TeSys Control Deca Contactors

Introduction

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.

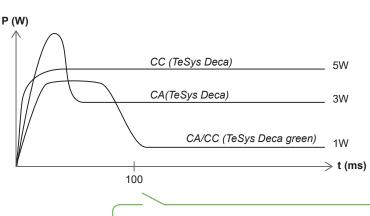
Highly competitive coil consumption

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.

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

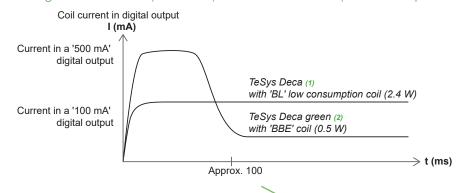
Coil currents comparison

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.

Contactors

TeSys Control **Deca Contactors**

Product references



LC1D09••



LC1D25.



LC1D80A●●



LC1D95••



LC1D115...

3-pc	ole c	onta	ctors	s - Mo	otor	contro	l up to 75 l	κW a	t 400 V,	in category AC-3/AC-	3e
Standard power ratings of 3-phase motors 50-60 Hz in category AC-3/AC-3e $(\theta \le 60~^{\circ}\text{C})$				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 380 V 415 V 440 V 500 V 66 230 V 400 V 69		690 V									
kW	kW	kW	kW	kW	kW	kW	A				kg
Con	nectio	n by s	crew	clam	o term	ninals					
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
Pow	er cor	nnecti	ons b	y Eve	rLink [®]	BTR so	rew connecto	ors (4) a	and contro	ol 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
Con	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

ales Office) 440 500											
440 500											
440 500											
LC1D09…D150 (D115 and D150 coils with built-in suppression as standard, by bi-directional peak limiting diode).											
R7 S7											
LC1D09D65 (not available with "connection for lugs or bars")											
R5 S5											
R6 –											
LC1D09D38 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)											
LC1D40AD65A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)											
LC1D115 and D150 (coil with built-in suppression device as standard)											

U 0.8...1.25 Uc JL ZL AL For other voltages between 5 and 690 V, see pages B8/48 to B8/51.

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- (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 ur rail NSYSDR or screw fixing.

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Low consumption DC (for low consumption AC/DC: Deca green contactors, page B8/19)

LC1D09...D38 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

24

BL

20

- LC1D80 to D95 ~: clip-on mounting on 35 mm ∟ rail NSYSDR or 75 mm ∟ rail AM1DL or screw fixing.

 LC1D80 to D95 ~: clip-on mounting on 35 mm ∟ rail NSYSDR 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 NSYSDR 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.

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EL

FL

110 220 250

ML

UL

- (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) 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.

Click HERE for access



Dimensions: pages B8/99 to B8/105 Schemes pages B8/106 and B8/107

TeSys Control Deca Contactors

Product references



LC1D09..



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 NSYSDR or screw fixing.
 - LC1D80 and D95 ~: clip-on mounting on 35 mm □ rail NSYSDR 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 NSYSDR or screw fixing.

 (3) The weights indicated are for contactors with a.c. control
- (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 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 A	C-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) Fixing (2)	Weight (3)				
Α						kg				
Connection by so	crew clamp	termi	nals							
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 Ev	verLink®, B	TR sc	rew co	nn	ectors (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•• (5)	1.610				
200	3	1	1		LC1D115••	2.500				
				or	LC1D150ee (6)	2.500				

3-pole contactors for connection by lugs

Example: LC1D09 • becomes LC1D096 • •

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

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
LC1D09D150 (LC1D115 and D150 coils with built-in suppression device as standard)													
50/60 Hz	В7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7	S7
LC1D09D65 (not available with "connection for lugs or bars")													
50 Hz	B5	D5	E5				P5						
LC1D80D150													
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		
LC1D09D38 (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)											eak		
U 0.71.25 Úc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD		
LC1D40AD65A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)													
U 0.751.25 Uc	JD	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	RD		
LC1 or LP1D80 and D95													
U 0.851.1 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD		
U 0.751.2 Uc	JW	BW	CW	EW	_	SW	FW	_	MW	_	_		
LC1D115 and D150 (coils with built-in suppression device fitted as standard)													
U 0.751.2 Uc	-	BD	_	ED	ND	SD	FD	GD	MD	UD	RD		
Low consumption	1												

12 20 24 48 110 220 250

BL EL FL ML UL

LC1D09...D38 (coils with integral suppression device fitted as standard, by bi-directional peak

ZL



Life Is On

limiting diode)

U 0.8...1.25 Uc