



TeSys

TeSys Power and Control
Motor Starter Solutions with Fast and
Reliable SNAP IN Connections up to 15 kW
Catalog 2025

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se.com/tesys

Life Is On

Schneider
Electric

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TeSys Deca Motor starter solution with SNAP IN connection

Simplicity It's so EASY!

- The world's first self-explanatory clamping technology. One hole, one pusher, one click.
- Solid and flexible wires with or without cable end can be connected without any tools.

Simplicity It's so QUICK!

- Electrical connection under one second
- Up to 92% faster than traditional technologies

Reliability It's so SECURE!

- Your peace of mind with every connection through, a clearly audible click and the pusher moves forwards.

Scalability READY-TO-ROBOT!

- The first motor circuit breaker and contactor suitable for fully automatic mounting and wiring.



Reliability General benefits

- Each connection has a testing point for diagnostics
- Maintenance-free clamping technology
- One-handed unwiring

Scalability Comprehensive solution!

- Up to 15 kW motor starter solution thanks to extensive accessories

Simplicity with just 1 click for 1 second

It's so **EASY** as one hole, one pusher, one click.

- No special tool skills needed.
- No wiring tool needed regardless of flexible, solid or fine-stranded conductors



It's so **QUICK** as one second

- Up to 92% time saving compared with other connection technology

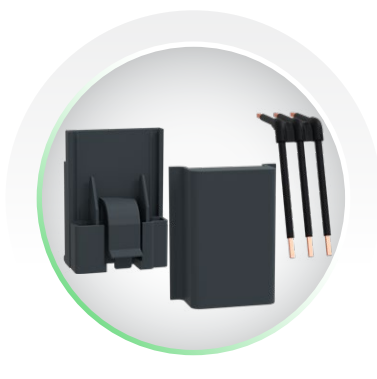


Scalability with comprehensive solution

Achieved by extensive accessories
for comprehensive motor starter solution up to 15 kW



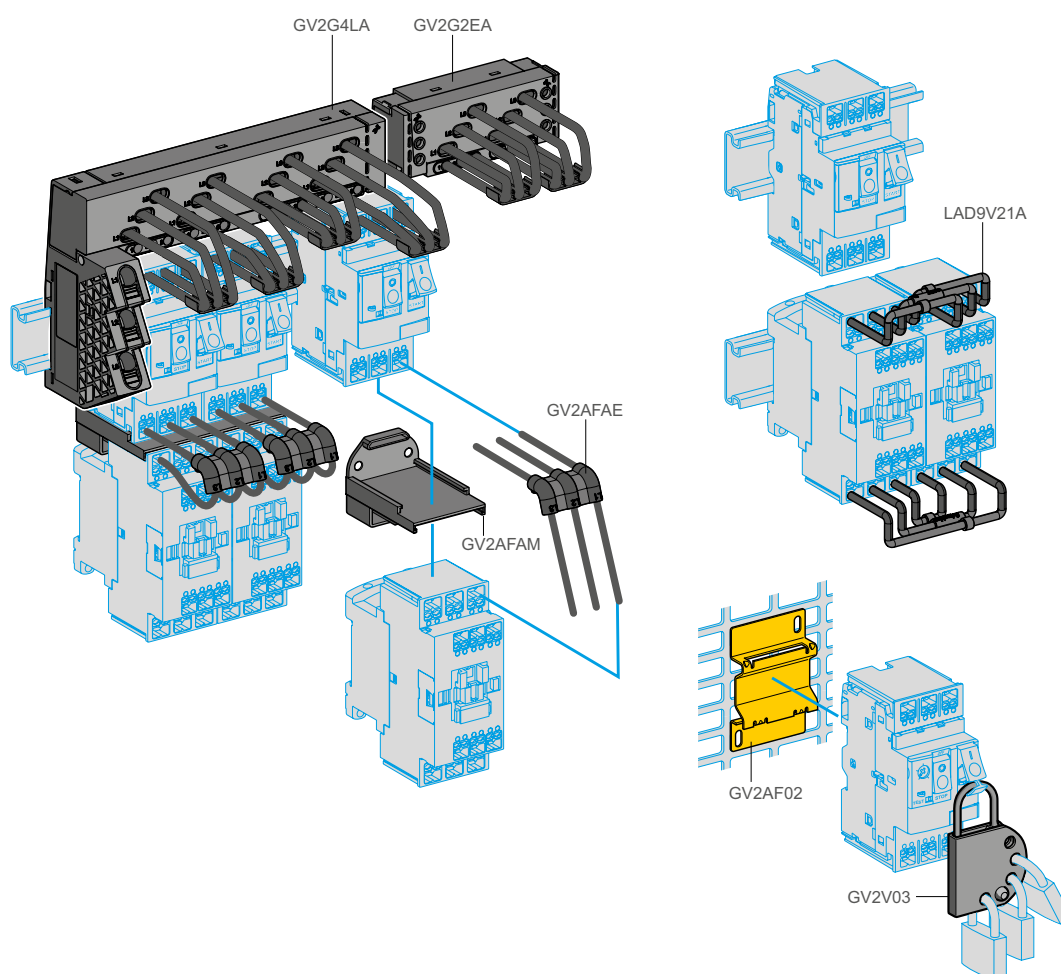
Infeed busbar



Motor Starter Assembly



Contactor Switch Kit



Scalability by READY-TO-ROBOT

• Our circuit breakers and contactors are specially developed for use in fully automated production processes. It can be assembled automatically and simply wired without changing tools.

Optimized efficiency

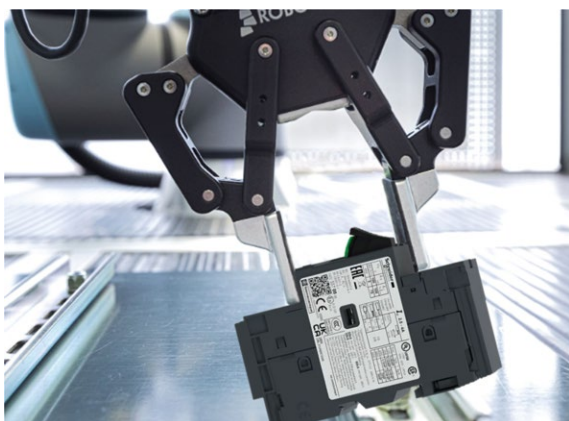
Production speed is significantly increased by automating placement and wiring. Reduced need for manual intervention and tool changes lowers operating costs.

High precision

Automated processes ensure consistently high quality and accuracy.

Improved safety

Minimizing manual intervention helps to reduce the risk of accidents at work and to increase occupational safety.



Step 1: Place



Only one swiveling, pushing movement is necessary to place the product

Step 2: Wiring

The robot only has to hold the wire and make a forward movement until it receives visual or audible feedback from the clamp. No other tools or movements are required.



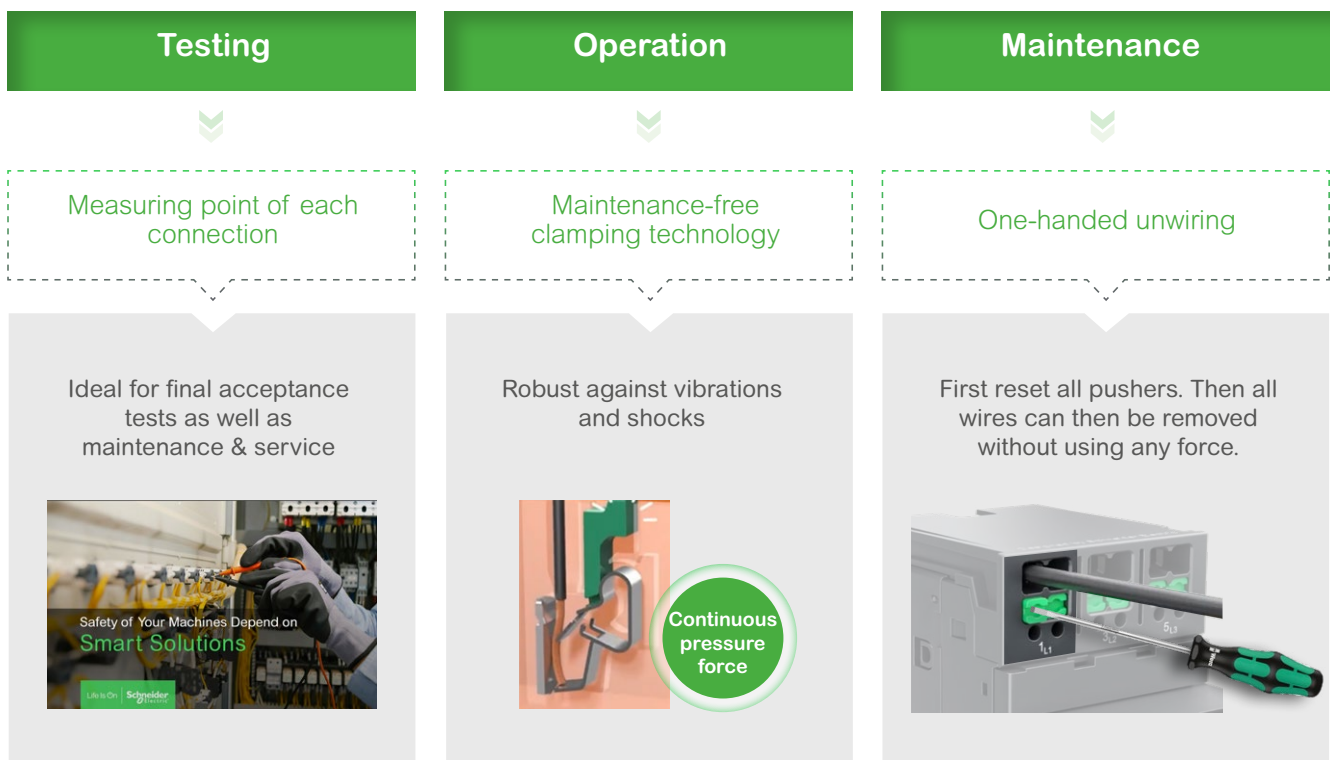
Reliability from install to maintain

It's so SECURE

- Clear indication by a sound and visual feedback as confirmation to the electricians



