6	40	LC1D25●●
2	5	10	10	20	2	WG 14 - 6	50	LC1D32●● ⁽²⁾
2	5	10	10	20	25	AWG 14 - 6	50	LC1D38●● ⁽²⁾

Power connections by EverLink® BTR screw connectors and control by spring terminals

3	5	10	10	30		WG 16 - 2	60	LC1D40A●●
3	7.5	15	15	40	40	AWG 16 - 2	70	LC1D50A●●
5	10	20	20	40	50	WG 16 - 2	80	LC1D65A●●
5	10	20	20	40	50	AWG 16 - 2	80	LC1D80A●●

Connection by screw clamp terminals or connectors

7.5	15	25	30	60	60	AWG 10 - 2	110	LC1D80●●
7.5	15	25	30	60	60	AWG 10 - 2	110	LC1D95●●
-	-	30	40	75	100	AWG 8-1/0	160	LC1D115●●
-	-	40	50	100	125	AWG 8-1/0	160	LC1D150●●

Applications with High-Fault Short-Circuit ratings

High-fault short-circuit current ratings are: 100 kA (D09-80, D115-150) at 600 V with Class J fuses and 85 kA (D09-38), 100 kA (D40A-80, D115-150) at 480 V and 50 kA (D09-80, D115-150) at 600 V with circuit breakers.

Application example

For a 15 HP-230 V motor

Select a contactor type **LC1D50A**.

Information: the contactor rating selected corresponds to "size 2", the associated cable is type AWG3 75 °C-Cu.

Standard control circuit voltages (for other voltages, please consult your Regional Sales Office)

a.c. supply

Volts	24	42	48	110	115	120	208	220	230	240	380	400	415	440	480	500
LC1D09...D150 (D115 and D150 coils with built-in suppression device as standard)																
50/60 Hz	B7	D7	E7	F7	FE7	G7 ⁽³⁾	LE7 ⁽³⁾	M7	P7	U7	Q7	V7	N7	R7	T7 ⁽³⁾	S7
LC1D09...D65 (not available with "connection for lugs or bars")																
50 Hz	B5	D5	E5						P5							

LC1D80...D115

50 Hz	B5	D5	E5	F5	FE5	G5	-	M5	P5	U5	Q5	V5	N5	R5	-	S5
60 Hz	B6	-	E6	F6	-	G6	L6	M6	-	U6	Q6	-	-	R6	T6	-

d.c. supply

Volts	12	24	36	48	60	72	110	125	220	250	440
LC1D09...D32 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)											
U 0.7...1.25 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
LC1D40A...D65A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)											
U 0.75...1.25 Uc	JD ⁽⁴⁾	BD ⁽⁴⁾	CD ⁽⁴⁾	ED ⁽⁴⁾	ND ⁽⁴⁾	SD ⁽⁴⁾	FD ⁽⁴⁾	GD ⁽⁴⁾	MD ⁽⁴⁾	UD ⁽⁴⁾	RD
LC1D80 and D95											
U 0.85...1.1 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
U 0.75...1.2 Uc	JW	BW	CW	EW	-	SW	FW	-	MW	-	-
LC1D115 and D150 (coils with built-in suppression device as standard)											
U 0.75...1.2 Uc	-	BD	-	ED	ND	SD	FD	GD	MD	UD	RD

Low consumption

Volts	5	12	20	24	48	72	110	220	250
LC1D09...D38 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)									
U 0.8...1.25 Uc	AL	JL	ZL	BL	EL	SL	FL	ML	UL

- (1) LC1D09 to D65A: clip-on mounting on 35 mm L rail NSYS DR or screw fixing.
LC1D80 and LC1D95: clip-on mounting on 35 mm L rail NSYS DR or 75 mm L rail AM1DL or screw fixing.
LC1D115 and D150: clip-on mounting on 2 x 35 mm L rails NSYS DR or screw fixing.
- (2) Versions with spring terminals LC1D323 and LC1D383 are not certified UL/CSA.
- (3) Contactors LC1D40A, 50A, 65A, 80A: for this coil voltage use is only on 60 Hz.
- (4) For these coil voltages, choose from TeSys D Green contactors. Same product ref. radical, just add BBE coil voltage code for 24 V DC, BNE for 24-60 V AC/DC, EHE for 48-130 V AC/DC, KUE for 100-250 V AC/DC. Example: LC1D40ABBE.

TeSys

TeSys D Reversing contactors

Product references



LC2D12●●



LC2D65A●●



LC2D115●●

3-pole reversing contactors - Motors up to 75 kW / 400 V in category AC-3

Horizontally mounted - Pre-wired power connections.

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 (θ ≤ 60 °C)							Rated operational current in AC-3 440 V up to	Instantaneous auxiliary contacts per contactor	Contactors supplied with coil Basic reference, to be completed by adding the control voltage code	Weight ⁽²⁾
220 V	380 V	415 V	440 V	500 V	660 V	1000 V				
230 V	400 V				690 V					
kW	kW	kW	kW	kW	kW	kW	A		Fixing ⁽¹⁾	kg

With mechanical interlock, without electrical interlocking, for connection by screw clamp terminals or connectors

2.2	4	4	4	5.5	5	-	9	1	1	LC2D09●● ⁽³⁾	0.687
3	5.5	5.5	5.5	7.5	7.5	-	12	1	1	LC2D12●● ⁽³⁾	0.697
4	7.5	9	9	10	10	-	18	1	1	LC2D18●● ⁽³⁾	0.707
5.5	11	11	11	15	15	-	25	1		LC2D25●● ⁽³⁾	0.787
7.5	15	15	15	18.5	18.5	-	32	1		LC2D32●● ⁽³⁾	0.797
9	18.5	18.5	18.5	18.5	18.5	-	38	1	1	LC2D38●● ⁽³⁾	0.807
11	18.5	22	22	22	30	-	40	1		LC2D40A●●	1.870
15	22	25	30	30	33	-	50	1	1	LC2D50A●●	1.880
18.5	30	37	37	37	37	-	65	1	1	LC2D65A●●	1.890
22	37	45	45	55	45	-	80	1	1	LC2D80●●	3.200
25	45	45	45	55	45	-	95	1	1	LC2D95●●	3.200

With mechanical interlock and electrical interlocking, for connection by screw clamp terminals or connectors

30	55	59	59	75	80	65	115	1	1	LC2D115●●	6.350
40	75	80	80	90	100	75	150	1	1	LC2D150●●	6.400

Connection by lugs or bars

For reversing contactors LC2D09 to LC2D38, LC2D115 and LC2D150, in the references selected above, insert a figure 6 before the voltage code. Example: **LC2D09●●** becomes **LC2D096●●**.

To build a 40 to 65 A reversing contactor, for connection by lugs, order 2 contactors **LC1D●●A6** and mechanical interlock **LAD4CM** (see page B8/29).

Component parts

Auxiliary contact blocks and add-on modules: see pages B8/22 to B8/28.

- (1) LC2D09 to D65A: clip-on mounting on 35 mm rail **NSYS DR** or screw fixing.
- LC2D80 and D95: clip-on mounting on 35 mm rail **NSYS DR** or 75 mm rail **AM1DL** or screw fixing.
- LC2D115 and D150: clip-on mounting on 35 mm rail **NSYS DR** or screw fixing.

Standard control circuit voltages (for other voltages, please consult your Regional Sales Office)

a.c. supply													
Volts	24	42	48	110	115	220	230	240	380	400	415	440	500
LC2D09...D150 (D115 and D150 coils with built-in suppression device as standard)													
50/60 Hz	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7	S7
LC2D80...D115													
50 Hz	B5	D5	E5	F5	FE5	M5	P5	U5	Q5	V5	N5	R5	S5
60 Hz	B6	-	E6	F6	-	M6	-	U6	Q6	-	-	R6	-
d.c. supply													
Volts	12	24	36	48	60	72	110	125	220	250	440		
LC2D09...D38 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.7...1.25 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD		
LC2D40A...D65A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.75...1.25 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD		
Low consumption													
Volts ---	5	12	20	24	48	110							
LC2D09...D38 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.8...1.25 Uc	AL	JL	ZL	BL	EL	FL	ML	UL					

For other voltages between 5 and 690 V, see pages B8/31 to B8/34.

(2) The weights indicated are for contactors with a.c. control circuit. For d.c. or low consumption control circuit, add 0.330 kg for **LC2D09** to **D38**, 0.150 kg for **LC1D40A** to **D65A**.

(3) For reversing contactors with electrical interlocking pre-wired at the factory, add suffix **V** to the references selected above. Example: **LC2D09P7** becomes **LC2D09P7V**.

Note: when assembling a reversing contactor, it is good practice to incorporate a 50 ms time delay.



Contactor's

TeSys

TeSys D Reversing contactors

Product references

PF10305.eps



LC2D123●●

3-pole reversing contactors - Motors up to 15 kW / 400 V in category AC-3

Pre-wired power connections.

Mechanical interlock without electrical interlocking.

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 ($\theta \leq 60^\circ\text{C}$)						Rated operational current in AC-3 440 V up to	Instantaneous auxiliary contacts per contactor	Contactors supplied with coil Basic reference, to be completed by adding the voltage code	Weight ⁽²⁾	
220 V	380 V	415 V	440 V	500 V	660 V					
230 V	400 V									
kW	kW	kW	kW	kW	kW	A			kg	
For connection by spring terminals										
2.2	4	4	4	5.5	5.5	9	1	1	LC2D093●●	0.687
3	5.5	5.5	5.5	7.5	7.5	12	1	1	LC2D123●●	0.697
4	7.5	9	9	10	10	18	1		LC2D183●●	0.707
5.5	11	11	11	15	15	25			LC2D253●●	0.787
7.5	15	15	15	18.5	18.5	32 ⁽³⁾	1	1	LC2D323●●	0.797
Power connection by EverLink®, BTR screw connectors ⁽⁴⁾ and control by spring terminals										
11	18.5	22	22	22	30	40	1		LC2D40A3●●	1.870
15	22	25	30	30	33	5			LC2D50A3●●	1.880
18.5	30	37	37	37	3				LC2D65A3●●	1.890

For connection by Faston connectors

All power connections are to be made by the customer.

These contactors are fitted with Faston connectors: 2 x 6.35 mm on the power poles and 1 x 6.35 mm on the coil terminals.

For reversing contactors LC2D09 and LC2D12 only, in the references selected above, replace the figure 3 before the voltage code with a figure 9.

Example: LC2D093●● becomes LC2D099●●.

Component parts

Auxiliary contact blocks and add-on modules: see pages B8/22 to B8/28.

⁽¹⁾ LC2D09 to D32: clip-on mounting on 35 mm rail NSYS DR or screw fixing.

Standard control circuit voltages (for other voltages, please consult your Regional Sales Office)

a.c. supply

Volts	24	42	48	110	115	220	230	240	380	400	415	440	500
LC2D09...D65A													
50/60 Hz	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7	S7

d.c. supply

Volts	12	24	36	48	60	72	110	125	220	250	440
LC2D09...D32 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)											
U 0.7...1.25 U _c	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
LC2D40A...D65A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)											
U 0.75...1.25 U _c	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD

Low consumption

Volts	5	12	20	24	48	110		
LC2D09...D32 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)								
U 0.8...1.25 U _c	AL	JL	ZL	BL	EL	FL	ML	UL

For other voltages between 5 and 690 V, see pages B8/31 to B8/34.

⁽²⁾ The weights indicated are for reversing contactors with a c. control circuit. For d.c. or low consumption control circuit, add 0.330 kg for LC2D09 to D38, 0.150 kg for LC1D40A to D65A.

⁽³⁾ Must be wired with 2 x 4 mm² cables in parallel on the upstream side. On the downstream side, outgoing terminal block LAD331 may be used (Quickfit technology, see page B1/18). When wired with a single cable, the product is limited to 25 A (11 kW/400 V motors).

⁽⁴⁾ BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LADALLEN4, see page B8/28).



Contactors

TeSys

TeSys D Green Reversing contactors

Product references



LC2D09●●●



LC2D40A●●●

TeSys D Green contactors have a dark grey casing and a 3-character code voltage.

3-pole reversing contactors - Motors up to 37 kW / 400 V in category AC-3

Pre-wired power connections

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 (θ ≤ 60 °C)						Rated operational current in AC-3 440 V up to	Instantaneous auxiliary contacts per contactor	Contactors supplied with coil Partial reference, to be completed by adding the control voltage code	Weight
220 V	380 V	415 V	440 V	500 V	660 V				
230 V	400 V				690 V		Fixing ⁽¹⁾		

kW	kW	kW	kW	kW	kW	A				kg
With mechanical interlock, without electrical interlocking, for connection by screw clamp terminals or Everlink BTR screw connectors ⁽²⁾ ⁽³⁾										

2.2	4	4	4	5.5	5.5	9	1	1	LC2D09●●●	0.783
3	5.5	5.5	5.5	7.5	7.5	12	1	1	LC2D12●●●	0.793
4	7.5	9	9	10	10	18			LC2D18●●●	0.803
5.5	11	11	11	15	15	25	1		LC2D25●●●	0.913
7.5	15	15	15	18.5	18.5	32	1		LC2D32●●●	0.923
9	18.5	18.5	18.5	18.5	18.5	3			LC2D38●●●	0.933
11	18.5	22	22	22	30	40	1		LC2D40A●●● ⁽²⁾	2.154
15	22	25	30	30	33	50	1	1	LC2D50A●●● ⁽²⁾	2.164
18.5	30	37	37	37	37	65	1	1	LC2D65A●●● ⁽²⁾	2.174
22	37	37	37	37	37	6			LC2D80A●●● ⁽²⁾	2.174

Auxiliary contact blocks and add-on modules

See pages B8/22 to B8/28.

Coil voltage codes

AC/DC 24 V DC supply

Volts	24 (DC only)	24-60	48-130	100-250
LC2D09...D32,				
LC2D40A... D80A				
U 0.85...1.1 Uc		BNE	EHE	KUE
LC2D09...D38				
U 0.8...1.2 Uc		BNE		
LC2D40A...D80A				
U 0.8...1.2 Uc		BBE		

⁽¹⁾ LC2D09 to D80A: clip-on mounting on 35 mm rail NSYS DR or screw fixing.

⁽²⁾ BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LADALLEN4, see page B8/28).

⁽³⁾ Electrical interlocking is recommended when 2 orders (direct and reverse) could appeared in the same time.



TeSys

TeSys D Changeover contactors

Product references

PE108324.eps



LC2DT20●●

PE121356.eps



LC2D115004●●



Contactors

4-pole changeover contactor pairs - 20 to 200 A in category A-1

Pre-assembled. Pre-wired power connections

LC2DT20 to LC2DT40: mechanical interlock without electrical interlocking.

LC2D80004: order separately 2 auxiliary contact blocks LADN●1 to obtain electrical interlocking between the 2 contactors (see page B8/22).

For electrical interlocking incorporated in the mechanical interlock, please consult your Regional Sales Office.

LC2D115004: mechanical interlock with integral, pre-wired electrical interlocking.

For connection by screw clamp terminals or connectors

Utilisation category AC-1 Non-inductive loads Maximum rated operational current ($\theta \leq 60^\circ\text{C}$)	Instantaneous auxiliary contacts per contactor		Contactors supplied with coil Basic reference, to be completed by adding the voltage code ⁽¹⁾ Fixing ⁽²⁾	Weight kg
A				
20	1	1	LC2DT20●●	0.730
25	1	1	LC2DT25●●	0.730
32	1	1	LC2DT32●●	0.850
40	1	1	LC2DT40●●	0.850
125	–	–	LC2D80004●●	3.200
200	–	–	LC2D115004●●	7.400

For connection by lugs or bars

20	1	1	LC2DT206●●	0.730
25	1	1	LC2DT256●●	0.730
32	1	1	LC2DT326●●	0.850
40	1	1	LC2DT406●●	0.850

For customer assembly

For connection by screw clamp terminals or connectors

60	1	1	LC1DT60A●● ⁽³⁾	–
80	1	1	LC1DT80A●● ⁽³⁾	–

For connection by lugs or bars

60	1	1	LC1DT60A6●● ⁽³⁾	–
80	1	1	LC1DT80A6●● ⁽³⁾	–

Auxiliary contact blocks and add-on modules: see pages B8/22 to B8/28.

Note: when assembling changeover contactor pairs, it is good practice to incorporate a 50 ms time delay.

⁽¹⁾ See note ⁽¹⁾ on next page.

⁽²⁾ LC2DT20 to LC2DT80: clip-on mounting on 35 mm rail NSYS DR or screw fixing.

LC2D80: clip-on mounting on 35 mm rail NSYS DR or 75 mm rail AM1 DL or screw fixing.

LC2D115: clip-on mounting on 2 x 35 mm rails NSYS DR or screw fixing.

⁽³⁾ For these operational currents, order 2 identical contactors and a mechanical interlock LAD4 CM (see page B8/29).



Example of necessary components for customer assembly:
2 x LC1DT80A3●● contactors + LAD4CM mechanical interlock

4-pole changeover contactor pairs for 20 to 80 A control in category AC-1

Pre-assembled, for customer assembly

Pre-wired power connections, for connection by spring terminals.

Utilisation category AC-1 Non-inductive loads Maximum rated operational current ($\theta \leq 60^\circ\text{C}$)	Instantaneous auxiliary contacts per contactor	Contactors supplied with coil Basic reference, to be completed by adding the control voltage code Fixing ⁽¹⁾

A			
20	1	1	LC2DT203●●

Power connection by EverLink®, BTR screw connectors ⁽²⁾ and control by spring terminals

60	1	1	LC1DT60A3●● ⁽³⁾
80	1	1	LC1DT80A3●● ⁽³⁾

Separate components

Auxiliary contact blocks and add-on modules: see pages B8/19 to B8/19.

Standard control circuit voltages

(for other voltages, please consult your Regional Sales Office)

a.c. supply

Volts	24	42	48	110	115	220	230	240	380	400	415	440	500
-------	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LC2DT20...DT40, LC2DT60A...DT80A

50/60 Hz	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7	-
----------	----	----	----	----	-----	----	----	----	----	----	----	----	---

LC2D80004...D115004

50 Hz	B5	D5	E5	F5	FE5	M5	P5	U5	Q5	V5	N5	R5	S5
-------	----	----	----	----	-----	----	----	----	----	----	----	----	----

60 Hz	B6	-	E6	F6	-	M6	-	U6	Q6	-	-	R6	-
-------	----	---	----	----	---	----	---	----	----	---	---	----	---

d.c. supply

Volts	12	24	36	48	60	72	110	125	220	250	440
-------	----	----	----	----	----	----	-----	-----	-----	-----	-----

LC2DT20...DT40, LC1DT60...DT80 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

U 0.7...1.25 U _c	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
-----------------------------	----	----	----	----	----	----	----	----	----	----	----

Low consumption

Volts ---	5	12	20	24	48	110	220	250
-----------	---	----	----	----	----	-----	-----	-----

LC2DT20...DT40 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

U 0.8...1.25 U _c	AL	JL	ZL	BL	EL	FL	ML	UL
-----------------------------	----	----	----	----	----	----	----	----

For other voltages between 5 and 690 V, see pages B8/19 to B8/19.

⁽¹⁾ Clip-on mounting on 35 mm rail NSYSDR or screw fixing.

⁽²⁾ BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LADALLEN4, see page B8/19).

⁽³⁾ For these operational currents, order 2 identical contactors and a mechanical interlock LAD4CM (see page B8/19).



