Product references

PB121522.tif

CA2SK11●●

Mini control relays

- Width of mini control relays 27 mm.
- Mounting on 35 mm ⎓ rail.
- Connection by connectors.

Control circuit supply	Auxiliary contacts		Basic reference, to be completed by adding the voltage code (1)
			
a.c. supply	2	–	**CA2SK20●●**
	1	1	**CA2SK11●●**
d.c. supply	2	–	**CA3SK20●●**
	1	1	**CA3SK11●●**

PB121523.eps

CA2SKE20●●

Mini control relay with alternating contacts

This mini control relay with alternating contacts (see function diagram page B7/17) makes it possible to automatically split the operating time between 2 circuits of a redundant system.
By regularly energising the “safety circuits”, this device makes it possible to ensure that they are operating correctly.

- Width of mini control relay 45 mm.
- Fixing by Ø4 screws.
- Connection by connectors.
- Cannot be fitted with front-mounted auxiliary contact block.
- Cannot be fitted with coil suppressor module.

Control circuit supply	Auxiliary contacts		Basic reference, to be completed by adding the voltage code (1)
			
a.c. supply	2	–	**CA2SKE20●●**

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

Mini control relays CA2SK and CA2SKE

Volts ∼ 50/60 Hz	**24**	**48**	**110**	**120**	**220**	**230**	**240**	**380**	**400**
Code	B7	E7	F7	G7	M7	P7	U7	Q7	V7

Mini control relays CA3SK

Volts ⎓	**12**	**24**	**36**	**48**	**72**
Code	JD	BD	CD	ED	SD

Control relays

Characteristics: pages B7/14 and B7/15
Dimensions: page B7/16
Schemes: page B7/17

Product references

PB111639_R.eps

LA4SK●●

Instantaneous auxiliary contact blocks

Clip-on front mounting

For use on control relays	Maximum number of blocks per contactor	Composition		Reference
CA2SK20	1	2	–	**LA1SK20**
		–	2	**LA1SK02**
		1	1	**LA1SK11**

PB111640_R.eps

LA4SK●1●

Suppressor modules

Connection without need for tools by clipping onto right-hand side of contactor

For use on control relays	Type	For voltages	Sold in lots of	Unit reference
CA2SK and **CA3SK**	Varistor (1)	∼ and ⎓ 24 V…48 V	10	**LA4SKE1E**
		∼ and ⎓ 110 V…250 V	10	**LA4SKE1U**
	Diode (2)	⎓ 24 V…250 V	10	**LA4SKC1U**

(1) 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).
(2) No overvoltage or oscillating frequency.
Slight increase in drop-out time (1.1 to 1.5 times the normal time).

Control relays

Characteristics: page B7/15
Dimensions: page B7/16
Schemes: page B7/17

Product references

PB123768.eps

CA2KN22●●

Control relays for a.c. control circuit

- Mounting on 35 mm ⎓ rail or Ø4 screw fixing.
- Screws in the open “ready-to-tighten” position.

Control circuit Consumption	Auxiliary contacts		Basic reference, to be completed by adding the voltage code [1]
Screw clamp connections			
4.5 VA	4	–	**CA2KN40●●**
	3	1	**CA2KN31●●**
	2	2	**CA2KN22●●**
Spring terminal connections			
4.5 VA	4	–	**CA2KN403●●**
	3	1	**CA2KN313●●**
	2	2	**CA2KN223●●**
Faston connectors, 1 x 6.35 or 2 x 2.8			
4.5 VA	4	–	**CA2KN407●●**
	3	1	**CA2KN317●●**
	2	2	**CA2KN227●●**
Solder pins for printed circuit boards			
4.5 VA	4	–	**CA2KN405●●**
	3	1	**CA2KN315●●**
	2	2	**CA2KN225●●**

PB123769.tif

CA2KN●●5●●

Control relays for d.c. control circuit

- Mounting on 35 mm ⎓ rail or Ø4 screw fixing.
- Screws in the open “ready-to-tighten” position.

Screw clamp connections			
3 W	4	–	**CA3KN40●●**
	3	1	**CA3KN31●●**
	2	2	**CA3KN22●●**
Spring terminal connections			
3 W	4	–	**CA3KN403●●**
	3	1	**CA3KN313●●**
	2	2	**CA3KN223●●**
Solder pins for printed circuit boards			
3 W	4	–	**CA3KN405●●**
	3	1	**CA3KN315●●**
	2	2	**CA3KN225●●**

PB123770.tif

CA3KN●●3●●

(1) Please check the availability of your variant in the index page B7/12. The SEARCH function of your viewer can be used.
Standard control circuit voltages (for other voltages, please consult your Regional Sales Office):

Control relays CA2K (0.8...1.15 Uc) *(0.85...1.1 Uc)*

Volts ∼ 50/60 Hz	**12**	**20**	**24**[2]	**36**	**42**	**48**	**110**	**115**	**127**	**220/ 230**	**230**	**230/ 240**	**380/ 400**	**400**	**400/ 415**	**440**	**500**	**660/ 690**
Code	J7	Z7	B7	C7	D7	E7	F7	FE7	FC7	M7	P7	U7	Q7	V7	N7	R7	S7	Y7

Up to and including 240 V, coil with integral suppression device available: add **2** to the code required. Example: **J72**

Control relays CA3K (0.8...1.15 Uc)

Volts ⎓	**12**	**20**	**24**[2]	**36**	**48**	**60**	**72**	**100**	**110**	**125**	**200**	**220**	**230**	**240**	**250**
Code	JD	ZD	BD	CD	ED	ND	SD	KD	FD	GD	LD	MD	MPD	MUD	UD

Coil with integral suppression device available: add **3** to the code required. Example: **JD3**.

(2) When connecting an electronic sensor or timer in series with the coil of the control relay, select a 20 V coil (∼ code Z7, ⎓ code ZD) so as to compensate for the incurred voltage drop.

Control relays

Characteristics: pages B7/18 and B7/19
Dimensions: page B7/20
Schemes: page B7/21

Product references

PB123771.eps

CA4KN40●●●

Low consumption control relays d.c. control circuit

- Mounting on 35 mm ⎓ rail or Ø4 screw fixing.
- Screws in the open “ready-to-tighten” position.

Control circuit Consumption	Auxiliary contacts		Basic reference, to be completed by adding the voltage code (1)
Screw clamp connections			
1.8 W	4	–	**CA4KN40●●**
	3	1	**CA4KN31●●**
	2	2	**CA4KN22●●**
Spring terminal connections			
1.8 W	4	–	**CA4KN403●●**
	3	1	**CA4KN313●●**
	2	2	**CA4KN223●●**
Faston connectors, 1 x 6.35 or 2 x 2.8			
1.8 W	4	–	**CA4KN407●●**
	3	1	**CA4KN317●●**
	2	2	**CA4KN227●●**
Solder pins for printed circuit boards			
1.8 W	4	–	**CA4KN405●●**
	3	1	**CA4KN315●●**
	2	2	**CA4KN225●●**

(1) Please check the availability of your variant in the index page B7/12. The SEARCH function of your viewer can be used.

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

Control relays CA4K (Wide range coil: 0.7...1.3 Uc)

Volts ⎓	**12**	**20**	**24**	**48**	**72**	**110**	**120**
Code	JW3	ZW3	BW3	EW3	SW3	FW3	GW3

Coil with integral suppression device fitted as standard, by bi-directional peak limiting diode.

Characteristics: pages B7/18 and B7/19
Dimensions: page B7/20
Schemes: page B7/21

Product references

PB121750.tif

LA1KN22

PB123795.eps

LA1KN●●3

PB123796.eps

LA1KN●●7

PB123797.eps

LA2KT2E

Instantaneous auxiliary contact blocks

Clip-on front mounting, 1 per control relay

Connection	Composition		Reference
Screw clamp terminals	2	–	**LA1KN20**
	–	2	**LA1KN02**
	1	1	**LA1KN11**
	4	–	**LA1KN40** (1)
	3	1	**LA1KN31** (1)
	2	2	**LA1KN22** (1)
	1	3	**LA1KN13** (1)
	–	4	**LA1KN04** (1)
Spring terminals	2	–	**LA1KN203**
	–	2	**LA1KN023**
	1	1	**LA1KN113**
	4	–	**LA1KN403** (1)
	3	1	**LA1KN313** (1)
	2	2	**LA1KN223** (1)
	1	3	**LA1KN133** (1)
	–	4	**LA1KN043** (1)
Faston connectors 1 x 6.35 or 2 x 2.8	2	–	**LA1KN207**
	4	–	**LA1KN407** (1)
	3	1	**LA1KN317** (1)

Electronic time delay contact blocks

- Relay output with common point changeover contact, ∼ or ⎓ 240 V, 2 A maximum
- Control voltage 0.85...1.1 Uc
- Maximum switching capacity 250 VA or 150 W
- Operating temperature -10...+ 60 °C
- Reset time: 1.5 s during the time delay period 0.5 s after the time delay period

Clip-on front mounting, 1 per control relay

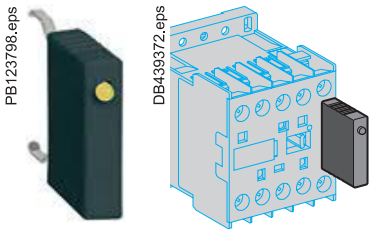
Voltage	Type	Timing range	Composition	Reference
V		s		
∼ or ⎓ 24...48	On-delay	1...30	1	**LA2KT2E**
∼ 110...240	On-delay	1...30	1	**LA2KT2U**

Other versions Electronic timers type RE4.
Please consult your Regional Sales Office.

*(1) Block of 4 contacts for use on **CA2K** and **CA3K**.*

Characteristics: page B7/19
Dimensions: page B7/20
Schemes: page B7/21

Product references



LA4KC1B

Suppressor modules incorporating LED indicator

Mounting and connection	Type	For voltages	Sold in lots of	Unit reference
Clips onto front of relay with locating device. No tools required.	Varistor (1)	∿ and ⎓ 12...24 V	5	**LA4KE1B**
		∿ and ⎓ 32...48 V	5	**LA4KE1E**
		∿ and ⎓ 50...129 V	5	**LA4KE1FC**
		∿ and ⎓ 130...250 V	5	**LA4KE1UG**
	Diode + Zener diode (2)	⎓ 12...24 V	5	**LA4KC1B**
		⎓ 32...48 V	5	**LA4KC1E**
	RC (3)	∿ 110...250 V	5	**LA4KA1U**

Mounting accessories

Description	Application		Sold in lots of	Unit reference
Mounting plates	On 2 ⊏ rails	110/120 mm fixing centres	10	**DX1AP25**

Marking accessories

LA9D90

AB1R9

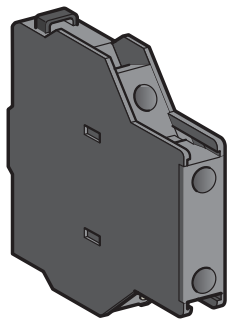
Description	Application		Sold in lots of	Unit reference
Marker holder	Clip-on fixing on front face	–	100	**LA9D90**
Clip-in markers	4 maximum per relay	Strips of 10 identical numbers 0 to 9	25	**AB1R●** (4)
		Strips of 10 identical capital letters A to Z	25	**AB1G●** (4)

(1) 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).
(2) No overvoltage or oscillating frequency.
Polarised component.
Slight increase in drop-out time (1.1 to 1.5 times the normal time).
(3) Protection by limiting the transient voltage to 3 Uc max. and limitation of the oscillating frequency.
Slight increase in drop-out time (1.2 to 2 times the normal time).
(4) Complete the reference by replacing the dot with the required character.

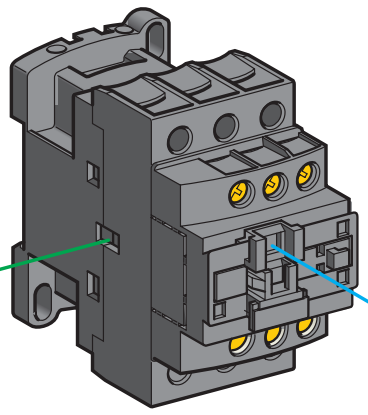
Dimensions:
page B7/20

Schemes:
page B7/21

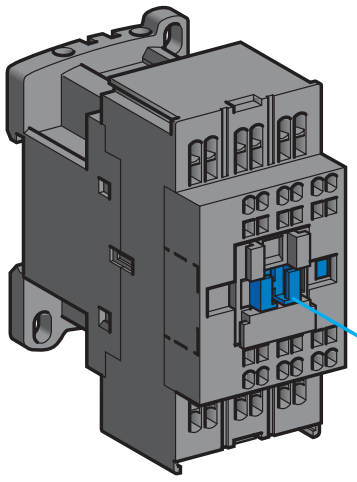
DB439375.eps



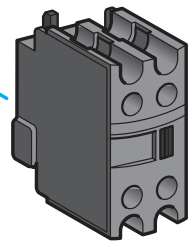
LAD 8N



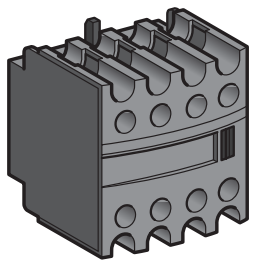
CAD ●●



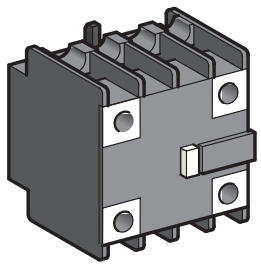
CAD ●●3



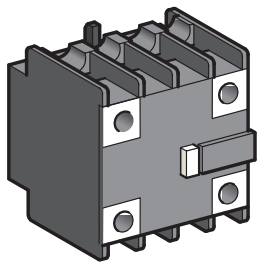
LAD N



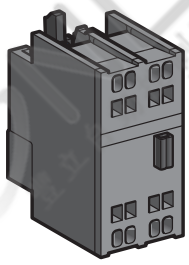
LAD N, LAD C



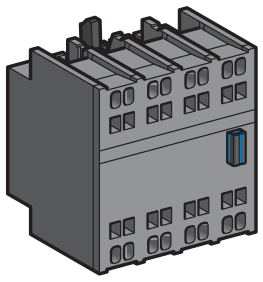
LA1 DX, DZ



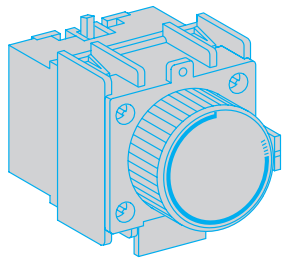
LA1 DY



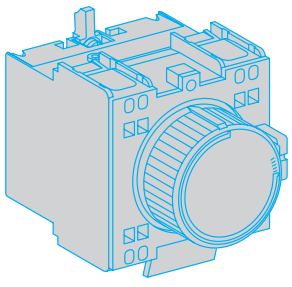
LAD N●●3



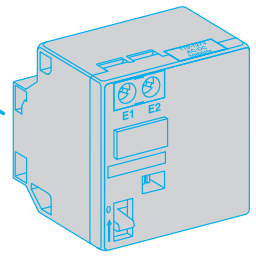
LAD N●●3
LAD C●●3



LAD T, LAD S
LAD R



LAD T●3, LAD R●3, LAD S●3



LAD 6K

Control relays

See page opposite for mounting possibilities according to control relay type and rating

Product references

PB121687.eps

CAD50●●

Control relays for connection by screw clamp terminals

Type	Number of contacts	Composition		Basic reference, to be completed by adding the control voltage code (1)	
Instantaneous	5	5	–	**CAD50●●** (3)	
		3	2	**CAD32●●** (3)	

Control relays for connection by spring terminals

Instantaneous	5	5	–	**CAD503●●**	
		3	2	**CAD323●●**	

PB121688.eps

CAD503●●

Instantaneous auxiliary contact blocks for connection by screw clamp terminals

For use in normal operating environments

Number of contacts	Maximum number per relay, Clip-on mounting: front	Maximum number per relay, Clip-on mounting: side	Composition		Reference	
2	1	–	1	1	**LADN11**	
	–	1 on LH side	1	1	**LAD8N11** (6)	
	1	–	2	–	**LADN20**	
	–	1 on LH side	2	–	**LAD8N20** (6)	
	1	–	–	2	**LADN02**	
	–	1 on LH side	–	2	**LAD8N02** (6)	
4 (4)	1	–	2	2	**LADN22**	**LADN22S** (7)
			1	3	**LADN13**	
			4	–	**LADN40**	
			–	4	**LADN04**	
			3	1	**LADN31**	
4 (4)	1	–	2	2	**LADC22**	

Including 1 N/O and 1 N/C make before break.

PB121689.eps

LADN22

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

Number of contacts	Maximum number per relay, Front mounting	Composition: protected (5)			Composition: not protected		Reference
2	1	2	–	–	–	–	**LA1DX20**
		–	2	–	–	–	**LA1DX02**
		2	–	2	–	–	**LA1DY20** (8)
4 (4)	1	2	–	–	2	–	**LA1DZ40**
		2	–	–	1	1	**LA1DZ31**

PB123800.eps

LA1DY20

Instantaneous auxiliary contact blocks for connection by spring terminals

This type of connection is not possible for contact blocks LAD 8 and blocks with dust and damp protected contacts.
For all other instantaneous auxiliary contact blocks, add the digit **3** to the end of the references selected above.
Example: **LADN11** becomes **LADN113**.

(1) Please check the availability of your variant in the index page B7/12. The SEARCH function of your viewer can be used.
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**
50/60 Hz	B7	D7	E7	F7	FE7	M7	P7	U7	Q7	V7	N7	R7
d.c. supply (coils with integral suppression device fitted as standard)												
Volts ⎓	**12**	**24**	**36**	**48**	**60**	**72**	**110**	**125**	**220**	**250**	**440**	
U from 0.7 to 1.25 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD	
Low consumption (coils with integral suppression device fitted as standard)												
Volts ⎓	**5**	**12**	**20**	**24**	**48**	**110**	**220**	**250**				
Code	AL	JL	ZL	BL	EL	FL	ML	UL				

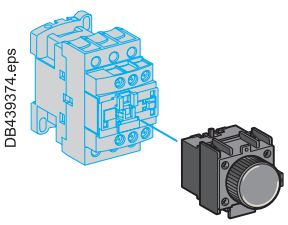
(2) LC: low consumption.
*(3) To order control relays with connection by lugs, add the digit **6** to the end of the selected reference.*
Example: CAD50●● becomes CAD506●●.
(4) Blocks with 4 auxiliary contacts cannot be used on low consumption control relays.
(5) Product fitted with 4 earth screen continuity terminals.
(6) These contact blocks are allowed with AC coil control relay only.
(7) With red front face - for safety chain indication.
(8) With 2 earth screen continuity poles.

Characteristics: pages B7/22 to B7/24
Curves: page B7/25
Dimensions: page B7/26
Schemes: page B7/27

Product references

PB123803.eps

DB439374.eps



LADT2

Time delay auxiliary contact blocks for connection by screw clamp terminals (1)

Number and type of contacts	Maximum number per relay	Time delay		Reference
	Front mounting	Type	Range	
1 N/C and 1 N/O	1	On-delay	0.3…3 s (2)	**LADT0**
			1…30 s	**LADT2**
			10…180 s	**LADT4**
			1…30 s (3)	**LADS2**
		Off-delay	0.3…3 s (2)	**LADR0**
			1…30 s	**LADR2**
			10…180 s	**LADR4**

(Sealing cover: see page B8/42)

Time delay auxiliary contact blocks for connection by spring terminals

Add the digit **3** to the references selected above. Example: **LADT0** becomes **LADT03**.

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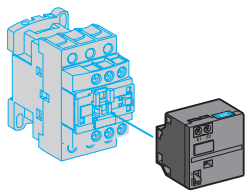
DB439373.eps



LAD6K10M

Mechanical latch blocks (4)

Unlatching control	Maximum number per relay	Basic reference to be completed (5)
	Front mounting	
Manual or electric	1	**LAD6K10●**

Suppressor modules

These modules clip onto the top of the control relay and the electrical connection is instantly made. Fitting of an input module is still possible.

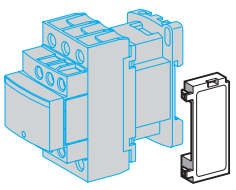
RC circuits (Resistor-Capacitor)

- Effective protection for circuits highly sensitive to “high frequency” interference.
- Voltage limited to 3 Uc maximum and oscillating frequency limited to 400 Hz maximum.
- Slight time delay on drop-out (1.2 to 2 times the normal time).

For mounting on	Operational voltage	Reference
CAD ∿	∿ 24…48 V	**LAD4RCE**
	∿ 50…127 V	**LAD4RCG**
	∿ 110…250 V	**LAD4RCU**

PB121537.eps

DF510384.eps



LAD4RCU

Varistors (peak limiting)

- Protection provided by limiting the transient voltage value to 2Uc maximum.
- Maximum reduction of transient voltage peaks.
- Slight time delay on drop-out (1.1 to 1.5 times the normal time).

CAD ∿	∿ 24…48 V	**LAD4VE**
	∿ 50…127 V	**LAD4VG**
	∿ 110…250 V	**LAD4VU**

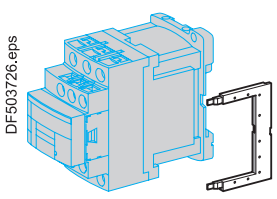
Freewheel diode

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

CAD ⎓	⎓ 5…600 V	**LAD4DDL** (6)

PB121538.eps

DF503726.eps



LAD4DDL

Bidirectional peak limiting diode (7)

- Protection provided by limiting the transient overvoltage value to 2Uc maximum.
- Maximum reduction of transient voltage peaks.

