

Deca green, enriching Deca family

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

Deca 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*, Deca green contactors are part of a comprehensive solution that is ideal for all types of industrial machines and processes.

Deca Overload relay

By combining a Deca green contactor with our new Deca electronic overload relay, you will have less heat generation, and further reduce energy consumption.



* such as PLC I/O type M580, M340, M221 or M241 or extended I/O type Advantys STB range, or in association with Deca electronic overload relays or Tera Motor management system.

TeSys Control

Deca Contactors

Introduction



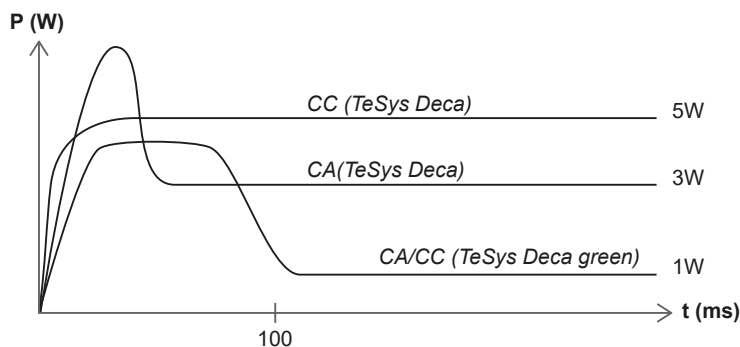
Highly competitive coil consumption

Small changes can generate big savings. The new Deca 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.

09-12-18 A 25-32-38 A 40-50-65-80 A

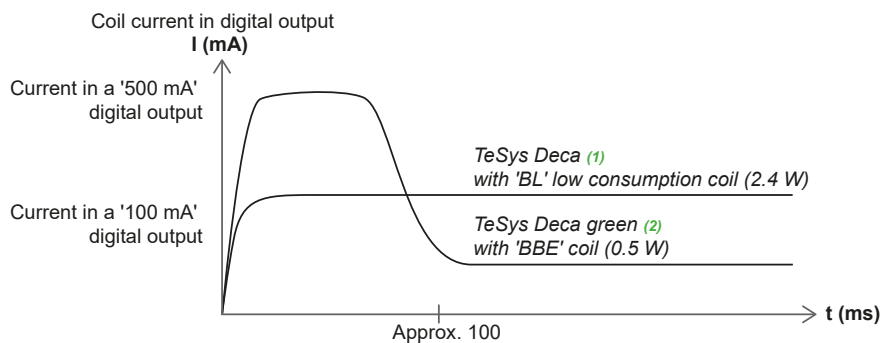
Coil currents comparison

Deca green contactors (AC/DC coil) vs Deca contactors (AC, DC coils)



Deca green brings a significant reduction of energy consumption.

Deca green contactors ("BBE" coil) vs Deca contactors (low consumption "BL" coil)



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

Deca green contactor is well adapted to direct control by PLC static outputs, even in its high ratings.




LC1D09●●●



LC1D40A●●●

Deca 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/AC-3e

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3/AC-3e ($\theta \leq 60^\circ\text{C}$)						Rated operational current in AC-3/AC-3e 440 V up to	Instantaneous auxiliary contacts 	Basic reference, to be completed by adding the control voltage code ⁽¹⁾ Fixing ⁽²⁾	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			kg	
Connection by screw clamp terminals										
2.2	4	4	4	5.5	5.5	9	1	1	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	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	1	1	LC1D38●●●	0.442
Power connections by EverLink[®] BTR ⁽³⁾ screw connectors and control by screw clamp terminal										
11	18.5	22	22	22	30	40	1	1	LC1D40A●●●	0.992
15	22	25	30	30	33	50	1	1	LC1D50A●●●	0.997
18.5	30	37	37	37	37	65	1	1	LC1D65A●●●	1.002
22	37	37	37	37	37	66	1	1	LC1D80A●●●	1.002

Connection for lugs or bars

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 B8/36 to B8/42.