Reliability benefits the whole customer journey



General Contents

Motor Starter Solutions with Fast and Reliable
SNAP IN Connections up to 15 kW

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TeSys Deca Motor Circuit Breakers		
Type of product	Range	Pages
AC-3/AC-3e Applications - 3-pole TeSys Deca Frame 2 Motor Circuit Breakers - Thermal-magnetic (Product ref. GV2ME••A)	0.06 to 15 kW / 400/415 V	A1/2
UL Applications - TeSys Deca Frame 2 Motor Circuit Breakers	3/4 to 20 HP / 460 V	A1/3
Contact Blocks: Connection by SNAP IN Terminals		A1/5
Mounting and Connection Accessories		A1/7
Technical Data for Designers		A1/9

PG1256401fr

Motor
circuit
breakers



GV2ME●●A

Motor circuit breakers from 0.06 to 15 kW / 400 V

Deca - Frame 2 (ref. GV2ME): control by push button, connection by SNAP IN terminals ⁽¹⁾

Standard power ratings of 3-phase
motors 50/60 Hz in category AC-3/AC-3e

400/415 V			500 V			690 V			Setting range of thermal trips	Magnetic tripping current I _i ± 20 %	Reference
P	I _{cu}	I _{cs} ⁽²⁾	P	I _{cu}	I _{cs} ⁽²⁾	P	I _{cu}	I _{cs} ⁽²⁾			
kW	kA	%	kW	kA	%	kW	kA	%	A	A	
—	—	—	—	—	—	—	—	—	0.1...0.16	1.93	GV2ME01A
0.06	★	★	—	—	—	—	—	—	0.16...0.25	3.08	GV2ME02A
0.09	★	★	—	—	—	—	—	—	0.25...0.40	5.8	GV2ME03A
0.12	★	★	—	—	—	0.37	★	★	0.40...0.63	9.3	GV2ME04A
0.18	★	★	—	—	—	—	—	—	—	—	—
0.25	★	★	0.37	★	★	0.55	★	★	0.63...1	15.1	GV2ME05A
0.37	★	★	—	—	—	—	—	—	—	—	—
0.37	★	★	0.37	★	★	—	—	—	1...1.6	26.2	GV2ME06A
0.55	★	★	0.55	★	★	0.75	★	★	—	—	—
—	—	—	0.75	★	★	1.1	★	★	—	—	—
0.75	★	★	1.1	★	★	1.5	3	75	1.6...2.5	39	GV2ME07A
1.1	★	★	1.5	★	★	2.2	3	75	2.5...4	74	GV2ME08A
1.5	★	★	2.2	★	★	3	3	75	—	—	—
2.2	★	★	3	50	100	4	3	75	4...6.3	91	GV2ME10A
3	★	★	4	10	100	5.5	3	75	6...10	149	GV2ME14A
4	★	★	5.5	10	100	7.5	3	75	—	—	—
5.5	15	50	7.5	6	75	9	3	75	9...14	253.4	GV2ME16A
—	—	—	—	—	—	11	3	75	—	—	—
7.5	15	50	9	6	75	15	3	75	13...18	341	GV2ME20A
9	15	40	11	4	75	18.5	3	75	17...23	341	GV2ME21A
11	15	40	—	—	—	—	—	—	—	—	—
11	15	40	15	4	75	—	—	—	20...25	388.3	GV2ME22A
15	10	50	18.5	4	75	22	3	75	24...32	537.6	GV2ME32A

⁽¹⁾ For Coordination Tables, please refer to Chapter A5 of Tesys Catalog, ref. MKTED210011EN.

⁽²⁾ As % of I_{cu}.

★ > 100 kA.

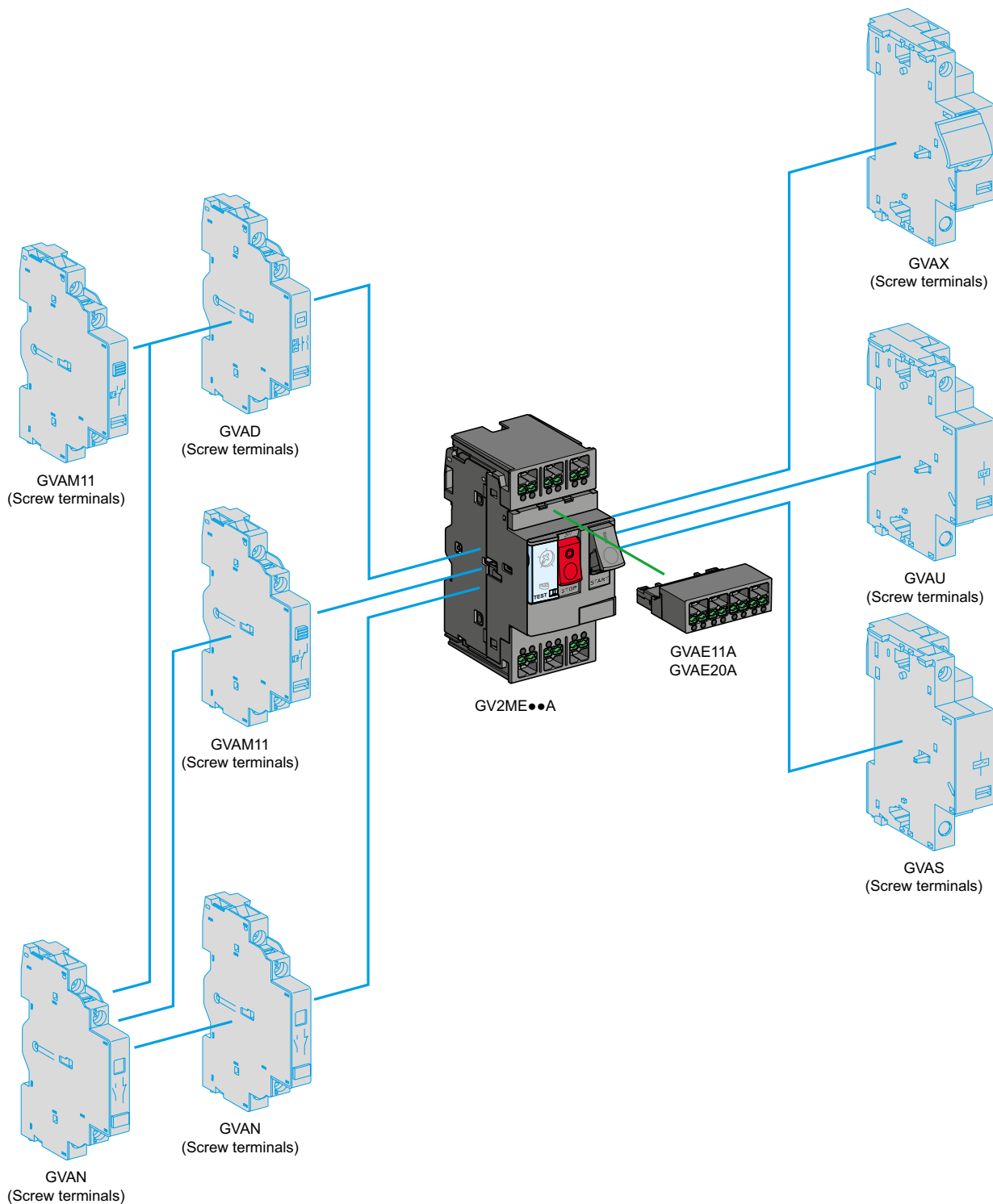


GV2ME●●A

Motor circuit breakers from 3/4 to 20 HP / 460 V										
Deca - Frame 2 (ref. GV2ME): control by push button, connection by SNAP IN terminals										
Thermal setting (A)	Maximum Horsepower ratings								Group Motor applications	Reference
	Single-Phase			Three-Phase						
	115 V	200 V	230 V	115 V	200 V	230 V	460 V	575 V	Max. Fuse or Circuit breaker (A)	
0.1...0.16	–	–	–	–	–	–	–	–	450	GV2ME01A
0.16...0.25	–	–	–	–	–	–	–	–	450	GV2ME02A
0.25...0.40	–	–	–	–	–	–	–	–	450	GV2ME03A
0.40...0.63	–	–	–	–	–	–	–	–	450	GV2ME04A
0.63...1	–	–	–	–	–	–	–	1/2	450	GV2ME05A
1...1.6	–	–	1/10	–	–	–	1/2	3/4	450	GV2ME06A
1.6...2.5	–	1/6	1/6	–	1/2	1/2	1	1.5	450	GV2ME07A
2.5...4	1/8	1/4	1/3	–	3/4	3/4	2	3	450	GV2ME08A
4...6.3	1/4	1/2	1/2	3/4	1	1.5	3	5	450	GV2ME10A
6...10	1/2	1	1.5	1	2	3	5	7.5	450	GV2ME14A
9...14	3/4	2	2	2	3	3	10	10	450	GV2ME16A
13...18	1	2	3	2	5	5	10	15	450	GV2ME20A
17...23	1.5	3	3	3	5	7.5	15	20	450	GV2ME21A
20...25	2	–	–	–	7.5	7.5	15	20	450	GV2ME22A
24...32	2	5	5	5	7.5	10	20	25	450	GV2ME32A ⁽¹⁾

⁽¹⁾ 2 x 10 AWG cables can be connected in parallel if 8 AWG is needed.

Motor circuit breakers



Note: Please refer to Tesys Catalog, ref. MKTED210011EN for the details of all auxiliaries with screw terminals.