CAD ∿	∿ 24 V	**LAD4TB**
	∿ 72 V	**LAD4TS**
CAD ⎓	⎓ 24 V	**LAD4TBDL**
	⎓ 72 V	**LAD4TSDL**
	⎓ 125 V	**LAD4TGDL**
	⎓ 250 V	**LAD4TUDL**

(1) These contact blocks cannot be used on low consumption control relays.
(2) With extended scale from 0.1 to 0.6 s.
(3) With switching time of 40 ms ±15 ms between opening of the N/C contact and closing of the N/O contact.
(4) Power should not be simultaneously applied or maintained to the mechanical latching block of the CADN. The duration of the control signal to the mechanical latching block and the CADN should be ⩾ 100 ms.
(5) Standard control circuit voltages (for other voltages, please consult your Regional Sales Office):

Volts ∿ and ⎓	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

(6) Not compatible with low consumption control relays.
*(7) **CAD●●** ⎓ and low consumption control relays are fitted with a built-in bi-directional peak limiting diode suppressor as standard. On control relays produced after 15th July 2004, this diode is removable. It can therefore be replaced by the user (see references **LAD4T●●●** above). It can also be replaced by a freewheel diode **LAD4DDL**.*

Control relays

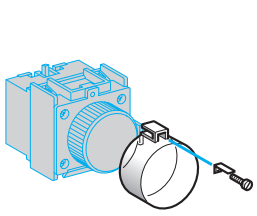
Characteristics: pages B7/22 to B7/24 | Illustrations: page B7/8 | Curves: page B7/25 | Dimensions: page B7/26 | Schemes: page B7/27

Product references

PB121532.eps

LA9D901

810535.eps



PB123804.eps

LAD9ET1S

Accessories (to be ordered separately)

Description	For mounting on	Sold in lots of	Unit reference
For marking			
Sheet of 64 blank legends, self-adhesive, 8 x 33 mm	CAD, LAD (4 contacts)	10	**LAD21**
Sheet of 112 blank legends, self-adhesive, 8 x 12 mm	LAD (2 contacts), LADT		**LAD22**
"SIS Label" labelling software for legends LAD21 and LAD22, supplied on CD-Rom	Multi-language version: English, French, German, Italian, Spanish	1	**XBY2U**
Legend holder, snap-in, 8 x 18 mm	LC1D09...38 LC1DT20...40 LADN (4 contacts) LADT, LADR	100	**LAD90**
For protection			
Sealing cover	LADT, LADR	1	**LA9D901**
Safety cover preventing access to the moving contact carrier	CAD	1	**LAD9ET1**
Red cover (for safety chain indication)	CAD	1	**LAD9ET1S**

Spare parts: coils

Specifications

- Average consumption at 20 °C:
  - inrush (cos φ = 0.75) 50/60 Hz: 70 VA at 50 Hz,
  - sealed (cos φ = 0.3) 50/60 Hz: 8 VA at 60 Hz,
- Operating range (θ < 60 °C): 0.85 to 1.1 Uc

Control circuit voltage Uc	Average resistance at 20 °C ±10 %	Inductance of closed circuit	Reference (1)
V	Ω	H	
			50/60 Hz
12	1.33	0.05	**LXD1J7**
24	5.37	0.22	**LXD1B7**
32	10.1	0.39	**LXD1C7**
42	17	0.67	**LXD1D7**
48	21.7	0.87	**LXD1E7**
110	124.1	4.6	**LXD1F7**
115	129.8	5	**LXD1FE7**
120	150.6	5.4	**LXD1G7** (2)
200	410.7	15	**LXD1L7**
208	430.4	16	**LXD1LE7** (2)
220	515.4	18	**LXD1M7** (3)
230	538.6	20	**LXD1P7**
240	562.3	22	**LXD1U7**
277	800.7	29	**LXD1W7** (2)
380	1551	55	**LXD1Q7** (4)
400	1633	60	**LXD1V7**
415	1694	65	**LXD1N7**
440	1993	73	**LXD1R7**
480	2398	87	**LXD1T7** (2)
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) Coil for use only on 60 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 pages B8/84 and B8/86).*
*(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 pages B8/84 and B8/86).*

TeSys Control

SK, K, Deca Control relays

Product references

CA2KN223B7	CA2SK20E7	CA3SK20BD	CAD32JD
CA2KN223F7	CA2SK20F7	CA3SK20JD	CAD32JL
CA2KN223P7	CA2SK20G7	CA4KN223BW3	CAD32L7
CA2KN223P72	CA2SK20M7	CA4KN225BW3	CAD32M7
CA2KN22B7	CA2SK20P7	CA4KN22BW3	CAD32MD
CA2KN22B72	CA2SK20Q7	CA4KN22EW3	CAD32N7
CA2KN22D7	CA2SK20T7	CA4KN22FW3	CAD32P7
CA2KN22E7	CA2SK20U7	CA4KN22SW3	CAD32Q7
CA2KN22F7	CA2SK20UE7	CA4KN313BW3	CAD32R7
CA2KN22F72	CA2SKE20B7	CA4KN31BW3	CAD32SD
CA2KN22FC7	CA2SKE20G7	CA4KN31FW3	CAD32T7
CA2KN22FE7	CA2SKE20M7	CA4KN31SW3	CAD32U7
CA2KN22G7	CA2SKE20P7	CA4KN403BW3	CAD32UD
CA2KN22G72	CA2SKE20Q7	CA4KN40BW3	CAD32V7
CA2KN22L7	CA2SKE20T7	CA4KN40EW3	CAD32X7
CA2KN22M7	CA2SKE20U7	CA4KN40FW3	CAD32XD
CA2KN22M72	CA3KN223BD	CAD323B7	CAD32Y7
CA2KN22N7	CA3KN223BD3	CAD323BD	CAD503BD
CA2KN22P7	CA3KN22BD	CAD323BL	CAD503BL
CA2KN22P72	CA3KN22BD3	CAD323E7	CAD503FD
CA2KN22Q7	CA3KN22ED	CAD323F7	CAD503FE7
CA2KN22R7	CA3KN22ED3	CAD323FE7	CAD503P7
CA2KN22T7	CA3KN22FD	CAD323G7	CAD506B7
CA2KN22U7	CA3KN22FD3	CAD323JD	CAD506BD
CA2KN22V7	CA3KN22GD	CAD323P7	CAD506ED
CA2KN313P72	CA3KN22GD3	CAD326B7	CAD506F7
CA2KN315F7	CA3KN22JD	CAD326BD	CAD506FD
CA2KN31B7	CA3KN22MD	CAD326BL	CAD506KD
CA2KN31D7	CA3KN22MD3	CAD326CD	CAD506M7
CA2KN31E7	CA3KN22ND	CAD326E7	CAD506MD
CA2KN31F7	CA3KN22SD	CAD326F7	CAD506P7
CA2KN31G7	CA3KN313BD	CAD326FD	CAD506R7
CA2KN31K7	CA3KN313BD3	CAD326G7	CAD50B7
CA2KN31M7	CA3KN315BD	CAD326GD	CAD50BD
CA2KN31M72	CA3KN317SD	CAD326K7	CAD50BL
CA2KN31P7	CA3KN31BD	CAD326KD	CAD50D7
CA2KN31P72	CA3KN31BD3	CAD326L7	CAD50E7
CA2KN31U7	CA3KN31ED	CAD326M7	CAD50ED
CA2KN31V7	CA3KN31ED3	CAD326MD	CAD50F7
CA2KN40B7	CA3KN31FD	CAD326P7	CAD50FD
CA2KN40B72	CA3KN31FD3	CAD326Q7	CAD50FE7
CA2KN40E7	CA3KN31GD	CAD326R7	CAD50G7
CA2KN40F7	CA3KN31GD3	CAD326SD	CAD50GD
CA2KN40FC72	CA3KN31JD	CAD326SL	CAD50K7
CA2KN40G7	CA3KN31MD	CAD326U7	CAD50L7
CA2KN40M7	CA3KN31MD3	CAD326V7	CAD50M7
CA2KN40N7	CA3KN31ND3	CAD326VD	CAD50MD
CA2KN40P7	CA3KN31UD	CAD32B7	CAD50N7
CA2KN40T7	CA3KN403BD	CAD32BD	CAD50P7
CA2KN40U7	CA3KN403BD3	CAD32BL	CAD50Q7
CA2SK11B7	CA3KN40BD	CAD32CD	CAD50R7
CA2SK11E7	CA3KN40BD3	CAD32D7	CAD50SD
CA2SK11F7	CA3KN40ED	CAD32E7	CAD50U7
CA2SK11G7	CA3KN40ED3	CAD32ED	CAD50UD
CA2SK11M7	CA3KN40EPD	CAD32EL	CAD50Y7
CA2SK11P7	CA3KN40FD	CAD32F7	
CA2SK11T7	CA3KN40FD3	CAD32FC7	
CA2SK11U7	CA3KN40GD	CAD32FD	
CA2SK11UE7	CA3KN40GD3	CAD32FE7	
CA2SK11V7	CA3KN40MD	CAD32FL	
CA2SK20B7	CA3KN40MD3	CAD32G7	
CA2SK20D7	CA3SK11BD	CAD32GD	

This document is current. Click on the product reference to get the most recent availability status (hyperlink to **se.com** product datasheet). If your product variant is no longer available, please consult your distributor or regional sales office.

Technical Data for Designers

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TeSys SK Mini control relays:
> characteristics ..... B7/14 and B7/15
> dimensions B7/16
> schemes B7/17

TeSys K Control relays:
> characteristics ..... B7/18 and B7/19
> dimensions B7/20
> schemes B7/21

Deca Control relays:
> characteristics ..... B7/22 to B7/24
> curves B7/25
> dimensions B7/26
> schemes B7/27

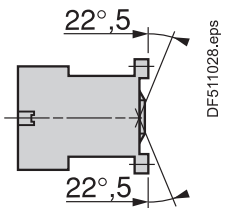
Characteristics

Environment

Rated insulation voltage (Ui)	Conforming to IEC 60947, CSA 22-2 n° 14, UL 508	**V**	690
Conforming to standards			IEC/EN 60947-5-1, UL 60947-5-1, CSA C22.2 n° 60947-5-1, GB/T 14048.5
Approvals			cULus, EAC, UKCA, CB certification
Degree of protection	Conforming to IEC 60529		Protection against direct finger contact IP2X
Ambient air temperature around the device	Storage	**°C**	-50…+70
	Operation	**°C**	-20…+50
Maximum operating altitude	Without derating	**m**	2000

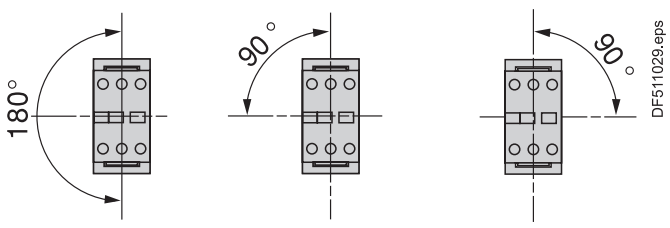
Operating position

Vertical axis



Without derating

Horizontal axis



Without derating

			Min.	**Max.**
Connection by connectors	Solid cable	**mm²**	1 x 1.5 or 2 x 1.5	1 x 6 or 2 x 4
	Flexible cable without cable end	**mm²**	1 x 0.5 or 2 x 0.35	1 x 6 or 2 x 2.5
	Flexible cable with cable end	**mm²**	1 x 0.35 or 2 x 0.35	1 x 6 or 2 x 1.5
Tightening torque	Pozidriv n° 1 head	**N.m**	0.8	
Terminal referencing	Conforming to standards EN 50005 and EN 50011		Up to 4 contacts	

Control circuit characteristics

Control relay			**CA2SK**	**CA2SKE**	**CA3SK**
Rated control circuit voltage (Uc)		**V**	~ 24…400		⎓ 12…72
Control voltage limits (≤ 50 °C)	For operation		0.85…1.1 Uc		0.85…1.1 Uc
	For drop-out		≤ 0.20 Uc		≤ 0.10 Uc
Average consumption at 20 °C and at Uc	Inrush		16 VA	23 VA	2.2 W
	Sealed		4.2 VA	4.9 VA	2.2 W
Heat dissipation		**W**	1.4	1.5	2.2
Operating time at 20 °C and at Uc	Between coil energisation and opening of the N/C contacts	**ms**	8…16		10…18
	Between coil energisation and closing of the N/O contacts	**ms**	7…14		8…12
	Between coil de-energisation and opening of the N/O contacts	**ms**	6…8		4…6
	Between coil de-energisation and closing of the N/C contacts	**ms**	8…10		6…8
Maximum operating rate	In operating cycles per hour		1200		1200
Mechanical durability at Uc in millions of operating cycles	50/60 Hz coil		10		–
	Standard ⎓ coil		–		10

Ref.
Control relays

References:
pages B7/2 and B7/3
Dimensions:
page B7/16
Schemes:
page B7/17

Characteristics

Auxiliary contact characteristics of mini control relays and instantaneous contact blocks

Rated operational voltage (Ue)		**V**	Up to 690
Rated insulation voltage (Ui)	Conforming to IEC 96047	**V**	690
Conventional rated thermal current (Ith)	For ambient temperature ≤ 55 °C	**A**	10
Frequency of the operational current		**Hz**	Up to 400
Short-circuit protection	Conforming to IEC 60947, gl fuse	**A**	10

Operational power of contacts conforming to IEC 60947

a.c. supply, category 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 φ 0.7) = 10 times the power broken (cos φ 0.4).

	V	24	48	110/ 127	220/ 230	380/ 400	440
1 million operating cycles	**VA**	48	96	240	440	800	880
3 million operating cycles	**VA**	17	34	86	158	288	317
10 million operating cycles	**VA**	7	14	36	66	120	132
Occasional making capacity	**VA**	1000	2050	5000	10000	14000	13 000

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.

	V	24	48	110	220	440
1 million operating cycles	**W**	120	80	60	52	51
3 million operating cycles	**W**	55	38	30	28	26
10 million operating cycles	**W**	15	11	9	8	7
Occasional making capacity	**W**	720	600	400	300	230

Ref.
Control relays

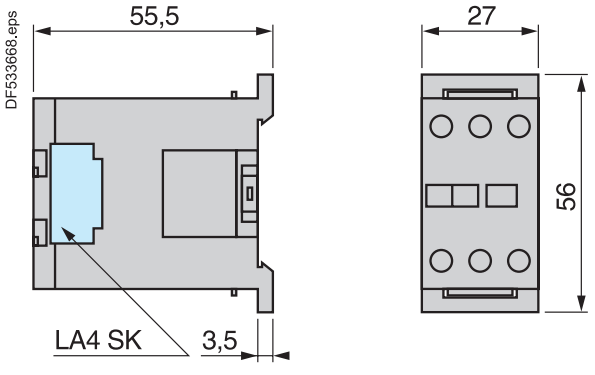
References: page B7/3
Dimensions: page B7/16
Schemes: page B7/17

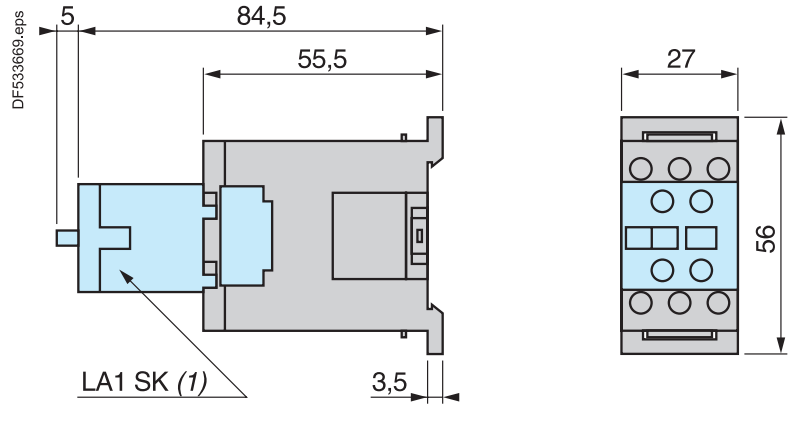
Dimensions and mounting

Dimensions

Mini control relays

CA2SK and CA3SK





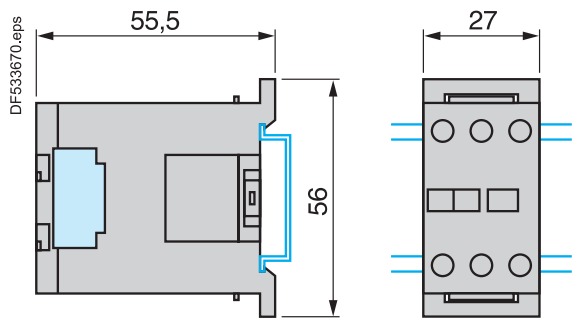
(1) Only on CA2SK20.

Mounting

Mini control relays

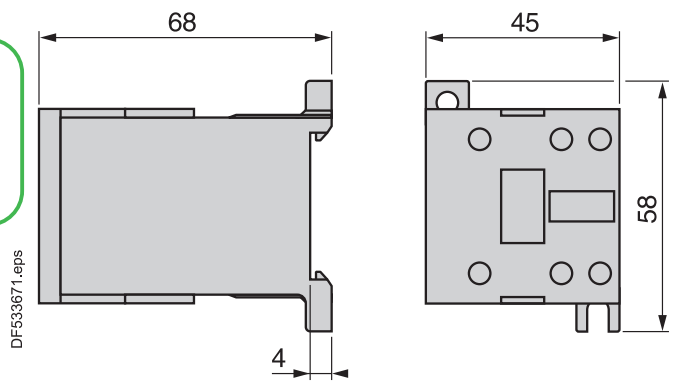
CA2SK and CA3SK

On mounting rail NSYDR200BD or NSYDR200 (⎓ 35 mm)



Dimensions

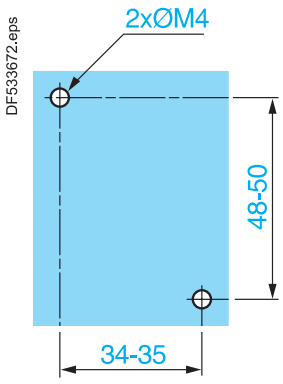
CA2SKE



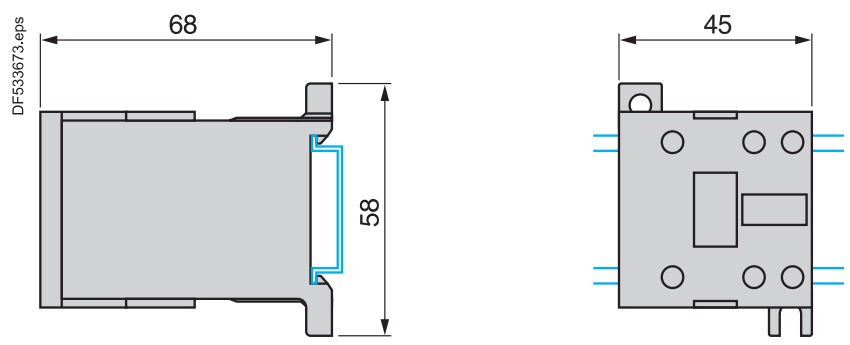
Mounting

CA2SKE

On panel



On mounting rail NSYDR200BD or NSYDR200 (⎓ 35 mm)



References:
pages B7/2 and B7/3

Characteristics:
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Schemes:
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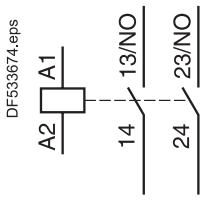
Ref.
Control relays

Schemes

Schemes

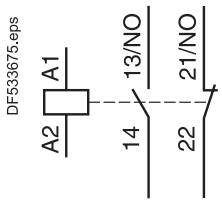
CA2SK20, CA3SK20

2 N/O



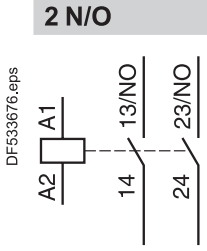
CA2SK11, CA3SK11

1 N/O + 1 N/C



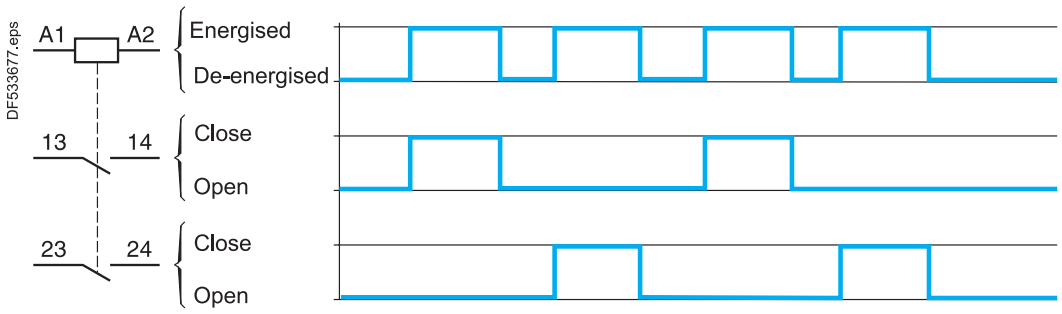
CA2SKE

2 N/O



CA2SKE

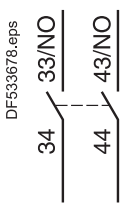
Function diagram



Instantaneous auxiliary contacts

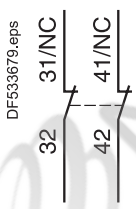
2 N/O

LA1SK20



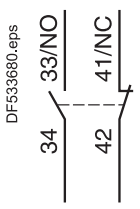
2 N/C

LA1SK02



1 N/O + 1 N/C

LA1SK11

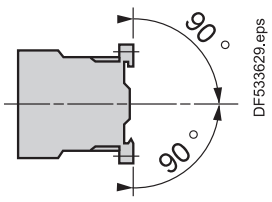
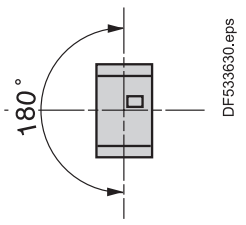
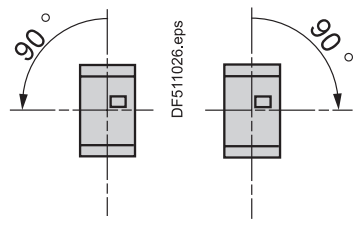


Ref.
Control relays

References:
pages B7/2 and B7/3
Characteristics:
pages B7/14 and B7/15
Dimensions:
page B7/16

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, CCC, EAC, UKCA, CB certification		
Operating positions			**Vertical axis**  Without derating	**Horizontal axis**  Without derating	 Possible positions for **CA2K** only, with derating, please consult your Regional Sales Office.
Connection			**Min.**	**Max.**	**Max. to IEC 60947**
Screw clamp connections	Solid cable	**mm²**	1 x 1.5	2 x 4	1 x 4 + 1 x 2.5
	Flexible cable without cable end	**mm²**	1 x 0.75	2 x 4	2 x 2.5
	Flexible cable with cable end	**mm²**	1 x 0.34	1 x 1.5 + 1 x 2.5	1 x 1.5 + 1 x 2.5
Spring terminals	Solid cable	**mm²**	1 x 0.75	1 x 1.5	2 x 1.5
	Flexible cable without cable end	**mm²**	1 x 0.75	1 x 1.5	2 x 1.5
Faston connectors	Clip	**mm**	2 x 2.8 or 1 x 6.35		
Solder pins for printed circuit board	With locating device between power and control circuits		4 mm x 35 microns		
Tightening torque	Philips head n° 2 and Ø6	**N.m**	0.8		
Terminal referencing	Conforming to standards EN 50005 and EN 50011		Up to 8 contacts		
Degree of protection	Conforming to IEC 60529		Protection against direct finger contact IP2x (devices with screw clamp terminals or pins for printed circuit board)		
Ambient air temperature around the device	Storage	**°C**	-50...+80		
	Operation	**°C**	-25...+50		
Maximum operating altitude	Without derating	**m**	2000		
Vibration resistance	Control relay open		2 gn		
5...300 Hz Conforming to IEC/EN 60068-2-27	Control relay closed		4 gn		
Flame resistance	Conforming to IEC 60695-2-11		850 °C		
Shock resistance (1/2 sine wave, 11 ms) Conforming to IEC/EN 60068-2-27	Control relay open		10 gn		
	Control relay closed		15 gn		

