

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.

Available in



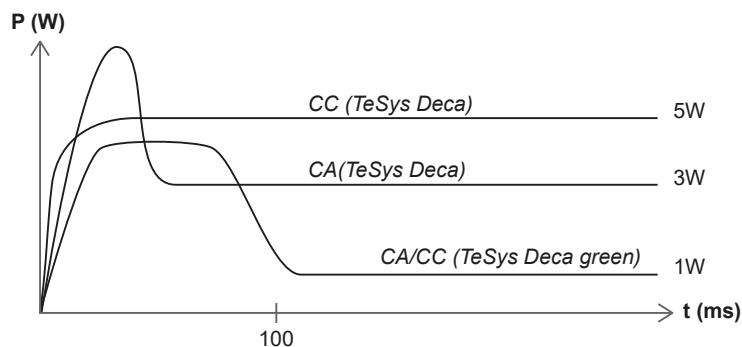
09-12-18 A

25-32-38 A

40-50-65-80 A

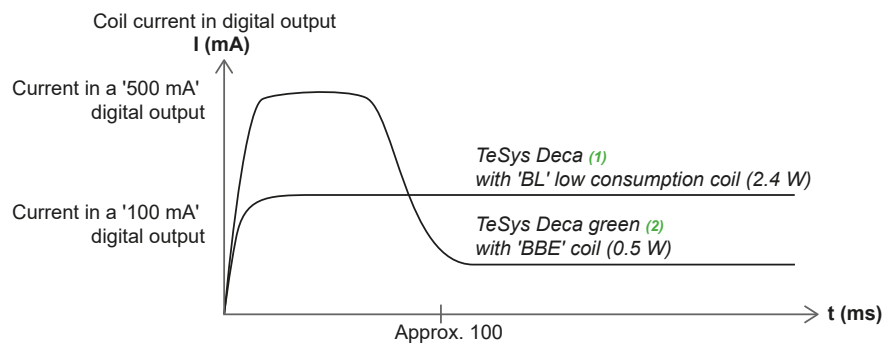
Coil currents comparison

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.

TeSys Control

Deca Contactors

Product references

PB121661.epa



LC1D09●●

PB121723.epa



LC1D80A●●

For other voltages between 5 and 690 V, see pages B8/48 to B8/51.

- (1) Please check the availability of your variant in the index page B8/58. 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.
LC1D80 and D95: clip-on mounting on 35 mm rail **NSYS**DR 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 **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 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 B8/45).
- (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. 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 ⁽¹⁾	Weight ⁽³⁾
			Fixing ⁽²⁾	
A				kg
Connection by screw clamp terminals				
25	3	1	1 LC1D09●●	0.320
			or LC1D12●●	0.325
32	3	1	1 LC1D18●●	0.330
40	3	1	1 LC1D25●●	0.370
50	3	1	1 LC1D32●●	0.375
			or LC1D38●●	0.380
Connection by EverLink®, BTR screw connectors ⁽⁴⁾				
60	3	1	1 LC1D40A●●	0.850
80	3	1	1 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●● ⁽⁶⁾	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			





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 B8/37 to B8/45.

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...D80A

50/60 Hz	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7	S7
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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 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	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
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Low consumption

Volts $\overline{\text{---}}$	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 Uc	AL	JL	ZL	BL	EL	FL	ML	UL
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For other voltages between 5 and 690 V, see pages B8/48 to B8/51.

⁽¹⁾ Please check the availability of your variant in the index page B8/59. The SEARCH function of your viewer can be used.

⁽²⁾ **LC1D09** to **D80A**: clip-on mounting on 35 mm $\overline{\text{---}}$ 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 B8/45).

⁽⁸⁾ Coordination tables according to the number of operating cycles, see AC-1 curve, page A5/58.