Product references

PB125641 1fr



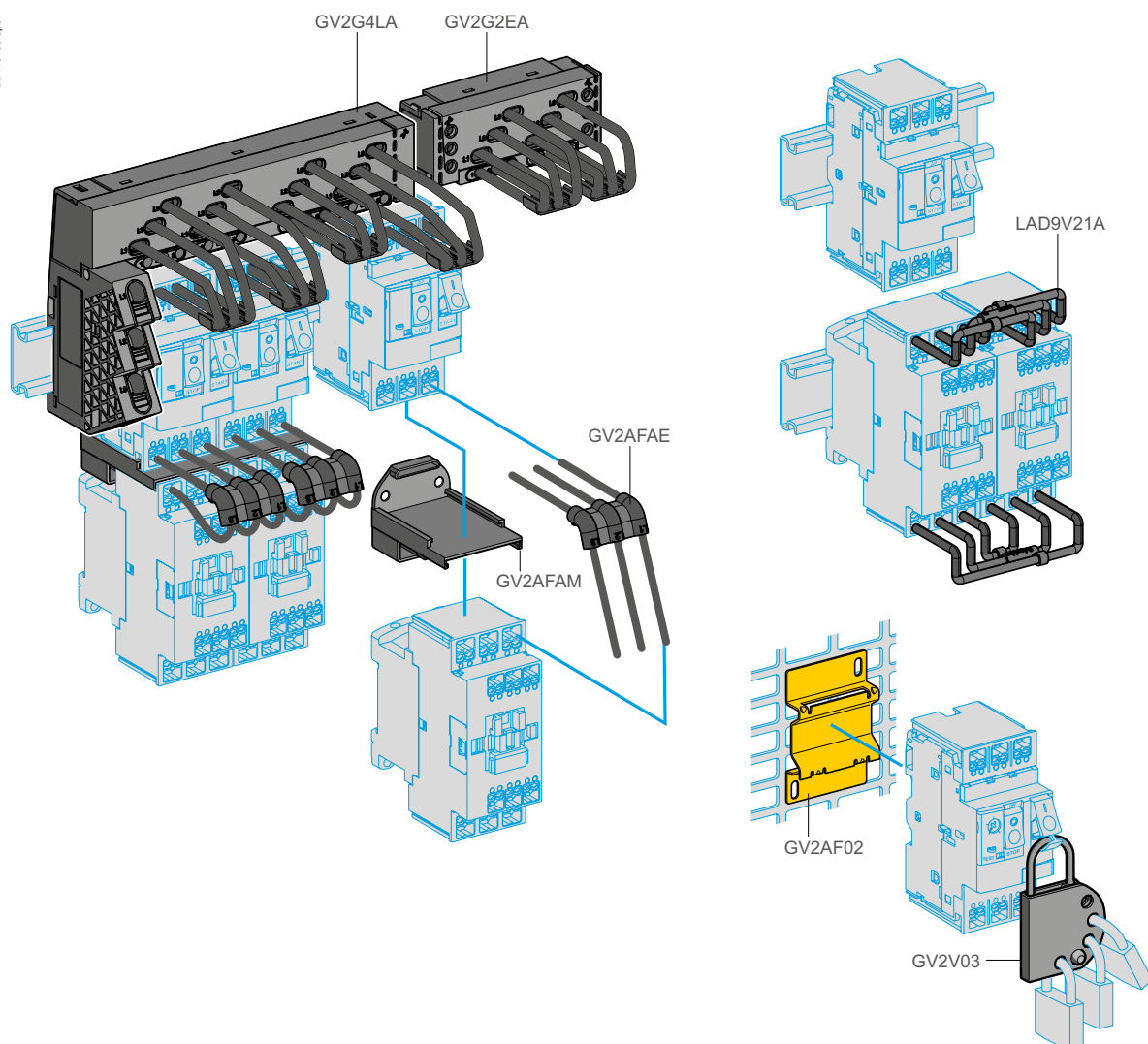
GVAE11A

Contact blocks: connection by SNAP IN terminals ⁽¹⁾				
Description	Mounting	Maximum number	Type of contacts	Unit reference
Instantaneous auxiliary contacts	Front	1	N/O + N/C	GVAE11A
			N/O + N/O	GVAE20A

⁽¹⁾ For other screw version Auxiliaries (GVAD, GVAN, GVAM, GVAU, GVAS and GVAX), please refer to page B6/21 of Tesys Catalog, ref. MKTED210011EN for more details.

Motor circuit breakers

Motor
circuit
breakers





Accessories for circuit breakers with SNAP IN connections				
Description		Application	Sold in lots of	Unit reference
Adapter plates		For mounting a GV2 by screw fixing	10	GV2AF02
Combination blocks between GV2 and contactor LC1D09...D38		For 7.5 mm depth DIN Rail	4	GV2AFAM
		For 15 mm depth DIN Rail	4 + 6	GV2AFAM + GV2AFAM1
Description		Application	Number of tap-offs	Reference
Sets of 3-pole lth = 63 A busbars		Left infeed	2	GV2G2LA
			3	GV2G3LA
			4	GV2G4LA
			2	GV2G2RA
		Right infeed	3	GV2G3RA
			4	GV2G4RA
			2	GV2G2EA
		Extension module	4	GV2G4EA
Description	le	Application	Sold in lots of	Unit reference
	A			
Flexible 3-pole connection for connecting a GV2 to a contactor LC1D09...D25	32	Maximum distance between mounting rails: 120 mm	4	GV2AFAE
Padlocking device	-	For use with up to 4 padlocks, Ø6 mm shank max. (padlocks not included)	1	GV2V03

TeSys Power

Deca - Frame 2 Motor circuit breakers - Mounting and Connection Accessories

Product references

Motor
circuit
breakers

GV2AFAE
GV2AFAM
GV2AFAM1
GV2G2EA
GV2G2LA
GV2G2RA
GV2G3LA
GV2G3RA
GV2G4EA
GV2G4LA
GV2G4RA
GV2ME01A
GV2ME02A
GV2ME03A
GV2ME04A
GV2ME05A
GV2ME06A
GV2ME07A
GV2ME08A
GV2ME10A
GV2ME14A
GV2ME16A
GV2ME20A
GV2ME21A
GV2ME22A
GV2ME32A
GVAE11A
GVAE20A

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

Technical Data for Designers

Deca - Frame 2:

- > characteristics
- > curves
- > characteristics - accessories
- > dimensions, schemes

A1/10 to A1/12
A1/13 to A1/15
A1/16 to A1/17
A1/18 to A1/19

TeSys Power

Deca - Frame 2 Motor circuit breakers

Characteristics

Motor
circuit
breakers

Environment				
Circuit breaker type				GV2ME**A
Conforming to standards				IEC/EN 60947-4-1, IEC/EN 60947-2, UL 60947-4-1, CSA C22.2 n° 60947-4-1
Product certifications				CB Scheme, CCC, CE, UKCA, cULus
Degree of protection (front face)	Conforming to IEC 60529	Open mounted		Against direct finger contact: IP20
Shock resistance	Conforming to IEC 60068-2-27			30 gn - 11 ms
Vibration resistance	Conforming to IEC 60068-2-6			5 gn (5 to 150 Hz)
Ambient air temperature	Storage		°C	-40...+80
	Operation	Open mounted	°C	-20...+60
		In enclosure	°C	-20...+40
Temperature compensation		Open mounted	°C	-20...+60
		In enclosure	°C	-20...+40
Flame resistance	Conforming to IEC 60695-2-11		°C	960
Maximum operating altitude			m	2000
Suitable for isolation	Conforming to IEC 60947-1 § 8.1.7			Yes
Resistance to mechanical impact			J	0.5
				IK04
Sensitivity to phase failure				Yes, conforming to IEC 60947-4-1 § 8-2-1-5-2
Technical characteristics				
Circuit breaker type				GV2ME**A
Utilisation category	Conforming to IEC 60947-2			A
	Conforming to IEC 60947-4-1			AC3/AC-3e
Rated operational voltage (Ue)	Conforming to IEC 60947-2		V	690
Rated insulation voltage (Ui)	Conforming to IEC 60947-2		V	690
Rated voltage	Conforming to UL 60947-4-1, CSA C22.2 n° 60947-4-1		V	600
Rated operational frequency	Conforming to IEC 60947-4-1, UL, CSA		Hz	50/60
Rated impulse withstand voltage (U imp)	Conforming to IEC 60947-2		kV	6
Total power dissipated per pole			W	2.5
Mechanical durability (C.O.: Closing, Opening)			C.O.	100 000
Electrical durability for AC-3e/415V duty (C.O.: Closing, Opening)	415 V In		C.O.	100 000
Duty class (maximum operating rate)			C.O./h	25
Maximum conventional rated thermal current (Ith)	Conforming to IEC 60947-4-1		A	0.16...32
Rated duty	Conforming to IEC 60947-4-1			Continuous duty

TeSys Power

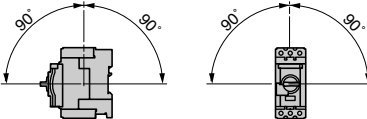
Deca - Frame 2 Motor circuit breakers

Characteristics

Mounting characteristics

Operating position
Without derating, in relation to normal vertical mounting plane ⁽¹⁾

DF510520 eps



Products side by side

DB446492 eps



When several products **GV2ME●●A**, are mounted side by side, the thermal trip setting I_r maybe need to be adjusted up to $1.1 \times I_n$.

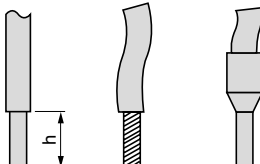
Do not exceed the maximum thermal setting I_r .
E.g: **GV2ME14A**, thermal setting range: 6...10, do not adjust I_r above 10 A.

Connection characteristics

Connection to SNAP IN terminals

Bare cables

DF510554 eps



Circuit breaker type

Connection to SNAP IN terminals
(Max. number of
conductors x c.s.a.)

		GV2ME●●A	
		Size 1: GV2ME01A...14A	Size 2: GV2ME16A...32A
	h	mm	10
	Solid cable	mm ²	2 x (0.5...2.5)
	Flexible cable without cable end	mm ²	2 x (0.5 ⁽¹⁾ ...4)
	Flexible cable with cable end	mm ²	2 x (0.5...2.5)

⁽¹⁾ When mounting on a vertical rail, fit a stop to prevent any slippage.

⁽²⁾ For flexible cable with thin single conductors, it is recommended to use cable ends for preventing the wire from being damaged or severed by the spring.