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) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

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

(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 B8/42).



PB121708.tif



LC1D09●●●

PB121710.tif



LC1D40A●●●

PB121712.eps



LC1DT60A●●●

Deca 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 ⁽¹⁾	Weight
				Fixing ⁽²⁾	
Connection by screw clamp terminals					kg
25	3	1	1	LC1D09●●● or LC1D12●●●	0.368 0.373
32	3	1	1	LC1D18●●●	0.378
40	3	1	1	LC1D25●●●	0.433
50	3	1	1	LC1D32●●● or LC1D38●●●	0.438 0.442
Connection by EverLink®, BTR screw connectors ⁽³⁾					
60	3	1	1	LC1D40A●●●	0.992
80	3	1	1	LC1D50A●●● or LC1D65A●●● ⁽⁴⁾ or LC1D80A●●● ⁽⁴⁾	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 ⁽³⁾ screw connectors

60	4	1	1	LC1DT60A●●●	1.230
80	4	1	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 ⁽³⁾ screw connectors

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

Control voltage codes

AC/DC 24 V DC supply

Volts	24 (DC only)	24-60	48-130	100-250
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⁾ Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

⁽²⁾ LC1D09 to D80A, LC●DT60A and LC●DT80A: clip-on mounting on 35 mm \perp rail NSYSDR or screw fixing.

⁽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 B8/42).

⁽⁴⁾ Coordination tables according to the number of operation cycles, consult online datasheets for values.



Contactors

PE121708.fr



LC1D09●●●

PE121710.fr



LC1D40A●●●



Deca 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 ⁽¹⁾ Fixing, connection ⁽²⁾
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	AWG 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 ⁽³⁾ screw connectors and control by spring terminals

3	5	10	10	30	30	AWG 16 - 2	60	LC1D40A●●●
3	7.5	15	15	40	40	AWG 16 - 2	70	LC1D50A●●●
5	10	20	20	40	50	AWG 16 - 2	80	LC1D65A●●●
5	10	20	20	40	50	AWG 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) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

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

(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 B8/42).

Deca 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.

TeSys Control

Deca Contactors

Product references



LC1D09●●



LC1D25●●



LC1D80A●●



LC1D95●●



LC1D115●●

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

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3/AC-3e ($\theta \leq 60^\circ\text{C}$)							Rated operational current in AC-3/AC-3e 440 V up to	Instantaneous auxiliary contacts	Basic reference, to be completed by adding the control voltage code ⁽¹⁾	Weight ⁽³⁾
220 V 230 V	380 V 400 V	415 V	440 V	500 V	660 V 690 V	1000 V				
									Fixing ⁽²⁾	

kW	kW	kW	kW	kW	kW	kW	A				kg
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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 ⁽⁴⁾ 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	-	80	1	1	LC1D80●●	1.590
25	45	45	45	55	45	-	95	1	1	LC1D95●●	1.610
30	55	59	59	75	80	65	115	1	1	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 B8/36 to B8/42.

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
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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
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LC1D09...D65 (not available with "connection for lugs or bars")

50 Hz	B5	D5	E5					P5					
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LC1D80...D115

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

Volts	12	24	36	48	60	72	110	125	220	250	440
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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
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LC1D40A...D65A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

U 0.75...1.25 Uc	JD	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	RD
------------------	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----

LC1D80...D95

U 0.85...1.1 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
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U 0.75...1.2 Uc	JW	BW	CW	EW	-	SW	FW	-	MW	-	-
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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
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Low consumption DC (for low consumption AC/DC: Deca green contactors, page B8/18)

Volts	5	12	20	24	48	110	220	250
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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
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For other voltages between 5 and 690 V, see pages B8/45 to B8/48.

(1) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

(2) 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.

(3) 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.

(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 B8/42).

(5) For these coil voltages, choose from Deca 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.