Control circuit characteristics

Control relay type			**CA2K**	**CA3K**	**CA4K**
Rated control circuit voltage (Uc)		**V**	∼ 12...690	⎓ 12...250	⎓ 12...120
Control voltage limits (y 50 °C) single voltage coil	For operation		0.8...1.15 Uc	0.8...1.15 Uc	0.7...1.3 Uc
	For drop-out		⩽ 0.2 Uc	⩽ 0.1 Uc	⩽ 0.1 Uc
Mechanical durability at Uc In millions of operating cycles	50/60 Hz coil		10	–	–
	Standard ⎓ coil		–	20	–
	Wide range, low consumption ⎓ coil		–	–	30
Maximum operating rate	In operating cycles per hour		10 000	10 000	6000
Average consumption at 20 °C and at Uc	Inrush		30 VA	3 W	1.8 W
	Sealed		4.5 VA	3 W	1.8 W
Heat dissipation		**W**	1.3	3	1.8
Operating time at 20 °C and at Uc	Between coil energisation and				
	opening of the N/C contacts	**ms**	5...15	25...35	25...35
	closing of the N/O contacts	**ms**	10...20	30...40	30...40
	Between coil de-energisation and				
	opening of the N/O contacts	**ms**	10...20	10	10...20
	closing of the N/C contacts	**ms**	15...25	15	15...25
Maximum immunity to microbreaks		**ms**	2	2	2

Ref.
Control relays

References: pages B7/4 to B7/7
Dimensions: page B7/20
Schemes: page B7/21

Characteristics

Contact characteristics of control relays and instantaneous contact blocks

Number of auxiliary contacts	On **CA●K**		4
	On **LA1K**		2 or 4 for **CA2K** and **CA3K,** 2 for **CA4K**
Rated operational voltage (Ue)	Up to	**V**	690
Rated insulation voltage (Ui)	Conforming to IEC 60947	**V**	690
	Conforming to UL 60947-5-1, CSA C22.2 n° 60947-5-1	**V**	600
Conventional thermal current (Ith)	For ambient temperature ≤ 50 °C	**A**	10
Frequency of the operational current		**Hz**	Up to 400
Minimum switching capacity	U min	**V**	17
	I min	**mA**	5
Short-circuit protection	Conforming to IEC 60947, gG fuse	**A**	10
Rated making capacity	Conforming to IEC 60947		
	I rms	**A**	110
Short-time rating	Permissible for		
	1 s	**A**	80
	500 ms	**A**	90
	100 ms	**A**	110
Insulation resistance		**MΩ**	> 10
Non-overlap distance	CA●K and LA1K: linked contacts conforming to INRS, BIA and CNA specifications	**mm**	0.5 (see schemes page B7/21)

Operational power of contacts conforming to IEC 60947

a.c. supply, category 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 φ 0.7) = 10 times the power broken (cos φ 0.4)

V	**24**	**48**	**110/ 127**	**220/ 230**	**380/ 400**	**440**	**600/ 690**
1 million operating cycles	**VA**	48	96	240	440	800	880	1200
3 million operating cycles	**VA**	17	34	86	158	288	317	500
10 million operating cycles	**VA**	7	14	36	66	120	132	200
Occasional making capacity	**VA**	1000	2050	5000	10000	14000	13000	9000

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.

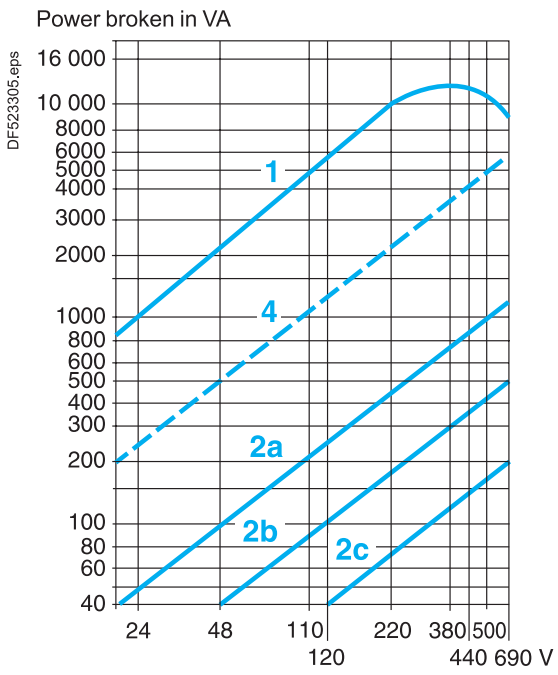
V	**24**	**48**	**110**	**220**	**440**	**600**
1 million operating cycles	**W**	120	80	60	52	51	50
3 million operating cycles	**W**	55	38	30	28	26	25
10 million operating cycles	**W**	15	11	9	8	7	6
Occasional making capacity	**W**	720	600	400	300	230	200

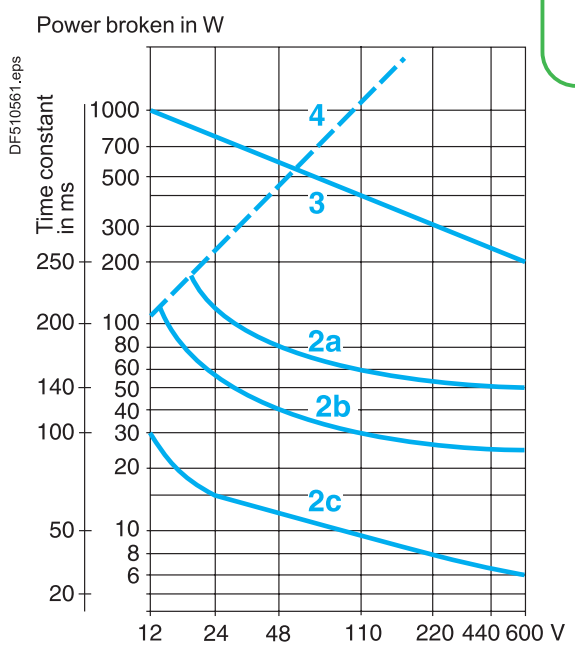
1 Breaking limit of contacts valid for:
■ maximum of 50 operating cycles at 10 s intervals (power broken = making current x cos φ 0.7).

2 Electrical durability of contacts for:
■ 1 million operating cycles (**2a**)
■ 3 million operating cycles (**2b**)
■ 10 million operating cycles (**2c**).

3 Breaking limit of contacts valid for:
■ maximum of 20 operating cycles at 10 s intervals with current passing for 0.5 s per operating cycle.

4 Thermal limit





References:
page B7/6
Dimensions:
page B7/20
Schemes:
page B7/21

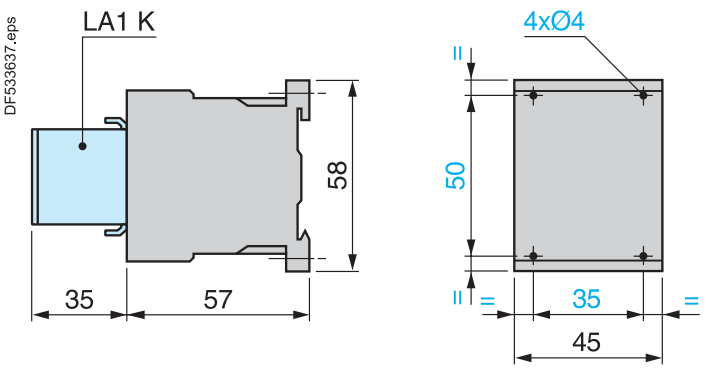
Dimensions and mounting

Control relays

CA2K, CA3K, CA4K

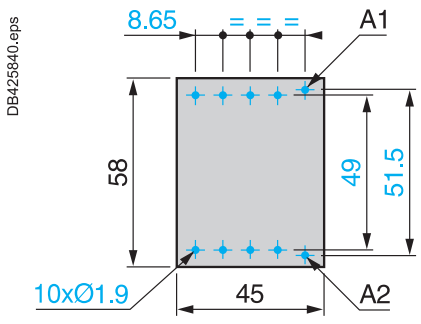
On panel

DF533637.eps



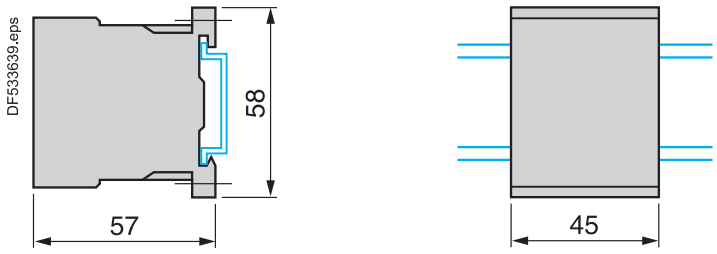
On printed circuit board

DB425840.eps



On mounting rail NSYDR200BD or NSYDR200 (⎓ 35 mm)

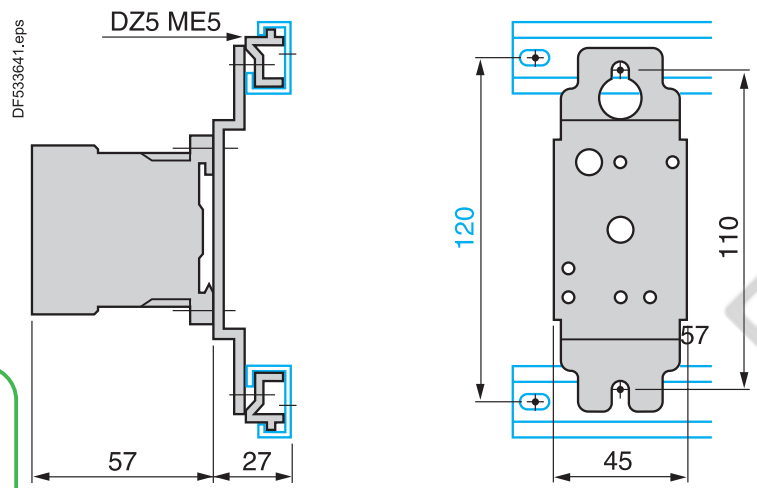
DF533639.eps



DX1AP25

On asymmetrical rail with clip-on mounting plates

DF533641.eps



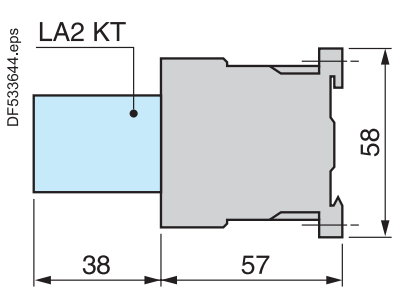
Electronic time delay contact blocks

LA2KT

On control relay

DF533642.eps

DF533644.eps



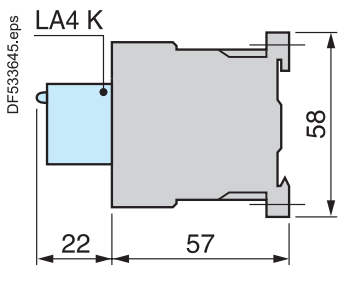
Suppressor modules

LA4K

On control relay

DB439585.eps

DF533645.eps



References:
pages B7/4 to B7/7

Characteristics:
pages B7/18 and B7/19

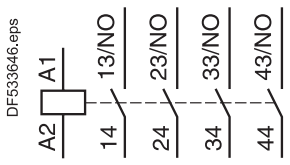
Schemes:
page B7/21

Schemes

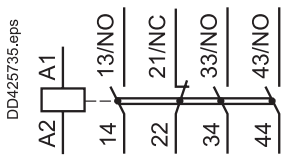
Control relays

CA2K, CA3K, CA4K

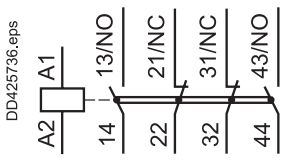
4 N/O



3 N/O + 1 N/C

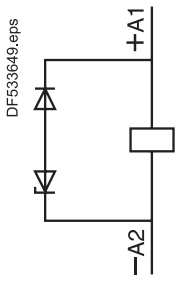


2 N/O + 2 N/C

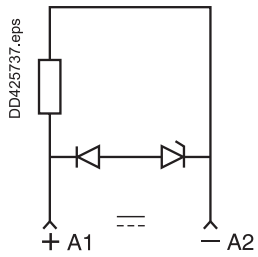


With integral suppression device

CA3K



CA4K

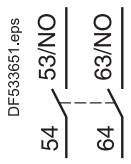


Instantaneous auxiliary contact blocks LA1K

For CA2K, CA3K, CA4K

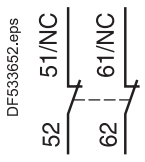
2 N/O

LA1KN20, LA1 KN207



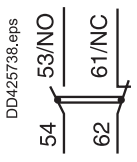
2 N/C

LA1KN02, LA1 KN027



1 N/O + 1 N/C

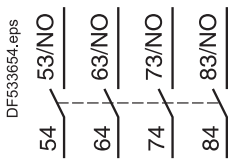
LA1KN11,
LA1 KN117



For CA2K, CA3K

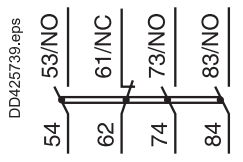
4 N/O

LA1KN40, LA1 KN407



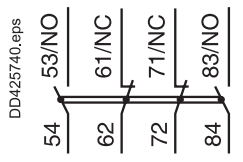
3 N/O + 1 N/C

LA1KN31, LA1 KN317



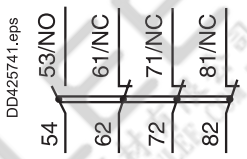
2 N/O + 2 N/C

LA1KN22



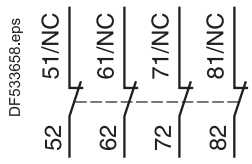
1 N/O + 3 N/C

LA1KN13



4 N/C

LA1KN04

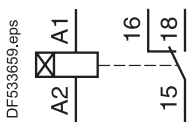


Electronic time delay contact blocks LA2KT

For CA2K, CA3K, CA4K

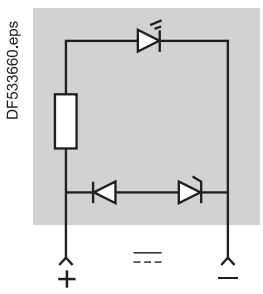
1 C/O

LA2KT2

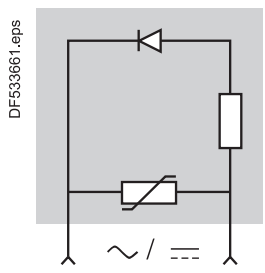


Suppressor modules

LA4KC



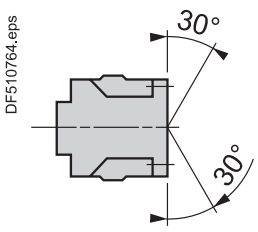
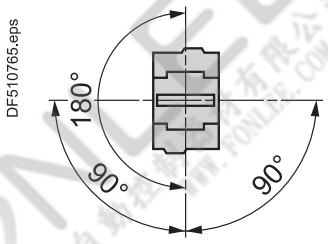
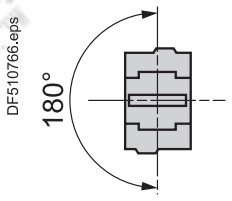
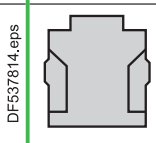
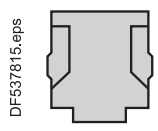
LA4KE



Ref.
Control relays

Characteristics

Environment

Control relay type			CAD ∼	CAD ⎓	CAD ⎓ low consumption
Rated insulation voltage (Ui)	Conforming to IEC 60947-5-1 Overvoltage category III and degree of pollution 3	**V**	690	690	690
	Conforming to UL, CSA	**V**	600	600	600
Rated impulse withstand voltage (Uimp)	Conforming to IEC 60947	**kV**	6	6	6
Separation of electrical circuits	Conforming to IEC 60536		Reinforced insulation up to 400 V		
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, UKCA, CB certification, EU-RO-MR by DNV-GL		
Degree of protection	Conforming to IEC 60529		Front face protected against direct finger contact IP 2X		Protection against direct finger contact IP 2X
Ambient air temperature around the device	Storage	**°C**	-60…+80		
	Operation (1)	**°C**	-40…+60		
	Allowed (1)	**°C**	+60...+70 at Uc to 1,●● x Uc		
Maximum operating altitude	Without derating	**m**	3000	3000	3000
Operating positions	Without derating in the following positions				
	Positions that are not allowed				
Shock resistance (2) half sine wave for 11ms	Control relay open		10 gn	10 gn	10 gn
	Control relay closed		15 gn	15 gn	15 gn
Vibration resistance (2) 5…300 Hz	Control relay open		2 gn	2 gn	2 gn
	Control relay closed		4 gn	4 gn	4 gn
Screw clamp connections	Flexible conductor without cable end — 1 conductor	**mm²**	1…4	1…4	1…4
	Flexible conductor without cable end — 2 conductors	**mm²**	1…4	1…4	1…4
	Flexible conductor with cable end — 1 conductor	**mm²**	1…4	1…4	1…4
	Flexible conductor with cable end — 2 conductors	**mm²**	1…2.5	1…2.5	1…2.5
	Solid conductor without cable end — 1 conductor	**mm²**	1…4	1…4	1…4
	Solid conductor without cable end — 2 conductors	**mm²**	1…4	1…4	1…4
	Tightening torque	**N.m**	1.7	1.7	1.7
Spring terminal connections	1 or 2 flexible or rigid conductors without cable end	**mm²**	1…2.5	1…2.5	1…2.5

(1) As per IEC60947-1, operating time and drop out voltage given and tested for -5...+40 °C.
(2) In the least favourable direction, without change of contact state, with coil supplied at Uc.

References: pages B7/9 to B7/11
Curves: page B7/25
Dimensions: page B7/26
Schemes: page B7/27

Characteristics

Control circuit characteristics

Control relay type			CAD ∼	CAD ⎓	CAD low consumption
Rated control circuit voltage (Uc)		**V**	12…690	12…440	⎓ 5…72
Control voltage limits					
Operation	With coil 50/60 Hz		0.8…1.1 Uc at 50 Hz	–	–
			0.85…1.1 Uc at 60 Hz	–	–
	With standard coil, wide range		–	0.7…1.25 Uc	0.7…1.25 Uc
Drop-out			0.3…0.6 Uc	0.1…0.25 Uc	0.1…0.25 Uc
Average consumption at 20 °C and at Uc	∼ 50/60 Hz (at 50 Hz)	**VA**	Inrush: 70	–	–
			sealed: 8	–	–
	With standard coil	**W**	–	Inrush or sealed: 5.4	Inrush or sealed: 2.4
Operating time (at rated control circuit voltage and at 20 °C)	Between coil energisation and - opening of the N/C contacts	**ms**	4…19	55 ± 15 %	67 ± 15 %
	- closing of the N/O contacts	**ms**	12…22	63 ± 15 %	77 ± 15 %
	Between coil de-energisation and - opening of the N/O contacts	**ms**	4…12	20 ± 20 %	27 ± 20 %
	- closing of the N/C contacts	**ms**	6…17	25 ± 20 %	35 ± 20 %
Short supply failure	Maximum duration without affecting hold-in of the device	**ms**	2	2	2
Maximum operating rate	In operating cycles per second		3	3	3
Mechanical durability In millions of operating cycles	With coil 50/60 Hz (at 50 Hz)		30	–	–
	With standard coil ⎓ wide range		–	30	30
Time constant L/R		**ms**	–	28	40

Ref.
Control relays

References: pages B7/9 to B7/11
Curves: page B7/25
Dimensions: page B7/26
Schemes: page B7/27

Characteristics

Characteristics of instantaneous contacts incorporated in the control relay

Number of contacts				5
Rated operational voltage (Ue)	Up to		**V**	690
Rated insulation voltage (Ui)	Conforming to IEC 60947-5-1		**V**	690
	Conforming to UL, CSA		**V**	600
Conventional thermal current (Ith)	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: 10 A
Rated making capacity	Conforming to IEC 60947-5-1	I rms		∼ 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)
Tightening torque	Philips head n° 2 and Ø6		**N.m**	1.7
Non-overlap distance				Linked contacts in association with auxiliary contacts LADN
Mechanically linked contacts	Conforming to IEC 60947-5-1			The 3 N/O contacts and the 2 N/C contacts of CAD N32 are linked mechanically by one mobile contact carrier.

Ref.
Control relays

References: pages B7/9 to B7/11
Curves: page B7/25
Dimensions: page B7/26
Schemes: page B7/27

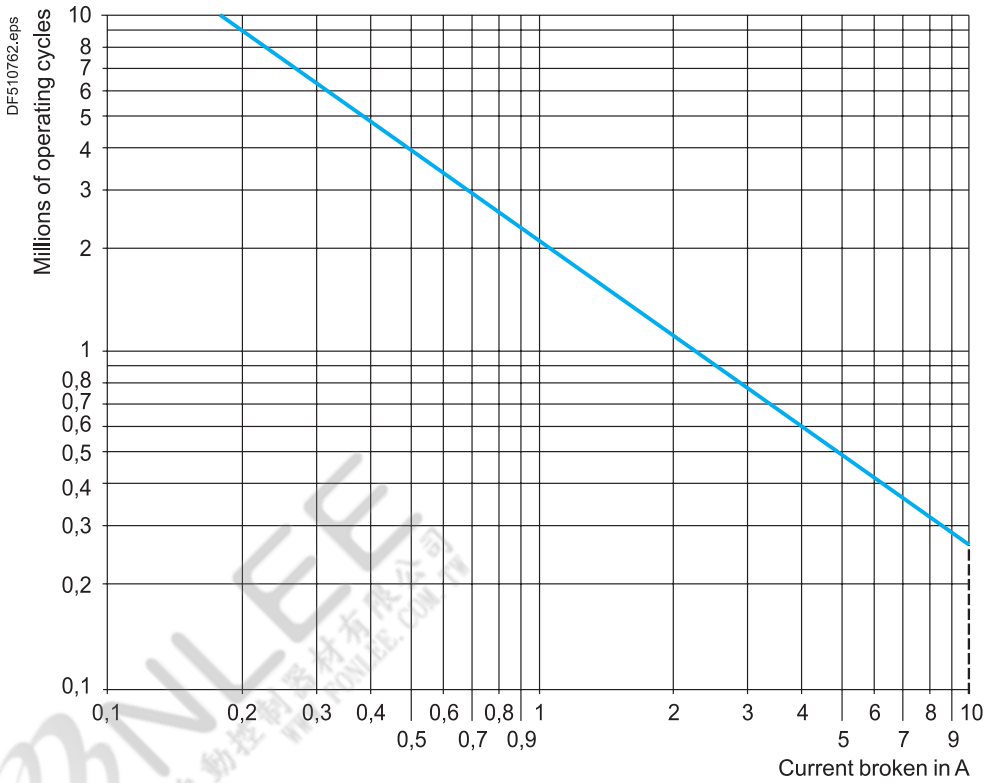
Curves

Rated 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 φ 0.7) = 10 times the power broken (cos φ 0.4).