Motor
circuit
breakers

TeSys Power

Deca - Frame 2 Motor circuit breakers - Thermal-magnetic

Characteristics

Motor
circuit
breakers

Breaking capacity of GV2ME●●A												
Circuit breaker type				GV2ME								
Rating			A	01 to 06 0.1 to 1.6	07 2.5	08 4	10 6.3	14 10	16 14	20 18	21 & 22 23 & 25	32
Breaking capacity conforming to IEC 60947-2	230/240 V	Icu	kA	★	★	★	★	★	★	★	50	50
		Ics % ⁽¹⁾		★	★	★	★	★	★	★	100	100
	400/415 V	Icu	kA	★	★	★	★	★	15	15	15	10
		Ics % ⁽¹⁾		★	★	★	★	★	50	50	40	50
	440 V	Icu	kA	★	★	★	50	15	8	8	6	6
		Ics % ⁽¹⁾		★	★	★	100	100	50	50	50	50
	500 V	Icu	kA	★	★	★	50	10	6	6	4	4
		Ics % ⁽¹⁾		★	★	★	100	100	75	75	75	75
	690 V	Icu	kA	★	3	3	3	3	3	3	3	3
		Ics % ⁽¹⁾		★	75	75	75	75	75	75	75	75
Associated fuses (if required) if Isc > breaking capacity Icu conforming to IEC 60947-2	230/240 V	aM	A	★	★	★	★	★	★	★	80	80
		gG	A	★	★	★	★	★	★	★	100	100
	400/415 V	aM	A	★	★	★	★	★	63	63	80	80
		gG	A	★	★	★	★	★	80	80	100	100
	440 V	aM	A	★	★	★	50	50	50	50	63	63
		gG	A	★	★	★	63	63	63	63	80	80
	500 V	aM	A	★	★	★	50	50	50	50	50	50
		gG	A	★	★	★	63	63	63	63	63	63
	690 V	aM	A	★	16	25	32	32	40	40	40	40
		gG	A	★	20	32	40	40	50	50	50	50

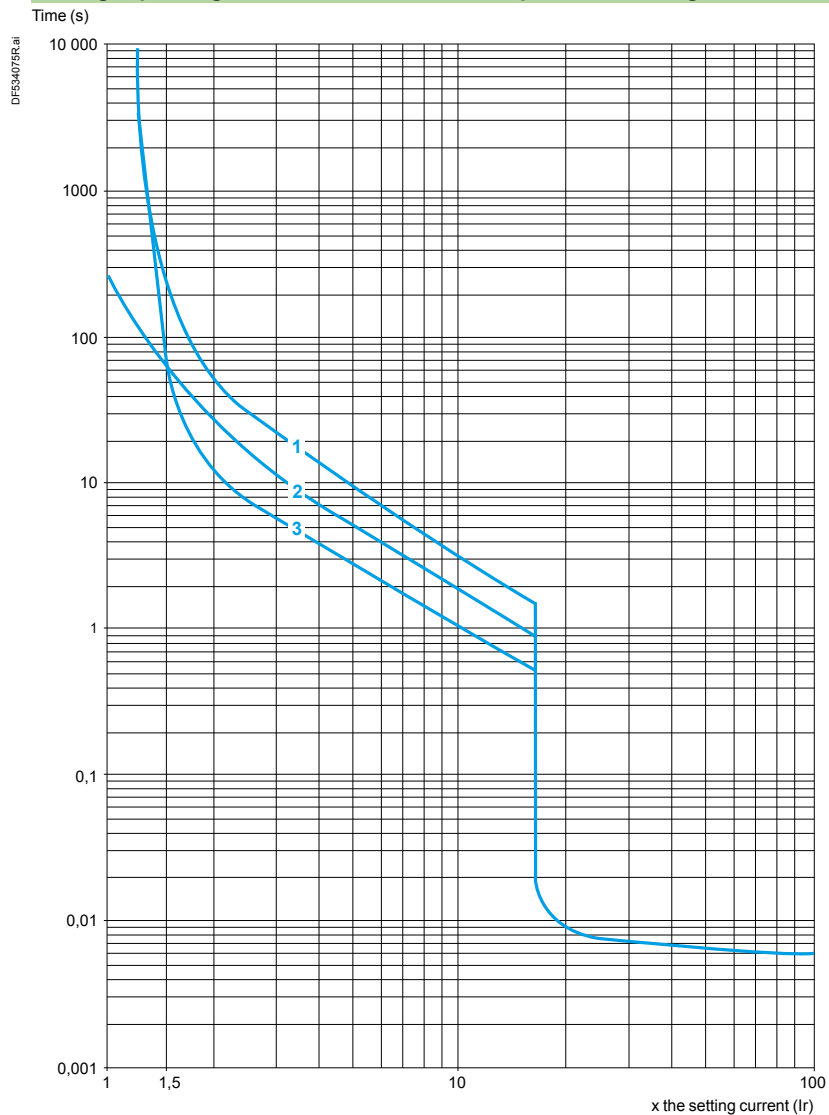
★ ≥100 kA.
(1) As % of Icu.

Circuit breaker type				GV2ME									
				01 to 06	07	08	10	14	16	20	21	22	32
Rating			A	0.1 to 1.6	2.5	4	6.3	10	14	18	23	25	32
Cable protection against thermal stress in the event of short-circuit (PVC insulated copper cables)	Minimum c.s.a. protected at 40 °C at I _{sc} max.	1 mm ²		●	●	●	≤ 10 kA	≤ 6 kA	(2)	(2)	(2)	(2)	(2)
		1.5 mm ²		●	●	●	≤ 20 kA	≤ 10 kA	(2)	(2)	(2)	(2)	(2)
		2.5 mm ²		●	●	●	●	●	●	●	●	●	(2)
		4...6 mm ²		●	●	●	●	●	●	●	●	●	●

● Cable c.s.a. protected.
(2) Cable c.s.a. not protected.

Thermal-magnetic tripping curves for GV2ME

Average operating times at 20 °C related to multiples of the setting current



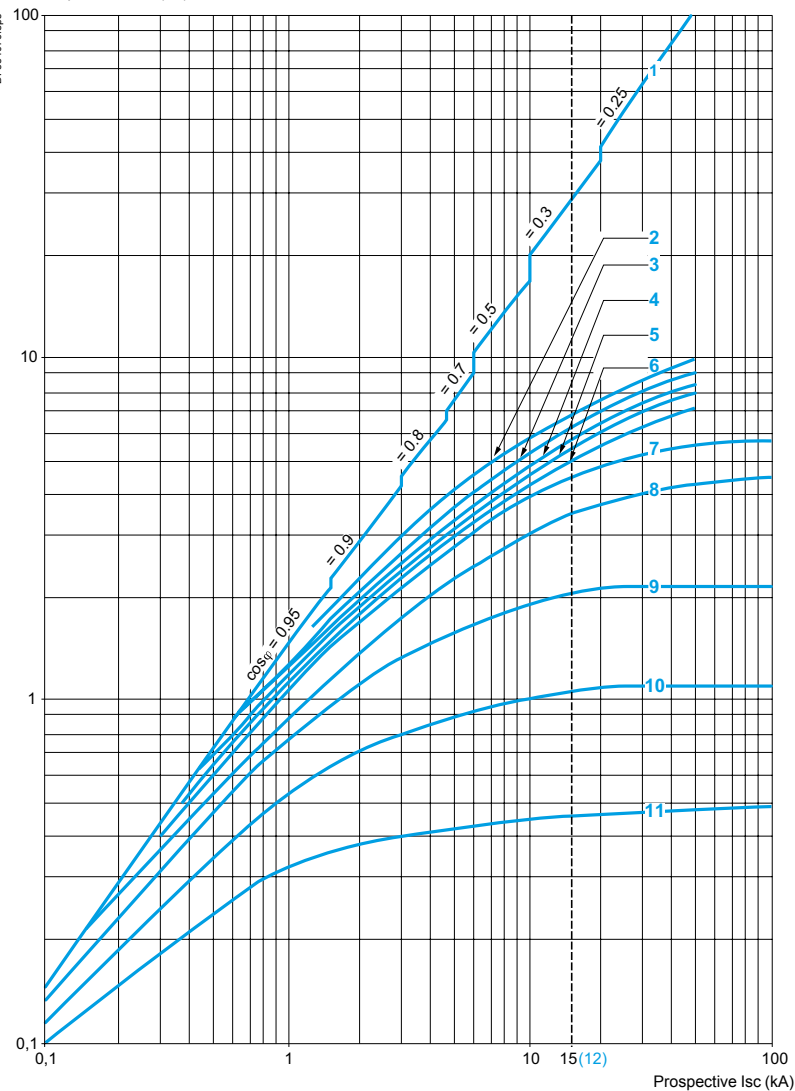
- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

Current limitation on short-circuit for GV2ME (3-phase 400/415 V)

Dynamic stress

$I_{peak} = f(\text{prospective } I_{sc}) \text{ at } 1.05 U_e = 435 \text{ V}$

Limited peak current (kA)



