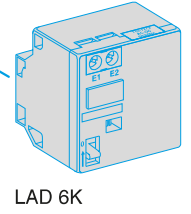
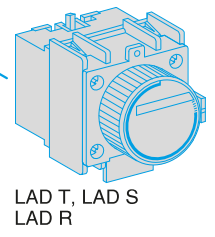
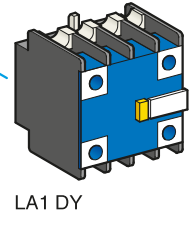
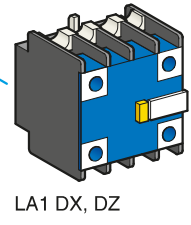
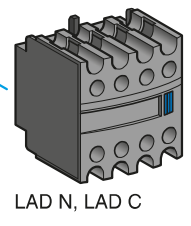
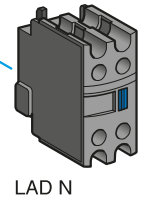
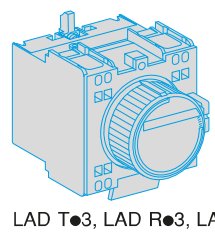
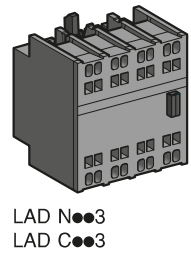
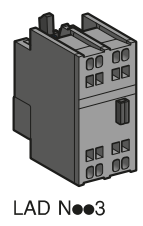
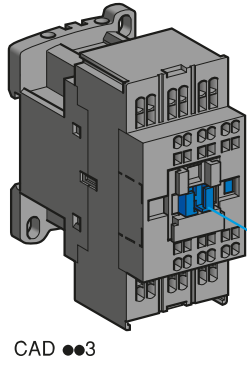
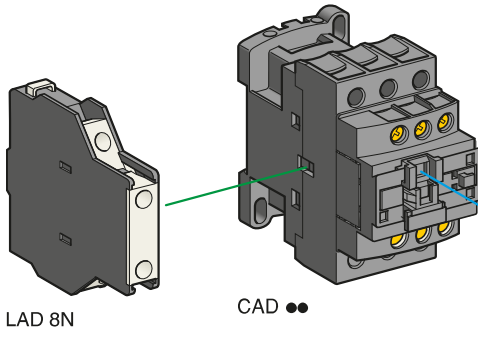


TeSys SK, K Relays	
Product	Pages
Mini relays - 2 contacts, simultaneous action TeSys SK, SKE	 B7/2
Relays - 4 contacts, simultaneous action TeSys K	 B7/4
Auxiliary contact blocks, accessories TeSys K	 B7/6
TeSys Deca Relays	
Relays 5 contacts, simultaneous action	 B7/8
TeSys Deca Accessories	 B7/10



Control relays

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

TeSys Control

Deca Control relays

Product references



CAD50●●



CAD503●●



LADN22



LA1DY20

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●●

Instantaneous auxiliary contact blocks for connection by screw clamp terminals

For use in normal operating environments

Number of contacts	Maximum number per relay		Composition	Reference
	Clip-on mounting front	side		
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.

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

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

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 U _c	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.

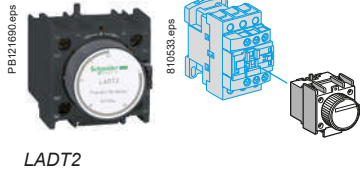
⁽⁵⁾ Product fitted with 4 earth screen continuity terminals.

⁽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.





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

Number and type of contacts	Maximum number per relay Front mounting	Time delay		Reference
		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
		Off-delay	1...30 s ⁽³⁾	LADS2
			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.

Mechanical latch blocks ⁽⁴⁾

Unlatching control	Maximum number per relay Front mounting	Basic reference to be completed ⁽⁵⁾
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

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 ~	Operational voltage	Reference
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 ---	Operational voltage	Reference
CAD ---	--- 5...600 V	LAD4DDL

Bidirectional peak limiting diode ⁽⁶⁾

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

CAD ~	Operational voltage	Reference
CAD ~	~ 24 V	LAD4TB
	~ 72 V	LAD4TS
	~ 24 V	LAD4TBDL
CAD ---	--- 24 V	LAD4TSDL
	--- 72 V	LAD4TSDL
	--- 125 V	LAD4TGD
	--- 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⁾ 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.

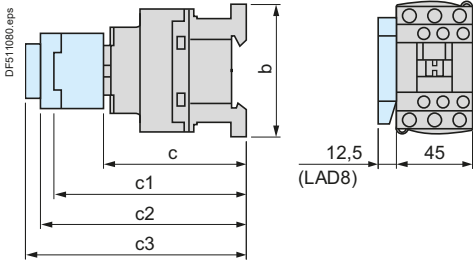
TeSys Control

Deca Control relays

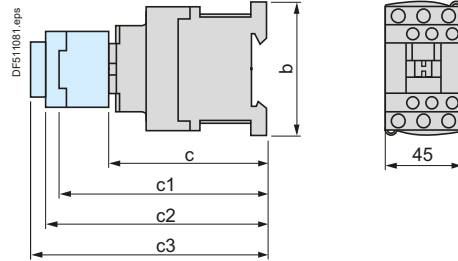
Dimensions and mounting

Dimensions

CAD ~



CAD --- or LC (low consumption)



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

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

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

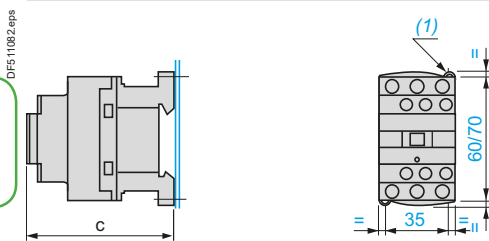
Ref.



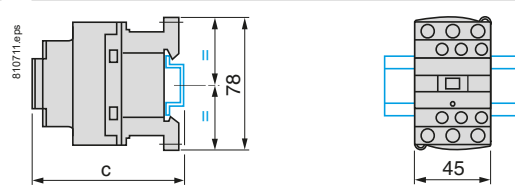
Mounting

CAD

Panel mounted



Mounted on rail NSYDR200BD or NSYDR200



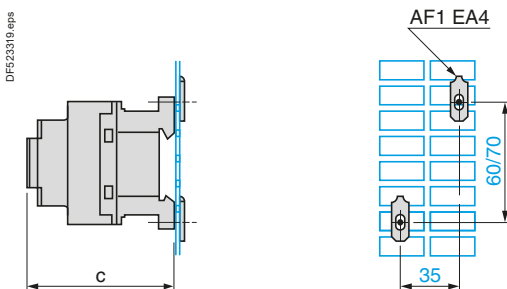
	CAD ~	CAD --- or LC
c with cover	86	95

	CAD ~	CAD --- or LC
c (NSYDR200BD) ⁽²⁾	88	97
c (NSYDR200BD) ⁽²⁾	96	105

(1) 2 elongated holes 4.5 x 9.

(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