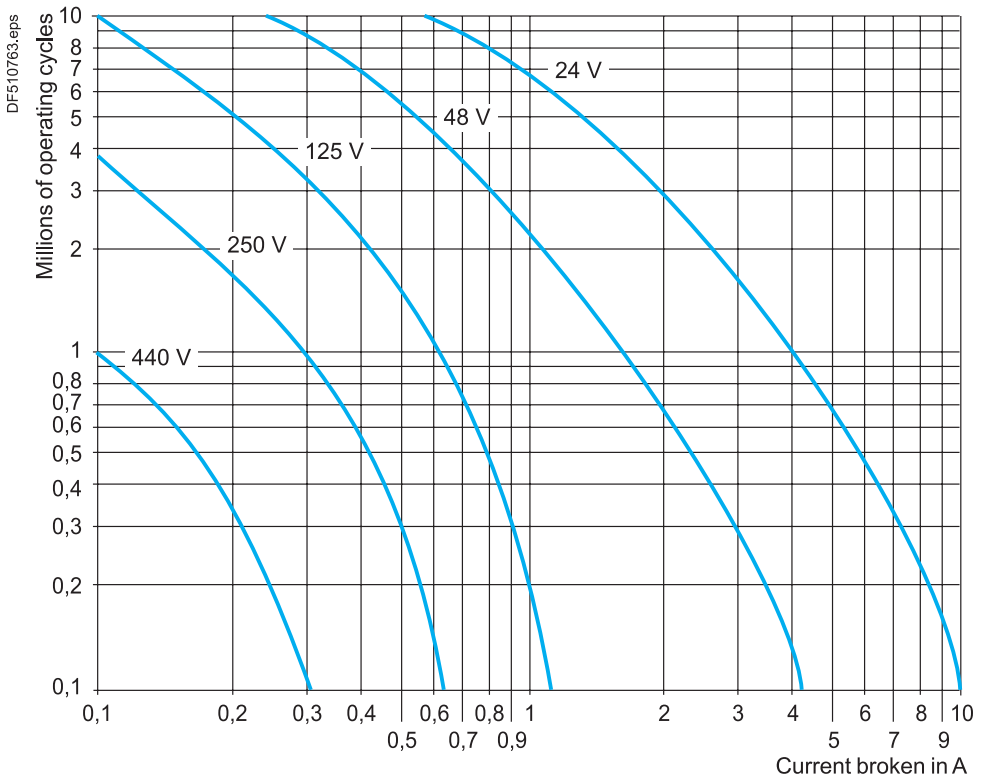
	V	24	48	115	230	400	440	600
1 million operating cycles	**VA**	60	120	280	560	960	1050	1440
3 million operating cycles	**VA**	16	32	80	160	280	300	420
10 million operating cycles	**VA**	4	8	20	40	70	80	100



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 power.

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	–	–



References:
pages B7/9 to B7/11

Characteristics:
pages B7/22 to B7/24

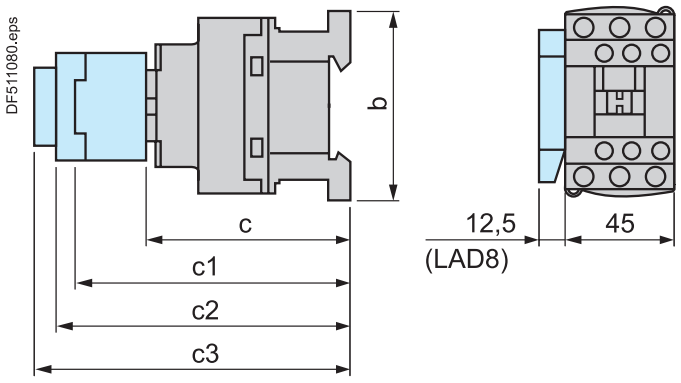
Dimensions:
page B7/26

Schemes:
page B7/27

Dimensions and mounting

Dimensions

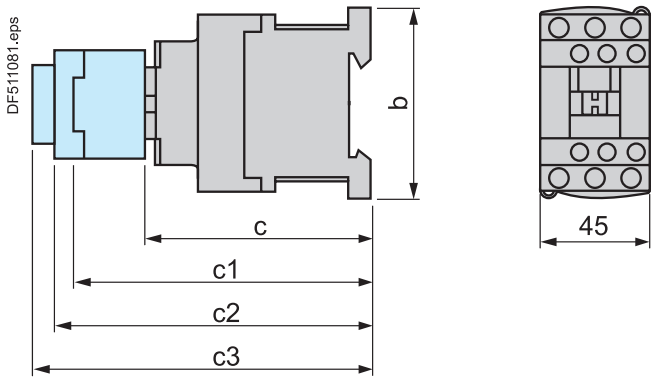
CAD ∼



CAD		32	323
		50	503
b		77	99
c	without cover or add-on blocks	84	84
	with cover, without add-on blocks	86	86
c1	with LADN or C (2 or 4 contacts)	117	117
c2	with LAD6K10	129	129
c3	with LADT, R, S	137	137
	with LADT, R, S and sealing cover	141	141

Operating cycles	V	24	48	125	250	440
1 million	W	120	90	75	68	61
3 million	W	70	50	38	33	28
10 million	W	25	18	14	12	10

CAD ⎓ or LC (low consumption)

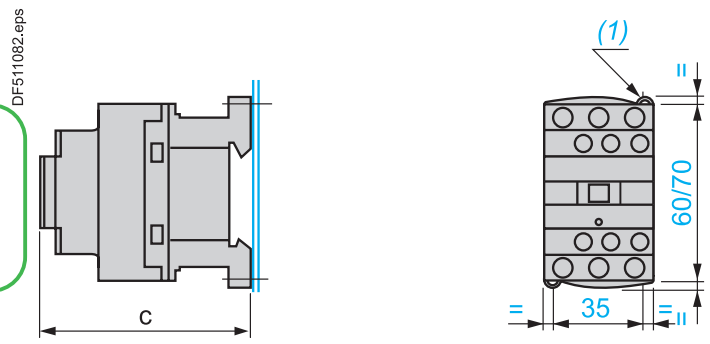


CAD		32	323
		50	503
b		77	99
c	without cover or add-on blocks	93	93
	with cover, without add-on blocks	95	95
c1	with LADN or C (2 or 4 contacts)	126	126
c2	with LAD6K10	138	138
c3	with LADT, R, S	146	146
	with LADT, R, S and sealing cover	150	150

Mounting

CAD

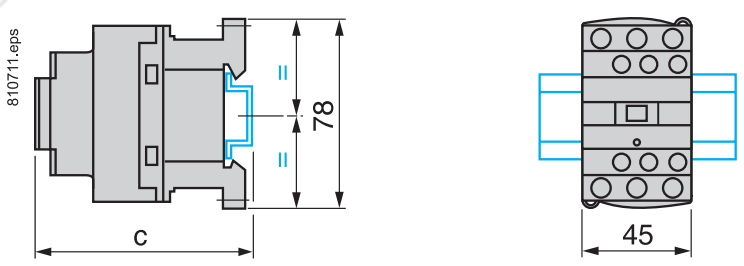
Panel mounted



		CAD ∼	CAD ⎓ or LC
c	with cover	86	95

(1) 2 elongated holes 4.5 x 9.

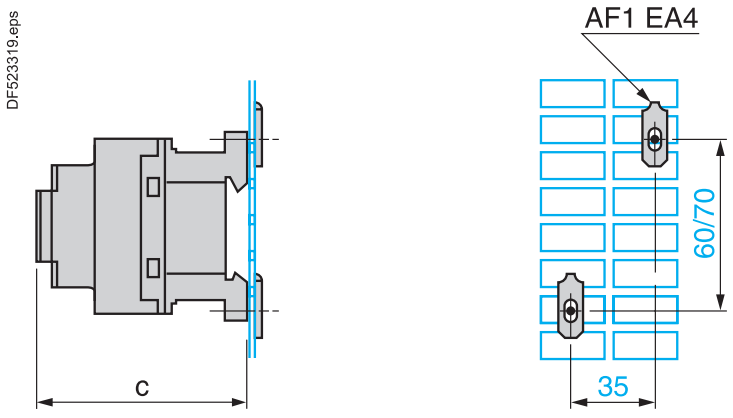
Mounted on rail NSYDR200BD or NSYDR200



		CAD ∼	CAD ⎓ or LC
c	(NSYDR200BD) (2)	88	97
c	(NSYDR200BD) (2)	96	105

(2) With cover.

Mounted on plate AM1P



		CAD ∼	CAD ⎓ or LC
c	with cover	86	95

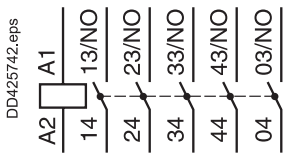
References: pages B7/9 to B7/11
Illustration: page B7/8
Characteristics: pages B7/22 to B7/24
Curves: page B7/25
Schemes: page B7/27

TeSys Control
Deca Control relays
Schemes

Instantaneous auxiliary contacts

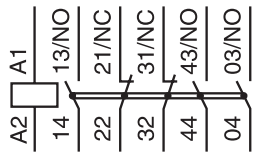
5 N/O

CAD50



3 N/O + 2 N/C

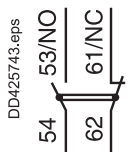
CAD32



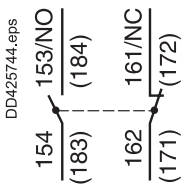
Instantaneous auxiliary contact blocks

1 N/O + 1 N/C

LADN11

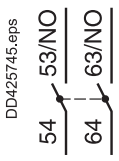


LAD8N11 (1)

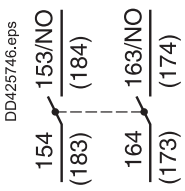


2 N/O

LADN20

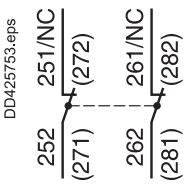


LAD8N20 (1)

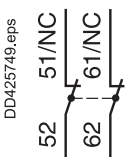


2 N/C

LAD8N02



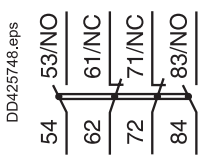
LADN02



(1) The figures in brackets are for the device mounted on the RH side of the control relay.

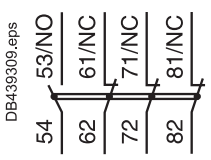
2 N/O + 2F N/C

LADN22



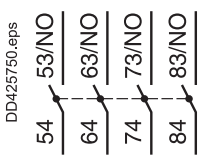
1 N/O + 3 N/C

LADN13



4 N/O

LADN40

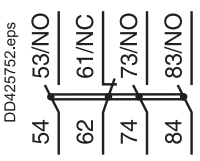


4 N/C

LADN04

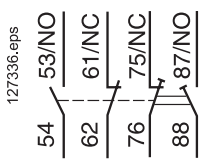
3 N/O + 1 N/C

LADN31



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

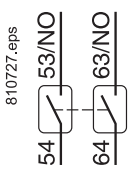
LADC22



With dust and damp protected contacts

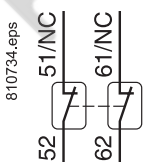
2 N/O protected

LA1DX20



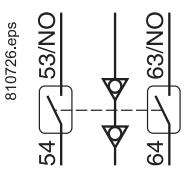
2 N/C protected

LA1DX02



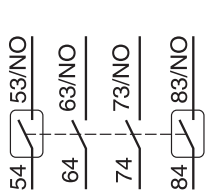
2 N/O protected (2) **with 2 cable screen terminals**

LA1DY20



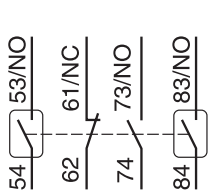
2 N/O protected + 2 N/O non protected

LA1DZ40



2 N/O protected + 1 N/O + 1 N/C non protected

LA1DZ31

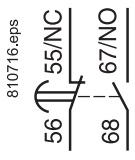


(2) Product fitted with 4 earth screen continuity terminals.

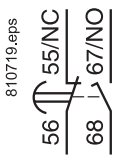
Time delay auxiliary contact blocks

On-delay 1 N/O + 1 N/C

LADT

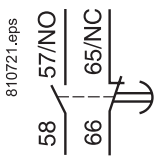


LADS



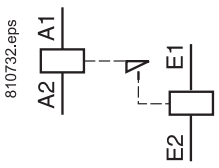
Off-delay 1 N/O + 1 N/C

LADR



Mechanical latch blocks

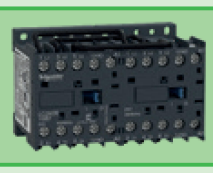
LAD6K10



References: pages B7/9 to B7/11
Illustration: page B7/8
Characteristics: pages B7/22 to B7/24
Curves: page B7/25
Dimensions: page B7/26

TeSys Control
SK, K, SKGC, Deca, Modular Contactors

TeSys SK, K contactors

Type of product	Range		Pages
Contactors 27 and 45 mm width for use in modular panels TeSys SK	From 12 to 20 A		B8/2
Contactors TeSys K	From 6 to 16 A		B8/4
Reversing pre-assembled contactors TeSys K	From 6 to 16 A		B8/8
Auxiliary contact blocks - accessories			B8/13

TeSys S207 series contactors
for railways applications.
Click on image to download.

TeSys S335 series contactors
for electrodomestic application.
Click on image to download.

TeSys Deca contactors

AC-3, AC-1, UL CSA applications- TeSys Deca green contactors (with AC/DC compatible coil)	From 9 to 80 A		B8/16
AC-3 applications - 3-pole, 4-pole TeSys Deca contactors	From 9 to 150 A		B8/22
AC-1 applications - 3-pole, 4-pole TeSys Deca contactors	From 25 to 200 A		B8/23
UL CSA application - 3-pole TeSys Deca contactors	From 25 to 200 A		B8/28
Reversing, changeover pre-assembled TeSys Deca contactors	From 9 to 150 A		B8/29
Reversing contactors TeSys Deca green contactors (with AC/DC compatible coil)	From 9 to 80 A		B8/33
Contactors for switching capacitor banks	From 12.5 to 60 kVAR		B8/34
Auxiliary contact blocks – accessories – spare coils for TeSys Deca			B8/36

Modular contactors

Modular contactors	From 16 to 100 A		B8/51
Modular Dual tariff contactors	16, 25, 40 or 100 A		B8/52
Modular Impulse relay	Up to 16 A		B8/53
Auxiliary contact blocks - accessories			B8/54

Technical Data for Designers B8/61

Product references

PB111641.eps

LC1SK0600●●

- Width of contactor 27 mm.
- Mounting on 35 mm ⎓ rail.
- Screw clamp terminals.

LC1SK contactors can be fitted with an add-on block or auxilliary contact block, LP1SK and LC1SKGC contactors can't.

Mini-contactors for motor in category AC-3

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3 (1)			Rated operational voltage in AC-3 up to 400 V	Number of poles	Instantaneous auxiliary contacts		Basic reference. Complete with code indicating control circuit voltage (2) (3)
220 V 230 V	380 V 415 V	660 V 690 V					
kW	kW	kW	A				
1.1	2.2	2.2	6	2	–	–	**LC1SK0600●●**

Mini-contactors for motor in category AC-1

Non inductive loads maximum current (θ ≤ 55 °C) utilisation category AC-1	Control circuit supply	Number of poles	Instantaneous auxiliary contacts		Basic reference. Complete with code indicating control circuit voltage (2) (3)
A					
12	a.c.	2	–	–	**LC1SK0600●●**
	d.c.	2	–	–	**LP1SK0600●●**

*(1) For use in AC-3 category and 3-phase circuits, an **LA1SK●●** auxiliary contact block should be ordered separately for mounting on the contactor.*

(2) Standard control circuit voltages (variable delivery times, please consult your Regional Sales Office):

Mini-contactors LC1SK									
Volts ∼ 50/60 Hz	24	48	110	120	220	230	240	380	400
Code	B7	E7	F7	G7	M7	P7	U7	Q7	V7

Mini-contactors LP1SK					
Volts ⎓	12	24	36	48	72
Code	JD	BD	CD	ED	SD

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

PB111639.eps

LA1SK01

Add-on power pole (for 3-phase circuits) with aux. contact

For use on contactor LC1SK0600●● with 1 NO power pole (6 A AC-3, 10 A AC-1) and with 1 NC aux. contact (Ith 10 A). Ue 690 V AC 50/60 Hz for both contacts	Number of poles	Instantaneous auxiliary contacts		Reference
Clip-on front mounting	1	–	1	**LA1SK01**

Instantaneous auxiliary contact blocks

For use on contactor LC1SK0600●● Aux. contacts: Ith 10 A. Ue: 690 V AC 50/60 Hz	Maximum number of blocks per contactor	Composition		Reference
Clip-on front mounting	1	2	–	**LA1SK20**
		–	2	**LA1SK02**
		1	1	**LA1SK11**

PB111640.eps

LA4SK●1●

Coil suppressor modules

Clip-on fixing and electrical connection on right-hand side, without use of tools

For use on contactors	Type	For voltages	Sold in lots of	Unit reference
LC1SK0600●● LP1SK0600●●, LC1SKGC	Varistor (1)	∼ and ⎓ 24 V…48 V	10	**LA4SKE1E**
		∼ and ⎓ 110 V…250 V	10	**LA4SKE1U**
	Diode (2)	⎓ 24 V…250 V	10	**LA4SKC1U**

(1) 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).

(2) No overvoltage or oscillating frequency. Slight increase in drop-out time (1.1 to 1.5 times the normal time).

Characteristics: pages B8/62 to B8/65
Dimensions, schemes: page B8/66
Click **HERE** for access to online contactor selector

Product references

PB111643.eps

LC1SKGC200

Mini-contactors 25 and 47 mm pitch for use in modular panels.
- Mounting on 35 mm ⎓ rail or fixing by four Ø4 screws, except for LC1SKGC200.
- Connection by connectors.
- Mini-contactor fitted with transparent, sealable protective cover to prevent front face access.

Mini-contactors, width 27 mm

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3			Rated operational current in AC-3 up to 400 V	Non inductive loads category AC-1 maximum current θ ≤ 50 °C	No. of poles			Basic reference, to be completed by adding the voltage code (1) (2)
220 V 230 V	380 V 415 V	660 V 690 V						
kW	kW	kW	A	A				
–	–	–	5	20	2	–	–	**LC1SKGC200●●**

PB111644.eps

LC1SKGC300

Mini-contactors, width 45 mm

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3			Rated operational current in AC-3 up to 400 V	Non inductive loads category AC-1 maximum current θ ≤ 50 °C	No. of poles			Basic reference, to be completed by adding the voltage code (1) (2)
220 V 230 V	380 V 415 V	660 V 690 V						
kW	kW	kW	A	A				
1.1	4	4	9	20	3	1	–	**LC1SKGC310●●**
					3	–	1	**LC1SKGC301●●**

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

Volts ∼ 50/60 Hz	24	48	110	120	220	230	240	380	400
Code	B7	E7	F7	G7	M7	P7	U7	Q7	V7

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

Contactors

Characteristics: pages B8/67 to B8/69
Curves: page B8/70
Dimensions, schemes: page B8/71
Click **HERE** for access to online contactor selector

Product references

PB123779.tif

LC1K0910●●

PB123781.eps

LC1K09103●●

PB123783.eps

LC1K09107●●

PB123782.eps

LC1K09105●●

PB123786.eps

LC7K0910●●

Mounting on 35 mm ⎓ rail or Ø4 screw fixing.
Screws in the open “ready-to-tighten” position.
Add-on auxiliary contact blocks and accessories, see pages B8/13 to B8/15.

3-pole contactors - Motor control 6 to 16 A in categories AC-3 AC-4 - a.c. coil

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3			Rated operational current in category AC-3 440 V up to	Instantaneous auxiliary contacts		Basic reference, to be completed by adding the voltage code (1) (2)
220 V 230 V	380 V 415 V	440/500 V 660/690 V				
kW	kW	kW	A			
Screw clamp connections						
1.5	2.2	3	**6**	1	-	**LC1K0610●●**
				-	1	**LC1K0601●●**
2.2	4	4	**9**	1	-	**LC1K0910●●**
				-	1	**LC1K0901●●**
3	5.5	4 (> 440)	**12**	1	-	**LC1K1210●●**
		5.5 (440)		-	1	**LC1K1201●●**
4	7.5	4 (> 440)	**16**	1	-	**LC1K1610●●**
		5.5 (440)		-	1	**LC1K1601●●**
Spring terminal connections (3)						
1.5	2.2	3	**6**	1	-	**LC1K06103●●**
				-	1	**LC1K06101●●**
2.2	4	4	**9**	1	-	**LC1K06103●●**
				-	1	**LC1K06101●●**
3	5.5	4 (> 440)	**12**	1	-	**LC1K06103●●**
		5.5 (440)		-	1	**LC1K06101●●**
4	7.5	4 (> 440)	**16**	1	-	**LC1K06103●●**
		5.5 (440)		-	1	**LC1K06101●●**
Faston connectors, 1 x 6.35 or 2 x 2.8						
1.5	2.2	3	**6**	1	-	**LC1K06107●●**
				-	1	**LC1K06101●●**
2.2	4	4	**9**	1	-	**LC1K06107●●**
				-	1	**LC1K06101●●**
3	5.5	4 (> 440)	**12**	1	-	**LC1K06107●●**
		5.5 (440)		-	1	**LC1K06101●●**
4	7.5	4 (> 440)	**16**	1	-	**LC1K06107●●**
		5.5 (440)		-	1	**LC1K06101●●**
Solder pins for printed circuit boards						
1.5	2.2	3	**6**	1	-	**LC1K06105●●**
				-	1	**LC1K06101●●**
2.2	4	4	**9**	1	-	**LC1K06105●●**
				-	1	**LC1K06101●●**
3	5.5	4 (> 440)	**12**	1	-	**LC1K06105●●**
		5.5 (440)		-	1	**LC1K06101●●**
4	7.5	4 (> 440)	**16**	1	-	**LC1K06105●●**
		5.5 (440)		-	1	**LC1K06101●●**

3-pole silent contactors

Recommended for use in areas sensitive to noise, high interference mains supplies, etc.
Coil with rectifier incorporated, suppressor fitted as standard.