1 Maximum peak current

2 24 - 32 A

3 20 - 25 A

4 17 - 23 A

5 13 - 18 A

6 9 - 14 A

7 6 - 10 A

8 4 - 6.3 A

9 2.5 - 4 A

10 1.6 - 2.5 A

11 1 - 1.6 A

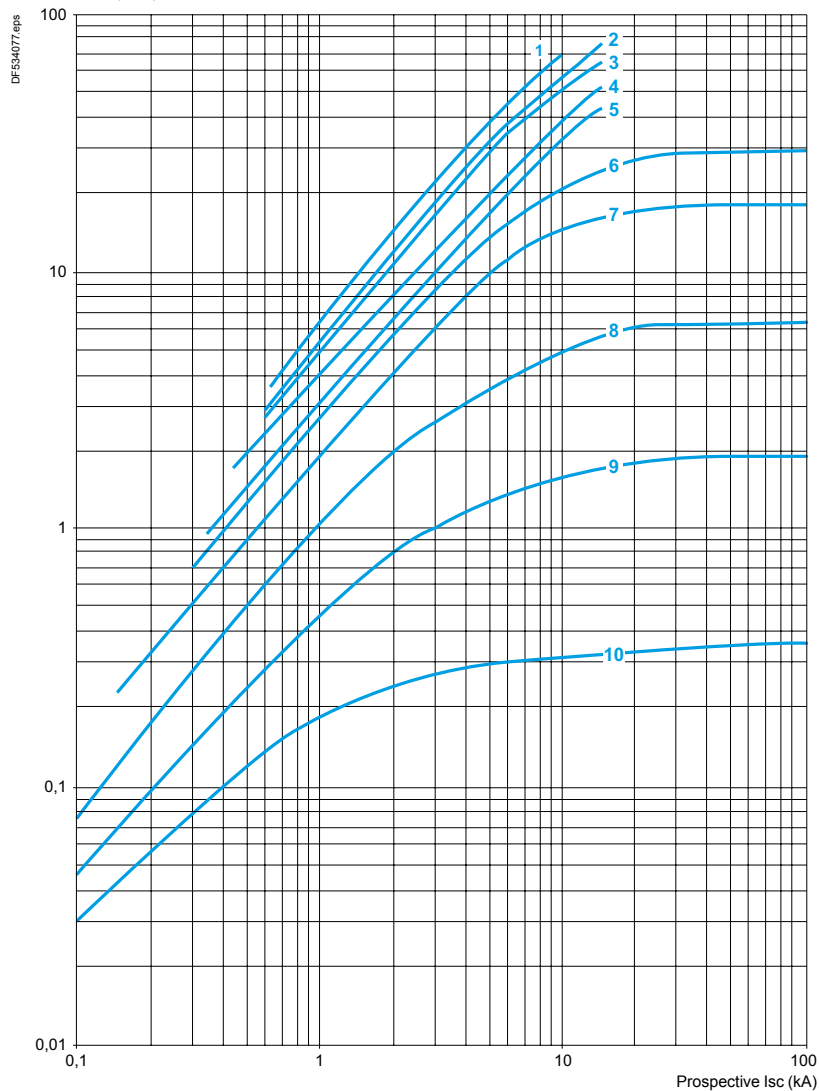
12 Limit of rated ultimate breaking capacity on short-circuit of GV2ME (14, 18, 23 and 25 A ratings)

Thermal limit on short-circuit for GV2ME

Thermal limit in kA^2s in the magnetic operating zone

Sum of $I^2dt = f$ (prospective I_{sc}) at $1.05 U_e = 435 \text{ V}$

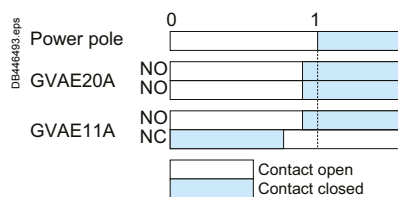
Sum of I^2dt (kA^2s)



- 1 24 - 32 A
- 2 20 - 25 A
- 3 17 - 23 A
- 4 13 - 18 A
- 5 9 - 14 A
- 6 6 - 10 A
- 7 4 - 6.3 A
- 8 2.5 - 4 A
- 9 1.6 - 2.5 A
- 10 1 - 1.6 A

Type of contacts			Instantaneous auxiliary GVAE**A			
Rated insulation voltage (Ui) (associated insulation coordination)	Conforming to IEC 60947-1	V	250 (690 in relation to main circuit)			
	Conforming to UL 60947-4-1, CSA C22.2 n° 60947-4-1	V	300			
Conventional thermal current (Ith)	Conforming to IEC 60947-5-1	A	2.5			
	Conforming to UL 60947-5-1, CSA C22.2 n° 60947-5-1	A	1			
Mechanical durability (C.O.: Close - Open)		C.O.	100 000			
Operational power and current conforming to IEC 60947-5-1. a.c. operation			AC-15/100 000 C.O.			
Operation	Rated operational voltage (Ue)	V	24	48	110 127	230 240
	Operational power, normal conditions	VA	48	60	120	120
	Occasional breaking and making capacities, abnormal conditions	kVA	0.48	0.6	1.27	2.4
	Rated operational current (Ie)	A	2	1.25	1	0.5
Operational power and current conforming to IEC 60947-5-1. d.c.			DC-13/100 000 C.O.			
Operation	Rated operational voltage (Ue)	V	24	48	60	—
	Operational power, normal conditions	W	24	15	9	—
	Occasional breaking and making capacities, abnormal conditions	W	100	50	50	—
	Rated operational current (Ie)	A	1	0.3	0.15	—
Low power switching reliability of contact			GVAE: Number of failures for "n" million operating cycles (17 V-5 mA): = 10 ⁻⁶			
Minimum operational conditions		V	17			
		mA	5			
Short-circuit protection			GB2CB06 or gG fuse 10 A max			
Cabling, SNAP IN terminals	Number of conductors		2			
	Solid cable	mm ²	0.5...2.5			
	Flexible cable without cable end	mm ²	0.5 ⁽¹⁾ ...4			
	Flexible cable with cable end	mm ²	0.5...2.5			
	Strip length	mm	10			

Operation of instantaneous auxiliary contacts

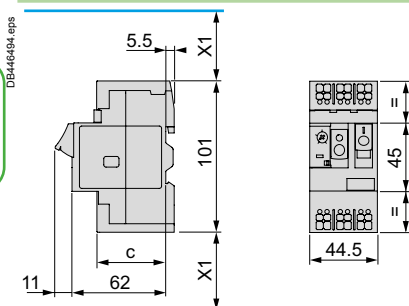


(1) For flexible cable with thin single conductors, it is recommended to use cable ends for preventing the wire from being damaged or severed by the spring.

Characteristics of 3-pole busbars GV2G●●A			
Rated insulation voltage (Ui)	Conforming to IEC 60947-1	V	690
Conventional thermal current (Ith)	Conforming to IEC 60439-1	A	63
Rated operational current (Ie)		A	63
Permissible peak current (I peak)		kA	11
Permissible thermal limit (I²t)		kA²s	104
Degree of protection	Conforming to IEC 60529		IP 20

Dimensions

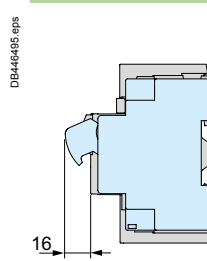
GV2ME••A



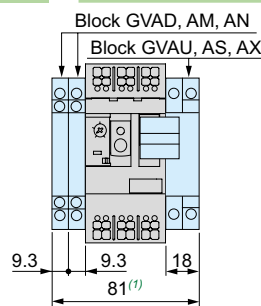
	c
Size 1: GV2ME01A...14A	45.5
Size 2: GV2ME16A...32A	49

X1 Electrical clearance = 40 mm for $U_e \leq 690$ V.

GVAX

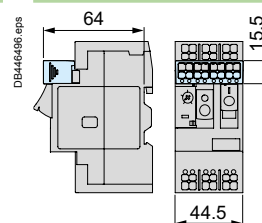


GVAD, AM, AN, AU, AS, AX



(1) Maximum.

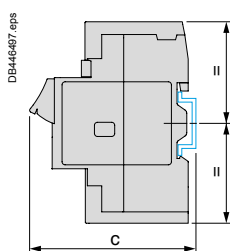
GVAE••A



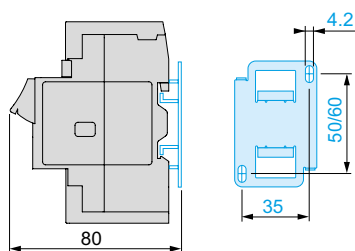
Mounting

GV2ME••A

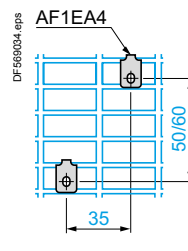
On 35 mm rail



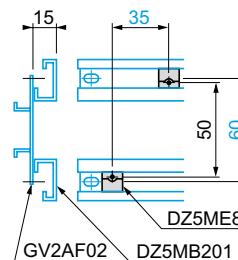
On panel with adapter plate GV2AF02



On pre-slotted plate AM1PA



On rails DZ5MB201

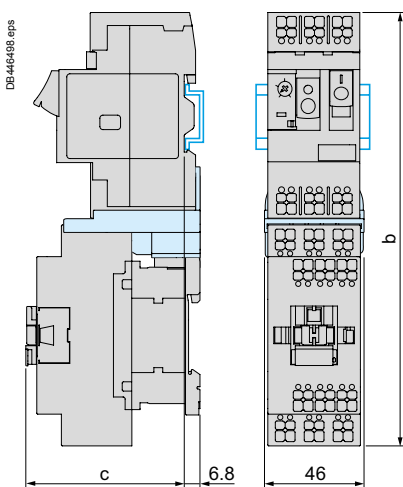


c = 78.5 on AM1 DP200 (35 x 7.5)
c = 86 on AM1 DE200, ED200 (35 x 15)

Dimensions

GV2AFAM

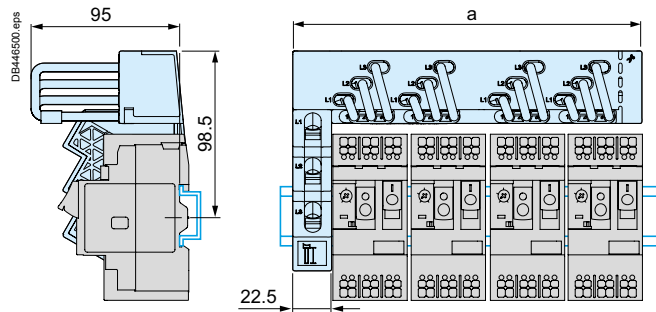
Combination GV2ME••A + LC1D••A contactor



GV2ME +	LC1D09 ...D18 AC	LC1D25 ...D32 AC	LC1D09 ...D18 DC	LC1D25 ...D32 DC
b	210.5	213.5	210.5	213.5
c	78.7	83.7	87.7	93.2