TeSys

TeSys D Contactors for switching capacitor banks

Product references



LC1DFK●●



LC1DGK●●, LC1DLK●●, LC1DMK●●



LC1DPK●●, LC1DTK●●

Contactors



LC1DWK12●●

Dimensions, schemes:
page B8/85

Contactors for switching 3-phase capacitor banks (power factor correction)

Special contactors **LC1D●K** are designed for switching 3-phase, single or multiple-step capacitor banks (up to 6 steps). Over 6 steps, it is recommended to use chokes in order to limit the inrush current and thus improve the lifetime of the installation. The contactors are conform to standards IEC 60070 and 60831, UL and CSA.

Contactors applications

Specification

Contactors fitted with a block of early make poles and damping resistors, limiting the value of the current on closing to 60 In max.

This current limitation increases the life of all the components of the installation, in particular that of the fuses and capacitors.

Operating conditions

Short-circuit protection must be provided by gI type fuses rated at 1.7...2 In. It will ensure the service continuity of the whole installation in case of a capacitor contactor end of life

Maximum operational power

The power values given in the selection table below are for the following operating conditions:

Prospective peak current at switch-on	LC1D●K	200 In
Maximum operating rate	LC1DFK, DGK, DLK, DMK	240 operating cycles/hour
	LC1DPK, DTK, DWK	100 operating cycles/hour
Electrical durability at nominal load	All contactor ratings	400 V 300 000 operating cycles
		690 V 200 000 operating cycles

Operational power at 50/60 Hz ⁽¹⁾ $\theta \leq 60^\circ\text{C}$ ⁽²⁾				Instantaneous auxiliary contacts		Tightening torque on cable end N.m	Basic reference, to be completed by adding the voltage code ⁽³⁾	Weight kg
230 V	400 V	440 V	690 V	N/O	N/C			
	415 V							
kVAR	kVAR	kVAR	kVAR					
7	12.5	12.5	21	1	2		LC1DFK●●	0.430
9.5	16.7	16.7	28.5	1	2	2.5	LC1DGK●●	0.450
11	20	21	33	1	2	2.	LC1DLK●●	0.600
14	25	27	42	1	2	2.5	LC1DMK●●	0.630
17	30	32	50	1	2	5	LC1DPK●●	1.300
22	40	43	67	1	2		LC1DTK●●	1.300
35	63	67	104	1	2	9	LC1DWK12●●	1.650

Switching of multiple-step capacitor banks (with equal or different power ratings)

The correct contactor for each step is selected from the above table, according to the power rating of the step to be switched.

Example: 50 kVAR 3-step capacitor bank. Temperature: 50 °C and U = 400 V or 440 V.

One 25 kVAR step: contactor LC1DMK, one 15 kVAR step: contactor LC1DGK, and one 10 kVAR step: contactor LC1DFK.

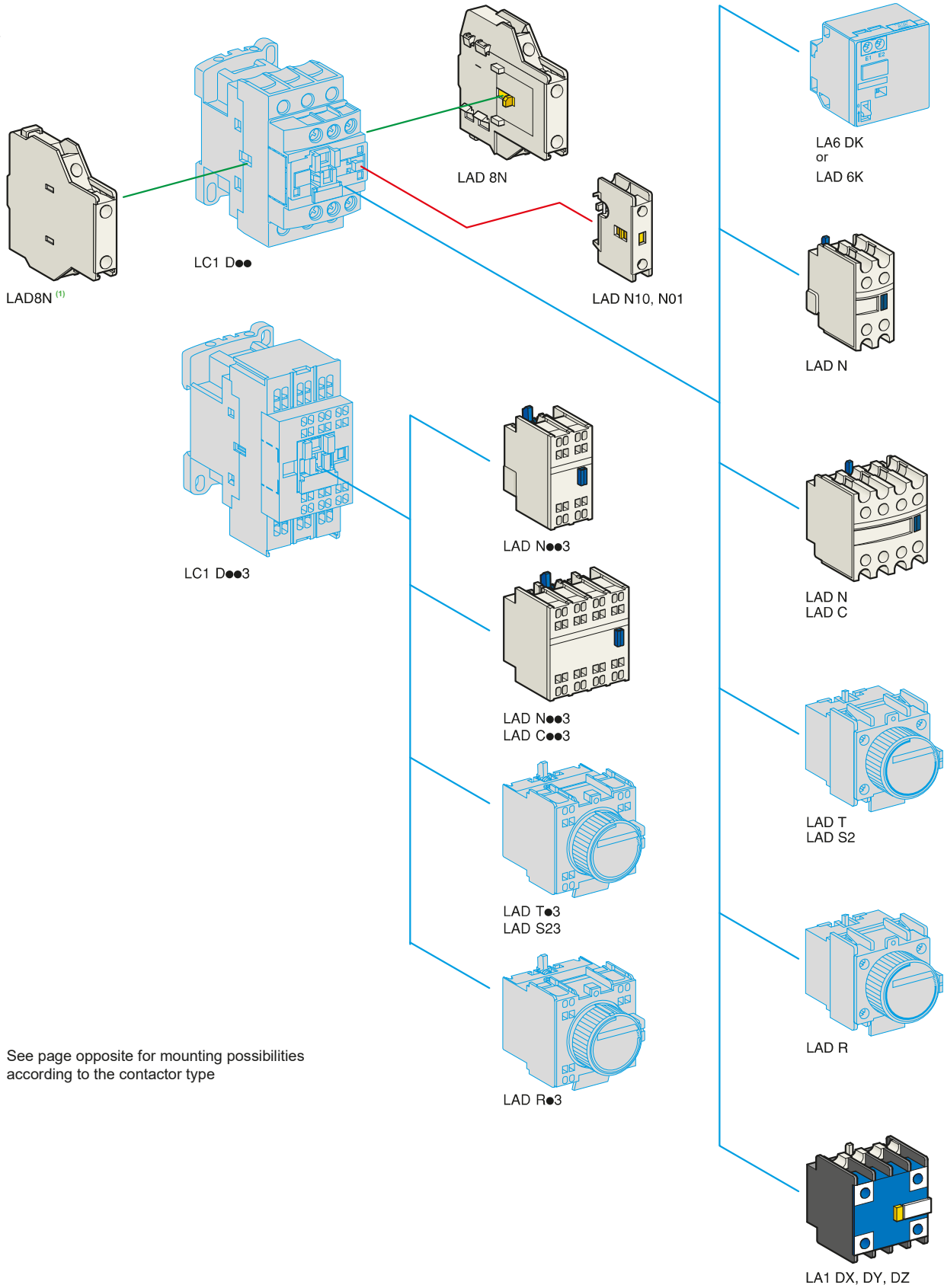
⁽¹⁾ Operational power of the contactor according to the scheme on the page opposite.

⁽²⁾ The average temperature over a 24-hour period, in accordance with standards IEC 60070 and 60831 is 45 °C.

⁽³⁾ Standard control circuit voltages (the delivery time is variable, please consult your Regional Sales Office):

Volts	24	48	110	120	220	230	240	380	400	415	440
50/60 Hz	B7	E7	F7	G7	M7	P7	U7	Q7	V7	N7	R7

Click [HERE](#) for access to online contactor selector



See page opposite for mounting possibilities according to the contactor type

(1) No left side mounting on TeSys D Green contactors.

TeSys

TeSys D contactors - Auxilliary contact blocks

Product references

PB121386.eps



LADN11

PB121388.eps



LAD8N11



PB121544.eps



LA1DX●●, LA1DZ●●

Contactors

Instantaneous auxiliary contact blocks for connection by screw clamp terminals

For use in normal operating environments

Clip-on mounting	Number of contacts per block	Composition					Reference	
Front	1	-	-	-	1	-	LADN10	
		-	-	-	-	1	LADN01	
	2	-	-	-	1	1	LADN11	
		-	-	-	2	-	LADN20	
	4	-	-	-	-	2	LADN02	
		-	-	-	2	2	LADN22	LADN22S ⁽⁴⁾
		-	-	-	1	3	LADN13	
		-	-	-	4	-	LADN40	
		-	-	-	-	4	LADN04	
		-	-	-	3	1	LADN31	
4 incl. 1 N/O & 1 N/C make before break	-	-	-	2	2	LADC22		
	-	-	-	1	1	LAD8N11		
Side (contact blocks compatible with AC coil contactors only)	2	-	-	-	2	-	LAD8N20	
		-	-	-	-	2	LAD8N02	

For terminal referencing conforming to EN 50012

Front on 3P contactors and 4P contactors 20 to 80 A	2	-	-	-	1	1	LADN11G
Front on 4P contactors 125 to 200 A	4	-	-	-	2	2	LADN22G
Front on 4P contactors 125 to 200 A	2	-	-	-	1	1	LADN11P
Front on 4P contactors 125 to 200 A	4	-	-	-	2	2	LADN22P

With dust and damp protected contacts, for use in particularly harsh industrial environments

Front	2	-	2	-	-	-	LA1DX20
		1	1	-	-	-	LA1DX11
		2	-	-	-	-	LA1DX02
		-	2	2	-	-	LA1DY20 ⁽²⁾
		-	2	-	2	-	LA1DZ40
4	-	2	-	1	1	LA1DZ31	

Instantaneous auxiliary contact blocks for connection by lugs

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

Instantaneous auxiliary contact blocks for connection by spring terminals

This type of connection is not possible for LAD8, LADN with 1 contact or blocks with dust and damp protected contacts. For all other contact blocks, add the figure 3 to the end of the references selected above. Example: LADN11 becomes LADN113.

Instantaneous auxiliary contact blocks for connection by Faston connectors

This type of connection is not possible for LAD8, LADN with 1 contact or blocks with dust and damp protected contacts. For all other contact blocks, add the figure 9 to the end of the references selected above. Example: LADN11 becomes LADN119.

Maximum number of auxiliary contacts that can be fitted:

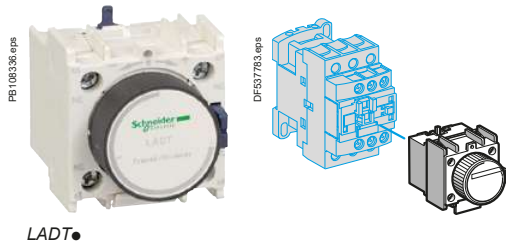
Contactors	Type	Number of poles and size	Instantaneous auxiliary contacts				Time delay Front mounted
			Side mounted	Front mounted			
				1 contact	2 contacts	4 contacts	
AC	3P	LC1D09...D38	1 on LH or 1 on RH side ⁽¹⁾ and	-	1	or 1	or 1
		LC1D40A...D80A	1 on LH or 1 on RH side	and -	1	or 1	or 1
		LC1D80 and D95 (50/60 Hz)	1 on each side	or 2	and 1	or 1	or 1
		LC1D80 and D95 (50 or 60 Hz)	1 on each side	and 2	and 1	or 1	or 1
		LC1D115 and D150	1 on LH side	and -	1	or 1	or 1
	4P	LC1DT20...DT40	1 on LH side	and -	1	or 1	or 1
		LC1DT60A and DT80A	1 on LH or 1 on RH side	and -	1	or 1	or 1
		LC1D40008, D65008 and D80	1 on each side	or 1	or 1	or 1	or 1
		LC1D115	1 on each side	and 1	or 1	or 1	or 1
		LC1D09...D38	-	-	1	or 1	or 1
DC	3P	LC1D40A...D80A	-	-	1	or 1	or 1
		LC1D80 and D95	-	1	or 1	or 1	or 1
		LC1D115 and D150	1 on LH side	and -	1	or 1	or 1
		LC1D20...DT40	-	-	1	or 1	or 1
		LC1DT60A and DT80A	-	-	1	or 1	or 1
	4P	LC1D40008, D65008 and D80	-	2	and 1	or 1	or 1
		LC1D115	1 on each side	-	and 1	or 1	or 1
		LC1D09...D38	-	-	1	-	-
		LC1DT20...DT40	-	-	1	-	-
		LC1D09...D38	-	-	1	-	-

(1) 1 on LH side for AC coils - 1 on RH side for AC/DC coils. (4) With red front face - for safety chain indication.
 (2) Device fitted with 4 earth screen continuity terminals. (5) LA1D●●● dust & damp proof auxiliary contact blocks not allowed.
 (3) LC: low consumption.

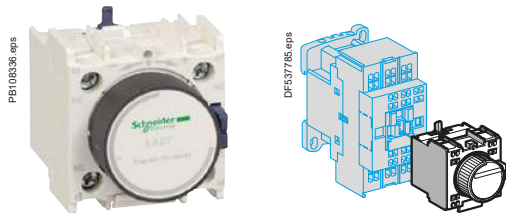
TeSys

TeSys D contactors - Time delay auxiliary contact blocks

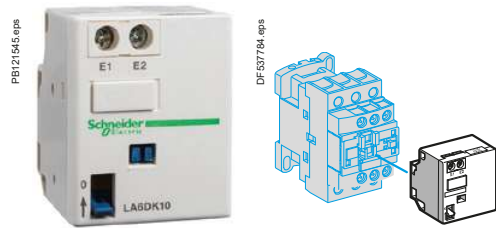
Product references



LADT●



LADT●3



LAD6K10●

Time delay auxiliary contact blocks for connection by screw clamp terminals

Maximum number of auxiliary contact blocks that can be fitted per contactor, see page B8/22.

Sealing cover to be ordered separately, see page B8/28.

LADT0 and LADR0: with extended scale from 0.1 to 0.6 s.

LADS2: with switching time of 40 ms ± 15 ms between opening of the N/C contact and closing of the N/O contact.

Clip-on mounting	Number of contacts	Time delay		Reference
		Type	Setting range	
Front	1 N/O + 1 N/C	On-delay	0...3 s	LADT0
			1...30 s	LADT2
			10...180 s	LADT4
		Off-delay	1...30 s	LADS2
			0...3 s	LADR0
			1...30 s	LADR2
		10...180 s	LADR4	

Time delay auxiliary contact blocks for connection by lugs

Add the figure 6 to the end of the references selected above. Example: LADT0 becomes LADT06.

Time delay auxiliary contact blocks for connection by spring terminals

Add the figure 3 to the end of the references selected above. Example: LADT0 becomes LADT03.

Time delay auxiliary contact blocks for connection by Faston connectors

Add the figure 9 to the end of the references selected above. Example: LADT0 becomes LADT09.

Mechanical latch blocks ⁽¹⁾

Clip-on mounting	Unlatching control	For use on contactor	Basic reference, to be completed by adding the control voltage code ⁽²⁾
Front	Manual or electric	LC1D09...D38 (~ or ---) ⁽³⁾	LAD6K10●
		LC1DT20...DT40 (~ or ---)	
		LC1D40A...D80A (3 P ~ or ---)	LA6DK10●
		LC1DT60A and DT80A (4 P ~ or ---)	
		LC1D80...D150 (3 P ~)	LA6DK20●
		LC1D80 and D115 (3 P ---)	
		LC1D80 (4 P ~)	
		LC1D80 and D115 (4 P ~)	
		LP1D80 and LC1D115 (4 P ---)	

- (1) The mechanical latch block must not be powered up at the same time as the contactor. The duration of the control signal for the mechanical latch block and the contactor should be: ≥ 100 ms for a contactor operating on an a.c. supply, ≥ 250 ms for a contactor operating on a d.c. supply. Maximum impulse duration for the LAD6K10● mechanical latch block: 10 seconds.
- (2) Standard control circuit voltages (for other voltages, please consult your Regional Sales Office):

Volts	50/60 Hz	24	32/36	42/48	60/72	100	110/127	220/240	256/277	380/415	---
Code	B	C	E	EN	K	F	M	U	Q		

- (3) The DC, low consumption contactors (coil code ●L) are not compatible with the mechanical latch blocks LAD6K10●.

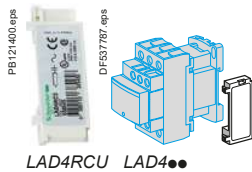


Contactors

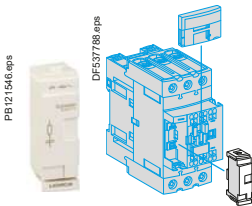
TeSys

TeSys D contactors - Suppressor modules

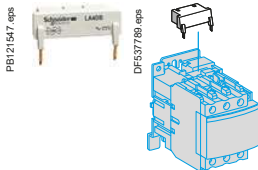
Product references



LAD4RCU LAD4●●

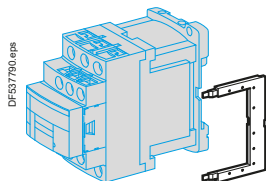


LAD4RC3●, LAD4V3●,
LAD4D3U, LAD4T3●



LA4D●●

Contactors



LAD4DDL or LAD4TDL



LAD4DDL

RC circuits (Resistor-Capacitor)

Effective protection for circuits highly sensitive to "high frequency" interference. For use only in cases where the voltage is virtually sinusoidal, i.e. less than 5 % total harmonic distortion. Voltage limited to 3 Uc max. and oscillating frequency limited to 400 Hz max. Slight increase in drop-out time (1.2 to 2 times the normal time).

Mounting	For use with contactor ⁽¹⁾ Rating	Type		Reference
		V~	V---	
Clip-on side mounting ⁽³⁾⁽⁵⁾	D09...D38 (3P) DT20...DT40	24...48	–	LAD4RCE
		50...127	–	LAD4RCG
		110...250	–	LAD4RCU
Clip-on front mounting ⁽³⁾⁽⁵⁾	D40A...D65A (3P) DT60A...DT80A (4P)	24...48	–	LAD4RC3E
		50...127	–	LAD4RC3G
		110...240	–	LAD4RC3U
Screw fixing ⁽⁴⁾	D80...D150 (3P) D40...D115 (4P)	380...415	–	LAD4RC3N
		24...48	–	LA4DA2E
		50...127	–	LA4DA2G
		110...240	–	LA4DA2U
		380...415	–	LA4DA2N

Varistors (peak limiting)

Protection provided by limiting the transient voltage to 2 Uc max. Maximum reduction of transient voltage peaks. Slight increase in drop-out time (1.1 to 1.5 times the normal time).

Clip-on side mounting ⁽³⁾⁽⁵⁾	D09...D38 (3P) DT20...DT40	24...48	–	LAD4VE
		50...127	–	LAD4VG
		110...250	–	LAD4VU
Clip-on front mounting ⁽³⁾⁽⁵⁾	D40A...D65A (3P) DT60A...DT80A (4P)	24...48	24...48	LAD4V3E
		50...127	50...127	LAD4V3G
		110...250	110...250	LAD4V3U
Screw fixing ⁽⁴⁾	D80...D115 (3P) D80...D115 (4P)	24...48	–	LA4DE2E
		50...127	–	LA4DE2G
		110...250	–	LA4DE2U
	D80...D95 (3P) D80 (4P)	–	24...48	LA4DE3E
		–	50...127	LA4DE3G
		–	110...250	LA4DE3U

Flywheel diodes

No overvoltage or oscillating frequency. Increase in drop-out time (6 to 10 times the normal time). Polarised component.

Clip-on side mounting ⁽⁵⁾	D09...D38 (3P), DT20...DT40	–	5...600	LAD4DDL
Clip-on front mounting ⁽⁵⁾	D40A...D65A (3P), DT60A...DT80A (4P)	–	24...250	LAD4D3U
Screw fixing ⁽⁴⁾	D80 and D95 (3P), D40...D80 (4P)	–	24...250	LA4DC3U

Bidirectional peak limiting diodes

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

Clip-on side mounting ⁽³⁾	D09...D38 (3P) DT20...DT40 (4P) ⁽²⁾	24	–	LAD4TB
		–	24	LAD4TBDL
		72	–	LAD4TS
		–	72	LAD4TSDL
		–	125	LAD4TGDL
		–	250	LAD4TUDL
Clip-on front mounting ⁽³⁾	D40A...D65A (3P) DT60A...DT80A (4P) ⁽²⁾	–	600	LAD4TXDL
		12...24	12...24	LAD4T3B
		25...72	25...72	LAD4T3S
		73...125	73...125	LAD4T3G
		126...250	126...250	LAD4T3U
		251...440	251...440	LAD4T3R
Screw fixing ⁽⁴⁾	D80...D95 (3P) D40...D80 (4P)	12...24	–	LA4DB2B
		25...72	–	LA4DB2S
		–	24	LA4DB3B
		–	72	LA4DB3S

(1) For satisfactory protection, a suppressor module must be fitted across the coil of each contactor except for TeSys D Green (●●E coil), as surge protection is already embedded.