Screw clamp connections						
1.5	2.2	3	**6**	1	-	**LC7K0610●●**
				-	1	**LC7K0601●●**
2.2	4	4	**9**	1	-	**LC7K0910●●**
				-	1	**LC7K0901●●**
3	5.5	4 (> 440)	**12**	1	-	**LC7K1210●●**
		5.5 (440)		-	1	**LC7K1201●●**
Faston connectors, 1 x 6.35 or 2 x 2.8						
1.5	2.2	3	**6**	1	-	**LC7K06107●●**
				-	1	**LC7K06101●●**
2.2	4	4	**9**	1	-	**LC7K06107●●**
				-	1	**LC7K06101●●**
3	5.5	4 (> 440)	**12**	1	-	**LC7K06107●●**
		5.5 (440)		-	1	**LC7K06101●●**
Solder pins for printed circuit boards						
1.5	2.2	3	**6**	1	-	**LC7K06105●●**
				-	1	**LC7K06101●●**
2.2	4	4	**9**	1	-	**LC7K06105●●**
				-	1	**LC7K06101●●**
3	5.5	4 (> 440)	**12**	1	-	**LC7K06105●●**
		5.5 (440)		-	1	**LC7K06101●●**

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

Coil voltage codes - a.c. (4)

Contactors LC1K (0.8…1.15 Uc) *(0.85…1.1 Uc)*

Volts	**12**	**20**	**24** (1)	**36**	**42**	**48**	**110**	**115**	**120**	**127**	**200/208**		***220/230***	***230***	***230/240***
50 Hz (5)			B5		D5	E5								*P5*	
50/60 Hz	J7	Z7	B7	C7	D7	E7	F7	FE7	G7	FC7	L7		*M7*	*P7*	*U7*
Volts	**256**	**277**	***380/400***		**400**	***400/415***		**440**	**480**	**500**	**575**	**600**	**660/690**		
50/60 Hz	W7	UE7	*Q7*	–	V7	*N7*		R7	T7	S7	SC7	X7	*Y7*	–	–

Up to and including 240 V, coil with integral suppression device available: add **2** to the code required. Example: **J72**.

Contactors LC7K (0.85…1.1 Uc)

Volts	**24**	**42**	**48**	**110**	**115**	**220**	**230/240**
50/60 Hz	B7	D7	E7	F7	FE7	M7	U7

*(1) For mains supplies with a high level of interference (voltage surge > 800 V), use a suppressor module **LA4KE1FC** (50…129 V) or **LA4KE1UG** (130…250 V), see page B8/14.*
(2) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.
*(3) For **LC●K●●●●3 / LP●K●●●●3** with spring terminal, Ith max = 10 A.*
(4) (0.8…1.15 Uc) for single voltage coil; (0.85…1.1 Uc) for dual voltage coil, exemple 200/208 V AC.
(5) Only available for ‘screw clamp terminals’ versions.

Characteristics: pages B8/72 to B8/74
Dimensions: page B8/76
Schemes: page B8/77
Click **HERE** for access to online contactor selector

Product references

PB123787.eps

LP1K0910●●

PB123789.eps

LP1K09103●●

PB123790.eps

LP1K09105●●

PB123792.eps

LP4K0910●●

Contactor selection according to utilisation category, see pages A5/34 to A5/39 and A5/42 to A5/45.
Mounting on 35 mm ⎓ rail or Ø4 screw fixing.
Screws in the open "ready-to-tighten" position.
Add-on auxiliary contact blocks and accessories, see pages B8/13 to B8/15.

3-pole contactors - Motor control 6 to 12 A in categories AC-3 AC-4 - d.c. coil

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3			Rated operational current in category AC-3 440 V up to	Instantaneous auxiliary contacts		Basic reference, to be completed by adding the voltage code (1) (2)
220 V 230 V	380 V 415 V	440/500 V 660/690 V				
kW	kW	kW	A			
Screw clamp connections						
1.5	2.2	3	**6**	1	–	**LP1K0610●●**
				–	1	**LP1K0601●●**
2.2	4	4	**9**	1	–	**LP1K0910●●**
				–	1	**LP1K0901●●**
3	5.5	4 (> 440)	**12**	1	–	**LP1K1210●●**
		5.5 (440)		–	1	**LP1K1201●●**
Spring terminal connections (3)						
In the references selected above, insert a figure **3** before the voltage code. Example: **LP1K0610●●** becomes **LP1K06103●●**.						
Faston connectors, 1 x 6.35 or 2 x 2.8						
In the references selected above, insert a figure **7** before the voltage code. Example: **LP1K0610●●** becomes **LP1K06107●●**.						
Solder pins for printed circuit boards						
In the references selected above, insert a figure **5** before the voltage code. Example: **LP1K0610●●** becomes **LP1K06105●●**.						

3-pole low consumption contactors

Compatible with programmable controller outputs.
Wide range coil (0.7…1.30 Uc), suppressor fitted as standard, consumption 1.8 W.

Screw clamp connections						
1.5	2.2	3	**6**	1	–	**LP4K0610●●**
				–	1	**LP4K0601●●**
2.2	4	4	**9**	1	–	**LP4K0910●●**
				–	1	**LP4K0901●●**
3	5.5	4 (> 440)	**12**	1	–	**LP4K1210●●**
		5.5 (440)		–	1	**LP4K1201●●**
Spring terminal connections						
In the references selected above, insert a figure **3** before the voltage code. Example: **LP4K0610●●** becomes **LP4K06103●●**.						
Faston connectors, 1 x 6.35 or 2 x 2.8						
In the references selected above, insert a figure **7** before the voltage code. Example: **LP4K0610●●** becomes **LP4K06107●●**.						
Solder pins for printed circuit boards						
In the references selected above, insert a figure **5** before the voltage code. Example: **LP4K0610●●** becomes **LP4K06105●●**.						

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

d.c. supply (contactors LP1K: 0.8...1.15 Uc)

Volts	**12**	**20**	**24** (1)	**36**	**48**	**60**	**72**	**100**	**110**	**125**	**155**	**174**	**200**	**220**	**230**	**240**	**250**
Code	JD	ZD	BD	CD	ED	ND	SD	KD	FD	GD	PD	QD	LD	MD	MPD	MUD	UD

Coil with integral suppression device available: add **3** to the code required. Example: **JD3**

Low consumption (contactors LP4K: 0.7...1.3 Uc)

Volts	**12**	**20**	**24**	**48**	**72**	**110**	**120**
Code	JW3	ZW3	BW3	EW3	SW3	FW3	GW3

Coil with integral suppression device fitted as standard, by bi-directional peak limiting diode.

*(1) For **LP1K** only, when connecting an electronic sensor or timer in series with the contactor coil, select a 20 V coil (∼ control circuit voltage code Z7, ⎓ control circuit voltage code ZD) so as to compensate for the incurred voltage drop.*
(2) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.
*(3) For **LC●K●●●●3 / LP●K●●●●3** with spring terminal), Ith max = 10 A.*

Characteristics: pages B8/72 to B8/74
Dimensions: page B8/76
Schemes: page B8/77
Click HERE for access to online contactor selector

Product references


PB123780.eps

LC1K09004●●

Contactor selection according to utilisation category, see pages A5/40 and A5/41.
Mounting on 35 mm ⎓ rail or Ø4 screw fixing.
Screws in the open “ready-to-tighten” position.
Add-on auxiliary contact blocks and accessories, see pages B8/13 to B8/15.

3 or 4-pole contactors - Load control up to 20 A in category AC-1 - a.c. coil (1)

Non-inductive loads Category AC-1 Maximum current at θ ≤ 50 °C	Number of poles		Instantaneous auxiliary contacts			Basic reference, to be completed by adding the voltage code (2) (3)
A						
Screw clamp connections						
20	3	–	1	–		**LC1K0910●●**
					or	**LC1K1210●●**
	3	–	–	1		**LC1K0901●●**
					or	**LC1K1201●●**
	4	–	–	–		**LC1K09004●●**
					or	**LC1K12004●●**
	2	2	–	–		**LC1K09008●●**


PB123781.eps

LC1K09103●●

Spring terminal connections (4)

In the references selected above, insert a figure **3** before the voltage code.
Example: **LC1K0910●●** becomes **LC1K09103●●.**

Faston connectors, 1 x 6.35 or 2 x 2.8

In the references selected above, insert a figure **7** before the voltage code.
Example: **LC1K0910●●** becomes **LC1K09107●●.**

Solder pins for printed circuit boards

In the references selected above, insert a figure **5** before the voltage code.
Example: **LC1K0910●●** becomes **LC1K09105●●.**

3 or 4-pole silent contactors (1)

Recommended for use in areas sensitive to noise, high interference mains supplies, etc.
Coil with rectifier incorporated, suppressor fitted as standard.


PB123783.eps

LC1K09107●●

Screw clamp connections

20	3	–	1	–		**LC7K0910●●**
					or	**LC7K1210●●**
	3	–	–	1		**LC7K0901●●**
					or	**LC7K1201●●**
	4	–	–	–		**LC7K09004●●**
					or	**LC7K12004●●**
	2	2	–	–		**LC7K09008●●**

Faston connectors, 1 x 6.35 or 2 x 2.8

In the references selected above, insert a figure **7** before the voltage code.
Example: **LC7K0910●●** becomes **LC7K09107●●.**

Solder pins for printed circuit boards

In the references selected above, insert a figure **5** before the voltage code.
Example: **LC7K0910●●** becomes **LC7K09105●●.**

(1) Coordination tables between 9 and 12 A ratings according to number of operating cycles, see AC-1 curve on page A5/40.


PB123786.eps

LC7K0910●●

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

Coil voltage codes - a.c. (5)

Contactors LC1K (0.8…1.15 Uc) *(0.85…1.1 Uc)*

Volts	**12**	**20**	**24** (2)	**36**	**42**	**48**	**110**	**115**	**120**	**127**	**200/208**		***220/230***	**230**	***230/240***
50 Hz (6)			B5		D5	E5								P5	
50/60 Hz	J7	Z7	B7	C7	D7	E7	F7	FE7	G7	FC7	L7		*M7*	P7	*U7*
Volts	**256**	**277**	***380/400***		**400**	***400/415***		**440**	**480**	**500**	**575**	**600**	***660/690***		
50/60 Hz	W7	UE7	*Q7*		V7	*N7*		R7	T7	S7	SC7	X7	*Y7*		

Up to and including 240 V, coil with integral suppression device available: add **2** to the code required. Example: **J72.**

Contactors LC7K (0.8…1.1 Uc)

Volts	**24**	**42**	**48**	**110**	**115**	**220**	**230/240**
50/60 Hz	B7	D7	E7	F7	FE7	M7	U7

*(2) For mains supplies with a high level of interference (voltage surge > 800 V), use a suppressor module **LA4KE1FC** (50…129 V) or **LA4KE1UG** (130…250 V), see page B8/14.*
(3) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.
*(4) For **LC●K●●●●3 / LP●K●●●●3** with spring terminal, Ith max = 10 A.*
(5) (0.8…1.15 Uc) for single voltage coil; (0.85…1.1 Uc) for dual voltage coil, exemple 200/208 V AC.
(6) Only available for ‘screw clamp terminals’ versions.

Characteristics: pages B8/72 to B8/74
Dimensions: page B8/76
Schemes: page B8/77
Click **HERE** for access to online contactor selector

Product references

PB123788.eps

LP1K09004●●

Contactor selection according to utilisation category, see pages A5/40 and A5/41.
Mounting on 35 mm ⎓ rail or Ø4 screw fixing.
Screws in the open “ready-to-tighten” position.
Add-on auxiliary contact blocks and accessories, see pages B8/13 to B8/15.

3 and 4-pole contactors - Load control - 20 A in category AC-1 - d.c. coil (1)

Non-inductive loads Category AC-1 Maximum current at θ ≤ 50 °C	Number of poles		Instantaneous auxiliary contacts		Basic reference, to be completed by adding the voltage code (2) (3)
A					
Screw clamp connections					
20	3	–	1	–	**LP1K0910●●**
				or	**LP1K1210●●**
	3	–	–	1	**LP1K0901●●**
				or	**LP1K1201●●**
	4	–	–	–	**LP1K09004●●**
				or	**LP1K12004●●**
	2	2	–	–	**LP1K09008●●**

PB123789.eps

LP1K09103●●

Spring terminal connections (4)

In the references selected above, insert a figure **3** before the voltage code.
Example: **LP1K0910●●** becomes **LP1K09103●●**.

Faston connectors, 1 x 6.35 or 2 x 2.8

In the references selected above, insert a figure **7** before the voltage code.
Example: **LP1K0910●●** becomes **LP1K09107●●**.

Solder pins for printed circuit boards

In the references selected above, insert a figure **5** before the voltage code.
Example: **LP1K0910●●** becomes **LP1K09105●●**.

PB123790.eps

LP1K09105●●

3 or 4-pole 20 A / AC-1 - d.c. low consumption coil (1)

Compatible with programmable controller outputs.
Wide range coil (0.7…1.30 Uc), suppressor fitted as standard, consumption 1.8 W.

Screw clamp connections

20	3	–	1	–	**LP4K0910●●●**
				or	**LP4K1210●●●**
	3	–	–	1	**LP4K0901●●●**
				or	**LP4K1201●●●**
	4	–	–	–	**LP4K09004●●●**
				or	**LP4K12004●●●**
	2	2	–	–	**LP4K09008●●●**

PB123792.eps

LP4K0910●●●

Spring terminal connections

In the references selected above, insert a figure **3** before the voltage code.
Example: **LP4K0910●●** becomes **LP4K09103●●**.

Faston connectors, 1 x 6.35 or 2 x 2.8

In the references selected above, insert a figure **7** before the voltage code.
Example: **LP4K0910●●** becomes **LP4K09107●●**.

Solder pins for printed circuit boards

In the references selected above, insert a figure **5** before the voltage code.
Example: **LP4K0910●●** becomes **LP4K09105●●**.

(1) Coordination tables between 9 and 12 A ratings according to number of operating cycles, see AC-1 curve on page A5/40.

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

Coil voltage codes - d.c. (contactors LP1K: 0.8...1.15 Uc)

Volts ⎓	12	20	24 (2)	36	48	60	72	100	110	125	155	174	200	220	230	240	250
Code	JD	ZD	BD	CD	ED	ND	SD	KD	FD	GD	PD	QD	LD	MD	MPD	MUD	UD

Coil with integral suppression device available: add **3** to the code required. Example: **JD3.**

Coil voltage codes - low consumption d.c. (contactors LP4K: 0.7...1.3 Uc)

Volts ⎓	12	20	24	48	72	110	120
Code	JW3	ZW3	BW3	EW3	SW3	FW3	GW3

Coil with integral suppression device fitted as standard, by bi-directional peak limiting diode.

*(2) For **LP1K** only, when connecting an electronic sensor or timer in series with the contactor coil, select a 20 V coil (∼ control circuit voltage code Z7, ⎓ control circuit voltage code ZD) so as to compensate for the incurred voltage drop.*

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

*(4) For **LC●K●●●●3 / LP●K●●●●3** with spring terminal, Ith max = 10 A.*

Characteristics: pages B8/72 to B8/74
Dimensions: page B8/76
Schemes: page B8/77
Click HERE for access to online contactor selector

Product references

PB123784.tif

LC2K0910●●

PB123785.eps

LC2K09105●●

Reversing contactor selection according to utilisation category, see pages A5/34 to A5/39 and A5/42 to A5/45.
Integral mechanical interlock.
It is essential to link the contacts of the electrical interlock.
Pre-wired power circuit connections as standard on screw clamp versions.
Mounting on 35 mm ⎓ rail or Ø4 screw fixing. Screws in the open “ready-to-tighten” position.
Add-on auxiliary contact blocks and accessories, see pages B8/13 to B8/15.

3-pole reversing contactors - Motor control 6 to 16 A in categories AC-3 AC-4 - a.c. coil

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3			Rated operational current in category AC-3 440 V up to	Instan-taneous auxiliary contacts per contactor		Basic reference, to be completed by adding the voltage code (1) (2)
220 V 230 V	380 V 415 V	440/500 V 660/690 V				
kW	kW	kW	A			
Screw clamp connections						
1.5	2.2	3	**6**	1	–	**LC2K0610●●**
				–	1	**LC2K0601●●**
2.2	4	4	**9**	1	–	**LC2K0910●●**
				–	1	**LC2K0901●●**
3	5.5	4 (> 440)	**12**	1	–	**LC2K1210●●**
		5.5 (440)		–	1	**LC2K1201●●**
4	7.5	4 (> 440)	**16**	1	–	**LC2K1610●●**
		5.5 (440)		–	1	**LC2K1601●●**

Spring terminal connections (3)

For 6 to 12 A ratings only, in the references selected above, insert a figure **3** before the voltage code.
Example: **LC2K0610●●** becomes **LC2K06103●●**.

Faston connectors, 1 x 6.35 or 2 x 2.8

For 6 to 16 A ratings, in the references selected above, insert a figure **7** before the voltage code.
Example: **LC2K0610●●** becomes **LC2K06107●●**.

Solder pins for printed circuit boards

For 6 to 16 A ratings, in the references selected above, insert a figure **5** before the voltage code.
Example: **LC2K0610●●** becomes **LC2K06105●●**.

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

Coil voltage codes - a.c. (4)

Reversing contactors LC2K (0.8…1.15 Uc) *(0.85…1.1 Uc)*

Volts	**12**	**20**	**24** (1)	**36**	**42**	**48**	**110**	**115**	**120**	**127**	**200/208**	***220/230***	**230**	***230/240***
50/60 Hz	J7	Z7	B7	C7	D7	E7	F7	FE7	G7	FC7	L7	*M7*	P7	U7
Volts	**256**	**277**	***380/400***		**400**	***400/415***		**440**	**480**	**500**	**575**	**600**	***660/690***	
50/60 Hz	W7	UE7	*Q7*		V7	*N7*		R7	T7	S7	SC7	X7	*Y7*	

Up to and including 240 V, coil with integral suppression device available: add **2** to the code required. Example: **J72.**

*(1) For mains supplies with a high level of interference (voltage surge > 800 V), use a suppressor module **LA4KE1FC** (50…129 V) or **LA4KE1UG** (130…250 V), see page B8/14.*
(2) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.
*(3) For **LC●K●●●●3 / LP●K●●●●3** with spring terminal, Ith max = 10 A.*
(4) (0.8…1.15 Uc) for single voltage coil; (0.85…1.1 Uc) for dual voltage coil, exemple 200/208 V AC.

Contactors

Characteristics: pages B8/72 to B8/74
Dimensions: page B8/78
Schemes: page B8/79
Click **HERE** for access to online contactor selector

Product references

Reversing contactor selection according to utilisation category, see pages A5/34 to A5/39 and A5/42 to A5/45.
Integral mechanical interlock.
It is essential to link the contacts of the electrical interlock.
Pre-wired power circuit connections as standard on screw clamp versions.
Mounting on 35 mm ⎓ rail or Ø4 screw fixing.
Screws in the open “ready-to-tighten” position.
Add-on auxiliary contact blocks and accessories, see pages B8/13 to B8/15.

3-pole reversing contactors - Motor control 6 to 12 A in categories AC-3 AC-4 - d.c. coil

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3			Rated operational current in category AC-3 440 V up to	Instantaneous auxiliary contacts per contactor		Basic reference, to be completed by adding the voltage code (1) (2)
220 V 230 V	380 V 415 V	440/500 V 660/690 V				
kW	kW	kW	A			
Screw clamp connections						
1.5	2.2	3	6	1	–	**LP2K0610●●**
				–	1	**LP2K0601●●**
2.2	4	4	9	1	–	**LP2K0910●●**
				–	1	**LP2K0901●●**
3	5.5	4 (> 440)	12	1	–	**LP2K1210●●**
		5.5 (440)		–	1	**LP2K1201●●**
Spring terminal connections (3)						
In the references selected above, insert a figure **3** before the voltage code. Example: **LP2K0610●●** becomes **LP2K06103●●**.						
Faston connectors, 1 x 6.35 or 2 x 2.8						
In the references selected above, insert a figure **7** before the voltage code. Example: **LC2K0610●●** becomes **LC2K06107●●**.						
Solder pins for printed circuit boards						
For 6 to 16 A ratings, in the references selected above, insert a figure **5** before the voltage code. Example: **LC2K0610●●** becomes **LC2K06105●●**.						

3-pole low consumption reversing contactors

Compatible with programmable controller outputs.
Wide range coil (0.7…1.30 Uc), suppressor fitted as standard, consumption 1.8 W.

Screw clamp connections						
1.5	2.2	3	6	1	–	**LP5K0610●●**
				–	1	**LP5K0601●●**
2.2	4	4	9	1	–	**LP5K0910●●**
				–	1	**LP5K0901●●**
3	5.5	4 (> 440)	12	1	–	**LP5K1210●●**
		5.5 (440)		–	1	**LP5K1201●●**
Spring terminal connections						
In the references selected above, insert a figure **3** before the voltage code. Example: **LP5K0610●●** becomes **LP5K06103●●**.						
Faston connectors, 1 x 6.35 or 2 x 2.8						
In the references selected above, insert a figure **7** before the voltage code. Example: **LP5K0610●●** becomes **LP5K06107●●**.						
Solder pins for printed circuit boards						
In the references selected above, insert a figure **5** before the voltage code. Example: **LP5K0610●●** becomes **LP5K06105●●**.						

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

Coil voltage codes - d.c.

Reversing contactors LP2K (0.8…1.15 Uc)

Volts	**12**	**20**	**24 (1)**	**36**	**48**	**60**	**72**	**100**	**110**	**125**	**155**	**174**	**200**	**220**	**230**	**240**	**250**
Code	JD	ZD	BD	CD	ED	ND	SD	KD	FD	GD	PD	QD	LD	MD	MPD	MUD	UD

Coil with integral suppression device available: add **3** to the code required. Example: **JD3**.

Coil voltage codes - low consumption d.c.

Reversing contactors LP5K (0.7…1.3 Uc)

Volts	**12**	**20**	**24**	**48**	**72**	**110**	**120**
Code	JW3	ZW3	BW3	EW3	SW3	FW3	GW3

Coil with integral suppression device fitted as standard, by bi-directional peak limiting diode.