Mounting

GV2ME••A + GV2G••A busbars

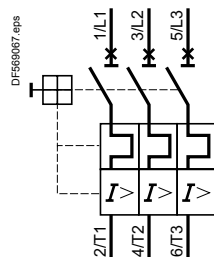


	a
GV2G2LA / GV2G2RA	115 mm
GV2G3LA / GV2G3RA	158 mm
GV2G4LA / GV2G4RA	203 mm

Motor
circuit
breakers

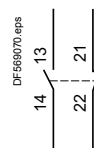
Schemes

GV2ME••A

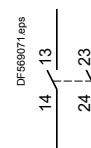


Front mounting add-on contact blocks Instantaneous auxiliary contacts

GVAE11A



GVAE20A



TeSys Deca contactors		
Type of product	Range	Pages
AC-3/AC-3e Applications - 3-pole TeSys Deca Contactors	From 9 to 32 A	 A2/3
AC-1 Applications - 3-pole TeSys Deca Contactors	From 20 to 40 A	A2/4
UL and CSA Applications - 3-pole TeSys Deca Contactors	From 25 to 40 A	A2/5
Auxiliary Contact Blocks, Assembly Kits for TeSys Deca Contactors		A2/7

Technical Data for Designers

A2/11





LC1D09AP7



LC1D25AP7

3-pole contactors - Motor control up to 15 kW at 400 V, in category AC-3/AC-3e

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3/AC-3e ⁽²⁾ (θ ≤ 60 °C)							Rated operational current in AC-3/AC-3e 440 V up to	Instantaneous auxiliary contacts 	Basic reference, to be completed by adding the control voltage code Fixing ⁽¹⁾	
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
Power and control connections by SNAP IN terminals										
2.2	4	4	4	5.5	5.5		9	1	1	LC1D09A●●
3	5.5	5.5	5.5	7.5	7.5		12	1	1	LC1D12A●●
4	7.5	9	9	10	10		18	1	1	LC1D18A●●
5.5	11	11	11	15	15		25	1	1	LC1D25A●●
7.5	15	15	15	18.5	18.5		32	1	1	LC1D32A●●

Separate components

Auxiliary contact blocks and add-on modules: see pages A2/6 to A2/7.

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

a.c. supply	
Volts	12 24 32 42 48 100 110 115 120 127 200 208 220 230 240 277 380 400 415 440 480 500 600 690
LC1D09A...D32A	
50/60 Hz	J7 B7 C7 D7 E7 K7 F7 FE7 G7 FC7 L7 LE7 M7 P7 U7 W7 Q7 V7 N7 R7 T7 S7 X7 Y7
d.c. supply	
Volts	12 24 36 48 60 72 100 110 125 220 250 440
LC1D09A...D32A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)	
0.7...1.25 U _c	JD BD CD ED ND SD KD FD GD MD UD RD
Low consumption d.c. supply	
Volts	12 20 24 48 72 110 220 250
LC1D09A...D32A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)	
0.8...1.25 U _c	JL ZL BL EL SL FL ML UL
a.c./d.c. supply	
Volts	24-60 48-130 100-250
LC1D09A...D32A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)	
0.85...1.1 U _c	BNE EHE KUE

(1) LC1D09A to D32A: clip-on mounting on 35 mm rail NSYSDR or screw fixing.

(2) For Coordination Tables, please refer to Chapter A5 of TeSys Catalog, ref. MKTED210011EN.



LC1D09AP7



LC1D25AP7

3-pole contactors - Load control from 20 to 40 A in category AC-1

Non inductive loads maximum current ($\theta \leq 60^\circ\text{C}$) utilisation category AC-1	Number of poles	Instantaneous auxiliary contacts	Basic reference, to be completed by adding the control voltage code Fixing ⁽¹⁾	Weight ⁽²⁾
A				kg
Connection by spring terminals				
20	3	1	1	LC1D09A●● 0.387
				or LC1D12A●● 0.387
25	3	1	1	LC1D18A●● 0.454
40	3	1	1	LC1D25A●● ⁽³⁾ 0.454
	3	1	1	LC1D32A●● ⁽³⁾ 0.454

Separate components

Auxiliary contact blocks and add-on modules: see pages A2/6 to A2/7.

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

a.c. supply

Volts 12 24 32 42 48 100 110 115 120 127 200 208 220 230 240 277 380 400 415 440 480 500 600 690

LC1D09A...D32A

50/60 Hz J7 B7 C7 D7 E7 K7 F7 FE7 G7 FC7 L7 LE7 M7 P7 U7 W7 Q7 V7 N7 R7 T7 S7 X7 Y7

d.c. supply

Volts 12 24 36 48 60 72 100 110 125 220 250 440

LC1D09A...D32A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

U 0.7...1.25 U_c JD BD CD ED ND SD KD FD GD MD UD RD

Low consumption d.c. supply

Volts 12 20 24 48 72 110 220 250

LC1D09A...D32A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

U 0.8...1.25 U_c JL ZL BL EL SL FL ML UL

(1) LC1D09A to D32A: clip-on mounting on 35 mm rail NSYSDR or screw fixing.

(2) The weights indicated are for contactors with a.c. control circuit. For d.c. or low consumption control circuit, add 0.160 kg from LC1D09A to D32A.

(3) 40 A with 2 cables (1 x 4 mm² + 1 x 6 mm²) connected in parallel.



LC1D09AP7



LC1D25AP7

Contactors conforming to UL and CSA standards (North American market) - 25 to 40 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 Fixing, connection ⁽¹⁾
Single-phase 1 Ø		3-phase 3 Ø						
120 V	240 V	208 V	240 V	480 V	600 V			
HP	HP	HP	HP	HP	HP		A	
Connection by SNAP IN terminals								
1/3	1	2	2	5	7.5	20-12 AWG	25	LC1D09A●●
0.5	2	3	3	7.5	10	20-12 AWG	25	LC1D12A●●
1	3	5	5	10	15	18-10 AWG	32	LC1D18A●●
2	3	7.5	7.5	15	20	18-10 AWG	40 ⁽²⁾	LC1D25A●●
2	5	10	10	20	25	18-10 AWG	40 ⁽²⁾	LC1D32A●●

Applications with High-Fault Short-Circuit ratings

High-fault short-circuit current ratings are: 100 kA (D09A...D32A) at 600 V with Class J fuses, 85 kA (D09A...D32A) at 480 V and 50 kA (D09A...D32A) at 600 V with circuit breakers.

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

a.c. supply

Volts	12	24	32	42	48	100	110	115	120	127	200	208	220	230	240	277	380	400	415	440	480	500	600	690
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LC1D09A...D32A

50/60 Hz	J7	B7	C7	D7	E7	K7	F7	FE7	G7	FC7	L7	LE7	M7	P7	U7	W7	Q7	V7	N7	R7	T7	S7	X7	Y7
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d.c. supply

Volts	12	24	36	48	60	72	100	110	125	220	250	440
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LC1D09A...D32A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

U 0.7...1.25 U_c JD BD CD ED ND SD KD FD GD MD UD RD

Low consumption d.c. supply

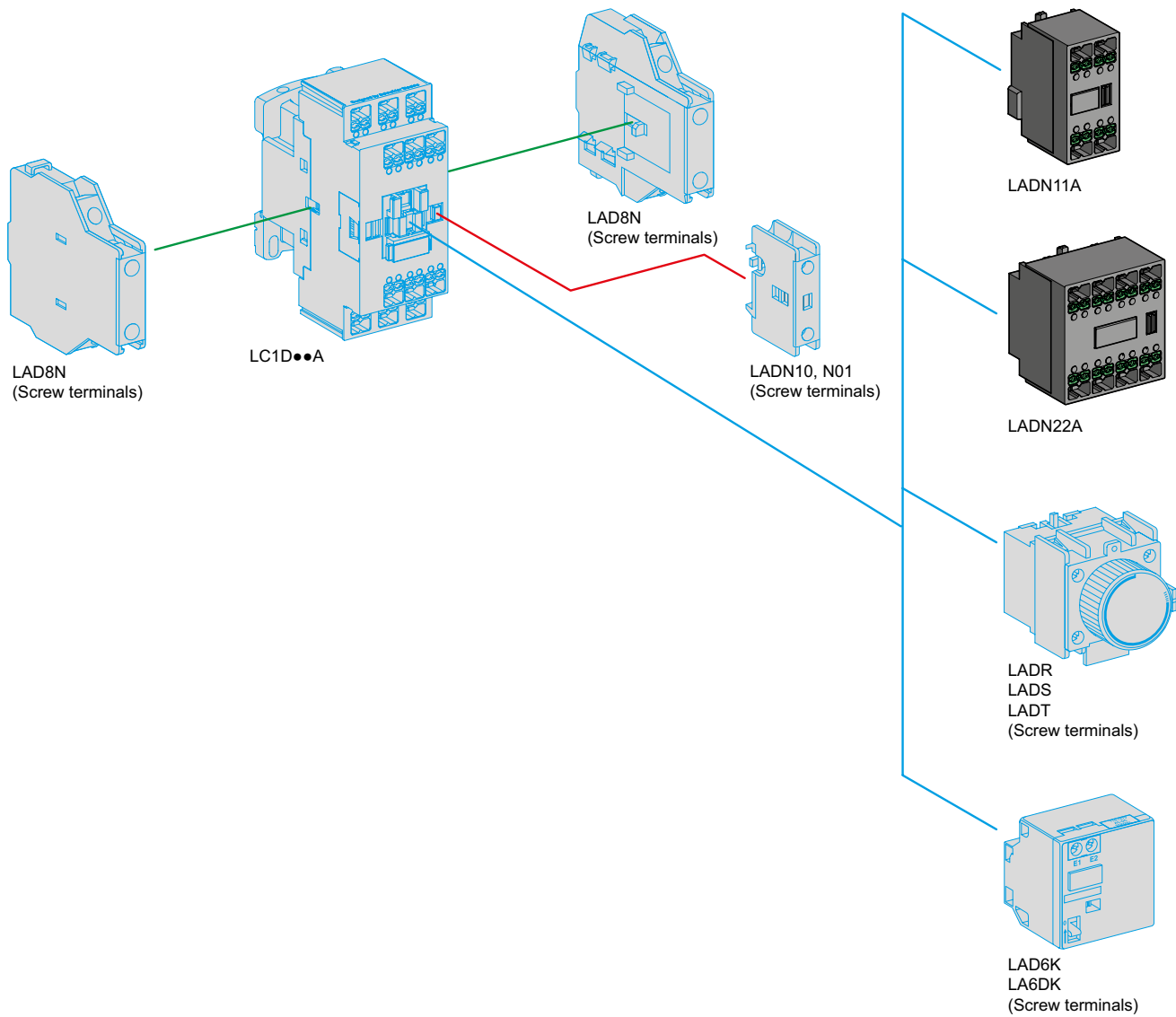
Volts	12	20	24	48	72	110	220	250
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LC1D09A...D32A (coils with integral suppression device fitted as standard, by bi-directional peak limiting diode)

U 0.8...1.25 U_c JL ZL BL EL SL FL ML UL

⁽¹⁾ LC1D09A to D32A: clip-on mounting on 35 mm L rail NSYSR or screw fixing.