LC1D123●●



LC1D80A3●●

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

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3/AC-3e ($\theta \leq 60^\circ\text{C}$)							Rated operational current in AC-3/AC-3e 440 V up to	Instantaneous auxiliary contacts	Basic reference, to be completed by adding the control voltage code ⁽¹⁾ Fixing ⁽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

Power and control connections by spring terminals

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	1	LC1D183●●
5.5	11	11	11	15	15		25	1	1	LC1D253●●
7.5	15	15	15	18.5	18.5		32 ⁽³⁾	1	1	LC1D323●●

Power connections by EverLink® BTR screw connectors ⁽⁴⁾ and control by spring terminals

11	18.5	22	22	22	30		40	1	1	LC1D40A3●●
15	22	25	30	30	33		50	1	1	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 B8/36 to B8/42.

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
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LC1D09...D80A

50/60 Hz	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7
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d.c. supply

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

Volts ~	5	12	20	24	48	110	220	250
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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
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For other voltages between 5 and 690 V, see pages B8/45 to B8/48.

⁽¹⁾ Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

⁽²⁾ LC1D09 to D32: clip-on mounting on 35 mm rail NSYSR or screw fixing.

⁽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 B8/42).



TeSys Control

Deca Contactors

Product references



LC1D09●●



LC1D80A●●



Contactors

For other voltages between 5 and 690 V, see pages B8/45 to B8/48.

- (1) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.
- (2) **LC1D09 to D80A**: clip-on mounting on 35 mm rail NSYSR or screw fixing.
LC1D80 and D95: clip-on mounting on 35 mm rail NSYSR or 75 mm rail AM1DL or screw fixing.
LC1 or **LP1D80 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.
- (3) 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**.
- (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 B8/42).
- (5) Coordination tables according to the number of operating cycles, see AC-1 curve, page A5/58.
- (6) 32 A with 2 x 4 mm² cables connected in parallel.
- (7) For these coil voltages, choose from Deca 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. Exemple: **LC1D40ABBE**.

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

Non inductive loads maximum current (θ ≤ 60 °C) utilisation category AC-1	Number of poles	Instantaneous auxiliary contacts	Basic reference, to be completed by adding the control voltage code ⁽¹⁾	Weight ⁽³⁾
			Fixing ⁽²⁾	
A				kg
Connection by screw clamp terminals				
25	3	1	1	LC1D09●● 0.320 or LC1D12●● 0.325 LC1D18●● 0.330
32	3	1	1	LC1D25●● 0.370
40	3	1	1	LC1D32●● 0.375 or LC1D38●● 0.380
Connection by EverLink®, BTR screw connectors ⁽⁴⁾				
60	3	1	1	LC1D40A●● 0.850 LC1D50A●● 0.855 or LC1D65A●● ⁽⁵⁾ 0.860 or LC1D80A●● ⁽⁵⁾ 0.860
Connection by screw clamp terminals or connectors				
125	3	1	1	LC1D80●● 1.590 or LC1D95●● ⁽⁵⁾ 1.610
200	3	1	1	LC1D115●● 2.500 or LC1D150●● ⁽⁶⁾ 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	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	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	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

TeSys Control

Deca 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 ⁽¹⁾ Fixing ⁽²⁾	Weight ⁽³⁾

A kg

Connection by spring terminals				
16	3	1	1	LC1D093●● ⁽⁴⁾ 0.320 or LC1D123●● ⁽⁴⁾ 0.325
25	3	1	1	LC1D183●● ⁽⁵⁾ 0.335 or LC1D253●● ⁽⁶⁾ 0.325 or LC1D323●● ⁽⁶⁾ 0.325

Power connections by EverLink® BTR screw connectors ⁽⁷⁾ and control by spring terminals

60	3	1	1	LC1D40A3●● 0.850
80	3	1	1	LC1D50A3●● ⁽⁸⁾ 0.855 or LC1D65A3●● ⁽⁸⁾ 0.860 or LC1D80A3●● ⁽⁸⁾ 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 B8/36 to B8/42.