(2) From D09 to D65A and from LC1DT20 to DT80A, d.c. low consumption are fitted with a built-in bidirectional peak limiting diode suppressor as standard. This bidirectional peak limiting diode is removable and can therefore be replaced by the user. (See reference above). If a d.c. or low consumption contactor is used without suppression, the standard suppressor should be replaced with a blanking plug (reference LAD9DL for LC1D09 to D38 and LC1DT20 to DT40; reference LAD9DL3 for LC1D40A to D65A and LC1DT60A to DT80A).

(3) Clipping-on makes the electrical connection. The overall size of the contactor remains unchanged.

(4) Mounting at the top of the contactor on coil terminals A1 and A2.

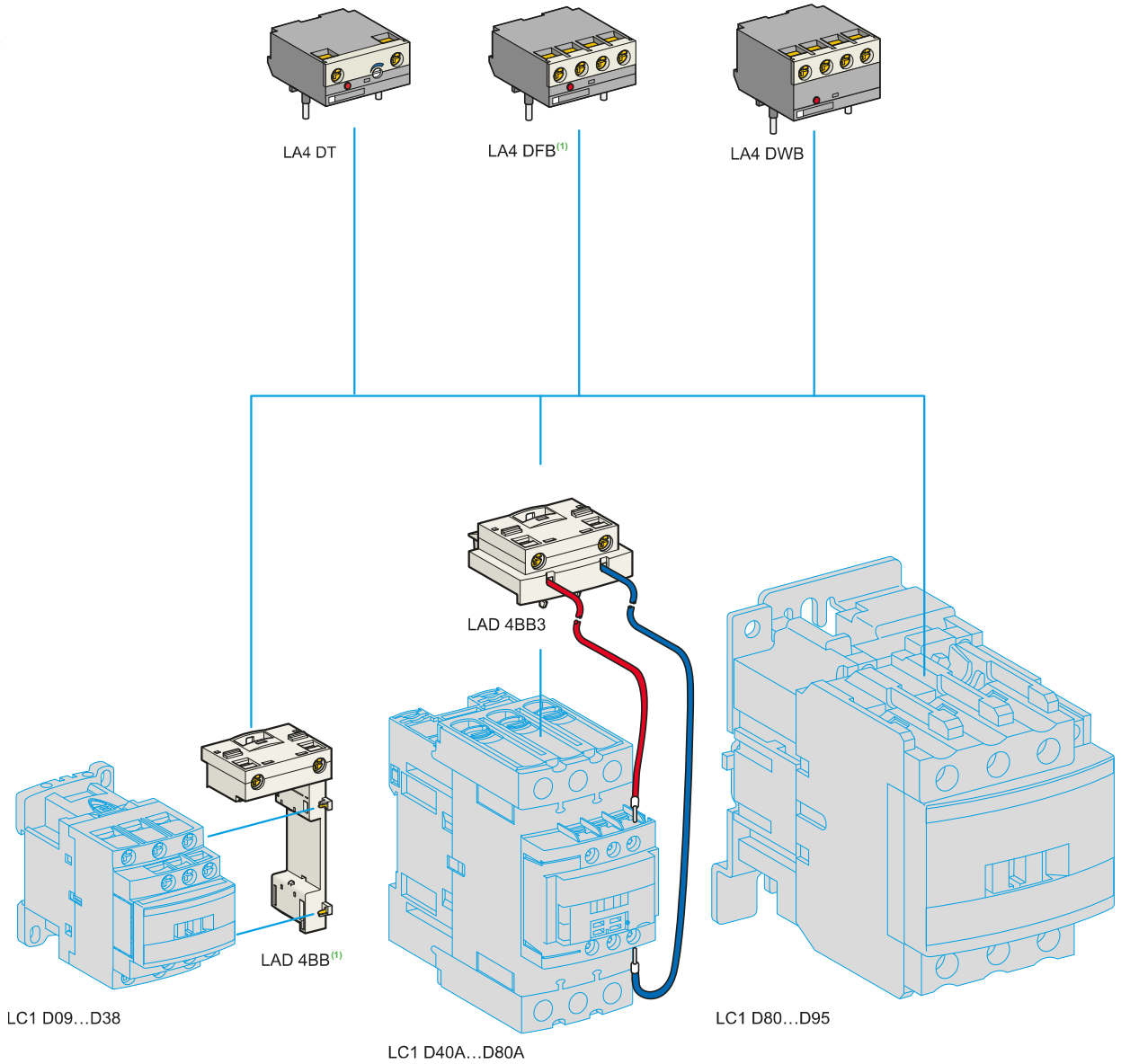
(5) In order to install these accessories, the existing suppression device must first be removed.

Characteristics:
page B8/69

B8/24

Life Is On

Schneider
Electric



Contactors

See page opposite for mounting possibilities according to the contactor type.

⁽¹⁾ For TeSys D with AC coil only.

TeSys

TeSys D contactors - Accessories

Product references



LA4DT●●



LA4DFB



LA4DBL



LAD4BBVU

Contactors

Electronic serial timer modules ⁽¹⁾

- 3-pole contactors LC1D09 to D38: mounted using adapter LAD4BB, to be ordered separately, see below.
- 3-pole contactors LC1D40A to D65A: mounted using adapter LAD4BB3, to be ordered separately, see below.
- 3-pole contactors LC1D80 to D150 and 4-pole contactors LC1D40 to D115: mounted directly across terminals A1 and A2 of the contactor.

On-delay type

Operational voltage ~		Time delay	Reference
24...250 V	100...250 V		
LC1D09...D80A (3P)	LC1D80...D150 (3P)	0.1...2 s	LA4DT0U
		1.5...30 s	LA4DT2U
		25...500 s	LA4DT4U

Interface modules

- 3-pole contactors LC1D09 to D38: mounted using adapter LAD4BB, to be ordered separately, see below.
- 3-pole contactors LC1D40A to D80A: mounted using adapter LAD4BB3, to be ordered separately, see below.

Relay interface

Operational voltage ~		Supply voltage E1-E2 (---)	Reference
24...250 V			
LC1D09...D150 (3P)		24 V	LA4DFB

Static relay interface

Operational voltage ~		Supply voltage E1-E2 (---)	Reference
24...250 V	100...250 V		
LC1D09...D80A (3P)	LC1D80...D115 (3P)	24 V	LA4DWB

Adapter kit for low control signal

For use on contactors	Composition	Reference
LC1D40A...D80A (3P) ⁽²⁾	<ul style="list-style-type: none"> ■ 1 LAD4BB3 coil wiring adapter ■ 1 LA4DFB relay interface module 	LA4DBL

Wiring adapters for coil retrofit of 3 pole contactors

For adapting existing wiring to a new product

For use on contactors		Reference	
LC1D09...D38	Without coil suppression	LAD4BB ⁽³⁾	
	With coil suppression	~ 24...48 V	LAD4BBVE
		~ 50...127 V	LAD4BBVG
		~ 110...250 V	LAD4BBVU
LC1D40A...80A	Without coil suppression	LAD4BB3	

⁽¹⁾ For 24 V operation, the contactor must be fitted with a 21 V coil (code Z). See pages B8/31 to B8/34.

⁽²⁾ The kit is compatible with a coil voltage of ~ 24 V to ~ 250 V (B7 to U7) and --- 24 V to --- 250 V (BD to UD).

⁽³⁾ LAD4BB can not be used with 4 poles contactors.

TeSys

TeSys D contactors - Accessories

Product references



LA9D3260



LA9D11550



LA9D96570



LA9D11560



LA9D11570



LA9D80962



LA9D11567

Accessories for main pole and control connections

Description		For use with contactors LC1		Sold in lots of	Unit reference
		~	---		
Connectors for cable, size (1 connector)	4-pole 10 mm ²	DT20, DT25	DT20, DT25	1	LAD92560
	3-pole 25 mm ²	D09...D38	D09...D38	1	LA9D3260
EverLink® terminal block	3-pole	D40A...D80A	D40A...D80A	1	LAD96560
	Connectors for cables (2 connectors)	3-pole 120 mm ²	D115, D150	1	LA9D115603
Connectors for lug type terminals (2 connectors)	4-pole 120 mm ²	D115	D115	1	LA9D115604
	3-pole	D1156, D1506	D1156, D1506	1	LA9D115503
Protective covers for connectors for lug type terminals	4-pole	D1156	D1156	1	LA9D115504
	3-pole	D40A6...D80A6	D40A6...D80A6	1	LAD96570
IP 20 covers for lug type terminals (for mounting with circuit breakers GV3 P●●6 and GV3 L●●6)	4-pole	D1156, D1506	D1156, D1506	1	LA9D115703 ⁽¹⁾
		D60A6...D80A6	D60A6...D80A6	1	LAD96580
	3 poles	D1156, D1506	D1156, D1506	1	LA9D115704
		D40A6...D80A6	D40A6...D80A6	1	LAD96575
Links for parallel connection of	2 poles	D09...D38	D09...D38	10	LA9D2561
		DT20, DT25 (4P)	DT20, DT25 (4P)	10	LA9D1261
		DT32, DT40 (4P)	DT32, DT40 (4P)	10	LAD96061
	3 poles	D40A...D80A	D40A...D80A	1	LAD9P32
		D80, D95	D80, D95	2	LA9D80961
		D09...D38	D09...D38	10	LAD9P3 ⁽²⁾
4 poles	D40A...D80A	D40A...D80A	1	LAD9P33	
	D80, D95	D80, D95	1	LA9D80962	
Staggered coil connection	4 poles	DT20, DT25	DT20, DT25	2	LA9D1263
	–	D80	D80	2	LA9D80963
Control circuit take-off from main pole	–	D80	D80	10	LA9D09966
	D80, D95	D80, D95	D80, D95	10	LA9D8067
Spreaders for increasing the pole pitch to 45 mm	D115, D150	D115, D150	D115, D150	10	LA9D11567
	D115, D150	D115, D150	D115, D150	3	GV7AC03

(1) For 3-pole contactors: 1 set of 6 covers, for 4-pole contactors: 1 set of 8 covers.

(2) Separate connecting bar for connecting 2 poles in parallel.

Contactors



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Sets of contacts and arc chambers

Description	For contactor		Reference
Sets of contacts	3-pole	LC1D115	LA5D1158031
		LC1D150	LA5D150803
	4-pole	LC1D115004	LA5D115804
Arc chambers	3-pole	LC1D115	LA5D11550
		LC1D150	LA5D15050
	4-pole	LC1D115004	LA5D115450

Power connection accessories

Terminal block	For supply to one or more GV2G busbar sets	GV1G09
Set of 63 A busbars for parallelling of contactors	2 contactors LC1D09...D18 or D25...D38	GV2G245
	4 contactors LC1D09...D18 or D25...D38	GV2G445
Set of 115 A busbars for parallelling of contactors	2 contactors LC1D40A...D80A	GV3G264
	3 contactors LC1D40A...D80A	GV3G364 ⁽¹⁾
Set of S-shape busbars	For circuit breakers GV3P●● and GV3L●● ⁽³⁾ and contactors LC1D40A...D73A	GV3S

Protection accessories

Description	Use	Sold in lots of	Reference
Miniature control circuit fuse holder	5 x 20 with 4 A-250 V fuse	1	LA9D941
Sealing cover	For LADT, LADR	1	LA9D901
Safety cover preventing access to the moving contact carrier	LC1D09...D80A and DT20...DT80A	1	LAD9ET1
	Red cover (for safety chain indication)	1	LAD9ET1S
	LC1D80 and D95	1	LAD9ET3
	Red cover (for safety chain indication)	1	LAD9ET3S
	LC1D115 and D150	1	LAD9ET4
	Red cover (for safety chain indication)	1	LAD9ET4S

Marking accessories

Description	Use	Sold in lots of	Unit reference
Sheet of 64 blank legends, self-adhesive, 8 x 33 mm ⁽²⁾	Contactors (except 4P) LC1D80...D115, LADN (4 contacts), LA6DK	10	LAD21
Sheet of 112 blank legends, self-adhesive, 8 x 12 mm ⁽²⁾	LADN (2 contacts), LADT, LADR, LRD	10	LAD22
Sheet of 64 blank legends for marking using plotter or 8 x 33 mm engraver	Contactors (except 4P) LC1D80...D115, LAD (4 contacts), LA6DK	10	LAD23
Sheet of 440 blank legends for marking using plotter or 8 x 12 mm engraver	All products	35	LAD24
Marker holder snap-in, 8 x 22 mm	4-pole contactors, LC1D80...D115, LA6DK	100	LA9D92
Marker holder snap-in, 8 x 18 mm	LC1D09...D65A, LC1DT20...DT80A, LADN (4 contacts), LADT, LADR	100	LAD90
Bag of 300 blank legends self-adhesive, 7 x 21 mm	On holder LA9D92	1	LA9D93

Mounting accessories

Retrofit plate for screw fixing	For replacement of LC1D40 to D80 with LC1D40A to D80A	1	LAD7X3
Mounting plate	For replacement of LC1F115 or F150 with LC1D115 or D150	1	LA9D730
Size 4 Allen key, insulated, 1000 V	For use on contactors LC1D40A to LC1D150	5	LADALLEN4

⁽¹⁾ With this set of busbars, any one contactor can be supplied directly by its EverLink® double cage power terminal block. The other two contactors are supplied by the busbar set. The 115 A limitation is therefore applied to these two contactors. Example: 1 LC1D65A supplied directly + 1 contactor LC1D65A and 1 contactor LC1D50A supplied via the busbar set = 115 A. This combination is compatible with busbar set GV3G364.

⁽²⁾ These legends are for sticking onto the safety cover of the contactors or add-on block, if fitted.

⁽³⁾ With 73 A current limit for GV3L73, GV3P73.

TeSys

TeSys D contactors - Assembly kits

Product references

PB121375.eps



LAD9R1

PB121376.eps



LAD9R3

PB121377.eps



LA9D8069

PB114205.eps



LAD91217

PB121378.eps



LAD91218

For 3-pole reversing contactors for motor control

Contactors with screw clamp terminals or connectors. Horizontally mounted, assembled by customer.

Description	For contactors ⁽¹⁾ (2 identical contactors)	Reference
Kits for assembly of reversing contactors		
Kit comprising: ■ a mechanical interlock LAD9V2 with electrical interlocking LAD9V1 ■ a set of power connections LAD9V5 (parallel) and LAD9V6 (reversing).	LC1D09 to D38	LAD9R1V
Kit comprising: ■ a mechanical interlock LAD9V2 without electrical interlocking ■ a set of power connections LAD9V5 (parallel) and LAD9V6 (reversing).	LC1D09 to D38	LAD9R1
Kit comprising: ■ a mechanical interlock LAD4CM ■ a set of power connections LA9D65A69 .	LC1D40A to D80A	LAD9R3
Mechanical interlocks		
Mechanical interlock with integral electrical interlocking	LC1D80 and D95 (~)	LA9D4002
	LC1D80 and D95 (---)	LA9D8002
	LC1D115 and D150	LA9D11502
Mechanical interlock without integral electrical interlocking	LC1D09 to D38	LAD9V2
	LC1D40A to D80A	LAD4CM
	LC1D80 and D95 (~)	LA9D50978
	LC1D80 and D95 (---)	LA9D80978
Sets of power connections		
Comprising: ■ a set of parallel bars ■ a set of reverser bars.	LC1D09 to D38 with screw clamp terminals or connectors	LAD9V5 + LAD9V6
	LC1D09...D32 with spring terminal connections	LAD9V12 + LAD9V13 ⁽²⁾
	LC1D40A to D80A	LA9D65A69
	LC1D80 and D95 (~)	LA9D8069
	LC1D80 and D95 (---)	LA9D8069
LC1D115 and D150	LA9D11569	

For low-speed/high-speed starter

Description	For LC1D09... D38 contactors with connection type	Reference
Connection kit enabling reversing of low and high speed directions using a reversing contactor and a 2N/O + 2N/C main pole contactor	Screw clamps or connectors	LAD9PVGV
	Spring terminals	LAD3PVGV

For star-delta starter

Description	For contactors	Reference	Without timer LADS2
Mounting kit comprising: ■ 1 time delay contact block LADS2 (LC1D09...D80) , ■ power circuit connections (LC1D09...D80), ■ hardware required for fixing the contactors onto the mounting plate (LC1D80).	LC1D09 to D38 ⁽³⁾	LAD91217	LAD91218
	LC1D09 to D38 ⁽⁴⁾	LAD93217	LAD93218
	LC1D40A to D65A	LAD9SD3	-
Equipment mounting plates	LC1D80	LA9D8017	-
	LC1D09 to D38	LA9D12974	-
	LC1D40A and D50A	-	-
	LC1D80	LA9D80973	-

⁽¹⁾ To order the 2 contactors: see pages B8/9 and B8/15.

⁽²⁾ To assemble a reversing contactor with spring terminal connections, the following components must be ordered:

- 1 mechanical interlock **LAD9V2**,

- 1 upstream power connection kit and 1 downstream power connection kit.

Upstream power connection kit **LAD9V10**: installed in the Quickfit system with power connection module **LAD34**.

(If module **LAD34** is not used, replace **LAD9V10** with **LAD9V12**).

Downstream power connection kit **LAD9V11**: installed in the Quickfit system with outgoing terminal block **LAD331**.

(If **LAD331** is not used, replace **LAD9V11** with **LAD9V13**).

⁽³⁾ For assembly of 3 contactors of the same physical size (depth).

⁽⁴⁾ For assembly of 3 contactors with star contactor physically smaller (depth).



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TeSys D contactors - Assembly kits

Product references

PB121379.eps



LAD9R1V

PB121381.eps



LA9D50978



PB121380.eps



LA9D8070

Contactors

PB121382.eps



LAD9R3S

For 4-pole changeover contactor pairs (3-phase distribution + neutral)

Contactors with screw clamp terminals or connectors. Horizontally mounted, assembled by customer.

Description	For contactors ⁽¹⁾ (2 identical contactors)	Reference
-------------	---	-----------

Kits for assembly of changeover contactor pairs

Kit comprising: ■ a mechanical interlock LAD9V2 with electrical interlocking LAD9V1, ■ a set of power connections (changeover) LAD9V7.	LC1DT20 to DT40 with screw clamps or connectors	LAD9R1V
--	---	---------

Kit comprising: ■ a mechanical interlock LAD9V2 without electrical interlocking, ■ a set of power connections (changeover) LAD9V7.	LC1DT20 to DT40 with screw clamps or connectors	LAD9R1
--	---	--------

Mechanical interlocks

With integral electrical interlocking	LC1D80004 LP1D80004 LC1D115004	LA9D4002 LA9D8002 LA9D11502
Without integral electrical interlocking	LC1DT20 to DT40 with screw clamps or connectors LC1DT203 to DT403 with spring terminals LC1DT60A and DT80A LC1D80004 LP1D80004	LAD9V2 ⁽²⁾ LAD9V2 ⁽²⁾ LAD4CM LA9D50978 LA9D80978

Sets of power connections

Comprising a set of parallel bars	LC1D80004 LP1D80004 LC1D115004 LC1DT203 to DT403 with spring terminals LC1D80004 LP1D80004	LA9D8070 LA9D8070 LA9D11570 LAD9V9 LA9D8070 ⁽²⁾ LA9D8070 ⁽²⁾
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For 3-pole changeover contactor pairs

Contactors with screw clamp terminals or connectors. Horizontally mounted, assembled by customer.

