

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.



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



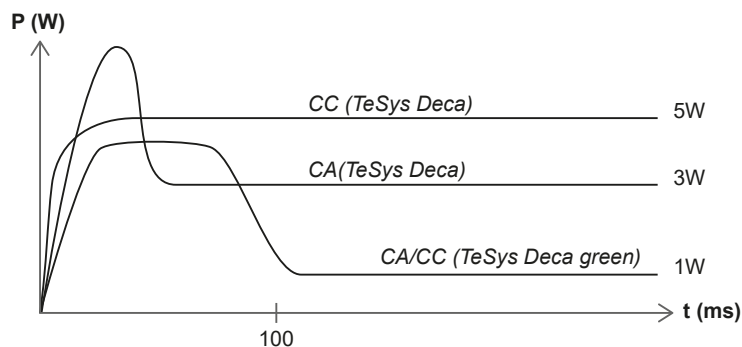
09-12-18 A

25-32-38 A

40-50-65-80 A

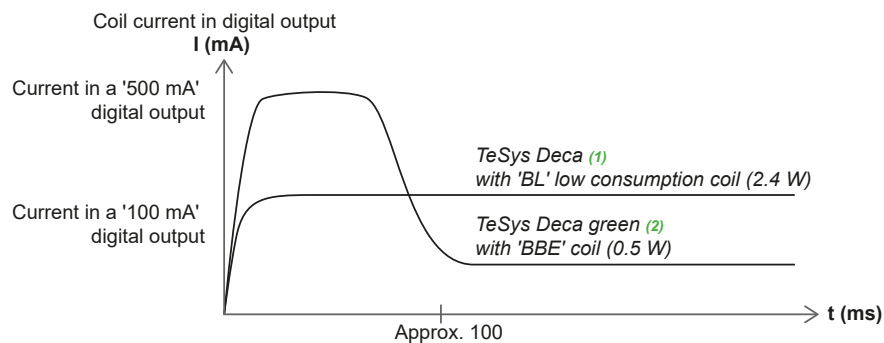
Coil currents comparison

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 green Contactors

Product references



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 (θ ≤ 60 °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
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 ⁽²⁾	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 B8/37 to B8/45.

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 B8/57. 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 B8/45).



Contactors

TeSys Control

Deca green Contactors

Product references



LC1D09...



LC1D40...



LC1DT60...



Contactors

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	Instan- taneous auxiliary contacts	Partial reference, to be completed by adding the control voltage code ⁽¹⁾	Weight
			Fixing ⁽²⁾	

A kg

Connection by screw clamp terminals

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

Connection by EverLink®, BTR screw connectors ⁽³⁾

60	3	1	1	LC1D40A...	0.992
80	3	1	1	LC1D50A...	0.997
				or LC1D65A... ⁽⁴⁾	1.002
				or LC1D80A... ⁽⁴⁾	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 B8/57 The SEARCH function of your viewer can be used.

⁽²⁾ LC1D09 to D80A, LC•DT60A and LC•DT80A: 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 B8/45).

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

TeSys Control

Deca green Contactors

Product references



LC1D09●●●



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 240 V	200 V 208 V	230 V 240 V	460 V 480 V	575 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 B8/57. The SEARCH function of your viewer can be used.

⁽²⁾ LC1D09 to D80: 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 B8/45).



Contactors

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.