*(1) For **LP2K** only, when connecting an electronic sensor or timer in series with the contactor coil, select a 20 V coil (∼ control circuit voltage code Z7, ⎓ control circuit voltage code ZD) so as to compensate for the incurred voltage drop.*

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

*(3) For **LC●K●●●●3 / LP●K●●●●3** with spring terminal, Ith max = 10 A.*

Characteristics: pages B8/72 to B8/75
Dimensions: page B8/78
Schemes: page B8/79
Click HERE for access to online contactor selector

PB123784.tif

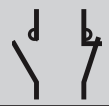
LC2K0910●●

PB123785.eps

LC2K09105●●

Warning: reversing contactors LC2K0910●● and LC2K0901●● are pre-wired for reverse motor operation as standard.
Reversing contactor selection according to utilisation category, see pages A5/40 and A5/41.
Integral mechanical interlock.
It is essential to link the contacts of the electrical interlock.
Mounting on 35 mm ⎓ rail or Ø4 screw fixing.
Screws in the open “ready-to-tighten” position.
Add-on auxiliary contact blocks and accessories, see pages B8/13 to B8/15.

3 or 4-pole reversing contactors - Load control - 20 A in category AC-1 - a.c. coil (1)

Non-inductive loads Category AC-1 Maximum current at θ ≤ 50 °C	Number of poles	Instantaneous auxiliary contacts per contactor			Basic reference, to be completed by adding the voltage code (2) (3)
					
A					
Screw clamp connections					
20	3	–	1	–	**LC2K0910●●**
				or	**LC2K1210●●**
	3	–	–	1	**LC2K0901●●**
				or	**LC2K1201●●**
	4	–	–	–	**LC2K09004●●**
				or	**LC2K12004●●**

Spring terminal connections (4)

In the references selected above, insert a figure **3** before the voltage code.
Example: **LC2K0910●●** becomes **LC2K09103●●.**

Faston connectors, 1 x 6.35 or 2 x 2.8

In the references selected above, insert a figure **7** before the voltage code.
Example: **LC2K0910●●** becomes **LC2K09107●●.**

Solder pins for printed circuit boards

In the references selected above, insert a figure **5** before the voltage code.
Example: **LC2K0910●●** becomes **LC2K09105●●.**

(1) Coordination tables between 9 and 12 A ratings according to number of operating cycles, see AC-1 curve on page A5/40.

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

Coil voltage codes - a.c. (5)

Reversing contactors LC2K (0.8…1.15 Uc) *(0.85…1.1 Uc)*

Volts	**12**	**20**	**24** (2)	**36**	**42**	**48**	**110**	**115**	**120**	**127**	**200/208**		***220/230***	***230***	***230/240***
50/60 Hz	J7	Z7	B7	C7	D7	E7	F7	FE7	G7	FC7	L7		*M7*	*P7*	*U7*
Volts	**256**	**277**	***380/400***		**400**	***400/415***		**440**	**480**	**500**	**575**	**600**	***660/690***		
50/60 Hz	W7	UE7	Q7		V7	*N7*		R7	T7	S7	SC7	X7	*Y7*		

Up to and including 240 V, coil with integral suppression device available: add **2** to the code required. Example: **J72**.

*(2) For mains supplies with a high level of interference (voltage surge > 800 V), use a suppressor module **LA4KE1FC** (50…129 V) or **LA4KE1UG** (130…250 V), see page B8/14.*
(3) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.
*(4) For **LC●K●●●●3 / LP●K●●●●3** with spring terminal, Ith max = 10 A.*
(5) (0.8…1.15 Uc) for single voltage coil; (0.85…1.1 Uc) for dual voltage coil, exemple 200/208 V AC.

Contactors

Characteristics: pages B8/72 to B8/75
Dimensions: page B8/78
Schemes: page B8/79
Click **HERE** for access to online contactor selector

Warning: reversing contactors LP2K0910●● and LP2K0901●● are pre-wired for reverse motor operation as standard.
Reversing contactor selection according to utilisation category, see pages A5/40 and A5/41.
Integral mechanical interlock.
It is essential to link the contacts of the electrical interlock.
Mounting on 35 mm ⎽⎺⎽ rail or Ø4 screw fixing.
Screws in the open “ready-to-tighten” position.
Add-on auxiliary contact blocks and accessories, see pages B8/13 to B8/15.

3 or 4-pole reversing contactors - Load control - 20 A in category AC-1 - d.c. coil (1)

Non-inductive loads Category AC-1 Maximum current at θ ≤ 50 °C	Number of poles		Instantaneous auxiliary contacts per contactor			Basic reference, to be completed by adding the voltage code (2) (3)
A						
Screw clamp connections						
20	3	–	1	–		**LP2K0910●●**
					or	**LP2K1210●●**
	3	–	–	1		**LP2K0901●●**
					or	**LP2K1201●●**
	4	–	–	–		**LP2K09004●●**
					or	**LP2K12004●●**

Spring terminal connections (4)
In the references selected above, insert a figure **3** before the voltage code.
Example: **LP2K0910●●** becomes **LP2K09103●●**.

Faston connectors, 1 x 6.35 or 2 x 2.8
In the references selected above, insert a figure **7** before the voltage code.
Example: **LP2K0910●●** becomes **LP2K09107●●**.

Solder pins for printed circuit boards
In the references selected above, insert a figure **5** before the voltage code.
Example: **LP2K0910●●** becomes **LP2K09105●●**.

3 or 4-pole reversing contactors - 20 A / AC-1 - d.c. low consumption coil (1)

Compatible with programmable controller outputs.
Wide range coil (0.7…1.30 Uc), suppressor fitted as standard, consumption 1.8 W.

Screw clamp connections						
20	3	–	1	–		**LP5K0910●●●**
					or	**LP5K1210●●●**
	3	–	–	1		**LP5K0901●●●**
					or	**LP5K1201●●●**
	4	–	–	–		**LP5K09004●●●**
					or	**LP5K12004●●●**

Spring terminal connections
In the references selected above, insert a figure **3** before the voltage code.
Example: **LP5K0910●●** becomes **LP5K09103●●**.

Faston connectors, 1 x 6.35 or 2 x 2.8
In the references selected above, insert a figure **7** before the voltage code.
Example: **LP5K0910●●** becomes **LP5K09107●●**.

Solder pins for printed circuit boards
In the references selected above, insert a figure **5** before the voltage code.
Example: **LP5K0910●●** becomes **LP5K09105●●**.

(1) Coordination tables between 9 and 12 A ratings according to number of operating cycles, see AC-1 curve on page A5/40.

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

Coil voltage codes - d.c. (reversing contactors LP2K: 0.8…1.15 Uc)

Volts ⎓	12	20	24 (2)	36	48	60	72	100	110	125	155	174	200	220	230	240	250
Code	JD	ZD	BD	CD	ED	ND	SD	KD	FD	GD	PD	QD	LD	MD	MPD	MUD	UD

Coil with integral suppression device available: add **3** to the code required. Example: **JD3**.

Coil voltage codes - low consumption d.c. (reversing contactors LP5K: 0.7…1.3 Uc)

Volts ⎓	12	20	24	48	72	110	120
Code	JW3	ZW3	BW3	EW3	SW3	FW3	GW3

Coil with integral suppression device fitted as standard, by bi-directional peak limiting diode.

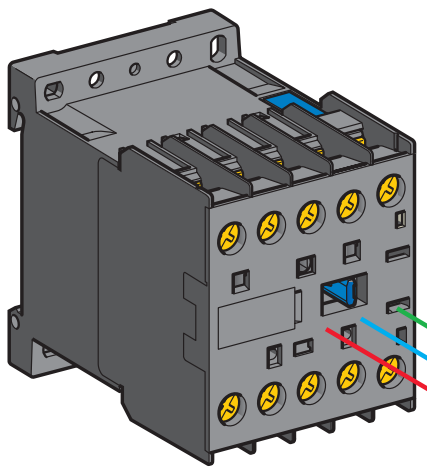
*(2) For **LP2K** only, when connecting an electronic sensor or timer in series with the contactor coil, select a 20 V coil (∼ control circuit voltage code Z7, ⎓ control circuit voltage code ZD) so as to compensate for the incurred voltage drop.*

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

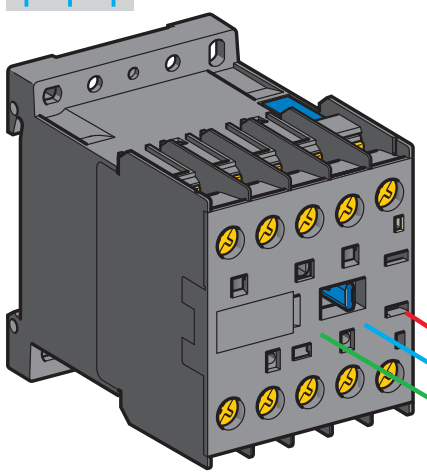
*(4) For **LC●K●●●●3 / LP●K●●●●3** with spring terminal, Ith max = 10 A.*

Characteristics: pages B8/72 to B8/75
Dimensions: page B8/78
Schemes: page B8/79
Click HERE for access to online contactor selector

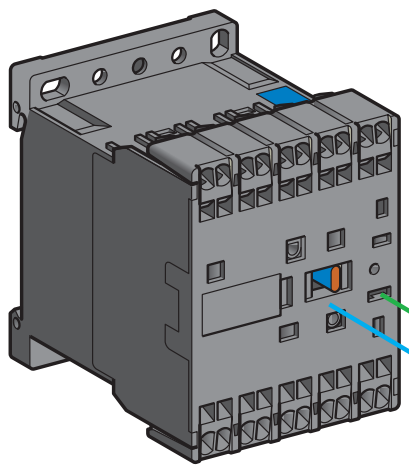
DB439406.eps



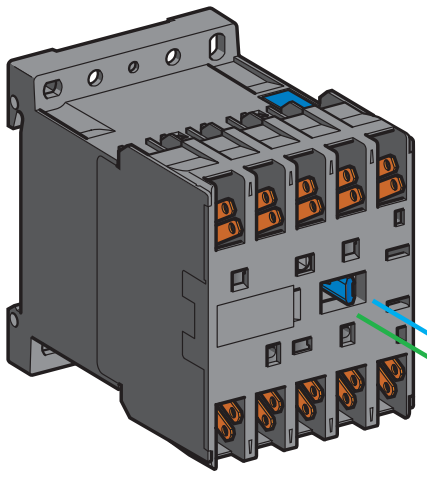
LC1, LC7, LP1 K



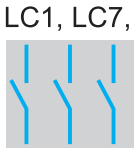
LC1, LC7, LP1 K

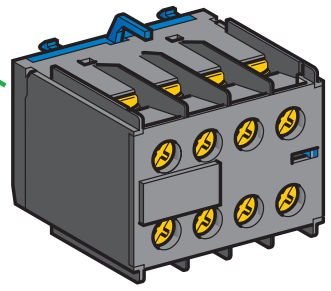


LC1, LP1 K

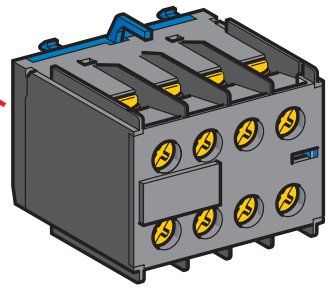


LC1, LC7, LP1 K

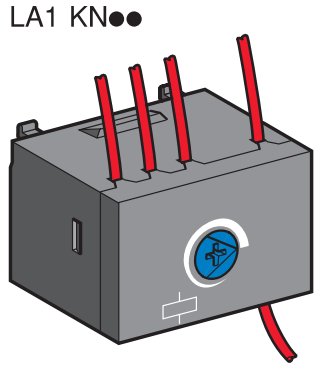




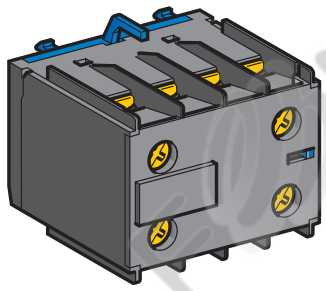
LA1 KN●●M



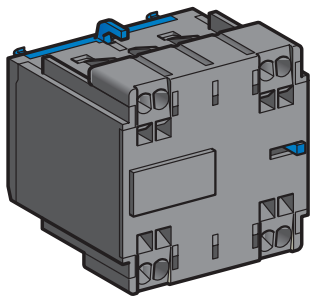
LA1 KN●●



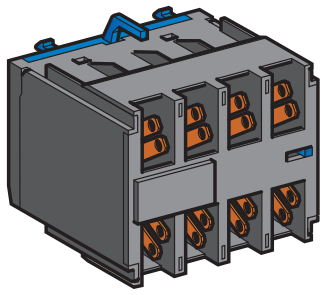
LA2 KT2●



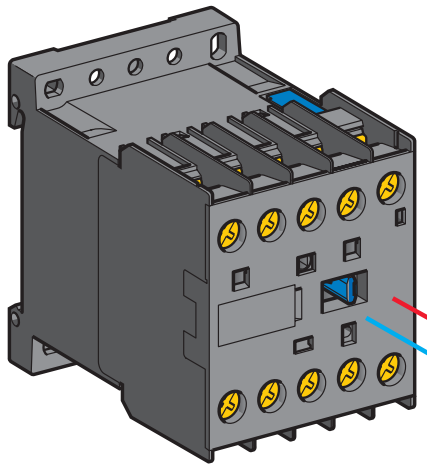
LA1 KN●●P



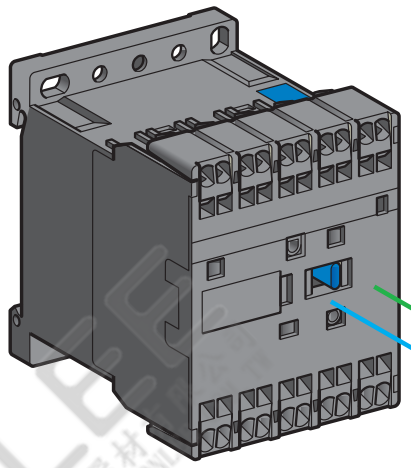
LA1 KN●●3



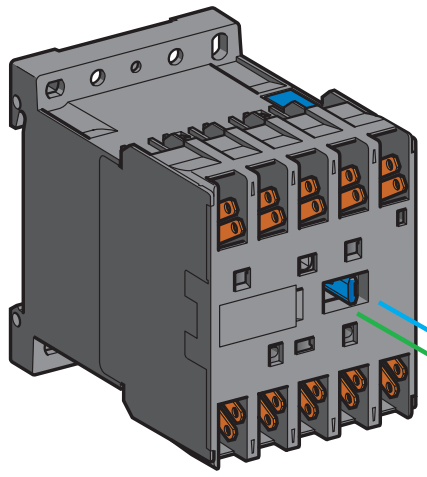
LA1 KN●●7



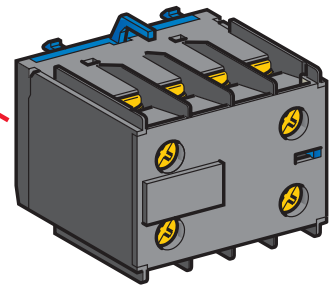
LP4



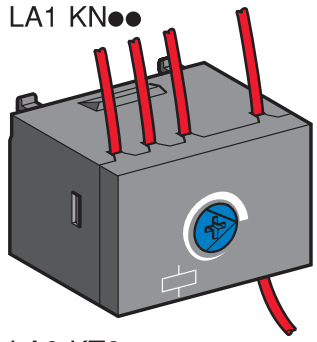
LP4



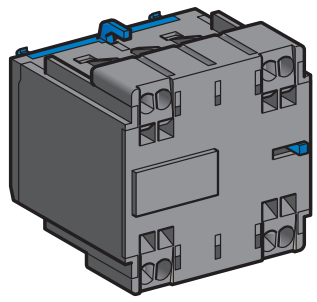
LP4



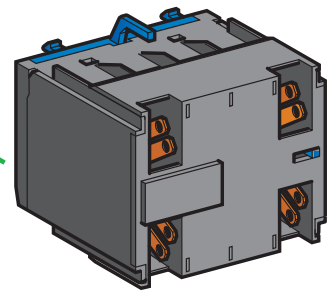
LA1 KN●●



LA2 KT2●



LA1 KN●●3



LA1 KN●●7

Contactors

Product references

PB121750_R.tif

LA1KN22

PB123817.eps

LA1KN223

PB123818.eps

LA1KN407

Instantaneous auxiliary contact blocks

Recommended for standard applications. Clip-on front mounting, 1 block per contactor

Connection	For use on contactors	Composition		Reference
		⊣	⊢	
Screw clamp terminals	All products with screw clamp terminals	2	–	**LA1KN20**
		–	2	**LA1KN02**
		1	1	**LA1KN11**
	All products with screw clamp terminals except low consumption	4	–	**LA1KN40**
		3	1	**LA1KN31**
		2	2	**LA1KN22**
		1	3	**LA1KN13**
		–	4	**LA1KN04**
Spring terminals	All products with spring terminals	2	–	**LA1KN203**
		–	2	**LA1KN023**
		1	1	**LA1KN113**
	All products with spring terminals except low consumption	4	–	**LA1KN403**
		3	1	**LA1KN313**
		2	2	**LA1KN223**
		1	3	**LA1KN133**
		–	4	**LA1KN043**
Faston connectors, 1 x 6.35 or 2 x 2.8	All products with Faston connectors	2	–	**LA1KN207**
	All products with Faston connectors except low consumption	4	–	**LA1KN407**
		3	1	**LA1KN317**

With terminal referencing to standard EN 50012. Clip-on front mounting, 1 block per contactor

Screw clamp terminals with referencing conforming to standard EN 50012	All 3-pole + N/O products with screw clamp terminals except LP4 and LP5K12	–	2	**LA1KN02M**
		1	1	**LA1KN11M**
	All 3-pole + N/O products with screw clamp terminals except LP4 or LP5K06, K09 and K12	3	1	**LA1KN31M**
		2	2	**LA1KN22M**

Electronic time delay auxiliary contact blocks

Relay output with common point changeover contact, ∼ or ⎓ 240 V, 2 A maximum.
Control voltage 0.85…1.1 Uc.
Maximum switching capacity 250 VA or 150 W.
Operating temperature -10…+60 °C.
Reset time: 1.5 s during the time delay period, 0.5 s after the time delay period.

Clip-on front mounting, 1 block per contactor

Voltage	Type	Timing range	Composition	Reference
			⊣	
V		s		
∼ or ⎓ 24…48	On-delay	1…30	1	**LA2KT2E**
∼ 110…240	On-delay	1…30	1	**LA2KT2U**

Characteristics: page B8/75
Dimensions: pages B8/76 and B8/78
Schemes: pages B8/77 and B8/79

Product references

PB123798_R.eps

LA4K●●●

References

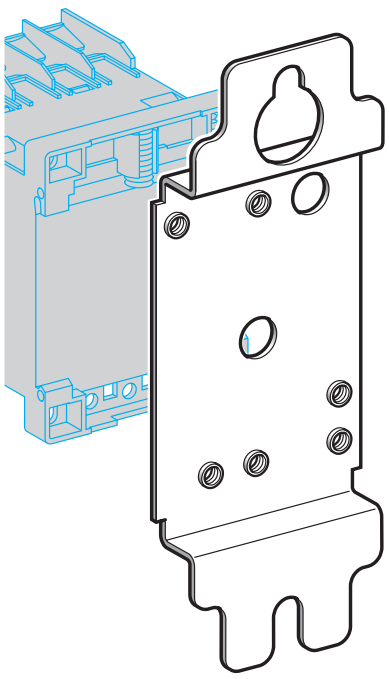
Mounting and connection	Type	For voltages	Sold in lots of	Unit reference
Clip-on fixing on the front of contactors LC1 and LP1, with locating device. No tools required.	Varistor (1)	~ and ⎓ 12…24 V	5	**LA4KE1B**
		~ and ⎓ 32…48 V	5	**LA4KE1E**
		~ and ⎓ 50…129 V	5	**LA4KE1FC**
		~ and ⎓ 130…250 V	5	**LA4KE1UG**
	Diode + Zener diode (2)	⎓ 12…24 V	5	**LA4KC1B**
		⎓ 32…48 V	5	**LA4KC1E**
	RC (3)	~ 110…250 V	5	**LA4KA1U**

(1) 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).
(2) No overvoltage or oscillating frequency.
Polarised component.
Slight increase in drop-out time (1.1 to 1.5 times the normal time).
(3) Protection by limiting the transient voltage to 3 Uc max. and limitation of the oscillating frequency.
Slight increase in drop-out time (1.2 to 2 times the normal time).

Characteristics: page B8/75
Dimensions: pages B8/76 and B8/78
Schemes: pages B8/77 and B8/79

Product references

DF5650019.eps



DX1AP25

PB121398.eps

LA9E01

Mounting and marking accessories

Description	Application		Sold in lots of	Unit reference
Mounting plates (1)	For fixing on 2 ⊔ rails	110/120 mm fixing centres	10	**DX1AP25**
Marker holder	Clip-on	Onto front of contactor	100	**LA9D90**
Clip-in markers	4 maximum per contactor	Strips of 10 identical numbers 0…9	25	**AB1R●** (2)
		Strips of 10 identical letters A…Z	25	**AB1G●** (2)

Connection accessories

Description	Application		Sold in lots of	Unit preference
Paralleling links	For 2 poles	With screw clamps	4	**LA9E01**
	For 4 poles	With screw clamps	2	**LA9E02**
Set of 6 power connections	For 3-pole reversing contactors for motor control	For contactors with screw clamp terminals	100	**LA9K0969**

(1) Order 1 mounting plate for fixing a contactor and 2 mounting plates for fixing a reversing contactor.
(2) Complete the reference by replacing the dot with the required character.

Control Panel Technical Guide:
Mounting and wiring accessories for TeSys K, Deca, F contactors. Star-delta, reverser, low-high speed control motor starters and changeover applications - Product references and details on all kits and wiring accessories.

> Ref. Document: CPTG011_EN

> Click on QR code to download

Dimensions:
pages B8/76 and B8/78

Introduction

Deca green, enriching Deca family

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

9 - 12 - 18 A

25 - 32 - 38 A

40 - 50 - 65 A

80 A

80 - 95 A

115 - 150 A

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.

9 - 12 - 18 A

25 - 32 - 38 A

40 - 50 - 65 - 80 A
Direct control by 24 V/500 mA DC I/O, with coil ref. BBE

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.