Description	For contactors ⁽¹⁾ (2 identical contactors)	Reference
-------------	---	-----------

Kits for assembly of changeover contactor pairs

Kit comprising: ■ a mechanical interlock LAD4CM ■ a set of parallel bars LA9D65A6	LC1D40A...D80A	LAD9R3S
---	----------------	---------

Mechanical interlocks

Without integral electrical interlocking	LC1D40A...D80A	LAD4CM
With integral electrical interlocking	LC1D115 and D150	LA9D11502

Sets of power connections

Comprising a set of parallel bars	LC1D40A...D80A LC1D115 and D150	LA9D65A6 LA9D11571
-----------------------------------	------------------------------------	-----------------------

⁽¹⁾ To order the 2 contactors: see pages B8/9 and B8/15.

⁽²⁾ Order 2 contact blocks LADN^o1 to build the electrical interlock, see page B8/22.



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LXD100

a.c coils for ~ contactors LC1D09...D38 and LC1DT20...DT40

Specifications

Average consumption at 20 °C:

- inrush ($\cos \phi = 0.75$) 70 VA,
- sealed ($\cos \phi = 0.3$) 50 Hz: 7 VA, 60 Hz: 7.5 VA.

Operating range ($\theta \leq 60$ °C): 50 Hz: 0.8... 1.1 Uc, 60 Hz: 0.85... 1.1 Uc.

Control circuit voltage Uc	Average resistance at 20 °C ± 10 %	Inductance of closed circuit	Reference ⁽¹⁾
V	Ω	H	
12	1.33	0.05	LXD1J7
21 ⁽²⁾	4.17	0.17	LXD1Z7
24	5.37	0.22	LXD1B7
32	10.1	0.39	LXD1C7
36	12.8	0.49	LXD1CC7
42	17	0.67	LXD1D7
48	21.7	0.87	LXD1E7
60	34.6	1.4	LXD1EE7
100	100.4	3.8	LXD1K7
110	124.1	4.6	LXD1F7
115	129.8	5	LXD1FE7
120	150.6	5.4	LXD1G7 ⁽³⁾
127	158.5	6.1	LXD1FC7
200	410.7	15	LXD1L7
208	430.4	16	LXD1LE7 ⁽³⁾
220	515.4	18	LXD1M7 ⁽⁴⁾
230	538.6	20	LXD1P7
240	562.3	22	LXD1U7
277	800.7	29	LXD1W7 ⁽³⁾
380	1551	55	LXD1Q7 ⁽⁵⁾
400	1633	60	LXD1V7
415	1694	65	LXD1N7
440	1993	73	LXD1R7
480	2398	87	LXD1T7 ⁽³⁾
500	2499	95	LXD1S7
575	3294	125	LXD1SC7
600	3810	136	LXD1X7
660	4656	165	LXD1YC7
690	5020	180	LXD1Y7

⁽¹⁾ The last 2 digits in the reference represent the voltage code.

⁽²⁾ Voltage for special coils fitted in contactors with serial timer modules, with 24 V supply.

⁽³⁾ Coil for use only on 60 Hz.

⁽⁴⁾ Suitable for use on 230 V / 50 Hz. In this case, apply a coefficient of 0.6 to the mechanical durability of the contactor (see page B8/60 and B8/62).

⁽⁵⁾ Suitable for use on 400 V / 50 Hz. In this case, apply a coefficient of 0.6 to the mechanical durability of the contactor (see page B8/60 and B8/62).



PB121394.eps

LXD3●●

a.c coils for ~ contactors LC1D40A...D80A, LC1DT60A and LC1DT80A

Specifications

Average consumption at 20 °C:

■ inrush ($\cos \phi = 0.75$) 160 VA,

■ sealed ($\cos \phi = 0.3$) 50 Hz: 15 VA, 60 Hz: 15 VA.

Operating range ($\theta \leq 60$ °C): 50 Hz: 0.8...1.1 Uc, 60 Hz: 0.85...1.1 Uc.

Control circuit voltage Uc	Average resistance at 20 °C $\pm 10\%$	Inductance of closed circuit	Reference ⁽¹⁾
V	Ω	H	50/60 Hz
12	0.49	0.03	LXD3J5 ⁽²⁾
24	1.98	0.12	LXD3B7
32	3.76	0.22	LXD3C7
42	6.18	0.37	LXD3D7
48	7.97	0.48	LXD3E7
100	37.63	2.	LXD3K7
110	42.28	2.50	LXD3F7
115	48.76	2.74	LXD3FE7
120	37.63	2.07	LXD3G7 ⁽⁵⁾
127	60.29	3.34	LXD3FC7
200	149	8.27	LXD3L7
208	105	6.22	LXD3LE7 ⁽⁵⁾
220	182	10	LXD3M7 ⁽³⁾
230	192	10.9	LXD3P7
240	202	11.9	LXD3U7
277	193	11	LXD3W7 ⁽⁵⁾
380	512	29.9	LXD3Q7 ⁽⁴⁾
400	607	33.1	LXD3V7
415	635	35.6	LXD3N7
440	682	40.1	LXD3R7
480	607	33.1	LXD3T7 ⁽⁵⁾
500	878	51.7	LXD3S7
575	1238	68.4	LXD3SC7
600	1304	74.5	LXD3X7
660	1593	90.1	LXD3YC7
690	1683	98.5	LXD3Y7

⁽¹⁾ The last 2 digits in the reference represent the voltage code.

⁽²⁾ This coil can only be used on 50 Hz.

⁽³⁾ Suitable for use on 230 V / 50 Hz. In this case, apply a coefficient of 0.6 to the mechanical durability of the contactor (see page B8/60 and B8/62).

⁽⁴⁾ Suitable for use on 400 V / 50 Hz. In this case, apply a coefficient of 0.6 to the mechanical durability of the contactor (see page B8/60 and B8/62).

⁽⁵⁾ This coil can only be used on 60 Hz.

PB121396L eps



LX1D8●●

a.c coils for 3 or 4-pole contactors LC1D115

Specifications

Average consumption at 20 °C:

■ inrush (cos ϕ = 0.8) 50 or 60 Hz: 300 VA

■ sealed (cos ϕ = 0.3) 50 or 60 Hz: 22 VA.

Operating range ($\theta \leq 55$ °C): 0.85...1.1 Uc.

Control circuit voltage Uc	Average resistance of closed circuit at 20 °C ± 10 %	Inductance of closed circuit	Reference ⁽¹⁾	Average resistance of closed circuit at 20 °C ± 10 %		Reference ⁽¹⁾
				Ω	H	
50 Hz						
60 Hz						
24	1.24	0.09	LX1D8B5	0.87	0.07	LX1D8B6
32	2.14	0.17	LX1D8C5	–	–	–
42	3.91	0.28	LX1D8D5	–	–	–
48	4.51	0.36	LX1D8E5	3.91	0.28	LX1D8E6
110	26.53	2.00	LX1D8F5	19.97	1.45	LX1D8F6
115	26.53	2.00	LX1D8FE5	–	–	–
120	–	–	–	24.02	1.70	LX1D8G6
127	32.75	2.44	LX1D8FC5	–	–	–
208	–	–	–	67.92	5.06	LX1D8L6
220	104.77	7.65	LX1D8M5	79.61	5.69	LX1D8M6
230	104.77	8.29	LX1D8P5	–	–	–
240	125.25	8.89	LX1D8U5	97.04	6.75	LX1D8U6
277	–	–	–	125.75	8.89	LX1D8W6
380	338.51	22.26	LX1D8Q5	243.07	17.04	LX1D8Q6
400	368.43	25.55	LX1D8V5	–	–	–
415	368.43	27.65	LX1D8N5	–	–	–
440	441.56	30.34	LX1D8R5	338.51	22.26	LX1D8R6
480	–	–	–	368.43	25.55	LX1D8T6
500	566.62	38.12	LX1D8S5	–	–	–

a.c coils for 3 or 4-pole contactors LC1D115, LC1D150

Specifications

Average consumption at 20 °C:

■ inrush: cos ϕ = 0.9 - 280 to 350 VA

■ sealed: cos ϕ = 0.9 - 2 to 18 VA.

Operating range ($\theta \leq 55$ °C): 0.8...1.15 Uc.

Coils with integral suppression device fitted as standard, class B.

Control circuit voltage Uc	Average resistance of closed circuit at 20 °C ± 10 %	Inductance of closed circuit	Reference ⁽¹⁾	Average resistance of closed circuit at 20 °C ± 10 %		Reference ⁽¹⁾
				Ω	H	
50/60 Hz						
24	–	–	–	147	3.03	LX1D8B7
32	–	–	–	301	8.28	LX1D8C7
42	–	–	–	498	13.32	LX1D8D7
48	–	–	–	1061	24.19	LX1D8E7
110	–	–	–	4377	109.69	LX1D8F7
115	–	–	–	4377	109.69	LX1D8FE7
120	–	–	–	4377	109.69	LX1D8G7
127	–	–	–	6586	152.65	LX1D8FC7
208	–	–	–	10 895	260.15	LX1D8LE7
220	–	–	–	9895	210.72	LX1D8M7
230	–	–	–	9895	210.72	LX1D8P7
240	–	–	–	9895	210.72	LX1D8U7
277	–	–	–	21 988	533.17	LX1D8UE7
380	–	–	–	21 011	482.42	LX1D8Q7
400	–	–	–	21 011	482.42	LX1D8V7
415	–	–	–	21 011	482.42	LX1D8N7
440	–	–	–	21 501	507.47	LX1D8R7
480	–	–	–	32 249	938.41	LX1D8T7
500	–	–	–	32 249	938.41	LX1D8S7

(1) The last 2 digits in the reference represent the voltage code.

d.c. coils for 3-pole contactors LC1D80 or 4-pole contactors LP1D80

Specifications

Average consumption: 22 W.
 Operating range: 0.85...1.1 Uc.

PB121387.eps



LX4D7.D

Control circuit voltage Uc	Average resistance at 20 °C ± 10%	Inductance of closed circuit	Reference ⁽¹⁾	Weight
V	Ω	H		kg
12	6.6	0.46	LX4D7JD	0.680
24	27	1.89	LX4D7BD	0.680
36	57	4	LX4D7CD	0.680
48	107	7.5	LX4D7ED	0.680
60	170	11.9	LX4D7ND	0.680
72	230	16.1	LX4D7SD	0.680
110	564	39.5	LX4D7FD	0.680
125	718	50.3	LX4D7GD	0.680
220	2215	155	LX4D7MD	0.680
250	2850	200	LX4D7UD	0.680
440	9195	640	LX4D7RD	0.680

⁽¹⁾ The last 2 digits in the reference represent the voltage code.

d.c. coils for contactors LC1D115, D150

Specifications

Consumption: inrush 270 to 365 W, sealed 2.4 to 5.1 W.

Operating range: 0.75...1.2 Uc.

Coils with integral suppression device fitted as standard, class B.



LX4D8●D

Control circuit voltage Uc	Average resistance at 20 °C ± 10 %	Inductance of closed circuit	Reference ⁽¹⁾	Weight
V	Ω	H		kg
24	147	3.03	LX4D8BD	0.300
48	1061	24.19	LX4D8ED	0.300
60	1673	38.44	LX4D8ND	0.300
72	2500	56.27	LX4D8SD	0.300
110	4377	109.69	LX4D8FD	0.300
125	6586	152.65	LX4D8GD	0.300
220	9895	210.72	LX4D8MD	0.300
250	18 022	345.40	LX4D8UD	0.300
440	21 501	684.66	LX4D8RD	0.300

d.c. coils for 3-pole contactors LC1D80 or 4-pole contactors LP1D80

Specifications

Wide range coils for specific applications

Average consumption: 23 W.

Operating range: 0.75 to 1.2 Uc.

Coils with "TH" treatment as standard.

Contactors

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LX4D7●●

Control circuit voltage Uc	Average resistance at 20 °C ± 10 %	Inductance of closed circuit	Reference ⁽¹⁾	Weight
V	Ω	H		kg
12	6.2	0.49	LX4D7JW	0.680
24	23.5	1.75	LX4D7BW	0.680
36	51.9	4.18	LX4D7CW	0.680
48	94.		LX4D7EW	0.680
72	204	15.7	LX4D7SW	0.680
110	483	36	LX4D7FW	0.680
220	1922	144	LX4D7MW	0.680

⁽¹⁾ The last 2 digits in the reference represent the voltage code.

Technical Data for Designers

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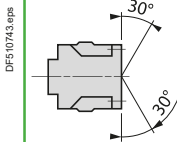
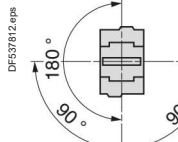
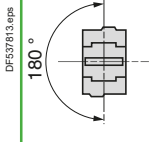
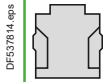
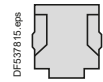
Standard IEC tests - Contactors
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Contactors

TeSys

TeSys D Green, TeSys D Contactors

Characteristics

Environment			D09...D18 DT20 and DT25	D25...D38 DT32 and DT40	D40A...D80A DT60A and DT80A	D80...D95 ⁽¹⁾	D115 and D150
Rated insulation voltage (Ui)	Conforming to IEC 60947-4-1, overvoltage category III, degree of pollution: 3	V	690			1000	
	Conforming to UL, CSA	V	600				
Rated impulse withstand voltage (Uimp)	Conforming to IEC 60947	kV	6			8	
Conforming to standards			IEC/EN 60947-4-1, IEC/EN 60947-5-1, UL 60947-4-1, CSA C22.2 n° 60947-4-1, UL 60947-5-1, CSA C22.2 n° 60947-5-1, GB/T 14048.4				
Product certifications ⁽¹⁾			UL, CSA, CCC, EAC, CB certification, EU-MR-RO by DNV-GL			UL, CSA, CCC, EAC, CB certification, DNV-GL, RINA, BV, LRoS	
Degree of protection ⁽²⁾ (front face)	Conforming to IEC 60529						
	Power circuit connections		Protection against direct finger contact IP20				
	Coil connection		Protection against direct finger contact IP20				
Climatic withstand			According to IACS E10 and IEC 60947-1 Annex Q category D			According to IACS E10	
Ambient air temperature around the device	Storage	°C	-60...+80				
	Operation ⁽³⁾	°C	-40...+60				
	Allowed with derating ^{(3) (4)}	°C	+60...+70 at Uc to 1.●● x Uc				
Maximum operating altitude	Without derating	m	3000				
Operating positions ⁽⁵⁾	Without derating in the following positions		AC and DC coils AC/DC and "BBE" coils		AC coils AC/DC and "BBE" coils		DC coils
							
	Positions that are not allowed		For --- contactors LC1D09 to LC1D150.				
							
Flame resistance	Conforming to IEC 60695-2-11	°C	850				
Shock resistance ⁽⁶⁾ 1/2 sine wave = 11 ms	Contacteur open		10 gn	8 gn	10 gn	8 gn	6 gn
	Contacteur closed		15 gn	15 gn	15 gn	10 gn	15 gn
Vibration resistance ⁽⁶⁾ 5...300 Hz	Contacteur open		2 gn				
	Contacteur closed		4 gn	4 gn	4 gn	3 gn	4 gn

- (1) Contactor **LC1D95** with d.c. coil is not UL/CSA certified.
 (2) Protection provided for the cabling c.s.a.'s indicated on the next page and for connection by cable. For lug type: add a protective cover.
 (3) As per IEC60947-4-1, operating time and drop out voltage given and tested for -5...+40 °C.
 (4) Refer to operational current in AC1 (page A6/40).
 (5) When mounting on a vertical rail, use a stop.
 (6) Without modifying the power contact states, in the most unfavourable direction (coil energised at Ue).
 In case of vibration, it is recommended to mount the devices separately by screws on metal plate.

TeSys

TeSys D Green, TeSys D Contactors

Characteristics

Pole characteristics TeSys D, TeSys D Green										
Contactor type		LC1	D09 (3P)	DT20 D098	D12 (3P)	DT25 D128	D18 (3P)	DT32 D188	D25 (3P)	DT40 D258
Rated operational current (Ie) (Ue ≤ 440 V)	In AC-3, θ ≤ 60 °C	A	9		12		18		25	
	In AC-1, θ ≤ 60 °C	A	25 ⁽¹⁾	20	25 ⁽¹⁾	25	32 ⁽¹⁾	32	40 ⁽¹⁾	40
Rated operational voltage (Ue)	Up to	V	690		690		690		690	
Frequency limits	Of the operational current	Hz	25...400		25...400		25...400		25...400	
Conventional thermal current (Ith)	θ ≤ 60 °C	A	25 ⁽¹⁾	20	25 ⁽¹⁾	25	32 ⁽¹⁾	32	40 ⁽¹⁾	40
Rated making capacity (440 V)	Conforming to IEC 60947	A	250		250		300		450	
Rated breaking capacity (440 V)	Conforming to IEC 60947	A	250		250		300		450	
Permissible short time rating No current flowing for preceding 15 minutes with θ ≤ 40 °C	For 1 s	A	210		210		240		380	
	For 10 s	A	105		105		145		240	
	For 1 min	A	61		61		84		120	
Fuse protection against short-circuits (U ≤ 690 V)	Without thermal overload relay, gG fuse	type 1	A		40		50		63	
		type 2	A		25		35		40	
	With thermal overload relay	A	See pages B11/4 and B11/5, for aM or gG fuse ratings corresponding to the associated thermal overload relay							
Average impedance per pole	At Ith and 50 Hz	mΩ	2.5		2.5		2.5			
Power dissipation per pole for the above operational currents	AC-3	W	0.20		0.36		0.8		1.25	
	AC-1	W	1.56		1.56		2.5		3.2	

Control circuit characteristics, a.c. supply TeSys D										
Rated control circuit voltage (Uc)	50/60 Hz	V	12...690							
Control voltage limits	50 or 60 Hz coils	Operation	-							
		Drop-out	-							
	50/60 Hz coils	Operation	0.8...1.1 Uc on 50 Hz and 0.85...1.1 Uc on 60 Hz at 60 °C							
		Drop-out	0.3...0.6 Uc at 60 °C							
Average consumption at 20 °C and at Uc	~ 50 Hz	Inrush	50 Hz coil	VA	-					
			Cos φ		0.75					
	Sealed	50 Hz coil	VA	70						
			Cos φ		0.3					
	50/60 Hz coil	VA	7							
		Cos φ		0.3						
	~ 60 Hz	Inrush	60 Hz coil	VA	-					
			Cos φ		0.75					
	Sealed	60 Hz coil	VA	70						
			Cos φ		0.3					
50/60 Hz coil	VA	7.5								
Heat dissipation	50/60 Hz	W	2...3							
Operating time ⁽²⁾	Closing "C"	ms	12...22							
		Opening "O"	ms	4...19						
Mechanical durability in millions of operating cycles	50 or 60 Hz coil		-							
		50/60 Hz coil on 50 Hz		15						
Maximum operating rate at ambient temperature ≤ 60 °C	In operating cycles per hour		3600							

(1) Versions with spring terminal connections:
16 A for LC1D093 and LC1D123 (20 A possible with 2 x 2.5 mm² in parallel),
25 A for LC1D183 to LC1D323 (32 A possible for LC1D183 connected with 2 x 4 mm² cables in parallel; 40 A possible for LC1D253 and LC1D323 connected with 2 x 4 mm² in parallel).