⁽²⁾ 40 A with 2 x 10 AWG cables connected in parallel.



Note: Other accessories like Side contact blocks, Time delay auxiliary contact blocks, Mechanical latch blocks are available in screw terminals version. Please refer to Tesys Catalog ref. MKTED210011EN, pages B8/36 to B8/39 for more details.

TeSys Control

Deca Contactors - Auxiliary Contact Blocks

Product references



LADN11A



LADN22A

Instantaneous auxiliary contact blocks for connection by SNAP IN terminals

For use in normal operating environments

Clip-on mounting	Number of contacts per block	Composition	Reference
		    	
Front	2	– – – 1 1	LADN11A
		– – – 2 –	LADN20A
		– – – – 2	LADN02A
	4	– – – 2 2	LADN22A
		– – – 1 3	LADN13A
		– – – 4 –	LADN40A
		– – – – 4	LADN04A
		– – – 3 1	LADN31A

Maximum number of auxiliary contacts that can be fitted:

Contactors		Instantaneous auxiliary contacts						Time delay
Coil Type	Number of poles and size	Side mounted ⁽⁴⁾		Front mounted				1 block
				1 contact		2 contacts	4 contacts	
AC	3P LC1D09A...D32A	1 on LH or 1 on RH side ⁽¹⁾ and	–		1	or 1	or 1	
AC/DC								
DC	3P LC1D09A...D32A	–	–		1	or 1	or 1	
LC ^{(2) (3)}	3P LC1D09A...D32A	–	–		1	–	–	

⁽¹⁾ 1 on LH side for AC coils - 1 on RH side for AC/DC coils.

⁽²⁾ LC: low consumption.

⁽³⁾ LA1D... dust & damp proof auxiliary contact blocks not allowed with LC coils.

⁽⁴⁾ Other auxiliaries, including Side mounted contact blocks, are available in screw terminals version. Please refer to Tesys Catalog ref. MKTED210011EN, page B8/37 for more details.



PB125642.png



LAD9V0A



LAD9V21A.png



LAD9V21A

For 3-pole reversing contactors for motor control

Contactors with SNAP IN terminals. Horizontally mounted, assembled by customer.

Description	For contactors (2 identical contactors)	Reference
Interlocks		
Mechanical interlock without integral electrical interlocking	LC1D09A to D32A	LAD9V2
Electrical interlock	LC1D09A to D32A	LAD9V0A
Sets of power connections		
Comprising: ■ a set of parallel bars ■ a set of reverser bars.	LC1D09A...D32A with SNAP IN terminal connections	LAD9V21A

For star-delta starter

Contactors with SNAP IN terminals.

Description	For contactors (2 identical contactors)	Reference
Interlocks		
Mechanical interlock without integral electrical interlocking	LC1D09A to D32A	LAD9V2
Electrical interlock	LC1D09A to D32A	LAD9V0A
Sets of power connections		
Comprising: ■ a set of parallel bars ■ a set of reverser bars ■ a set of star jumpers.	LC1D09A to D32A same frame ⁽¹⁾	LAD91218A

For 3-pole changeover contactor pairs

Contactors with SNAP IN terminals. Horizontally mounted, assembled by customer.

Description	For contactors (2 identical contactors)	Reference
Interlocks		
Mechanical interlock without integral electrical interlocking	LC1D09A to D32A	LAD9V2
Electrical interlock	LC1D09A to D32A	LAD9V0A
Set of power connections		
Comprising a set of parallel bars	LC1D09A to D32A	LAD9V19A

(1) For assembly of 3 contactors of the same size.



LAD9V19A.png

LAD9V19A

TeSys Control

Deca Contactors

Product references

LAD91218A	LC1D12AB7	LC1D18AFD	LC1D25AM7	LC1D32AU7
LAD93218A	LC1D12ABD	LC1D18AFE7	LC1D25AMD	LC1D32AUD
LAD9V0A	LC1D12ABL	LC1D18AFL	LC1D25AML	LC1D32AUL
LAD9V19A	LC1D12ABNE	LC1D18AG7	LC1D25AN7	LC1D32AV7
LAD9V21A	LC1D12AC7	LC1D18AGD	LC1D25AND	LC1D32AW7
LADN02A	LC1D12ACD	LC1D18AJ7	LC1D25AP7	LC1D32AX7
LADN04A	LC1D12AD7	LC1D18AJD	LC1D25AQ7	LC1D32AY7
LADN11A	LC1D12AE7	LC1D18AJL	LC1D25AR7	LC1D32AZL
LADN13A	LC1D12AED	LC1D18AK7	LC1D25ARD	
LADN20A	LC1D12AEHE	LC1D18AKD	LC1D25AS7	
LADN22A	LC1D12AEL	LC1D18AKUE	LC1D25ASD	
LADN31A	LC1D12AF7	LC1D18AL7	LC1D25ASL	
LADN40A	LC1D12AFC7	LC1D18ALE7	LC1D25AT7	
LC1D09AB7	LC1D12AFD	LC1D18AM7	LC1D25AU7	
LC1D09ABD	LC1D12AFE7	LC1D18AMD	LC1D25AUD	
LC1D09ABL	LC1D12AFL	LC1D18AML	LC1D25AUL	
LC1D09ABNE	LC1D12AG7	LC1D18AN7	LC1D25AV7	
LC1D09AC7	LC1D12AGD	LC1D18AND	LC1D25AW7	
LC1D09ACD	LC1D12AJ7	LC1D18AP7	LC1D25AX7	
LC1D09AD7	LC1D12AJD	LC1D18AQ7	LC1D25AY7	
LC1D09AE7	LC1D12AJL	LC1D18AR7	LC1D25AZL	
LC1D09AED	LC1D12AK7	LC1D18ARD	LC1D32AB7	
LC1D09AEHE	LC1D12AKD	LC1D18AS7	LC1D32ABD	
LC1D09AEL	LC1D12AKUE	LC1D18ASD	LC1D32ABL	
LC1D09AF7	LC1D12AL7	LC1D18ASL	LC1D32ABNE	
LC1D09AFC7	LC1D12ALE7	LC1D18AT7	LC1D32AC7	
LC1D09AFD	LC1D12AM7	LC1D18AU7	LC1D32ACD	
LC1D09AFE7	LC1D12AMD	LC1D18AUD	LC1D32AD7	
LC1D09AFL	LC1D12AML	LC1D18AUL	LC1D32AE7	
LC1D09AG7	LC1D12AN7	LC1D18AV7	LC1D32AED	
LC1D09AGD	LC1D12AND	LC1D18AW7	LC1D32AEHE	
LC1D09AJ7	LC1D12AP7	LC1D18AX7	LC1D32AEL	
LC1D09AJD	LC1D12AQ7	LC1D18AY7	LC1D32AF7	
LC1D09AJL	LC1D12AR7	LC1D18AZL	LC1D32AFC7	
LC1D09AK7	LC1D12ARD	LC1D25AB7	LC1D32AFD	
LC1D09AKD	LC1D12AS7	LC1D25ABD	LC1D32AFE7	
LC1D09AKUE	LC1D12ASD	LC1D25ABL	LC1D32AFL	
LC1D09AL7	LC1D12ASL	LC1D25ABNE	LC1D32AG7	
LC1D09ALE7	LC1D12AT7	LC1D25AC7	LC1D32AGD	
LC1D09AM7	LC1D12AU7	LC1D25ACD	LC1D32AJ7	
LC1D09AMD	LC1D12AUD	LC1D25AD7	LC1D32AJD	
LC1D09AML	LC1D12AUL	LC1D25AE7	LC1D32AJL	
LC1D09AN7	LC1D12AV7	LC1D25AED	LC1D32AK7	
LC1D09AND	LC1D12AW7	LC1D25AEHE	LC1D32AKD	
LC1D09AP7	LC1D12AX7	LC1D25AEL	LC1D32AKUE	
LC1D09AQ7	LC1D12AY7	LC1D25AF7	LC1D32AL7	
LC1D09AR7	LC1D12AZL	LC1D25AFC7	LC1D32ALE7	
LC1D09ARD	LC1D18AB7	LC1D25AFD	LC1D32AM7	
LC1D09AS7	LC1D18ABD	LC1D25AFE7	LC1D32AMD	
LC1D09ASD	LC1D18ABL	LC1D25AFL	LC1D32AML	
LC1D09ASL	LC1D18ABNE	LC1D25AG7	LC1D32AN7	
LC1D09AT7	LC1D18AC7	LC1D25AGD	LC1D32AND	
LC1D09AU7	LC1D18ACD	LC1D25AJ7	LC1D32AP7	
LC1D09AUD	LC1D18AD7	LC1D25AJD	LC1D32AQ7	
LC1D09AUL	LC1D18AE7	LC1D25AJL	LC1D32AR7	
LC1D09AV7	LC1D18AED	LC1D25AK7	LC1D32ARD	
LC1D09AW7	LC1D18AEHE	LC1D25AKD	LC1D32AS7	
LC1D09AX7	LC1D18AEL	LC1D25AKUE	LC1D32ASD	
LC1D09AY7	LC1D18AF7	LC1D25AL7	LC1D32ASL	
LC1D09AZL	LC1D18AFC7	LC1D25ALE7	LC1D32AT7	