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...D80A	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7	S7
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d.c. supply	12	24	36	48	60	72	110	125	220	250	440
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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
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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
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Low consumption	5	12	20	24	48	110	220	250
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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
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For other voltages between 5 and 690 V, see pages B8/45 to B8/48.
⁽¹⁾ Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

- ⁽²⁾ LC1D09 to D80A: clip-on mounting on 35 mm rail NSYS DR or screw fixing.
- ⁽³⁾ 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.
- ⁽⁴⁾ 20 A with 2 x 2.5 mm² cables connected in parallel.
- ⁽⁵⁾ 32 A with 2 x 4 mm² cables connected in parallel.
- ⁽⁶⁾ 40 A with 2 x 4 mm² cables connected in parallel.
- ⁽⁷⁾ 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 B8/42).
- ⁽⁸⁾ Coordination tables according to the number of operating cycles, see AC-1 curve, page A5/58.



Contactors

PB121714.fr



LC1DT20●●

PB121715.fr



LC1DT80A●●



PB123776.eps



LC1D65008●●

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 ⁽¹⁾ Fixing ⁽²⁾	Weight ⁽³⁾

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	4	–	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	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	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 B8/45 to B8/48.

(1) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

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

LC1D80 ~: clip-on mounting on 35 mm rail NSYSR or 75 mm rail AM1DL or screw fixing.

LC1 or LP1D80 ~: 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.

(3) 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.

(4) For these coil voltages, choose from Deca 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 Control

Deca 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 ⁽¹⁾ Fixing ⁽²⁾	Weight ⁽³⁾

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	4	–	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 B8/36 to B8/42.

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
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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	Volts	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 Uc	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 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
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Low consumption

Volts	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 Uc	AL	JL	ZL	BL	EL	FL	ML	UL
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For other voltages between 5 and 690 V, see pages B8/45 to B8/48.

⁽¹⁾ Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

⁽²⁾ LC1D09 to D38 and LC1DT20 to DT80A: clip-on mounting on 35 mm rail NSYS DR or screw fixing.

⁽³⁾ 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.





LC1D09●●



LC1D25●●



LC1D80A●●



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 by adding the control voltage code ⁽¹⁾ Fixing, connection ⁽²⁾
Single-phase 1 Ø		3-phase 3 Ø						
120 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	AWG 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●● ⁽³⁾
2	5	10	10	20	25	AWG 14 - 6	50	LC1D38●● ⁽³⁾

Power connections by EverLink® BTR screw connectors and control by spring terminals								
3	5	10	10	30	30	AWG 16 - 2	60	LC1D40A●●
3	7.5	15	15	40	40	AWG 16 - 2	70	LC1D50A●●
5	10	20	20	40	50	AWG 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 ⁽⁴⁾	LE7 ⁽⁴⁾	M7	P7	Q7	V7	N7	R7	T7 ⁽⁴⁾	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	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾	⁽⁵⁾	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⁾ Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

⁽²⁾ LC1D09 to D65A: clip-on mounting on 35 mm L rail NSYSR or screw fixing.

LC1D80 and LC1D95: clip-on mounting on 35 mm L rail NSYSR or 75 mm L rail AM1DL or screw fixing.

LC1D115 and D150: clip-on mounting on 2 x 35 mm L rails NSYSR or screw fixing.

⁽³⁾ Versions with spring terminals LC1D323 and LC1D383 are not certified UL/CSA.

⁽⁴⁾ Contactors LC1D40A, 50A, 65A, 80A: for this coil voltage use is only on 60 Hz.

⁽⁵⁾ For these coil voltages, choose from Deca 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 Control

Deca Reversing contactors

Product references



LC2D12●●



LC2D65A●●



LC2D115●●

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

Horizontally mounted - Pre-wired power connections.