(2) The closing time "C" is measured from the moment the coil supply is switched on to closure of the main poles. The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separate.

Ref.



Contactors

D32	D38	D40A	DT60A	D50A	D65A	D80A	DT80A	D80	D95	D115	D150
32	38	40	–	50	65	66	–	80	95	115	150
50 ⁽¹⁾	50	60	60	80	80	80	80	125	125	200	200
690	690	690	690	690	690	690	690	1000	1000	1000	1000
25...400	25...400	25...400	25...400	25...400	25...400	25...400	25...400	25...400	25...400	25...400	25...400
50	50	60	60	80	80	80	80	125	125	200	200
550	550	800	800	900	1000	1000	1000	1100	1100	1260	1660
550	550	800	800	900	1000	1000	1000	1100	1100	1100	1400
430	430	720	720	810	900	900	900	990	1100	1100	1400
260	310	320	320	400	640	640	640	640	800	950	1200
138	150	165	165	208	260	260	260	320	400	550	580
60	60	72	72	84	110	110	110	135	135	250	250
63	63	80	80	100	125	125	125	200	200	250	315
63	63	80	80	100	125	125	125	160	160	200	25

See pages B11/4 and B11/5 for aM or gG fuse ratings corresponding to the associated thermal overload relay

2	2	1.5	1.6	1.5	1.5	1.5	1.6	0.8	0.8	0.6	0.6
2	3	2.4	–	3.7	6.3	6.3	–	5.1	7.2	7.9	13.5
5	5	5.4	5.8	9.6	9.6	9.6	10.2	12.5	12.5	24	

12...690	12...690							24...500
–	–	0.85...1.1 Uc at 55 °C						
–	–	0.3...0.6 Uc at 55 °C						0.3...0.5 Uc at 55 °C
0.8...1.1 Uc on 50 Hz and 0.85...1.1 Uc on 60 Hz at 60 °C	0.8...1.1 Uc on 50 Hz and 0.85...1.1 Uc on 60 Hz at 60 °C	0.8...1.1 Uc on 50 Hz and 0.85...1.1 Uc on 60 Hz at 55 °C						0.8...1.15 Uc on 50/60 Hz at 55 °C
0.3...0.6 Uc at 60 °C	0.3...0.6 Uc at 60 °C	0.3...0.6 Uc at 55 °C						0.3...0.5 Uc at 55 °C
–	–	200						300
0.75	0.75	0.75						0.8
70	160	245						280...350
–	–	20						22
0.3	0.3	0.3						0.3
7	15	26						2...18
–	–	220						300
0.75	0.75	0.75						0.8
70	140	245						280...350
–	–	22						22
0.3	0.3	0.3						0.3
7.5	13	26						2...18
2...3	4...5	6...10						3...8
12...22	12...26	12...26	12...26	12...26	12...26	12...26	20...35	
4...19	4...19	4...19	4...19	4...19	4...19	4...19	6...20	
–	–	–						10
15	6	6	6	6	6	6	4	
3600	3600	3600	3600	3600	3600	3600	3600	

TeSys

TeSys D Contactors

Characteristics

d.c. control circuit characteristics TeSys D

Contactor type			LC1D09...D38 LC1DT20...DT40	LC1D40A...D80A LC1DT60A and DT80A	LC1 or LP1D80 LC1D95	LC1D115 and LC1D150	
Rated control circuit voltage (Uc) ---		V	12...440	12...440		24...440	
Rated insulation voltage	Conforming to IEC 60947-1	V	690				
	Conforming to UL, CSA	V	600				
Control voltage limits	Operation	Standard coil	0.7...1.25 Uc at 60 °C	0.75...1.25 Uc at 60 °C	0.85...1.1 Uc at 55 °C	0.75...1.2 Uc at 55 °C	
		Wide range coil	–	–	0.75...1.2 Uc at 55 °C	–	
	Drop-out		0.1...0.25 Uc at 60 °C	0.1...0.3 Uc at 60 °C	0.1...0.3 Uc at 55 °C	0.15...0.4 Uc at 55 °C	
Average consumption at 20 °C and at Uc	---	Inrush	W	5.4	19	22	270...365
		Sealed	W	5.4	7.4	22	2.4...5.1
Operating time ⁽¹⁾ average at Uc	Closing	"C"	ms	63 ±15 %	50 ±15%	95...130	20...35
	Opening	"O"	ms	20 ±20 %	20 ±20%	20...35	40...75
			<i>Note: The arcing time depends on the circuit switched by the poles. For all normal 3-phase applications, the arcing time is less than 10 ms. The load is isolated from the supply after a time equal to the sum of the opening time and the arcing time.</i>				
Time constant (L/R)		ms	28	34	75	25	
Mechanical durability at Uc	In millions of operating cycles		30	10	10	8	
Maximum operating rate at ambient temperature ≤ 60 °C	In operating cycles per hour		3600	3600	3600	1200	

Ref.



Low consumption control circuit characteristics TeSys D

Rated insulation voltage	Conforming to IEC 60947-1	V	690	–
	Conforming to UL, CSA	V	600	–
Maximum voltage	Of the control circuit on ---	V	250	–
Average consumption d.c. at 20 °C and at Uc	Wide range coil (0.8...1.25 Uc)	Inrush	W	2.4
		Sealed	W	2.4
Operating time ⁽¹⁾ at Uc and at 20 °C	Closing	"C"	ms	77 ±15 %
	Opening	"O"	ms	25 ±20 %
Voltage limits (θ ≤ 60 °C) of the control circuit	Operation		0.8 to 1.25 Uc	–
	Drop-out		0.1...0.3 Uc	–
Time constant (L/R)		ms	40	–
Mechanical durability	In millions of operating cycles		30	–
Maximum operating rate at ambient temperature ≤ 60 °C	In operating cycles per hour		3600	–

⁽¹⁾ The operating times depend on the type of contactor electromagnet and its control mode.
The closing time "C" is measured from the moment the coil supply is switched on to initial contact of the main poles.
The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separate.

Contactors

TeSys

TeSys D Green Contactors

Characteristics

Wide band TeSys D Green AC/DC coil circuit characteristics

Rated control circuit voltage (Uc)	V	AC/DC 24...250							
Operation	V	0.85 Uc mini...1.1 Uc maxi at 60 °C in AC or DC (BNE coil: 0.8 Uc mini at 24 VDC, 0.85 Uc mini in AC).							
Drop-out	V	0.1 Uc maxi (e.g. 100 to 250 V = 25 V at 60 °C)							
Contactor type		LC1D09...D38			LC1D40A...D80A, LC1DT60A, LC1DT80A				
Coil code		BNE	EHE	KUE	BBE	BNE	EHE	KUE	
Rated control circuit voltage (Uc)		24-60	48-130	100-250	24 DC	24-60	48-130	100-250	
AC supply at 20°C	Consumption inrush	VA	15	25	25	-	15	23	18
	Consumption sealed	VA	0.9	1.3	1.6	-	1	1.4	1.
	Consumption sealed	mA	28	15	9	-	35	17	9.5
	Heat dissipation	W	0.6	0.8	1.1	-	0.8	0.9	1.3
DC supply at 20°C	Consumption inrush	W	14	24	18	11	16	19	14
	Consumption sealed	mA	23	13	7	20	30	15	7
	Heat dissipation	W	0.6	0.8	1.1	0.5	0.7	0.9	1.2
Max operating time ⁽²⁾	Closing "C"	ms	50 ±5 ms			60 ±5 ms			
	Opening "O"	ms	20...90 ms			20...80 ms			
EMC immunity		Meets IEC 60947-4-1 standard, table 14							
EMC emission	IEC 60947-4-1 §9.4.3	Environment A ⁽¹⁾							
Maximum operating rate at ambient temperature ≤ 60°C	cycle/h	3600							
Mechanical durability at Uc In millions of operating cycles		15			6				

⁽¹⁾ Use of this product in EMC environment B may require mitigation measures to avoid unwanted disturbance.

⁽²⁾ The closing time "C" is measured from the moment the coil supply is switched on to closure of the main poles. The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separates.

Ref.



Contactors

TeSys

TeSys D Green, TeSys D Contactors

Characteristics

Power circuit connections

Screw clamp terminal connections TeSys D, TeSys D Green

Contactor type		LC1	D09 and D12 DT20 and DT25	D18 (3P)	D25 (3P)	D32	D38	D18 and D25 (4P) DT32 and DT40	D40A to D80A DT60A and DT80A ⁽¹⁾	D80 and D95	D115 and D150
Tightening			Screw clamp terminals					Connector 2 inputs	Screw clamp terminals	Connector 1 input	Connector 2 inputs
Flexible cable without cable end	1 conductor	mm ²	1...4	1.5...6	2.5...10			2.5...10	1...35	4...50	10...120
	2 conductors	mm ²	1...4	1.5...6	2.5...10			2.5...10	1...25 and 1...35	4...25	10...120 + 10...50
Flexible cable with cable end	1 conductor	mm ²	1...4	1...6	1...10			2.5...10	1...35	4...50	10...120
	2 conductors	mm ²	1...2.5	1...4	1.5...6			2.5...10	1...25 and 1...35	4...16	10...120 + 10...50
Solid cable without cable end	1 conductor	mm ²	1...4	1.5...6	1.5...10			2.5...16	1...35	4...50	10...120
	2 conductors	mm ²	1...4	1.5...6	2.5...10			2.5...16	1...25 and 1...35	6...25	10...120 + 10...50
Screwdriver	Phillips		N° 2	N° 2	N° 2			N° 2	–	–	–
	Flat screwdriver Ø		Ø6	Ø6	Ø6			Ø6	–	Ø6...Ø8	–
Hexagonal key			–	–	–			–	4	4	4
Tightening torque		N.m	1.7	1.7	2.5			1.8	5: ≤ 25 mm ² 8: 35 mm ²	12	12

Spring terminal connections ⁽²⁾ TeSys D

Flexible cable without cable end	1 conductor	mm ²	2.5 (4: DT25)	4	4	4	–	10	–	–
	2 conductors	mm ²	2.5 (except DT25)	4	4	4	–	–	–	–

Connection by bars or lugs TeSys D

Bar c.s.a.			–	–	–	–	–	–	–	3 x 16	5 x 25
Lug external Ø		mm	8	8	10	10	–	8	16.5	1	–
Ø of screw		mm	M3.5	M3.5	M4	M4	–	M3.5	M6	M6	M8
Screwdriver	Pozidriv		N° 2	N° 2	N° 2	N° 2	–	N° 2	–	–	–
	Flat screwdriver Ø		Ø6	Ø6	Ø6	Ø6	–	Ø6	–	Ø8	–
Key for hexagonal headed screw			–	–	–	–	–	–	10	10	13
Tightening torque		N.m	1.7	1.7	2.5	2.5	–	–	–	–	–

Control circuit connections

Connection by cable (tightening via screw clamps) TeSys D, TeSys D Green

Flexible cable without cable end	1 conductor	mm ²	1...4	1...4	1...4	1...4	1...4	1...4	1...4	1...4	1...2.5
	2 conductors	mm ²	1...4	1...4	1...4	1...4	1...4	1...4	1...4	1...4	1...2.5
Flexible cable with cable end	1 conductor	mm ²	1...4	1...4	1...4	1...4	1...4	1...4	1...4	1...2.5	1...2.5
	2 conductors	mm ²	1...2.5	1...2.5	1...2.5	1...2.5	1...2.5	1...2.5	1...2.5	1...2.5	1...2.5
Solid cable without cable end	1 conductor	mm ²	1...4	1...4	1...4	1...4	1...4	1...4	1...4	1...4	1...2.5
	2 conductors	mm ²	1...4	1...4	1...4	1...4	1...4	1...4	1...4	1...4	1...2.5
Screwdriver	Phillips		N° 2	N° 2	N° 2	N° 2	–	N° 2	N° 2	N° 2	N° 2
	Flat screwdriver Ø		Ø6	Ø6	Ø6	Ø6	–	Ø6	Ø6	Ø6	Ø6
Tightening torque		N.m	1.7	1.7	1.7	1.7	–	1.7	1.7	1.7	1.2

Spring terminal connections ⁽²⁾ TeSys D

Flexible cable without cable end	1 conductor	mm ²	2.5	2.5	2.5	2.5	–	2.5	0.75...2.5	–	–
	2 conductors	mm ²	2.5	2.5	2.5	2.5	–	2.5	0.75...2.5	–	–

Connection by bars or lugs TeSys D

Lug external Ø		mm	8	8	8	8	–	8	8	8	8
Ø of screw		mm	M3.5	M3.5	M3.5	M3.5	–	M3.5	M3.5	M3.5	M3.5
Screwdriver	Pozidriv (except for D80-95 / D115-150: Phillips)		N° 2	N° 2	N° 2	N° 2	–	N° 2	N° 2	N° 2	N° 2
	Flat screwdriver Ø		Ø6	Ø6	Ø6	Ø6	–	Ø6	Ø6	Ø6	Ø6
Tightening torque		N.m	1.7	1.7	1.7	1.7	–	1.7	1.7	1.7	1.2

(1) BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LADALLEN4, see page B8/28).

(2) If cable ends are used, choose the next size down (example: for 2.5 mm², use 1.5 mm²) and square crimp the cable ends using a special tool.

References:
pages B8/4 to B8/14

Dimensions:
pages B8/72 to B8/78

Schemes:
pages B8/79 and B8/80

B8/64

Life Is On

Schneider
Electric

Ref.



Contactor's

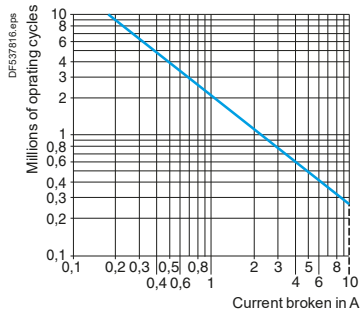
TeSys

TeSys D Green, TeSys D Contactors

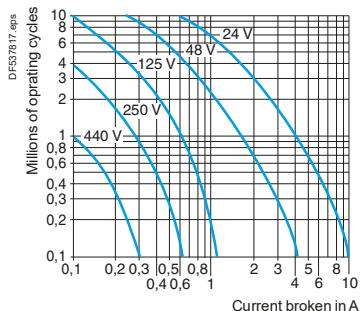
Characteristics

Characteristics of auxiliary contacts incorporated in the contactor

Mechanically linked contacts	Conforming to IEC 60947-5-1		Each contactor has 2 N/O and N/C contacts mechanically linked on the same movable contact holder	
Mirror contact	Conforming to IEC 60947-4-1		The N/C contact on each contactor represents the state of the power contacts and can be connected to a PREVENTA safety module	
Rated operational voltage (Ue)	Up to	V	690	
Rated insulation voltage (Ui)	Conforming to IEC 60947-1	V	690	
	Conforming to UL, CSA	V	600	
Conventional thermal current (Ith)	For ambient temperature $\leq 60^\circ\text{C}$	A	10	
Frequency of the operational current		Hz	25...400	
Minimum switching capacity $\lambda = 10^{-8}$	U min	V	17	
	I min	mA	5	
Short-circuit protection	Conforming to IEC 60947-5-1		gG fuse: 10 A	
Rated making capacity	Conforming to IEC 60947-5-1, I rms	A	\sim : 140, $\overline{\text{---}}$: 250	
Short-time rating	Permissible for	1 s	A	100
		500 ms	A	120
		100 ms	A	140
Insulation resistance		M Ω	> 10	
Non-overlap time	Guaranteed between N/C and N/O contacts	ms	1.5 (on energisation and on de-energisation)	
Tightening torque	Pozidriv / Philips head n° 2 and $\varnothing 6$	N.m	1.7	



AC-15



DC-13

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

a.c. supply, categories AC-14 and AC-15

Electrical durability (valid for up to 3600 operating cycles/hour) on an inductive load such as the coil of an electromagnet: making current ($\cos \varphi 0.7$) = 10 times the power broken ($\cos \varphi 0.4$).

Operating cycles	V	24	48	115	230	400	440	600
1 million	VA	60	120	280	560	960	1050	1440
3 million	VA	16	32	80	160	280	300	420
10 million	VA	4	8	20	40	70	80	100

d.c. supply, category DC-13

Electrical durability (valid for up to 1200 operating cycles/hour) on an inductive load such as the coil of an electromagnet, without economy resistor, the time constant increasing with the load.

Operating cycles	V	24	48	125	250	440
1 million	W	96	76	76	76	44
3 million	W	48	38	38	32	–
10 million	W	14	12	12	–	–

Environment					
Contact block type (not dust/damp protected)		LADN or LAD C	LADT and LADS	LADR	LAD8
Conforming to standards		IEC/EN 60947-5-1, UL 60947-5-1, CSA C22.2 n° 60947-5-1, GB/T 14048.5			
Product certifications		UL, CSA, CCC, EAC, CB certification			
Degree of protection	Conforming to IEC 60529	Protection against direct finger contact IP 2X			
Ambient air temperature around the device	Storage	°C	-60...+80		
	Operation	°C	-5...+60		
Maximum operating altitude	Without derating	m	3000		
Connection by cable	Phillips n° 2 and Ø6 mm	mm ²	Min: 1 x 1; max: 2 x 2.5		
	Flexible or solid cable with or without cable end				
Tightening torque		N.m	1.7		
Spring terminal connections	Flexible or solid cable	mm ²	Max: 2 x 2.5		
	without cable end				
Instantaneous and time delay contact characteristics					
Number of contacts			1, 2 or 4	2	2
Rated operational voltage (U _e)	Up to	V	690		
Rated insulation voltage (U _i)	Conforming to IEC 60947-5-1	V	690		
	Conforming to UL, CSA	V	600		
Conventional thermal current (I _{th})	For ambient temperature ≤ 60 °C	A	10		
Frequency of the operational current		Hz	25...400		
Minimum switching capacity	U min	V	17		
	I min	mA	5		
Short-circuit protection	Conforming to IEC 60947-5-1 gG fuse	A	10		
Rated making capacity	Conforming to IEC 60947-5-1 I rms	A	~: 140; ∴: 250		
Short-time rating	Permissible for	1 s	A	100	
		500 ms	A	120	
		100 ms	A	140	
Insulation resistance		MΩ	> 10		
Non-overlap time	Guaranteed between N/C and N/O contacts	ms	1.5 (on energisation and on de-energisation)		
Overlap time	Guaranteed between N/C and N/O contacts on LADC22	ms	1.5	–	–
Time delay (LADT, R and S contact blocks) Accuracy only valid for setting range indicated on the front face	Ambient air temperature for operation	°C	–	-40...+70	-40...+70
	Repeat accuracy		–	±2 %	±2 %
	Drift up to 0.5 million operating cycles		–	+15 %	+15 %
	Drift depending on ambient air temperature		–	0.25 % per °C	0.25 % per °C
Mechanical durability	In millions of operating cycles		30	5	5
Operational power of contacts			See page B8/68		

Ref.