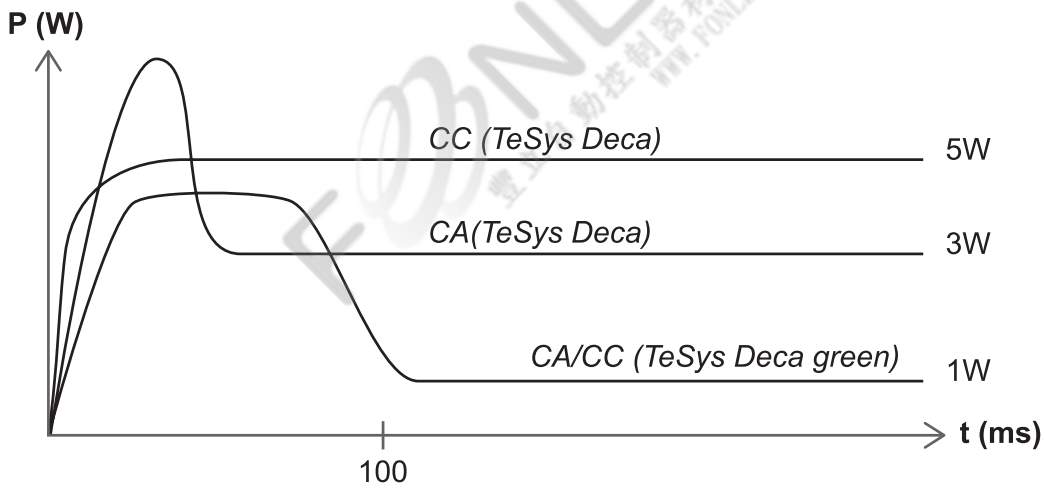
Introduction

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.

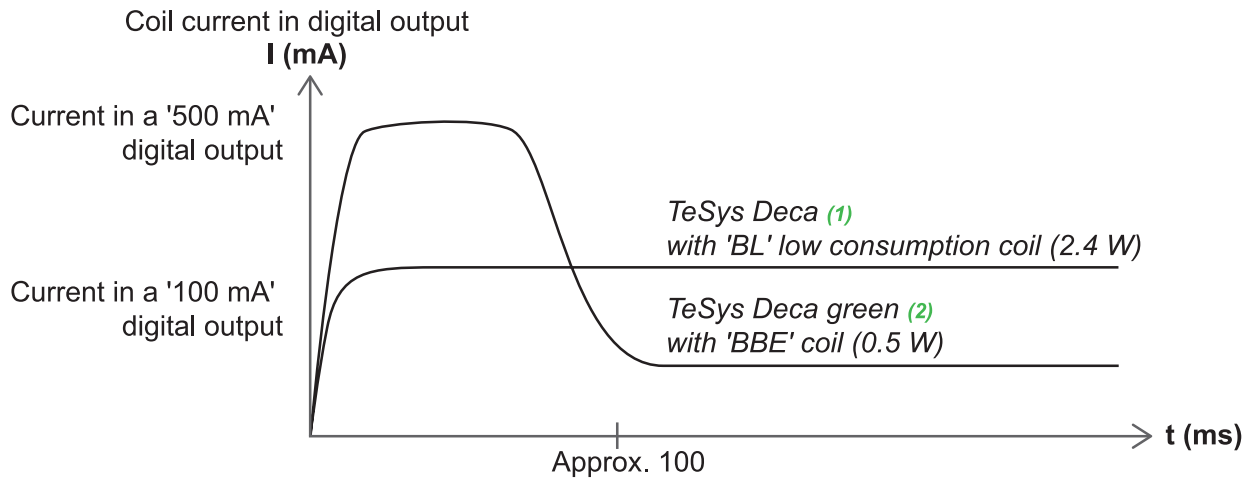
Coil currents comparison

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.

Product references

PB121708.tif

LC1D09●●●

PB121710.tif

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

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		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 **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 B8/42).

Contactors

Characteristics: pages B8/80 to B8/87
Curves: page B8/90
Dimensions: pages B8/98 to B8/100
Schemes: pages B8/101 and B8/102
Click **HERE** for access to online contactor selector

TeSys Control
Deca green Contactors
Product references

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 ($\theta \leqslant 60$ °C) utilisation category AC-1	Number of poles	Instantaneous auxiliary contacts			Partial reference, to be completed by adding the control voltage code (1) / Fixing (2)	Weight
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 B8/55. The SEARCH function of your viewer can be used.

(2) ***LC1D09*** *to* ***D80A***, ***LC●DT60A*** and ***LC●DT80A****: clip-on mounting on 35 mm ⊔ 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.

Characteristics: pages B8/80 to B8/87
Curves: page B8/90
Dimensions: pages B8/98 to B8/100
Schemes: pages B8/101 and B8/102
Click **HERE** for access to online contactor selector

Product references

PB121708.tif

LC1D09●●●

PB121710.tif

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)
Single-phase 1 Ø		3-phase 3 Ø						Fixing, connection (2)
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 B8/55. The SEARCH function of your viewer can be used.
*(2) **LC1D09** to **D80**: clip-on mounting on 35 mm ⊔ 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).*

Contactors

SELECT

Characteristics: pages B8/80 to B8/87
Curves: page B8/90
Dimensions: pages B8/98 to B8/100
Schemes: pages B8/101 and B8/102
Click **HERE** for access to online contactor selector

Product references

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●●,	BL, BNE
					LC1D40A●●● to LC1D80A, LC1DT60A●●● to LC1DT80A●●●	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●●	BL, BNE
					LC1D40A●●● to LC1D80A, LC1DT60A●●● to LC1DT80A●●●	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●●	BL, BNE
					LC1D40A●●● to LC1D80A, LC1DT60A●●● to LC1DT80A●●●	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**.*

Product references

PB121681.eps

LC1D09●●

PB121706.tif

LC1D25●●

PB121707.tif

LC1D80A●●

PB123774.tif

LC1D95●●

PB123775.tif

LC1D115●●

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 (θ ⩽ 60 °C)							Rated operational current in AC-3 440 V up to	Instantaneous auxiliary contacts		Basic reference, to be completed by adding the control voltage code (1) / Fixing (2)	Weight (3)
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				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 (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	45	80	1	1	**LC1D80●●**	1.590
25	45	45	45	55	45	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
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	(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
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 DC (for low consumption AC/DC: Deca green contactors, page B8/18)

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

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 NSYSDR *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**.*

*(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. Exemple: **LC1D40ABBE**.*

Characteristics: pages B8/80 to B8/87
Dimensions: pages B8/94 to B8/97
Schemes: pages B8/101 to B8/102
Click **HERE** for access to online contactor selector

Product references

PB121713.tif

LC1D123●●

PB121723.eps

LC1D80A3●●

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 (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 [1]
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			
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**
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 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	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 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 D32: clip-on mounting on 35 mm ⊔ rail NSYSDR *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).*

Characteristics: pages B8/80 to B8/87
Dimensions: pages B8/94 to B8/97
Schemes: pages B8/101 to B8/102
Click **HERE** for access to online contactor selector

Product references

PB121681.eps

LC1D09●●

PB121723.eps

LC1D80A●●

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

Non inductive loads maximum current ($\theta \leq 60$ °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)
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●●** (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

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 **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 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 A5/40.

(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__.

Contactors

Characteristics: pages B8/80 to B8/87
Dimensions: pages B8/94 to B8/97
Schemes: pages B8/101 to B8/102
Click **HERE** for access to online contactor selector

TeSys Control
Deca Contactors
Product references

PB121713.tif

LC1D123●●

PB121723.eps

LC1D80A3●●

3-pole contactors - Load control from 16 to 80 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) / 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													
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 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	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 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 **D80A**: clip-on mounting on 35 mm ⊔ rail **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** and 0.075 kg from **LC1D40A** to **D80A**.*

(4) 20 A with 2 x 2.5 mm^2 cables connected in parallel.

(5) 32 A with 2 x 4 mm^2 cables connected in parallel.

(6) 40 A with 2 x 4 mm^2 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 A5/40.

Characteristics: pages B8/80 to B8/87
Dimensions: pages B8/94 to B8/97
Schemes: pages B8/101 to B8/102
Click HERE for access to online contactor selector

Product references

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LC1DT20●●

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

Non inductive loads maximum current ($\theta \leq 60$ °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)
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

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LC1DT80A●●

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LC1D65008●●

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 **NSYSDR** or screw fixing.*
*__LC1D80__ ∿: clip-on mounting on 35 mm ⊔ rail **NSYSDR** 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 **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 **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. Exemple: **LC1DT60ABBE.***

Characteristics: pages B8/80 to B8/87
Dimensions: pages B8/94 to B8/97
Schemes: pages B8/101 to B8/102
Click **HERE** for access to online contactor selector

Product references

PB121716.tif

LC1DT253●●

PB121715.tif

LC1DT80A3●●

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

Non inductive loads maximum current ($\theta \leq 60$ °C) utilisation category AC-1	Number of poles		Instan-taneous 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
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	–

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 0.7…1.25 Uc	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD
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

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 **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 for **LC1DT60A** and **DT80A**.*

Characteristics:
pages B8/80 to B8/87

Dimensions:
pages B8/94 to B8/97

Schemes:
pages B8/101 to B8/102

Click **HERE** for access to online contactor selector

SELECT

Contactors

Product references

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LC1D09●●

PB121706.tif

LC1D25●●

PB121707.tif

LC1D80A●●

PB123774.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 by adding the control voltage code (1)
Single-phase 1 Ø		3-phase 3 Ø						
120 V	240 V	208 V	240 V	480 V	600 V			Fixing, connection (2)
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	U7	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 ⊔ rail **NSYSDR** or screw fixing.*
__LC1D80__ and __LC1D95__: clip-on mounting on 35 mm ⊔ rail __NSYSDR__ or 75 mm ⊔ rail __AM1DL__ or screw fixing.
__LC1D115__ and __D150__: clip-on mounting on 2 x 35 mm ⊔ rails __NSYSDR__ 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. Exemple: __LC1D40ABBE__.

Characteristics: pages B8/80 to B8/87
Dimensions: pages B8/94 to B8/97
Schemes: pages B8/101 to B8/102
Click **HERE** for access to online contactor selector

PB121717.tif

LC2D12●●

PB121685.eps

LC2D65A●●

PB123819.tif

LC2D1156●●

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 (1) / Fixing (2)	Weight (3)
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				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
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
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 **NSYSDR** or screw fixing.*
*LC2D80 and D95: clip-on mounting on 35 mm ⊔ rail **NSYSDR** or 75 mm ⊔ rail **AM1DL** or screw fixing.*
*LC2D115 and D150: clip-on mounting on 35 mm ⊔ rail **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 0.330 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.*

Characteristics: pages B8/80 to B8/87
Dimensions: pages B8/103 and B8/104
Schemes: pages B8/105 and B8/106
Click **HERE** for access to online contactor selector

Product references

PB121718.tif

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 (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 voltage code (1) Fixing (2)	Weight (3)
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
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 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**
LC2D09...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

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 **D38**, 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).*

Characteristics: pages B8/80 to B8/87
Dimensions: pages B8/103 and B8/104
Schemes: pages B8/105 and B8/106
Click **HERE** for access to online contactor selector

Product references

PB121719.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 ($\theta \leq 60$ °C)	Instantaneous auxiliary contacts per contactor		Contactors supplied with coil Basic reference, to be completed by adding the voltage code (1) (2) Fixing (3)	Weight
A				kg
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* ***NSYSDR*** *or screw fixing.*
LC2D80: *clip-on mounting on 35 mm ⊔ rail* ***NSYSDR*** *or 75 mm ⊔ rail* ***AM1DL*** *or screw fixing.*
LC2D115*: clip-on mounting on 2 x 35 mm ⊔ rails* ***NSYSDR*** *or screw fixing.*
(4) *For these operational currents, order 2 identical contactors and a mechanical interlock* ***LAD4CM*** *(see page B8/43).*

Contactors
SELECT

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 (θ ⩽ 60 °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 **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 B8/19).*

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

Contactors

Characteristics: pages B8/80 to B8/87
Dimensions: pages B8/103 and B8/104
Schemes: pages B8/105 and B8/106
Click **HERE** for access to online contactor selector

Product references

PB121720.tif

LC2D09●●●

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

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 (1)	Weight
220 V 230 V	380 V 400 V	415 V	440 V	500 V	660 V 690 V				Fixing (2)	
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 (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

PB121721.tif

LC2D40A●●●

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

Contactors

Product references

PB121722.eps

LC1DGK●●, LC1DLK●●, LC1DMK●●

PB123777.eps

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 recommanded 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.

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 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		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 415 V	440 V	690 V					
kVAR	kVAR	kVAR	kVAR	N/O	N/C	N.m		kg
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

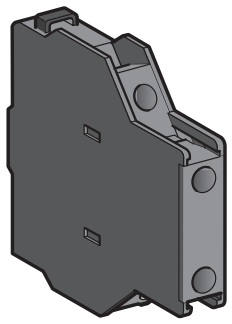
(4) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.

Dimensions, schemes:
page B8/107

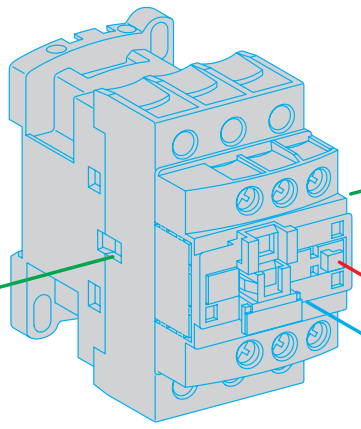
Click **HERE** for access to online contactor selector

Contactors

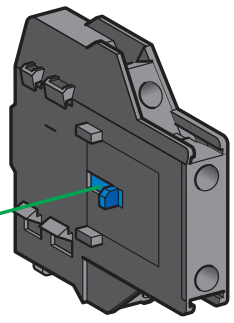
DB439405.eps



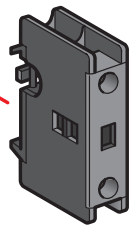
LAD8N (1)



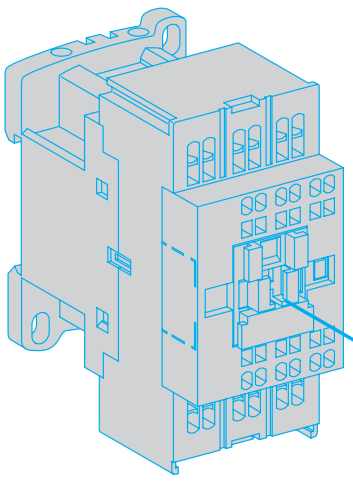
LC1 D●●



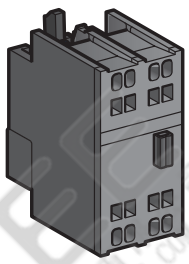
LAD 8N



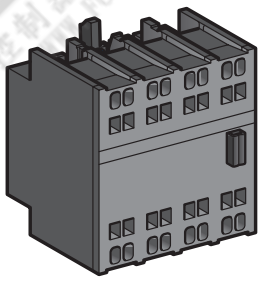
LAD N10, N01



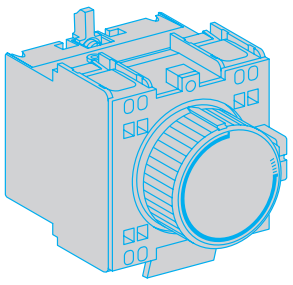
LC1 D●●3



LAD N●●3

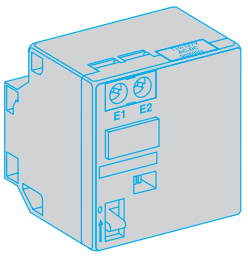


LAD N●●3
LAD C●●3

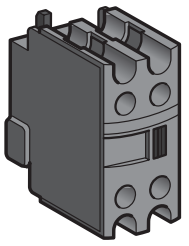


LAD T●3
LAD S23

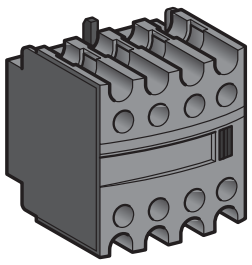
LAD R●3



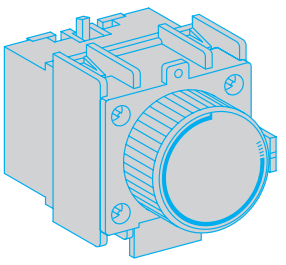
LA6 DK
or
LAD 6K



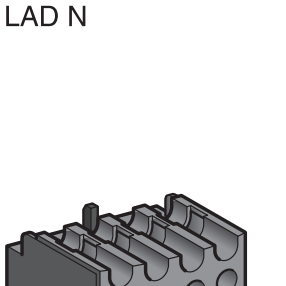
LAD N



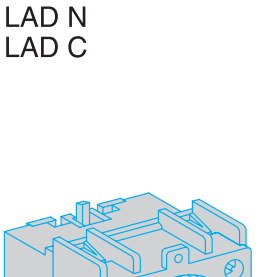
LAD N
LAD C



LAD T
LAD S2



LAD R



LA1 DX, DY, DZ

See page opposite for mounting possibilities according to the contactor type

(1) No left side mounting on Deca green contactors.

Product references

PB121689.eps

LADN22

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**	
		–	–	–	–	2	**LADN02**	
	4	–	–	–	2	2	**LADN22**	**LADN22S** (1)
		–	–	–	1	3	**LADN13**	
		–	–	–	4	–	**LADN40**	
		–	–	–	–	4	**LADN04**	
		–	–	–	3	1	**LADN31**	
	4 incl. 1 N/O & 1 N/C make before break	–	–	–	2	2	**LADC22**	
Side (contact blocks compatible with AC coil contactors only)	2	–	–	–	1	1	**LAD8N11**	
		–	–	–	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**	
	4	–	–	–	2	2	**LADN22G**	
Front on 4P contactors 125 to 200 A	2	–	–	–	1	1	**LADN11P**	
	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)	
	4	–	2	–	2	–	**LA1DZ40**	
		–	2	–	1	1	**LA1DZ31**	

PB123773.eps

LAD8N11

PB123821.eps

LA1DX●●, LA1DZ●●

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.**

Maximum number of auxiliary contacts that can be fitted:

Contactors			Instantaneous auxiliary contacts					Time delay Front mounted
Type	Number of poles and size		Side mounted		Front mounted			
					1 contact	2 contacts	4 contacts	
AC AC/DC	3P	LC1D09…D38	1 on LH or 1 on RH side(3)	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
DC	3P	LC1D09…D38	–		–	1	or 1	or 1
		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
	4P	LC1DT20…DT40	–		–	1	or 1	or 1
		LC1DT60A and DT80A	–		–	1	or 1	or 1
		LC1D40008, D65008 and D80	–		2	and 1	or 1	or 1
		LC1D115	1 on each side		–	and 1	or 1	or 1
LC (4) (5)	3P	LC1D09…D38	–		–	1	–	–
	4P	LC1DT20…DT40	–		–	1	–	–

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

Contactors

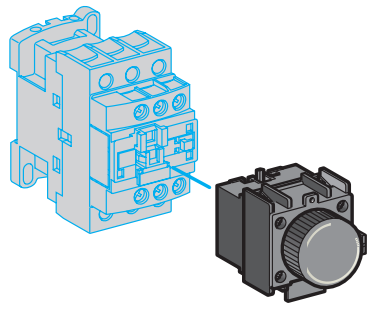
Characteristics: pages B8/88 and B8/89
Curves: page B8/90
Dimensions: pages B8/94 and B8/95

Product references

PB123803_R.eps

LADT●

DB439399.eps



Time delay auxiliary contact blocks for connection by screw clamp terminals

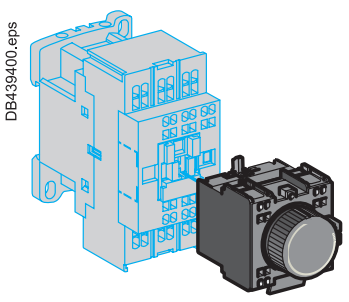
Maximum number of auxiliary contact blocks that can be fitted per contactor, see page B8/36.
Sealing cover to be ordered separately, see page B8/42.
LADS2: with switching time of 40 ms ± 15 ms between opening of the N/C contact and closing of the N/O contact.

Clip-on mounting	Number of contacts	Time delay		Reference
		Type	Setting range	
Front	1 N/O + 1 N/C	On-delay	0.3…3 s	**LADT0**
			1…30 s	**LADT2**
			10…180 s	**LADT4**
			1…30 s	**LADS2**
		Off-delay	0.3…3 s	**LADR0**
			1…30 s	**LADR2**
			10…180 s	**LADR4**

PB123803_R.eps

LADT●3

DB439400.eps



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.**

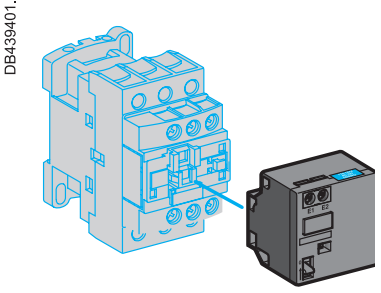
Time delay auxiliary contact blocks for connection by Faston connectors

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

PB123772_R.eps

LAD6K10●

DB439401.eps



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) (3)
Front	Manual or electric	LC1D09…D38 (∼ or ⎓) (4) LC1DT20…DT40 (∼ or ⎓)	**LAD6K10●**
		LC1D40A…D80A (3 P ∼ or ⎓) LC1DT60A and DT80A (4 P ∼ or ⎓)	**LAD6K10●**
		LC1D80…D150 (3 P ∼) LC1D80 and D150 (3 P ⎓) LC1D80 (4 P ∼) LC1D80 and D115 (4 P ∼) LP1D80 and LC1D115 (4 P ⎓)	**LA6DK20●**
		LC1D40 and D65 (4 P ∼) LP1D40 and D65 (4 P ⎓)	**LA6DK10●**

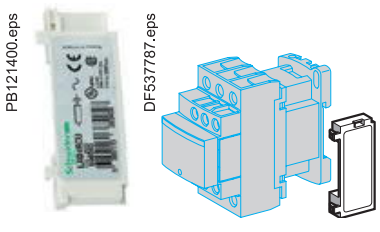
(1) The mechanical latch block must not be powered up at the same time as the contactor.
The duration of the control signal for the mechanical latch block and the contactor should be:
⩾ 100 ms for a contactor operating on an a.c. supply,
⩾ 250 ms for a contactor operating on a d.c. supply.
*Maximum impulse 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) Please check the availability of your variant in the index page B8/55. The SEARCH function of your viewer can be used.
*(4) The DC, low consumption contactors (coil code ●L) are not compatible with the mechanical latch blocks **LAD6K10●**.*

Characteristics: pages B8/88 to B8/90
Dimensions: pages B8/94 to B8/97
Schemes: pages B8/101 to B8/102

Product references

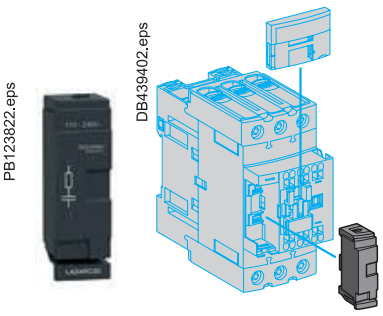


LAD4RCU *LAD4●●*

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)			Reference
	Rating	Type		
		V ∼	V ⎓	
Clip-on side mounting (2) (3)	D09…D38 (3P) DT20…DT40	24…48	–	**LAD4RCE**
		50…127	–	**LAD4RCG**
		110…250	–	**LAD4RCU**
Clip-on front mounting (2) (3)	D40A…D65A (3P) DT60A…DT80A (4P)	24…48	–	**LAD4RC3E**
		50…127	–	**LAD4RC3G**
		110…240	–	**LAD4RC3U**
		380…415	–	**LAD4RC3N**
Screw fixing (4)	D80…D150 (3P) D40…D115 (4P)	24…48	–	**LA4DA2E**
		50…127	–	**LA4DA2G**
		110…240	–	**LA4DA2U**
		380…415	–	**LA4DA2N**



LAD4RC3●, LAD4V3●, LAD4D3U, LAD4T3●

Varistors (peak limiting)

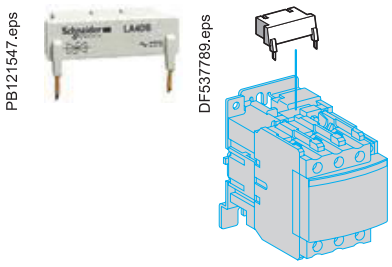
Protection provided by limiting the transient voltage to 2 Uc max. Maximum reduction of transient voltage peaks. Slight increase in drop-out time (1.1 to 1.5 times the normal time).