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3/AC-3e ($\theta \leq 60^\circ\text{C}$)	Rated operational current in AC-3/AC-3e 440 V up to	Instantaneous auxiliary contacts per contactor	Contactors supplied with coil Basic reference, to be completed by adding the control voltage code ⁽¹⁾	Weight ⁽³⁾
220 V 380 V 415 V 440 V 500 V 660 V 1000 230 V 400 V			Fixing ⁽²⁾	

kW kW kW kW kW kW A kg

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

2.2	4	4	4	5.5	5.5	-	9	1	1	LC2D09●● ⁽⁴⁾	0.687
3	5.5	5.5	5.5	7.5	7.5	-	12	1	1	LC2D12●● ⁽⁴⁾	0.697
4	7.5	9	9	10	10	-	18	1	1	LC2D18●● ⁽⁴⁾	0.707
5.5	11	11	11	15	15	-	25	1	1	LC2D25●● ⁽⁴⁾	0.787
7.5	15	15	15	18.5	18.5	-	32	1	1	LC2D32●● ⁽⁴⁾	0.797
9	18.5	18.5	18.5	18.5	18.5	-	38	1	1	LC2D38●● ⁽⁴⁾	0.807
11	18.5	22	22	22	30	-	40	1	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 B8/43).

Component parts

Auxiliary contact blocks and add-on modules: see pages B8/36 to B8/42.

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
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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	220	250
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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 B8/45 to B8/48.

(1) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

(2) 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 AM1 DL or screw fixing.

LC2D115 and D150: clip-on mounting on 35 mm rail NSYS DR or screw fixing.

(3) 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.

(4) For reversing contactors with electrical interlocking pre-wired at the factory, add suffix V to the references selected above. Example: LC2D09B7 becomes LC2D09B7V.

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



TeSys Control

Deca Reversing contactors

Product references



LC2D123●●

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

Pre-wired power connections.

Mechanical interlock without electrical interlocking.

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3/AC-3e ($\theta \leq 60^\circ\text{C}$)		Rated operational current in AC-3/AC-3e 440 V up to	Instantaneous auxiliary contacts per contactor	Contactors supplied with coil	Basic reference, to be completed by adding the voltage code ⁽¹⁾	Weight ⁽³⁾	
220 V	380 V	415 V	440 V	500 V	660 V	Fixing ⁽²⁾	
230 V	400 V			690 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	1	LC2D183●●	0.707
5.5	11	11	11	15	15	25	1	1	LC2D253●●	0.787
7.5	15	15	15	18.5	18.5	32 ⁽⁴⁾	1	1	LC2D323●●	0.797

Power connection by EverLink[®], BTR screw connectors ⁽⁵⁾ and control by spring terminals

11	18.5	22	22	22	30	40	1	1	LC2D40A3●●	1.870
15	22	25	30	30	33	50	1	1	LC2D50A3●●	1.880
18.5	30	37	37	37	37	65	1	1	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 B8/36 to B8/42.

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	220	250
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 B8/45 to B8/48.

(1) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

(2) LC2D09 to D32: clip-on mounting on 35 mm rail NSYSDR or screw fixing.

(3) 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 D32, 0.150 kg for LC1D40A to D65A.

(4) 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).

(5) 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 B8/42).

TeSys Control

Deca Changeover contactors

Product references

PB121716.eps



LC2DT20●●

PB123820.eps



LC2D115004●●

4-pole changeover contactor pairs - 20 to 200 A in category AC-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 B8/36).

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	Weight kg
			Basic reference, to be completed by adding the voltage code ⁽¹⁾⁽²⁾ Fixing ⁽³⁾	
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●● ⁽⁴⁾	–
80	1	1	LC1DT80A●● ⁽⁴⁾	–

For connection by lugs or bars

60	1	1	LC1DT60A6●● ⁽⁴⁾	–
80	1	1	LC1DT80A6●● ⁽⁴⁾	–

Auxiliary contact blocks and add-on modules: see pages B8/36 to B8/42.