Contactors

Characteristics

Environment							
Contact block type (dust/damp protected)			LA1DX	LA1DZ (4 contacts: 2 protected + 2 non protected)		LA1DY	
			Protected	Protected	Non protected	Protected	
Conforming to standards			IEC/EN 60947-5-1, UL 60947-5-1, CSA C22.2 n° 60947-5-1, GB/T 14048.5				
Product certifications			UL, CSA, CCC, EAC, CB certification				
Degree of protection	Conforming to IEC 60529		Protection against direct finger contact IP 2X				
Ambient air temperature	Storage and operation		°C	-25...+70			
Cabling	Phillips n° 2 and Ø6 mm Flexible or solid conductor with or without cable end		mm ²	Min: 1 x 1; max: 2 x 2.5			
Tightening torque			N.m	1.7			
Number of contacts			2	2	2	2	
Contact characteristics							
Rated operational voltage (Ue)	Up to		Vac	125	125	690	125
			Vdc	30	30		30
Rated insulation voltage (Ui)	Conforming to IEC 60947-5-1		V	250	250	690	250
	Conforming to UL, CSA		V	–	–	600	–
Conventional thermal current (Ith)	For ambient temperature ≤ 40 °C		A	–	–	10	–
Maximum operational current (Ie)			mA	100	100	–	100
Frequency of the operational current			Hz	–	–	25...400	–
Minimum switching capacity	U min		V	5	5	17	5
	I min		mA	1	1	5	1
Short-circuit protection	Conforming to IEC 60947-5-1 gG fuse		A	–	–	10	–
Rated making capacity	Conforming to IEC 60947-5-1		I rms	A	–	–	~:140; ∴: 250
Short-time rating	Permissible for		1 s	A	–	–	100
			500 ms	A	–	–	120
			100 ms	A	–	–	140
Insulation resistance			MΩ	> 10	> 10	> 10	> 10
Mechanical durability	In millions of operating cycles			5	5	30	5
Materials and technology used for dust and damp protected contacts				Gold alloy - Single break	Gold alloy - Single break	–	Gold alloy - Single break with crossed bars

Ref.



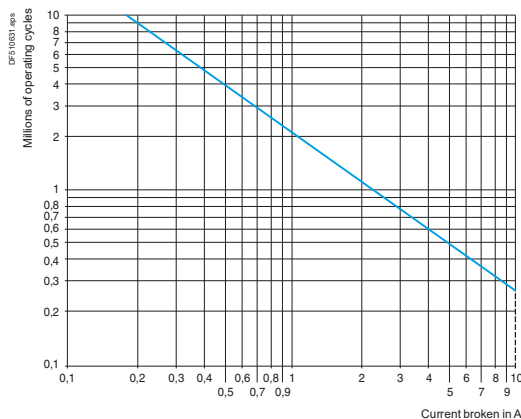
Contactors

Rated operational power of not dust/damp protected contacts (conforming to IEC 60947-5-1)

a.c. supply, categories AC-14 and AC-15

Electrical durability (valid for up to 3600 operating cycles/hour) on an inductive load such as the coil of an electromagnet: making current ($\cos \phi 0.7$) = 10 times the power broken ($\cos \phi 0.4$).

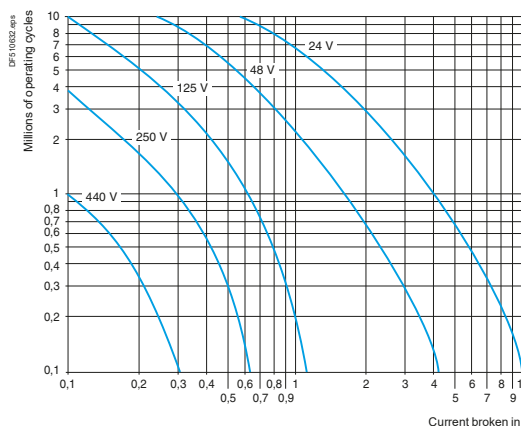
Operating cycles	V	24	48	115	230	400	440	600
1 million	VA	60	120	280	560	960	1050	1440
3 million	VA	16	32	80	160	280	300	420
10 million	VA	4	8	20	40	70	80	10



d.c. supply, category DC-13

Electrical durability (valid for up to 1200 operating cycles/hour) on an inductive load such as the coil of an electromagnet, without economy resistor, the time constant increasing with the load.

Operating cycles	V	24	48	125	250	440
1 million	W	96	76	76	76	44
3 million	W	48	38	38	32	–
10 million	W	14	12	12	–	–



Ref.



Contactors

Characteristics

Environment			
Conforming to standards			IEC/EN 60947-5-1, UL 60947-5-1, CSA C22.2 n° 60947-5-1, GB/T 14048.5
Product certifications			UL, CSA
Degree of protection	Conforming to IEC 60529		Protection against direct finger contact IP 2X
Ambient air temperature around the device	Storage	°C	-40...+80
	Operation	°C	-25...+55
	Permissible for operation at U _c	°C	-25...+70

Suppressor modules TeSys D						
Module type			LA4DA, LAD4RC, LAD4RC3	LA4DB, LAD4T, LAD4T3	LA4DC, LAD4D3	LA4DE, LAD4V, LAD4V3
Type of protection			RC circuit	Bidirectional peak limiting diode	Diode	Varistor
Rated control circuit voltage (U _c)		V	~ 24...415	~ or --- 24...440	--- 12...250	~ or --- 24...250
Maximum peak voltage			3 U _c	2 U _c	U _c	2 U _c
Natural RC frequency	24/48 V	Hz	400	–	–	–
	50/127 V	Hz	200	–	–	–
	110/240 V	Hz	100	–	–	–
	380/415 V	Hz	150	–	–	–

Mechanical latch blocks ⁽¹⁾ TeSys D, TeSys D Green						
Mechanical latch block type			LAD6K10	LA6DK20		
For use on contactor			LC1D09...D80A DT20...DT80A	LC1D80...D150 LP1D80 and LC1D115		
Product certifications			UL, CSA		UL, CSA	
Rated insulation voltage	Conforming to IEC 60947-5-1	V	690		690	
Rated control circuit voltage	~ 50/60 Hz and ---	V	24...415		24...415	
Power required	For unlatching	~	VA		25	
		---	W		30	
Maximum operating rate	In operating cycles/hour		1200		1200	
On-load factor			10 %		10 %	
Mechanical durability at U _c	In millions of operating cycles		0.5		0.5	

⁽¹⁾ Unlatching can be manually operated or electrically controlled (pulsed).

The LA6DK or LAD6K latch coil and the LC1D operating coil must not be energised simultaneously.

The duration of the LA6DK or LAD6K and LC1D control signals must be ≥ 100 ms.

Ref.



Contactors

Environment TeSys D, TeSys D Green

Module type		LA4DT (On-delay)	
Conforming to standards		IEC 60255-5	
Product certifications		UL, CSA	
Degree of protection	Conforming to IEC 60529	Protection against direct finger contact IP 2X	
Ambient air temperature around the device	Storage	°C	-40...+80
	Operation	°C	-25...+55
	For operation at U _c	°C	-25...+70
Rated insulation voltage (U _i)	Conforming to IEC 60947-1	V	250
Cablings	Phillips n° 2 and Ø6 mm Flexible or solid conductor with or without cable end	mm ²	Min: 1 x 1; max: 2 x 2.5
Tightening torque		N.m	1.7

Control circuit characteristics

Built-in protection	Of the input		By varistor
	Contactors coil suppression		By varistor
Rated control circuit voltage (U _c)		V	~ or ≡: 24...250
Permissible variation			0.8...1.1 U _c
Type of control			By mechanical contact only

Ref.

Timing characteristics

Timing ranges		s	0.1...2; 1.5...30; 25...500
Repeat accuracy	0...40 °C		±3 % (10 ms minimum)
Reset time	During time delay period	ms	150
	After time delay period	ms	50
Immunity to microbreaks	During time delay period	ms	10
	After time delay period	ms	2
Minimum control pulse duration		ms	–
Time delay signalling	By LED		Illuminates during time delay period



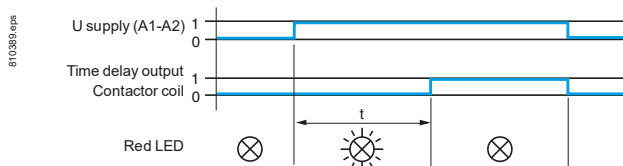
Switching characteristics (solid state type)

Maximum power dissipated		W	2
Leakage current		mA	< 5
Residual voltage		V	3.3
Overvoltage protection			3 kV; 0.5 joule
Electrical durability	In millions of operating cycles		30

Contactors

Function diagram

Electronic on-delay timer LA4DT



TeSys

TeSys D Green, TeSys D Contactors - Interface modules

Characteristics

Environment TeSys D, TeSys D Green							
Conforming to standards			IEC 60255-5				
Product certifications			UL, CSA				
Degree of protection	Conforming to IEC 60529		Protection against direct finger contact IP 2X				
Ambient air temperature around the device	Storage	°C	-40...+80				
	Operation	°C	-25...+55				
	Permissible for operation at Uc	°C	-25...+70				
Other characteristics							
Module type			LA4DFB for TeSys D With relay	LA4DWB for TeSys D, TeSys D Green Solid state			
Conventional thermal current (Ith)	For ambient temperature ≤ 50 °C	A	8				
Rated insulation voltage	Conforming to IEC 60947-5-1	V	250				
Rated operational voltage	Conforming to IEC 60947-5-1	V	250				
Indication of input state			By integral LED which illuminates when the contactor coil is energised				
Input signals	Control voltage (E1-E2)	V	~ 24	~ 24			
	Permissible variation	V	17...30	5...30			
	Current consumption at 20 °C	mA	25	8.5 for 5 V 15 for 24 V			
	State "0" guaranteed for U	V	< 2.4	< 2.4			
	I	mA	< 2	< 2			
State "1" guaranteed for U	V	17	5				
Built-in protection	Against reversed polarity		By diode	By diode			
	Of the input		By diode	By diode			
Electrical durability at 220 A/240 V	In millions of operating cycles		10	20			
Maximum immunity to microbreaks		ms	4	1			
Power dissipated	At 20 °C	W	0.6	0.4			
Direct mounting on contactor	With coil	~ 24...250 V	LC1D80...D150	–			
		~ 100...250 V	–	LC1D80...D115			
		~ 380...415 V	–	–			
Mounting with cabling adapter LAD4BB	With coil	~ 24...250 V	LC1D09...D38, LC1DT20...DT40	LC1D09...D38, LC1DT20...DT40			
		~ 380...415 V	–	–			
Mounting with cabling adapter LAD4BB3	With coil	~ 24...250 V	LC1D40A...D80A	LC1D40A...D80A			
		~ 380...415 V	LC1D40A...D80A	LC1D40A...D80A			
Total operating time at Uc (of the contactor)	The operating times depend on the type of contactor electromagnet and its control mode. The closing time "C" is measured from the moment the coil supply is switched on to initial contact of the main poles. The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separate.						
			LC1D09...D38, LC1DT20...DT40	LC1D40A...D80A	LC1D80 and D95	LC1D115	LC1D150
	With LA4DFB	"C"	ms	20...30	28...34	28...43	28...58
	"O"	ms	16...24	20...24	18...32	18...32	52...87
Cabling	Phillips n° 2 and Ø6 mm Flexible or solid cable with or without cable end	mm²	Min: 1 x 1; max: 2 x 2.5				
Tightening torque		N.m	1.7				

Ref.



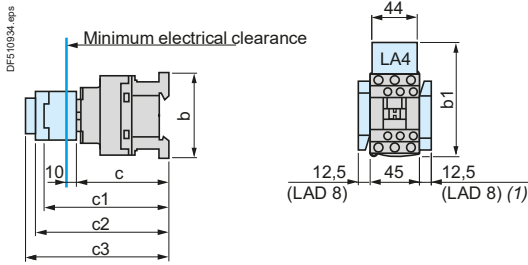
Contactors

TeSys

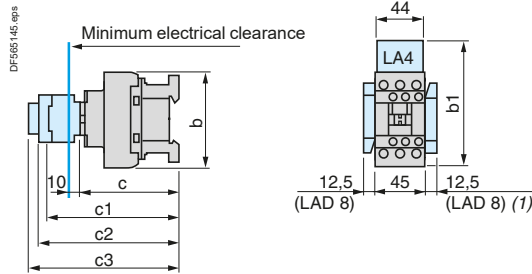
TeSys D Contactors - a.c. coil

Dimensions

LC1D09...D18 (3-pole)



LC1D25...D38 (3-pole), LC1DT20...DT40 (4-pole)



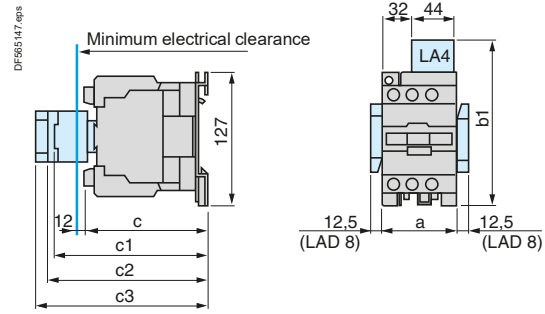
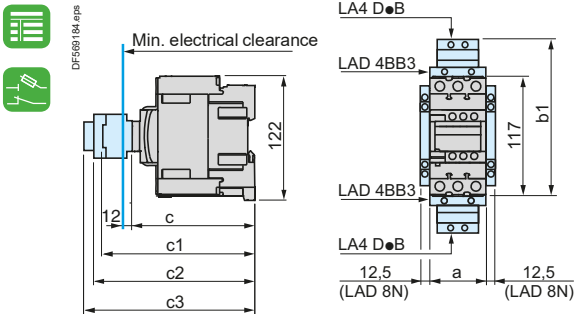
LC1	D09...D18	D093 D123	D099... D129	D25... D38	D18 D323	D098, D128, DT20 and DT25 and DT253	DT203 and DT40	DT32 and DT40	D188, D258, DT323 and DT403
b without add-on blocks	77	99	80	85	99	85	99	91	105
b1 with LAD4BB	94	107	95,5	98	107	98	-	-	-
with LA4D \bullet 2	110 ⁽¹⁾	123 ⁽¹⁾	111,5 ⁽¹⁾	114 ⁽¹⁾	123 ⁽¹⁾	114	-	-	-
with LA4DF, DT	119 ⁽¹⁾	132 ⁽¹⁾	120,5 ⁽¹⁾	123 ⁽¹⁾	132 ⁽¹⁾	129	-	-	-
with LA4DW, DL	126 ⁽¹⁾	139 ⁽¹⁾	127,5 ⁽¹⁾	130 ⁽¹⁾	139 ⁽¹⁾	190	-	-	-
c without cover or add-on blocks	84	84	84	90	90	90	90	97	97
with cover, without add-on blocks	86	86	86	92	92	92	92	99	99
c1 with LADN or C (2 or 4 contacts)	117	117	117	123	123	123	123	131	131
c2 with LA6DK10, LAD6K10	129	129	129	135	135	135	135	143	143
c3 with LADT, R, S	137	137	137	143	143	143	143	151	151
with LADT, R, S and sealing cover	141	141	141	147	147	147	147	155	155

(1) Including LAD4BB.

Ref.

LC1D40A...D80A (3-pole), LC1DT60A...DT80A (4-pole)

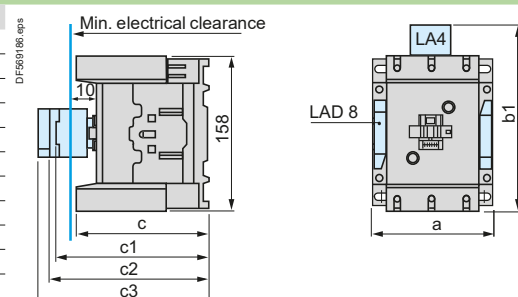
LC1D80 and D95 (3-pole), LC1D80004 and D80008 (4-pole), D40008 and D65008 (4-pole)



LC1	D40A...D80A	DT60A...DT80A	D40008	D80	D95, D65008	D80004	D80008
a	55	70	85	85	85	96	96
b1 with LA4D \bullet 2	-	-	135	135	135	135	135
with LA4DB3 or LAD4BB3	136	-	-	135	-	-	-
with LA4DF, DT	157	-	142	142	142	142	142
with LA4DM, DW, DL	166	-	150	150	150	150	150
c without cover or add-on blocks	118	118	125	125	125	125	140
with cover, without add-on blocks	120	120	-	130	130	-	-
c1 with LADN (1 contact)	-	-	139	150	150	150	150
with LADN or C (2 or 4 contacts)	150	150	147	158	158	158	158
c2 with LAD6K10 or LA6DK	163	163	159	170	170	170	170
c3 with LADT, R, S	171	171	167	178	178	178	178
with LADT, R, S and sealing cover	175	175	171	182	182	182	182

LC1D115 and D150 (3-pole), LC1D115004 (4-pole)

LC1	D115, D150	D115004	D1150046
a	120	150	155
b1 with LA4DA2	174	174	174
with LA4DF, DT	185	185	185
with LA4DM, DL	188	188	188
with LA4DW	188	188	188
c without cover or add-on blocks	132	132	115
with cover, without add-on blocks	136	-	-
c1 with LADN or C (2 or 4 contacts)	150	150	150
c2 with LA6DK20	155	155	155
c3 with LADT, R, S	168	168	168
with LADT, R, S and sealing cover	172	172	172



References:
pages B8/8 to B8/14

Characteristics:
pages B8/59 to B8/65

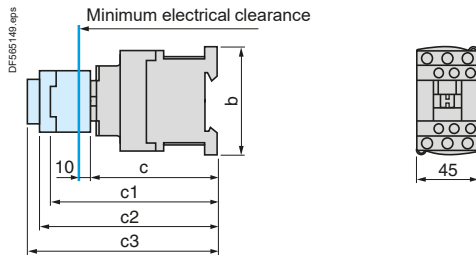
Schemes:
pages B8/79 and B8/80

TeSys

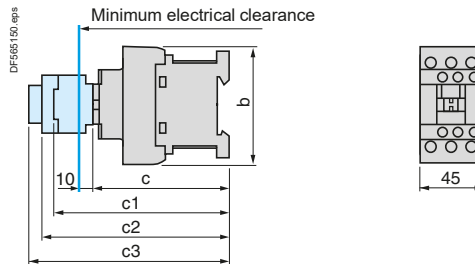
TeSys D Contactors - d.c. / low consumption coil

Dimensions

LC1D09...D18 (3-pole)

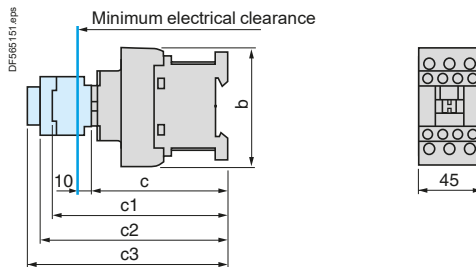


LC1D25...D38 (3-pole)



LC1	D09...D18	D093...D123	D099...D129	D25...D38	D183...D323
b	77	99	80	85	99
c without cover or add-on blocks	93	93	93	99	99
with cover, without add-on blocks	95	95	95	101	101
c1 with LADN or C (2 or 4 contacts)	126	126	126	132	132
c2 with LA6DK10	138	138	138	144	144
c3 with LADT, R, S	146	146	146	152	152
with LADT, R, S and sealing cover	150	150	150	156	156

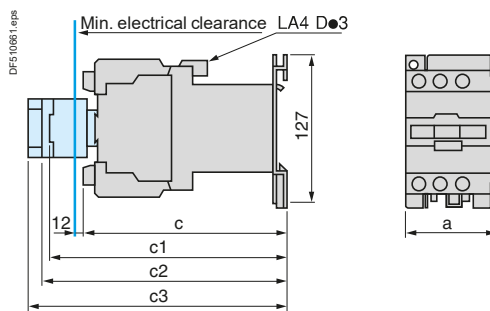
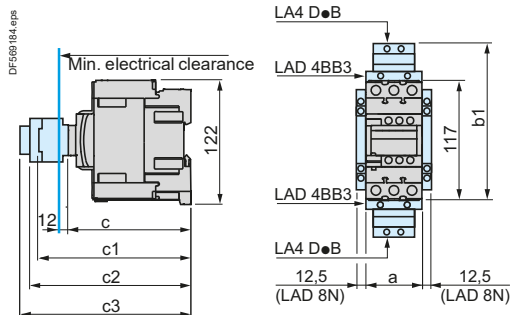
LC1DT20...DT40 (4-pole)



LC1	DT20 and DT25 D098 and D128	DT203 and DT253 D0983 and D1283	DT32 and DT40 D188...D258	DT323 and DT403 D1883 and D2583
b	85	99	91	105
c with cover	102	102	107	107
c1 with LADN or C (2 or 4 contacts)	123	123	131	131
c2 with LA6DK10	135	135	143	143
c3 with LADT, R, S	143	143	151	151
with LADT, R, S and sealing cover	147	147	155	155

LC1D40A...D80A (3-pole), LC1DT60A...DT80A (4-pole)

LC1D80 and D95 (3-pole), LP1D80004, LP1D80008 (4-pole), LP1D40008 and D65008 (4-pole)



	LC1D40A ... D80A	LC1 DT60A...DT80A	LP1D40008 and D65008	LC1 D80 and D95	LP1D80004	LP1D80008
a	55	72	85	85	96	96
b1 with LAD4BB3	136	136	-	-	-	-
with LA4DF, DT	157	157	-	-	-	-
c without cover or add-on blocks	118	118	182	181	181	196
with cover, without add-on blocks	120	120	-	186	-	-
c1 with LADN (1 contact)	-	-	196	204	204	204
with LADN or C (2 or 4 contacts)	150	150	202	210	210	210
c2 with LA6DK10	163	163	213	221	221	221
c3 with LADT, R, S	171	171	221	229	229	229
with LADT, R, S and sealing cover	175	175	225	233	233	233

LC1D115 and LC1D150 with coil: see page B8/72.