Clip-on side mounting (2) (3)	D09…D38 (3P) DT20…DT40	24…48	–	**LAD4VE**
		50…127	–	**LAD4VG**
		110…250	–	**LAD4VU**
Clip-on front mounting (2) (3)	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**
		–	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 (3) (5)	D09…D38 (3P), DT20…DT40	–	5...600	**LAD4DDL**
Clip-on front mounting (3)	D40A…D65A (3P), DT60A…DT80A (4P)	–	24…250	**LAD4D3U**
Screw fixing (4)	D80 and D95 (3P), D40…D80 (4P)	–	24…250	**LA4DC3U**

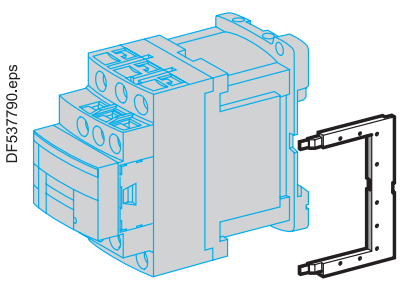


LA4DC3U

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 (2)	D09…D38 (3P) DT20…DT40 (4P) (6)	24	–	**LAD4TB**
		–	24	**LAD4TBDL**
		72	–	**LAD4TS**
		–	72	**LAD4TSDL**
		–	125	**LAD4TGDL**
		–	250	**LAD4TUDL**
Clip-on front mounting (2)	D40A…D65A (3P) DT60A…DT80A (4P) (6)	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)		–	24	**LA4DB3B**
		–	72	**LA4DB3S**



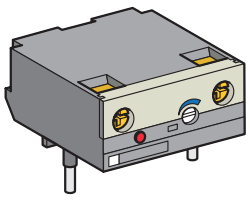
LAD4DDL or LAD4T●DL

LAD4DDL

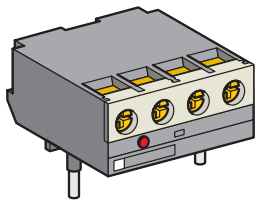
(1) For satisfactory protection, a suppressor module must be fitted across the coil of each contactor except for Deca green (●●E coil), as surge protection is already embedded.
(2) Clipping-on makes the electrical connection. The overall size of the contactor remains unchanged.
(3) In order to install these accessories, the existing suppression device must first be removed.
(4) Mounting at the top of the contactor on coil terminals A1 and A2.
(5) Not compatible with low consumption contactors.
*(6) 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).*

Characteristics:
page B8/91

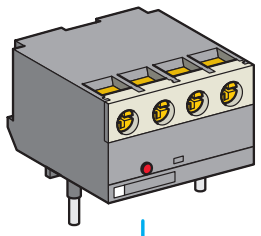
DB425486.eps



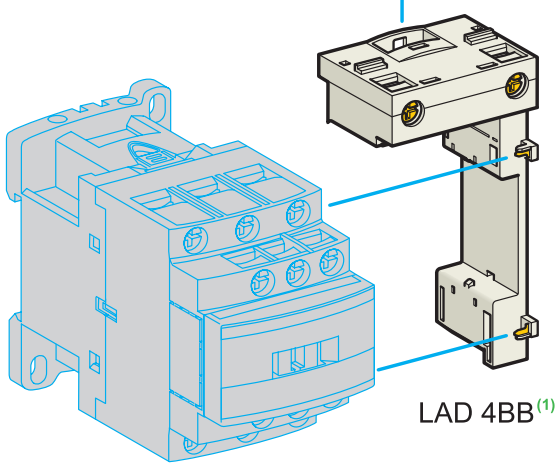
LA4 DT



LA4 DFB[1]

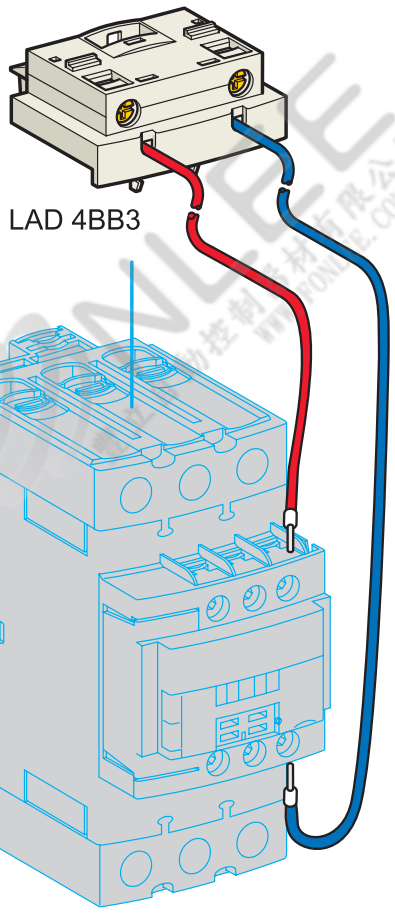


LA4 DWB



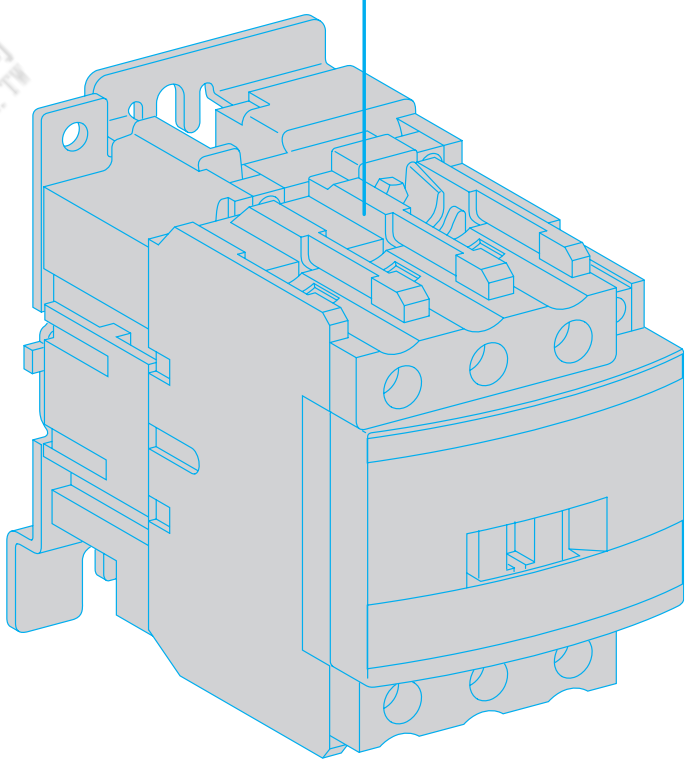
LAD 4BB[1]

LC1 D09…D38



LAD 4BB3

LC1 D40A…D80A



LC1 D80…D95

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

(1) For Deca contactor with AC coil only.

Product references

PB121548.eps

LA4DT●●

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**

PB121549.eps

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**

PB121550.eps

LA4DBL

Adapter kit for low control signal

For use on contactors	Composition	Reference
LC1D40A…D80A (3P) (2)	■ 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**

PB121402.eps

LAD4BBVU

(1) For 24 V operation, the contactor must be fitted with a 21 V coil (code Z). See pages B8/45 to B8/48.
(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.*

Characteristics: page B8/92
Dimensions: page B8/94
Schemes: page B8/102

Product references

PB121360.eps

LA9D3260

PB121363.eps

LA9D11560●

PB121361.eps

LA9D115503

PB121362.eps

LAD96570

PB121364.eps

LA9D11570●

PB121365.eps

LA9D80962

PB121366.eps

LA9D11567

Accessories for main pole and control connections

Description		For use with contactors LC1 ~	For use with contactors LC1 ⎓	Sold in lots of	Unit reference
Connectors for cable, size (1 connector)	4-pole 10 mm²	DT20, DT25	DT20, DT25	1	**LAD92560**
	3-pole 25 mm²	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 mm²	D115, D150	D115, D150	1	**LA9D115603**
	4-pole 120 mm²	D115	D115	1	**LA9D115604**
Connectors for lug type terminals (2 connectors)	3-pole	D1156, D1506	D1156, D1506	1	**LA9D115503**
Protective covers for connectors for lug type terminals	3-pole	D40A6…D80A6	D40A6…D80A6	1	**LAD96570**
		D1156, D1506	D1156, D1506	1	**LA9D115703** (1)
	4-pole	D60A6…D80A6	D60A6…D80A6	1	**LAD96580**
		D1156, D1506	D1156, D1506	1	**LA9D115704**
IP 20 covers for lug type terminals (for mounting with circuit breakers GV3 P●●6 and GV3 L●●6)	3 poles	D40A6…D80A6	D40A6…D80A6	1	**LAD96575**
Links for parallel connection of	2 poles	D09…D38	D09…D38	10	**LA9D2561**
		DT32, DT40 (4P)	DT32, DT40 (4P)	10	**LAD96061**
		D40A…D80A	D40A…D80A	1	**LAD9P32**
		D80, D95	D80, D95	2	**LA9D80961**
	3 poles	D09…D38	D09…D38	10	**LAD9P3** (2)
		D40A…D80A	D40A…D80A	1	**LAD9P33**
		D80, D95	D80, D95	1	**LA9D80962**
	4 poles	DT20, DT25	DT20, DT25	2	**LA9D1263**
		D80	D80	2	**LA9D80963**
Staggered coil connection		–	D80	10	**LA9D09966**
Control circuit take-off from main pole		D80, D95	D80, D95	10	**LA9D8067**
		D115, D150	D115, D150	10	**LA9D11567**
Spreaders for increasing the pole pitch to 45 mm		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.

Control Panel Technical Guide:
Mounting and wiring accessories for TeSys K, Deca, F contactors. Star-delta, reverser, low-high speed control motor starters and changeover applications - Product references and details on all kits and wiring accessories.

> Ref. Document: CPTG011_EN

> Click on QR code to download

Product references

PB121367.eps

GV2G245

PB121368.eps

GV1G09

PB121369.eps

GV3S

PB123823.eps

LAD9ET1

PB123804.eps

LAD9ET1S

PB123824.eps

LAD21...22

PB123825.eps

LAD90

PB121374.eps

LAD7X3

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**

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
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**
	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**
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**

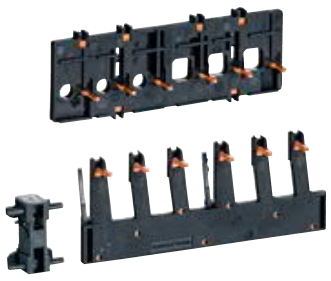
*(1) With this set of busbars, any one contactor can be supplied directly by its EverLink® double cage power terminal block. The other two contactors are supplied by the busbar set. The 115 A limitation is therefore applied to these two contactors. Example: 1 **LC1D65A** supplied directly + 1 contactor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

Product references

PB121375.eps



LAD9R1

PB121376.eps

LAD9R3

PB121377.eps

LA9D8069

PB123826.eps

LAD91217

Discover in video

PB121378.eps

LAD91218

Discover in video

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 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**
	LC1D25 to D38 [4]	**LAD93217**	**LAD93218**
	LC1D40A to D80A	**LAD9SD3**	–
	LC1D80	**LA9D8017**	–
Equipment mounting plates	LC1D09 to D38	**LA9D12974**	
	LC1D40A to D80A	–	
	LC1D80	**LA9D80973**	

(1) To order the 2 contactors: see pages B8/23 and B8/29.
(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 **LAD341**.*
*(If module **LAD341** 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 Main + Delta contactors **LC1D25** to **LC1D38** with Star contactor **LC1D09** to **LC1D18.***

Control Panel Technical Guide:
Mounting and wiring accessories for TeSys K, Deca, F contactors. Star-delta, reverser, low-high speed control motor starters and changeover applications - Product references and details on all kits and wiring accessories.

> Ref. Document: CPTG011_EN

> Click on QR code to download

Dimensions:
pages B8/103 and B8/104

Schemes:
pages B8/105 and B8/106

Product references

PB121379.eps

LADT9R1V

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	**LADT9R1V**
Kit comprising: ■ a mechanical interlock LAD9V2 without electrical interlocking, ■ a set of power connections (changeover) LAD9V7.	LC1DT20 to DT40 with screw clamps or connectors	**LADT9R1**
Mechanical interlocks		
With integral electrical interlocking	LC1D80004	**LA9D4002**
	LP1D80004	**LA9D8002**
	LC1D115004	**LA9D11502**
Without integral electrical interlocking	LC1DT20 to DT40 with screw clamps or connectors	**LAD9V2** [2]
	LC1DT203 to DT403 with spring terminals	**LAD9V2** [2]
	LC1DT60A and DT80A	**LAD4CM**
	LC1D80004	**LA9D50978**
	LP1D80004	**LA9D80978**
Sets of power connections		
Comprising a set of parallel bars	LC1D80004	**LA9D8070**
	LP1D80004	**LA9D8070**
	LC1D115004	**LA9D11570**
	LC1D80004	**LA9D8070** [2]
	LP1D80004	**LA9D8070** [2]

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LA9D50978

PB121380.eps

LA9D8070

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	**LA9D65A6**
	and D150	**LA9D11571**

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LAD9R3S

(1) To order the 2 contactors: see pages B8/23 and B8/29.
*(2) Order 2 contact blocks **LADN●1** to build the electrical interlock, see page B8/36.*

Control Panel Technical Guide:
Mounting and wiring accessories for TeSys K, Deca, F contactors. Star-delta, reverser, low-high speed control motor starters and changeover applications - Product references and details on all kits and wiring accessories.

> Ref. Document: CPTG011_EN

> Click on QR code to download

Dimensions:
pages B8/103 and B8/104

Schemes:
pages B8/105 and B8/106

PB121383.eps

LXD1●●

a.c coils for ∼ contactors LC1D09...D38 and LC1DT20…DT40

Specifications

Average consumption at 20 °C:
- inrush (cos ϕ = 0.75) 70 VA,
- sealed (cos ϕ = 0.3) 50 Hz: 7 VA, 60 Hz: 7.5 VA.

Operating range (θ ≤ 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	
			50/60 Hz
12	1.33	0.05	**LXD1J7**
24	5.37	0.22	**LXD1B7**
32	10.1	0.39	**LXD1C7**
42	17	0.67	**LXD1D7**
48	21.7	0.87	**LXD1E7**
110	124.1	4.6	**LXD1F7**
115	129.8	5	**LXD1FE7**
120	150.6	5.4	**LXD1G7** (2)
200	410.7	15	**LXD1L7**
208	430.4	16	**LXD1LE7** (2)
220	515.4	18	**LXD1M7** (3)
230	538.6	20	**LXD1P7**
240	562.3	22	**LXD1U7**
277	800.7	29	**LXD1W7** (2)
380	1551	55	**LXD1Q7** (4)
400	1633	60	**LXD1V7**
415	1694	65	**LXD1N7**
440	1993	73	**LXD1R7**
480	2398	87	**LXD1T7** (2)
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) Coil for use only on 60 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 pages B8/82 and B8/84).*
*(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 pages B8/82 and B8/84).*

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LXD3●●

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

Specifications

Average consumption at 20 °C:
- inrush (cos ϕ = 0.75) 160 VA,
- sealed (cos ϕ = 0.3) 50 Hz: 15 VA, 60 Hz: 15 VA.

Operating range (θ ≤ 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	
			50/60 Hz
24	1.98	0.12	**LXD3B7**
42	6.18	0.37	**LXD3D7**
48	7.97	0.48	**LXD3E7**
110	42.28	2.50	**LXD3F7**
115	48.76	2.74	**LXD3FE7**
120	37.63	2.07	**LXD3G7** (2)
208	105	6.22	**LXD3LE7** (2)
220	182	10	**LXD3M7** (3)
230	192	10.9	**LXD3P7**
240	202	11.9	**LXD3U7**
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** (2)
575	1238	68.4	**LXD3SC7**
600	1304	74.5	**LXD3X7**

(1) The last 2 digits in the reference represent the voltage code.
(2) This coil can only be used on 60 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 B8/82 and B8/84).*
*(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 B8/82 and B8/84).*

PB121385.eps

LX1D6●●

a.c coils for 3 or 4-pole contactors LC1D40, D50, D65, D80, D95

Specifications

Average consumption at 20 °C:
- inrush (cos ϕ = 0.75) 50 Hz: 200 VA, 60 Hz: 220 VA
- sealed (cos ϕ = 0.3) 50 Hz: 20 VA, 60 Hz: 22 VA.

Operating range (θ ≤ 55 °C): 0.85…1.1 Uc.

Control circuit voltage Uc	Average resistance at 20°C ±10 %	Inductance of closed circuit	Reference (1)	Average resistance at 20 °C ±10 %	Inductance of closed circuit	Reference (1)
V	Ω	H		Ω	H	
			50 Hz			60 Hz
24	1.4	0.09	**LX1D6B5**	1.05	0.06	**LX1D6B6**
110	31	1.9	**LX1D6F5**	22	1.2	
115	31	1.9	**LX1D6FE5**	–	–	–
208	–	–	**–**	86	4.3	**LX1D6L6**
220	–	–	**–**	98	4.8	**LX1D6M6**
220/230	127	7.5	**LX1D6M5**	–	–	–
240	152	8.7	**LX1D6U5**	120	5.7	**LX1D6U6**
380	–	–	**–**	300	14	**LX1D6Q6**
440	513	30	**LX1D6R5**	392	19	
480	–	–	**–**	480	23	**LX1D6T6**

Specifications

Average consumption at 20 °C:
- inrush (cos ϕ = 0.75) 50/60 Hz: 245 VA at 50 Hz
- sealed (cos ϕ= 0.3) 50/60 Hz: 26 VA at 50 Hz.

Operating range (θ ≤ 55 °C): 0.85…1.1 Uc.

						50/60 Hz
24	–	–	–	1.22	0.08	**LX1D6B7**
48	–	–	–	5	0.32	**LX1D6E7**
110	–	–	–	26	1.7	**LX1D6F7**
120	–	–	–	32	2	**LX1D6G7**
220/230 (2)	–	–	–	102	6.7	**LX1D6M7**
230	–	–	–	115	7.7	**LX1D6P7**
230/240 (3)	–	–	–	131	8.3	**LX1D6U7**
380/400 (4)	–	–	–	310	20	**LX1D6Q7**
400	–	–	–	349	23	**LX1D6V7**
415	–	–	–	390	24	**LX1D6N7**
440	–	–	–	410	27	**LX1D6R7**

(1) The last 2 digits in the reference represent the voltage code.
*(2) For use on **230 V** / 50 Hz, apply a coefficient of 0.6 to the mechanical durability of the contactor, see page B8/82 and B8/84. This coil can be used on 240 V at 60 Hz.*
(3) This coil can be used on 220/240 V at 50 Hz and on 240 V only at 60 Hz.
*(4) For use on **400 V** / 50 Hz, apply a coefficient of 0.6 to the mechanical durability of the contactor, see page B8/82 and B8/84.*

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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 (θ ≤ 55 °C): 0.85…1.1 Uc.

Control circuit voltage Uc	Average resistance at 20 °C ±10 %	Inductance of closed circuit	Reference (1)	Average resistance at 20 °C ±10 %	Inductance of closed circuit	Reference (1)
V	Ω	H		Ω	H	
			50 Hz			60 Hz
24	–	–	–	0.87	0.07	**LX1D8B6**
32	2.14	0.17	**LX1D8C5**	–	–	–
42	3.91	0.28	**LX1D8D5**	–	–	–
48	–	–	–	3.91	0.28	**LX1D8E6**
127	32.75	2.44	**LX1D8FC5**	–	–	–
208	–	–	–	67.92	5.06	**LX1D8L6**
220	104.77	7.65	**LX1D8M5**	–	–	–
380	338.51	22.26	**LX1D8Q5**	243.07	17.04	**LX1D8Q6**
440	441.56	30.34	**LX1D8R5**	338.51	22.26	**LX1D8R6**
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 (θ ≤ 55 °C): 0.8…1.15 Uc.

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

Control circuit voltage Uc	Average resistance at 20 °C ±10 %	Inductance of closed circuit	Reference (1)	Average resistance at 20 °C ±10 %	Inductance of closed circuit	Reference (1)
V	Ω	H		Ω	H	
						50/60 Hz
24	–	–	–	147	3.03	**LX1D8B7**
32	–	–	–	301	8.28	**LX1D8C7**
48	–	–	–	1061	24.19	**LX1D8E7**
110	–	–	–	4377	109.69	**LX1D8F7**
115	–	–	–	4377	109.69	**LX1D8FE7**
120	–	–	–	4377	109.69	**LX1D8G7**
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**

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

Product references

PB121387.eps

LX4D7JD

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.

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

(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
60	1673	38.44	**LX4D8ND**	0.300
220	9895	210.72	**LX4D8MD**	0.300
250	18 022	345.40	**LX4D8UD**	0.300

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