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

(1) See note (2) on next page.

(2) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

(3) 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.

(4) For these operational currents, order 2 identical contactors and a mechanical interlock LAD4CM (see page B8/43).





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 ⁽¹⁾
			Fixing ⁽²⁾
A			
20	1	1	LC2DT203●●
Power connection by EverLink®, BTR screw connectors ⁽³⁾ and control by spring terminals			
60	1	1	LC1DT60A3●● ⁽⁴⁾
80	1	1	LC1DT80A3●● ⁽⁴⁾

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 Uc 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 Uc AL JL ZL BL EL FL ML UL

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

(1) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

(2) Clip-on mounting on 35 mm rail NSYSR or screw fixing.

(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 B8/19).

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



TeSys Control

Deca green Reversing contactors

Product references

PE121720.fr



LC2D09●●●

PE121721.fr



LC2D40A●●●

Deca 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/AC-3e

Pre-wired power connections

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3/AC-3e ($\theta \leq 60^\circ\text{C}$)							Rated opera-tional current in AC-3/AC-3e 440 V up to	Instan- taneous auxiliary contacts per contactor	Contactors supplied with coil Partial reference, to be completed by adding the control voltage code ⁽¹⁾	Weight
220 V 230 V	380 V 400 V	415 V	440 V	500 V	660 V 690 V	kg				
kW	kW	kW	kW	kW	kW	A			Fixing ⁽²⁾	

With mechanical interlock, without electrical interlocking, for connection by screw clamp terminals or Everlink BTR screw connectors ^{(3) (4)}

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	1	1	LC2D18●●●	0.803
5.5	11	11	11	15	15	25	1	1	LC2D25●●●	0.913
7.5	15	15	15	18.5	18.5	32	1	1	LC2D32●●●	0.923
9	18.5	18.5	18.5	18.5	18.5	38	1	1	LC2D38●●●	0.933
11	18.5	22	22	22	30	40	1	1	LC2D40A●●● ⁽³⁾	2.154
15	22	25	30	30	33	50	1	1	LC2D50A●●● ⁽³⁾	2.164
18.5	30	37	37	37	37	65	1	1	LC2D65A●●● ⁽³⁾	2.174
22	37	37	37	37	37	66	1	1	LC2D80A●●● ⁽³⁾	2.174

Auxiliary contact blocks and add-on modules

See pages B8/36 to B8/42.

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⁾ Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

⁽²⁾ LC2D09 to D80A: clip-on mounting on 35 mm rail NSYS DR or screw fixing.

⁽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 B8/42).

⁽⁴⁾ Electrical interlocking is recommended when 2 orders (direct and reverse) could appeared in the same time.



Contactors

TeSys Control

Deca Contactors for switching capacitor banks

Product references



LC1DGK●●, LC1DLK●●, LC1DMK●●



LC1DWK12●●

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 conform to standards IEC 60070 and 60831, UL and CSA.

Contactor applications

Specification

Contactors fitted with a block of early make poles and damping resistors, limiting the value of the current on closing to 60 I_n 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 I_n. 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 I _n
Maximum operating rate	LC1DFK, DGK, DLK, DMK	240 operating cycles/hour
	LC1DPK, DTK, DWK	240 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⁾ θ ≤ 60 °C ⁽²⁾				Instantaneous auxiliary contacts		Tightening torque on cable end	Basic reference, to be completed by adding the voltage code ^{(3) (4)}	Weight
230 V	400 V	440 V	690 V	N/O	N/C	N.m		kg
kVAR	kVAR	kVAR	kVAR					
7	12.5	12.5	21	1	2	1.7	LC1DFK●●	0.430
9.5	16.7	16.7	28.5	1	2	2.5	LC1DGK●●	0.450
11	20	21	33	1	2	2.5	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	5	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

⁽⁴⁾ Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.