References:
pages B8/8 to B8/14

Characteristics:
pages B8/59 to B8/65

Schemes:
pages B8/79 and B8/80

Ref.



Contactor

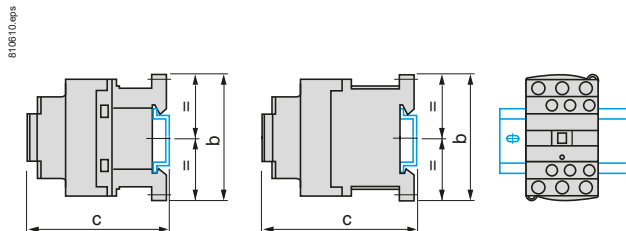
TeSys

TeSys D Contactors

Mounting

LC1D09...D38, DT20...DT40

On mounting rail NSYSR200BD, NSYSR200BD or NSYSR200 (width 35 mm)



Control circuit: a.c.

LC1	D09... D18	D25... D38	DT20 and DT25	DT32 and DT40
b	77	85	85	100
c (NSYSR200BD or NSYSR200BD) ⁽¹⁾	88	94	94	109
c (NSYSR200) ⁽¹⁾	96	102	102	117

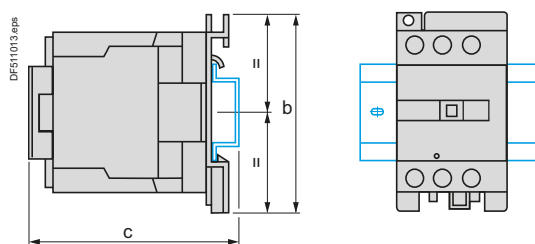
Control circuit: d.c.

LC1	D09... D18	D25... D38	DT20 and DT25	DT32 and DT40
b	77	85	94	109
c (NSYSR200BD or NSYSR200BD) ⁽¹⁾	97	103	103	118
c (NSYSR200) ⁽¹⁾	105	110	111	126

⁽¹⁾ With safety cover.

LC1D40A...D80A, LC1DT60A and DT80A, LC1D80 and D95, LC1D40008 and D65008

On mounting rail AM1DL201 (width 75 mm)⁽²⁾
On mounting rail NSSDPR●● or NSYSR200 (width 35 mm)



Control circuit: a.c.

LC1	D40A...D80A DT60A...DT80A	D80 and D95	D40008 and D65008
b	122	127	127
c	–	147	143
c (AM1DL201) ⁽¹⁾	–	137	133
c (NSSDPR●● or NSYSR200) ⁽¹⁾ 128	–	137	133

Control circuit: d.c.

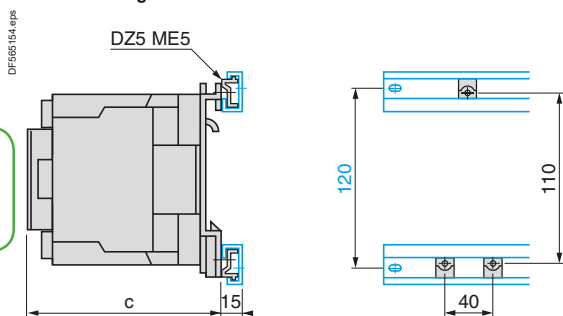
LC1	D40A...D80A DT60A...DT80A	D80 and D95	D40008 and D65008
b	–	205	200
c (AM1DL201) ⁽¹⁾	–	195	190
c (NSSDPR●● or NSYSR200) ⁽¹⁾ 128	–	–	190

⁽¹⁾ With safety cover.

⁽²⁾ Except for LC1D40A...D80A, LC1DT60A and DT80A.

LC1D80 and D95, LP1D80

On 2 mounting rails DZ5MB on 120 mm centres



Control circuit: a.c.

LC1	D80 and D95
c with cover	130

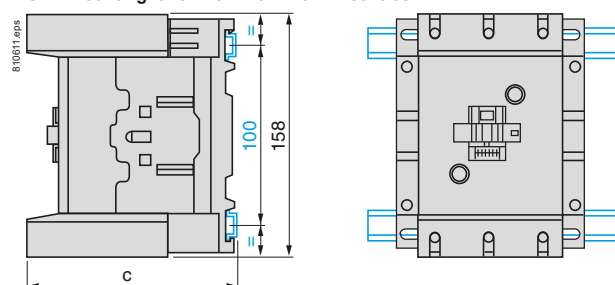
Control circuit: d.c.

LC1	D80 and D95
c with cover	186

LP1	D80
c	181

LC1D115, D150

On 2 mounting rails DZ5MB on 120 mm centres



Control circuit: a.c. or d.c.

LC1	D115 and D150	D1156 and D1506
c (NSYSR200BD or NSYSR200BD)	134.5	117.5
c (NSYSR200 or ED●●●)	142.5	125.5

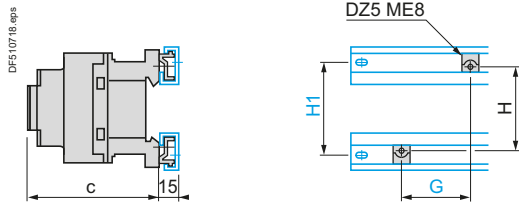
TeSys

TeSys D Contactors

Mounting

LC1D09...D38 and LC1DT20...DT40

On 2 mounting rails DZ5MB



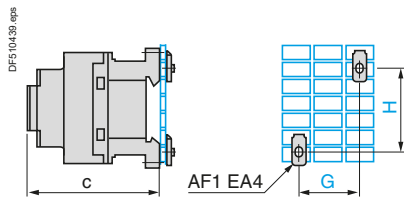
Control circuit:	a.c.		d.c.	
LC1	D09...D18	D25...D38	D09...D18	D25...D38
c with cover	86	92	95	101
G	35	35	35	35
H	60	60	70	70
H1	70	70	70	70

4-pole contactors

LC1	DT20 and DT25	DT32 and DT40	DT20 and DT25	DT32 and DT40
c	92	100	101	109
G	35	35	35	35
H	60	60	70	70
H1	70	70	70	70

LC1D09...D38 and LC1DT20...DT40

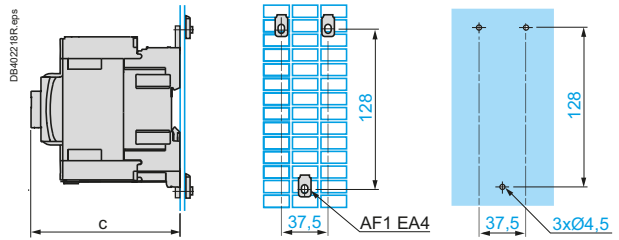
On pre-slotted mounting plate AM1 PA, PB, PC



Control circuit:	a.c.		d.c.	
LC1	D09...D18	D25...D38	D09...D18	D25...D38
c with cover	86	92	95	101
G	35	35	35	35
H	60/70	60/70	70	70
LC1	DT20 and DT25	DT32 and DT40	DT20 and DT25	DT32 and DT40
c with cover	80	93	118	132
G	35	35	35	35
H	60	60	70	70

LC1D40A...D80A, LC1DT60A...DT80A

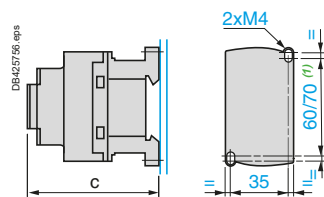
On pre-slotted mounting plate AM1 PA, PB, PC and panel mounted



Control circuit:	a.c.	d.c.
LC1	D40A...D80A, DT60A...DT80A	D40A...65A, DT60A...DT80A
c with cover	120	120

LC1D09...D38, LC1DT20...DT40

Panel mounted

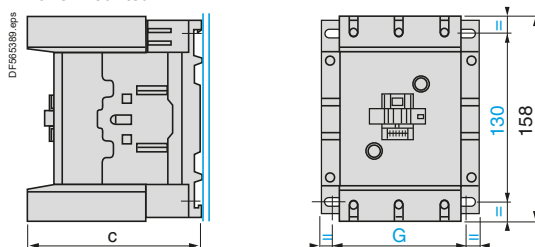


(1) for DC coil: 70 mm only.

Control circuit:	a.c.		d.c.	
LC1	D09...D18	D25...D38	D09...D18	D25...D38
c with cover	86	92	95	101
4-pole contactors				
LC1	DT20 and DT25	DT32 and DT40	DT20 and DT25	DT32 and DT40
c with cover	90	98	90	98

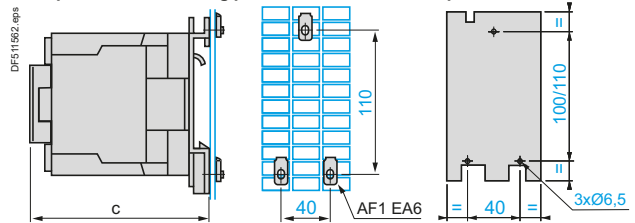
LC1D115, D150

Panel mounted



LC1D80 and D95, LC1D40008 and D65008, LP1D80

On pre-slotted mounting plate AM1 PA, PB, PC and panel mounted



Control circuit:	a.c.	d.c.
LC1	D80 and D95, D40008 and D65008	D80 and D95, D40008 and D65008
c with cover	130	186
LP1	-	D80
c without cover	-	181

LC1	D115	D1156	D150	D1506
c	132	115	132	115
G (3-pole)	96/110	96/110	96/110	96/110
G (4-pole)	130/144	130/144	-	-

References: pages B8/8 to B8/14

Characteristics: pages B8/59 to B8/65

Schemes: pages B8/79 and B8/80

Ref.



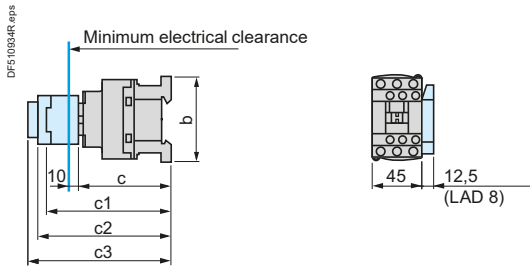
Contactors

TeSys

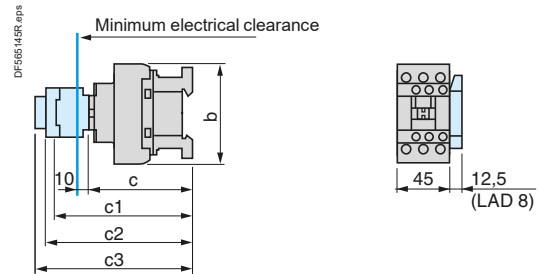
TeSys D Green Contactors

Dimensions

LC1D09...D18 (3-pole), with AC/DC compatible coil

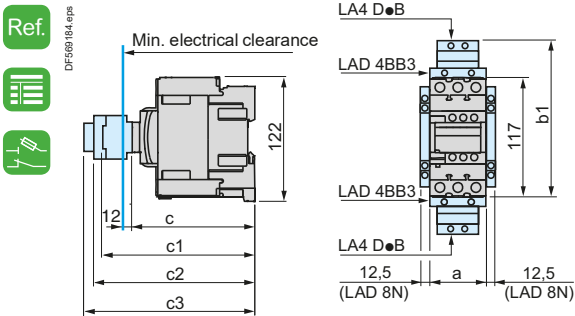


LC1D25...D38 (3-pole), with AC/DC compatible coil



LC1	D09...D18	D25...D38
b without add-on blocks	77	85
c without cover or add-on blocks	84	90
with cover, without add-on blocks	86	92
c1 with LADN or C (2 or 4 contacts)	117	123
c2 with LA6DK10	129	135
c3 with LADT, R, S	137	143
with LADT, R, S and sealing cover	141	147

LC1D40A...D80A (3-pole), LC1DT60A...DT80A (4-pole), with AC/DC compatible coil



LC1	D40A...D80A	DT60A...DT80A
a	55	70
b1 LAD4BB3	136	—
with LAD4DWB	166	—
c without cover or add-on blocks	118	118
with cover, without add-on blocks	120	120
c1 with LADN (1 contact)	—	—
with LADN or C (2 or 4 contacts)	150	150
c2 with LAD6K10	163	163
c3 with LADT, R, S	171	171
with LADT, R, S and sealing cover	175	175

Ref.



Contactors

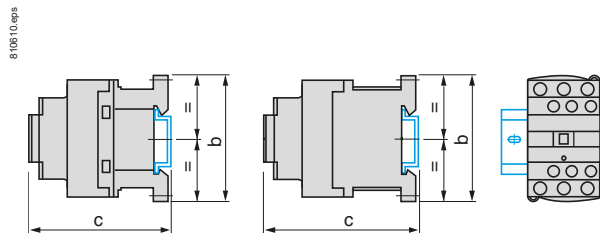
TeSys

TeSys D Green Contactors

Mounting

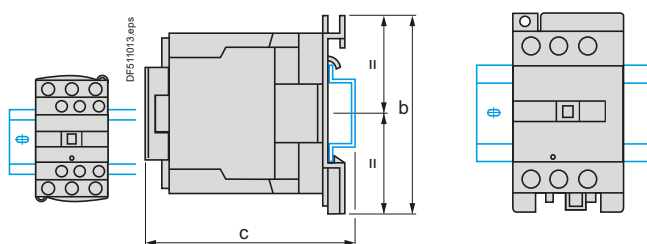
LC1D09...D38 (3-pole),
with AC/DC compatible coil

On mounting rail **NSYSR200BD**, **NSYSR200BD** or **NSYSR200** (width 35 mm)



LC1D40A...D80A (3-pole), **LC1DT60A** and **DT80A** (4-pole),
with AC/DC compatible coil

On mounting rail **AM1DL201** (width 75 mm) ⁽²⁾
On mounting rail **NSSDPR●●** or **NSYSR200** (width 35 mm)



LC1	D09...D18	D25...D38
b	77	85
c (NSYSR200BD or NSYSR200BD)	88	94
c (NSYSR200)	96	102

LC1	D40A...D80A DT60A...DT80A
b	122
c	–
c (AM1DL201)	–
c (NSSDPR●● or NSYSR200)	128

Ref.



Contactors

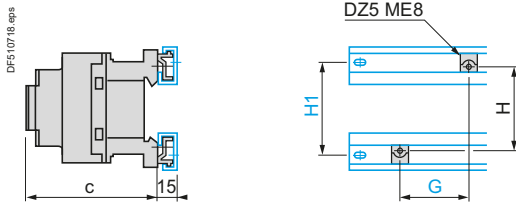
TeSys

TeSys D Green Contactors

Mounting

LC1D09...D38 (3-pole), with AC/DC compatible coil

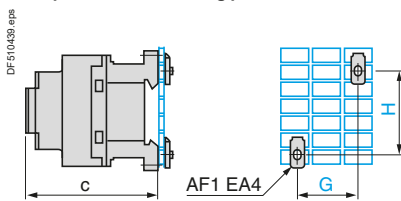
On 2 mounting rails DZ5MB



LC1	D09...D18	D25...D38
c with cover	86	92
G	35	35
H	60	60
H1	70	70

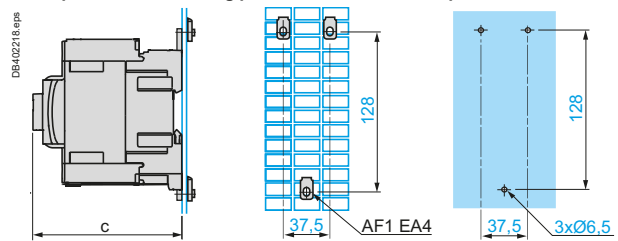
LC1D09...D38 (3-pole), with AC/DC compatible coil

On pre-slotted mounting plate AM1PA, PB, PC



LC1D40A...D80A (3-pole), LC1DT60A...DT80A (4-pole), with AC/DC compatible coil

On pre-slotted mounting plate AM1PA, PB, PC and panel mounted



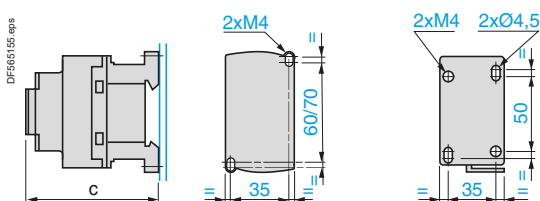
Ref.

LC1	D09...D18	D25...D38
c with cover	86	92
G	35	35
H	60/70	60/70



LC1D09...D38 (3-pole), with AC/DC compatible coil

Panel mounted



LC1	D40A...D80A , DT60A...DT80A
c with cover	120

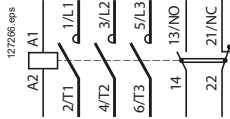
Contactors

LC1	D09...D18	D25...D38
c with cover	86	92

Contactors

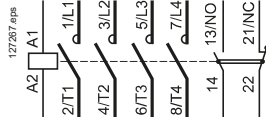
TeSys D, TeSys D Green 3-pole contactors (References: pages B8/8 to B8/11)

LC1D09 to D150

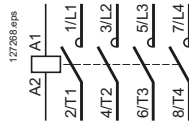


TeSys D 4-pole contactors (References: pages B8/12 and B8/13)

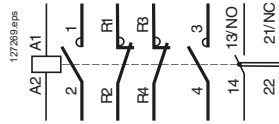
LC1DT20 to DT80A



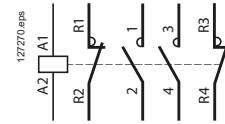
LC1D115004



LC1D098 to D258



LC1 and LP1D40008 to D80008



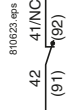
Front mounting add-on contact blocks

Instantaneous auxiliary contacts for TeSys D, TeSys D Green (References: page B8/22)

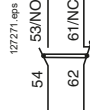
1 N/O LADN10 ⁽¹⁾



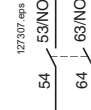
1 N/C LADN01 ⁽¹⁾



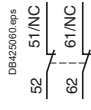
1 N/O + 1 N/C LADN11



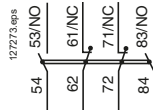
2 N/O LADN20



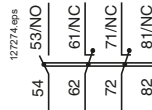
2 N/C LADN02



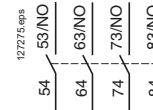
2 N/O + 2 N/C LADN22



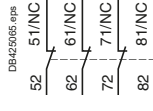
1 N/O + 3 N/C LADN13



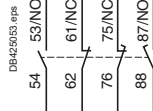
4 N/O LADN40



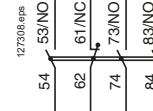
4 N/C LADN04



2 N/O + 2 N/C including 1 N/O + 1 N/C make before break LADC22

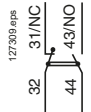


3 N/O + 1 N/C LADN31

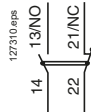


Instantaneous auxiliary contacts conforming to standard EN 50012 for TeSys D, TeSys D Green (References: page B8/22)

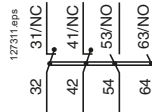
1 N/O + 1 N/C LADN11G



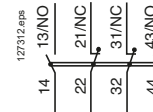
1 N/O + 1 N/C LADN11P



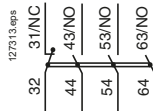
2 N/O + 2 N/C LADN22G



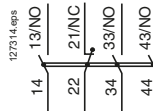
2 N/O + 2 N/C LADN22P



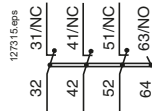
3 N/O + 1 N/C LADN31G



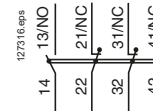
3 N/O + 1 N/C LADN31P



1 N/O + 3 N/C LADN13G



1 N/O + 3 N/C LADN13P



(1) Items in brackets refer to blocks mounted on right-hand side of contactor.

TeSys

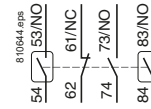
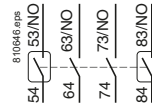
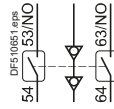
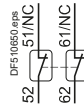
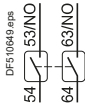
TeSys D Green, TeSys D Contactors

Schemes

Front mounting add-on contact blocks for TeSys D, TeSys D Green

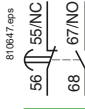
Dust and damp protected instantaneous auxiliary contacts (References: page B8/22)

2 N/O (24-50 V)	2 N/C (24-50 V)	2 N/O (5-24V) with 2 cable screen terminals	2 N/O protected (24-50 V) 2 N/O standard	2 N/O protected (24-50 V) + 1 N/O + 1 N/C standard
LA1DX20	LA1DX02	LA1DY20	LA1DZ40	LA1DZ31



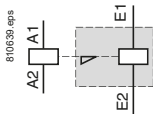
Time delay auxiliary contacts (References: page B8/23)

On-delay 1 N/O + 1 N/C	Off-delay 1 N/O + 1 N/C	On-delay 1 N/C + 1 N/O break before make
LADT	LADR	LADS



Mechanical latch blocks for TeSys D, TeSys D Green (References: page B8/23)

LAD6K10 and LA6DK20

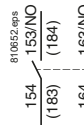


Ref.

Side mounting add-on contact blocks for TeSys D, TeSys D Green

Instantaneous auxiliary contacts (References: page B8/22)

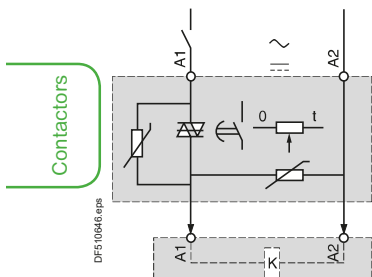
1 N/O + 1 N/C LAD8N11 ⁽¹⁾	2 N/O LAD8N20 ⁽¹⁾	2 N/C LAD8N02 ⁽¹⁾
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⁽¹⁾ Items in brackets refer to blocks mounted on right-hand side of contactor.

Electronic serial timer modules for TeSys D, TeSys D Green

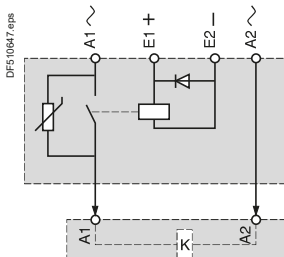
On-delay LA4DT•U



Interface modules

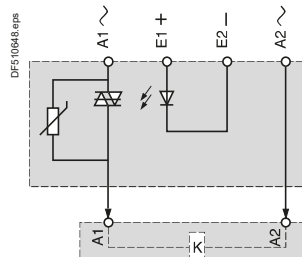
Relay output for TeSys D

LA4DFB



Solid state for TeSys D, TeSys D Green

LA4DWB



References: page B8/85.

References: pages B8/22 to B8/26

Characteristics: pages B8/66 to B8/70

Dimensions: pages B8/72 and B8/73, B8/76

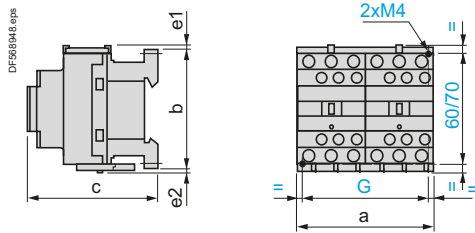
TeSys

TeSys D Green, TeSys D Reversing and changeover contactors

Dimensions

LC2D09 to D38 TeSys D, TeSys D Green

2 x LC1D09 to D38



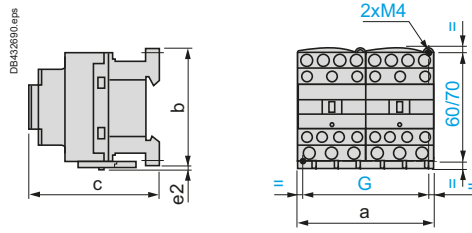
LC2 or 2 x LC1	a	b	c (1)	e1	e2	G
D09 to D1 AC, AC/DC	90	77	86	4	1.	80
D093 to D123 AC	90	99	86	–	–	80
D09 to D18 DC	90	77	95	4	1.5	80
D093 to D123 DC	90	99	95	–	–	80
D25 to D38 AC, AC/DC	90	85	92	9	5	80
D183 to D383 AC	90	99	92	–	–	80
D25 to D32 DC	90	85	101	9	5	80
D183 to D383 DC	90	99	101	–	–	80

e1 and e2: including cabling.

(1) With safety cover, without add-on block.

LC2DT20 to DT40 TeSys D

2 x LC1DT20 to DT40

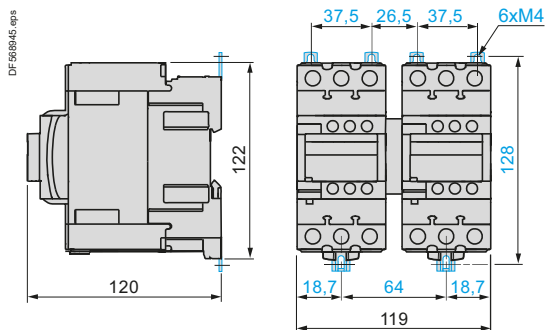


LC2 or 2 x LC1	a	b	c	G	e2
DT20 and DT25 AC	90	85	92	80	20
DT32 and DT40 AC	90	91	99	80	22
DT20 and DT25 DC	90	85	102	80	20
DT32 and DT40 DC	90	91	109	80	22

c, e: including cabling.

LC2D40A to D80A for TeSys D, TeSys D Green

2 x LC1D40A to D80A



Ref.



Contactors

TeSys

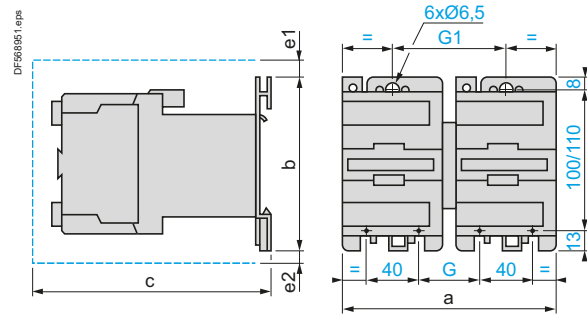
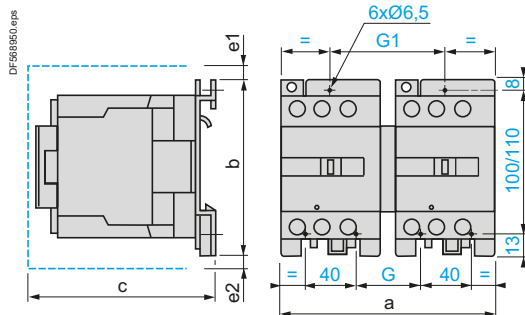
TeSys D Reversing and changeover contactors

Dimensions

LC2D80 and D95

2 x LC1D80 and D95 ~

2 x LC1D80 and D95 ---



LC2 or 2 x LC1	a	b	c	e1	e2	G	G1
D80 and D95 ~	182	127	158	13	-	57	96
D80004 ~	207	127	158	-	20	71	111

c, e1 and e2: including cabling.

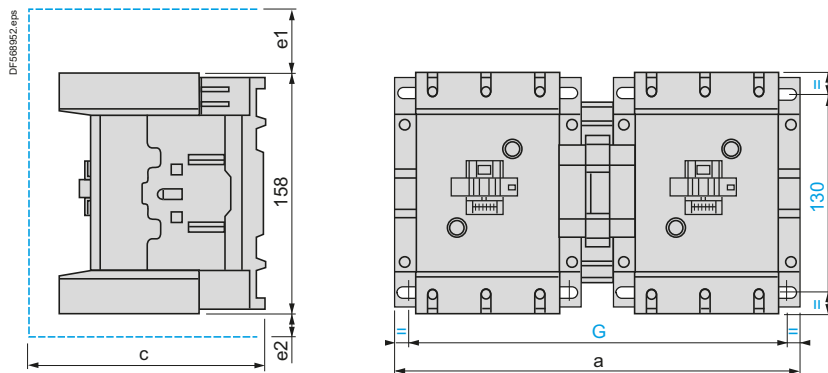
2 x LC1	a	b	c	e1	e2	G	G1
D80 and D95	207	127	215	13	20	96	111

c, e1 and e2: including cabling.

LC2D115 and D150

2 x LC1D115 and D150

Ref.



LC2 or 2 x LC1	a	c	e1	e2	G
D115 and D150	266	148	56	18	242/256
D115004	334	148	-	60	310/324

c, e1 and e2: including cabling.

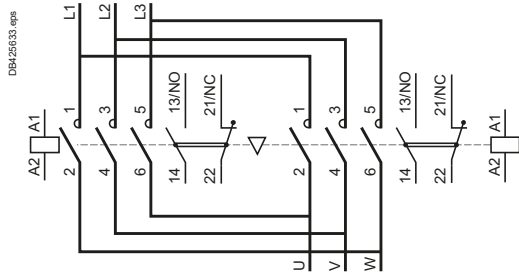
Contactors

Schemes

Reversing contactors for motor control

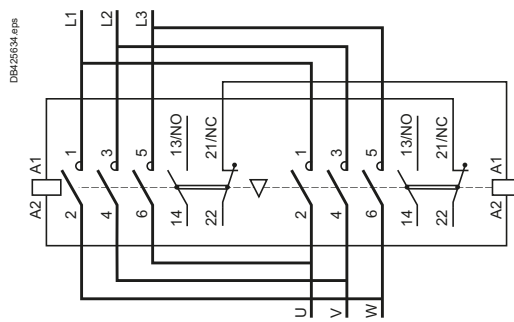
LC2D09...D80A TeSys D, TeSys D Green LC2D80...D150 TeSys D

Horizontally mounted



LAD9R1V TeSys D, TeSys D Green

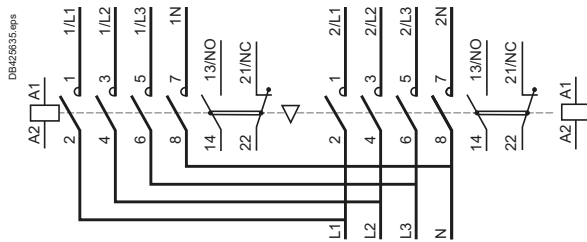
With integral electrical interlocking



Changeover contactor pairs TeSys D

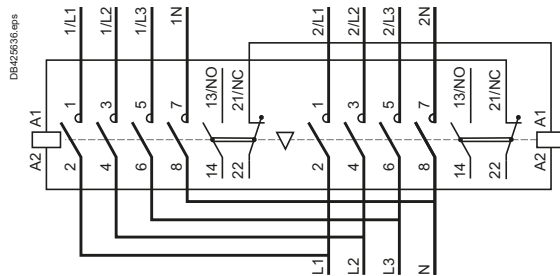
LC2DT20...DT40

Horizontally mounted



LADT9R1V

With integral electrical interlocking



Ref.



Contactors

TeSys

TeSys D Green, TeSys D Reversing and changeover contactors

Schemes

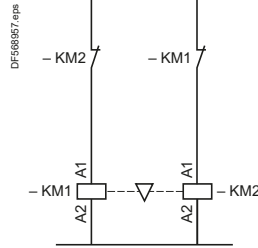
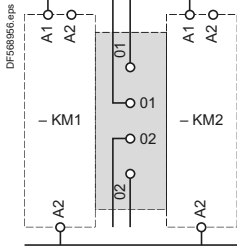
Electrical interlocking of TeSys D, TeSys D Green reversing contactors fitted with:

Mechanical interlock with integral electrical contacts

LA9D4002, LA9D8002 and LA9D11502

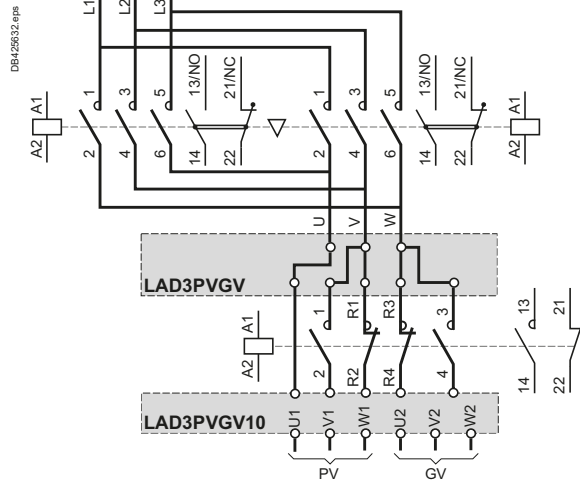
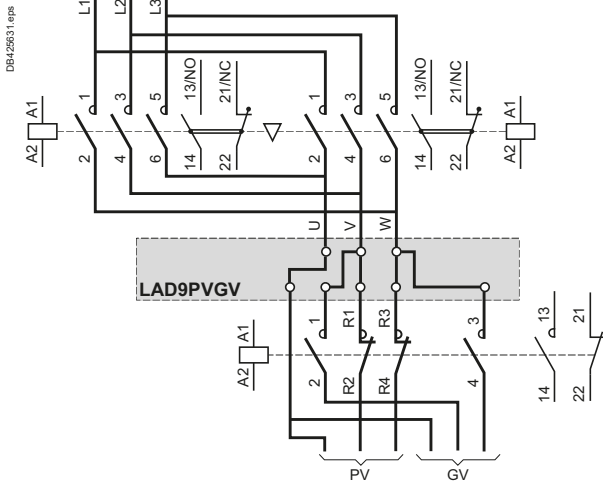
Mechanical interlock without integral electrical contacts

LAD9V2, LAD4CM, LA9D50978 and LA9D80978



Low speed - High speed cabling kit, screw clamp terminals for LC1D09... D38 contactors (TeSys D, TeSys D Green)

Low speed - High speed cabling kit, spring terminals for LC1D09... D38 contactors (TeSys D)



Ref.



Contactors

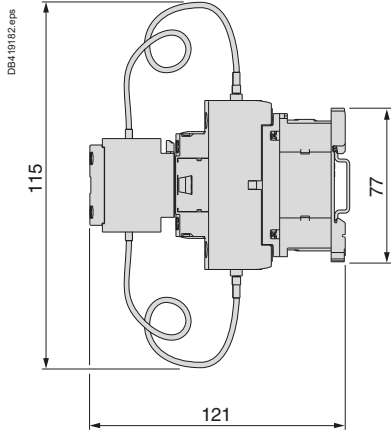
TeSys

TeSys D Contactors for 3-phase capacitor bank switching

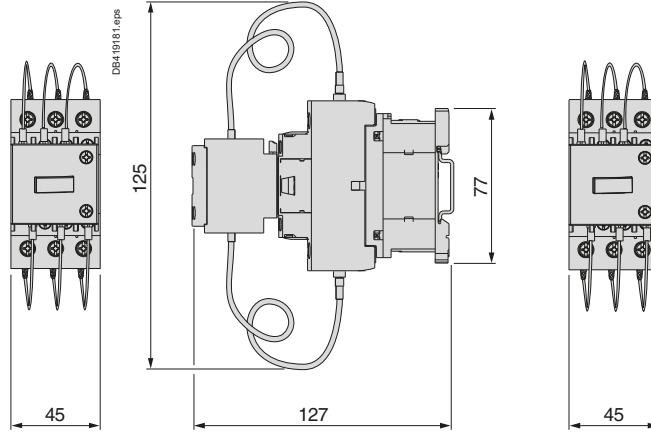
Dimensions and scheme

Dimensions

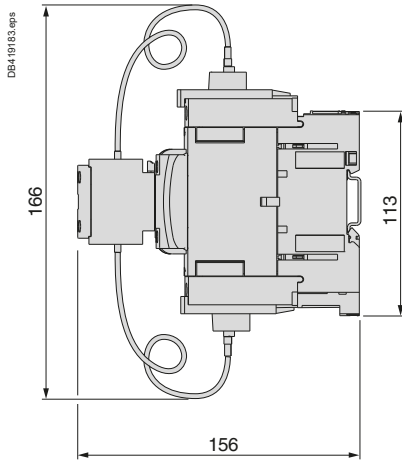
LC1DFK



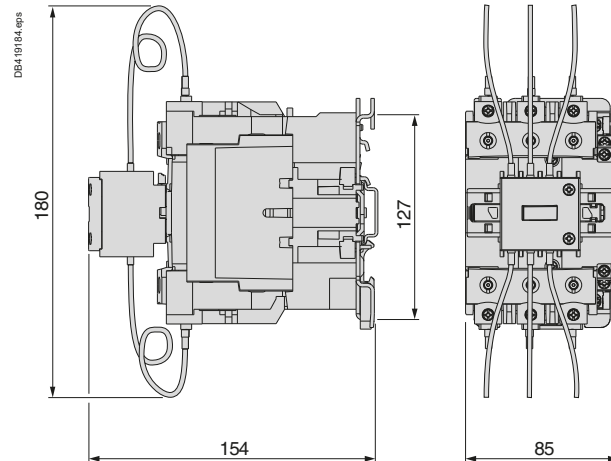
LC1DGK, DLK, DMK



LC1DPK, DTK



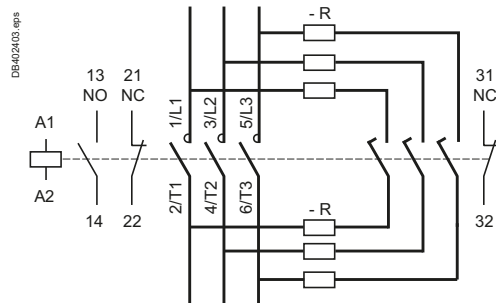
LC1DWK



Ref.

Scheme

LC1D \bullet K



R = Pre-wired resistor connections.

Contactors