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

Technical Data for Designers

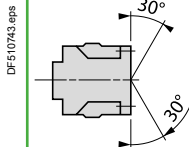
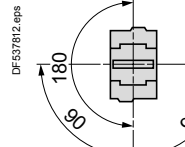
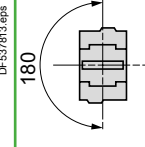
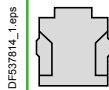
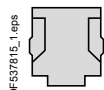
Deca Advanced, Deca contactors:

- > characteristics.....A2/12 to A2/17
- > dimensions, mounting and schemes.....A2/18 to A2/25

TeSys Control

Deca Advanced, Deca Contactors

Characteristics

Environment				
Contactor type LC1			D09A, D12A and D18A	D25A and D32A
Rated insulation voltage (Ui)	Conforming to IEC 60947-4-1, overvoltage category III, degree of pollution: 3	V	690	
	Conforming to UL, CSA	V	600	
Rated impulse withstand voltage (Uimp)	Conforming to IEC 60947	kV	6	
Conforming to standards			IEC/EN 60947-4-1, IEC/EN 60947-5-1, GB/T 14048.4, UL 60947-4-1, CSA C22.2 n° 60947-4-1, UL 60947-5-1, CSA C22.2 n° 60947-5-1	
Product certifications			CB Scheme, CCC, CE, UKCA, cULus	
Degree of protection ⁽¹⁾ (front face)	Conforming to IEC 60529			
	Power circuit connections		Protection against direct finger contact IP20	
	Coil connection		Protection against direct finger contact IP20	
Climatic withstand			According to IACS E10 and IEC 60947-1 Annex Q category D	
Ambient air temperature around the device	Storage	°C	-60...+80	
	Operation ⁽²⁾	°C	-40...+60	
	Allowed with derating ^{(2) (3)}	°C	+60...+70 at Uc to 1.●● x Uc	
Maximum operating altitude	Without derating	m	3000	
Operating positions ⁽⁴⁾	Without derating in the following positions		AC and DC coils AC/DC and "BBE" coils 	AC coils AC/DC and "BBE" coils  DC coils 
	Positions that are not allowed		For --- contactors LC1D09 to LC1D32  	
Flame resistance	Conforming to IEC 60695-2-11	°C	850	
Shock resistance ⁽⁵⁾ 1/2 sine wave = 11 ms Conforming to IEC/EN 60068-2-27	Contactor open		10 gn	8 gn
	Contactor closed		15 gn	15 gn
Vibration resistance ⁽⁵⁾ 5...300 Hz Conforming to IEC/EN 60068-2-6	Contactor open		2 gn	
	Contactor closed		4 gn	4 gn

⁽¹⁾ Protection provided for the cabling c.s.a.'s indicated on the next page and for connection by cable.

⁽²⁾ As per IEC60947-4-1, operating time and drop out voltage given and tested for -5...+40 °C.

⁽³⁾ Refer to operational current in AC1 in Tesys Catalog, ref. MKTED210011EN, page A5/112.

⁽⁴⁾ When mounting on a vertical rail, use a stop.

⁽⁵⁾ Without modifying the power contact states, in the most unfavourable direction (coil energised at Ue).

In case of vibration, it is recommended to mount the devices separately by screws on metal plate.

TeSys Control

Deca Advanced, Deca Contactors

Characteristics

Pole characteristics Deca contactors									
Contactor type				LC1	D09A (3P)	D12A (3P)	D18A (3P)	D25A (3P)	D32A (3P)
Rated operational current (Ie) (Ue ≤ 440 V)	In AC-3/AC-3e, θ ≤ 60 °C		A	9	12	18	25	32	
	In AC-1, θ ≤ 60 °C		A	25	25	32	40 ⁽¹⁾	40 ⁽¹⁾	
Rated operational voltage (Ue)	Up to (as per IEC 60947-1)		V	690	690	690	690	690	
Frequency limits	Of the operational current		Hz	25...400	25...400	25...400	25...400	25...400	
Conventional thermal current (Ith)	θ ≤ 60 °C		A	25	25	32	40 ⁽¹⁾	50 ⁽¹⁾	
Rated making capacity (440 V)	Conforming to IEC 60947		A	250	250	300	450	550	
Rated breaking capacity (440 V)	Conforming to IEC 60947		A	250	250	300	450	550	
Permissible short time rating No current flowing for preceding 15 minutes with θ ≤ 40 °C	For 1 s		A	210	210	240	380	430	
	For 10 s		A	105	105	145	240	260	
	For 1 min		A	61	61	84	120	138	
	For 10 min		A	30	30	40	50	60	
Fuse protection against short-circuits (U ≤ 690 V)	Without thermal overload relay, gG fuse	type 1	A	25	40	50	63	63	
		type 2	A	20	25	35	40	63	
		With thermal overload relay		A	See pages B11/4 and B11/5, for aM or gG fuse ratings corresponding to the associated thermal overload relay				
Average impedance per pole	At Ith and 50 Hz		mΩ	2.5	2.5	2.5	2	2	
Power dissipation per pole for the above operational currents	AC-3/AC-3e		W	0.20	0.36	0.8	1.25	2	
	AC-1		W	1.56	1.56	2.5	3.2	5	

Control circuit characteristics, a.c. supply Deca contactors						
Contactor type				LC1D09...D32		
Rated control circuit voltage (Uc)		50/60 Hz		V	12...690	
Rated operational voltage		Conforming to IEC 60947-1		V	690	
		Conforming to UL, CSA		V	600	
Control voltage limits						
50 or 60 Hz coils	Operation			—		
	Drop-out			—		
50/60 Hz coils	Operation			0.8...1.1 Uc on 50 Hz and 0.85...1.1 Uc on 60 Hz at 60 °C		
	Drop-out			0.3...0.6 Uc at 60 °C		
Average consumption at 20 °C and at Uc	~ 50 Hz	Inrush	50 Hz coil	VA	—	
			Cos φ		0.75	
			50/60 Hz coil	VA	70	
		Sealed	50 Hz coil	VA	—	
			Cos φ		0.3	
			50/60 Hz coil	VA	7.5	
	~ 60 Hz	Inrush	60 Hz coil	VA	—	
			Cos φ		0.75	
			50/60 Hz coil	VA	70	
		Sealed	60 Hz coil	VA	—	
			Cos φ		0.3	
			50/60 Hz coil	VA	7	
	Heat dissipation		50/60 Hz	W	2...3	
	Operating time ⁽²⁾		Closing "C"	ms	12...22	
Opening "O"			ms	4...19		
Mechanical durability in millions of operating cycles		50 or 60 Hz coil			—	
		50/60 Hz coil on 50 Hz			15	
Maximum operating rate at ambient temperature ≤ 60 °C		In operating cycles per hour			3600	

⁽¹⁾ Versions with SNAP IN terminal connections:

40 A with 2 cables (1 x 4 mm² + 1 x 6 mm²) connected in parallel.

⁽²⁾ The closing time "C" is measured from the moment the coil supply is switched on to closure of the main poles. The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separate.

TeSys Control

Deca Contactors

Characteristics

d.c. control circuit characteristics Deca contactors

Contactor type			LC1D09A...D32A	
Rated control circuit voltage (Uc) ---			V	12...440
Rated operational voltage	Conforming to IEC 60947-1		V	690
	Conforming to UL, CSA		V	600
Control voltage limits	Operation	Standard coil		0.7...1.25 Uc at 60 °C
		Wide range coil		–
	Drop-out			0.1...0.25 Uc at 60 °C
Average consumption at 20 °C and at Uc	---	Inrush	W	5.4
		Sealed	W	5.4
Operating time ⁽¹⁾ average at Uc	Closing	"C"	ms	63 ±15 %
	Opening	"O"	ms	20 ±20 %
			<i>Note: The arcing time depends on the circuit switched by the poles. For all normal 3-phase applications, the arcing time is less than 10 ms. The load is isolated from the supply after a time equal to the sum of the opening time and the arcing time.</i>	
Time constant (L/R)			ms	28
Mechanical durability at Uc	In millions of operating cycles			30
Maximum operating rate at ambient temperature ≤ 60 °C	In operating cycles per hour			3600

Low consumption control circuit characteristics Deca contactors

Contactor type				LC1D09A...D32A
Rated control circuit voltage (Uc) ---			V	12...250
Rated operational voltage	Conforming to IEC 60947-1		V	690
	Conforming to UL, CSA		V	600
Average consumption d.c. at 20 °C and at Uc	Wide range coil (0.8...1.25 Uc)	Inrush	W	2.4
		Sealed	W	2.4
Operating time ⁽¹⁾ at Uc and at 20 °C	Closing	"C"	ms	77 ±15 %
	Opening	"O"	ms	25 ±20 %
Voltage limits (θ ≤ 60 °C) of the control circuit	Operation			0.8 to 1.25 Uc
	Drop-out			0.1...0.3 Uc
Time constant (L/R)			ms	40
Mechanical durability	In millions of operating cycles			30
Maximum operating rate at ambient temperature ≤ 60 °C	In operating cycles per hour			3600

⁽¹⁾ The operating times depend on the type of contactor electromagnet and its control mode.

The closing time "C" is measured from the moment the coil supply is switched on to initial contact of the main poles.

The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separate.

TeSys Control

Deca Advanced Contactors

Characteristics

Wide band Deca Advanced contactors AC/DC coil circuit characteristics				
Rated control circuit voltage (Uc)		V	AC/DC 24...250	
	Operation	V	0.85 Uc mini...1.1 Uc maxi at 60 °C in AC or DC (BNE coil: 0.8 Uc mini at 24 VDC, 0.85 Uc mini in AC).	
	Drop-out	V	0.1 Uc maxi (e.g. 100 to 250 V = 25 V at 60 °C)	
Contactor type			LC1D09A...D32A	
Coil code			BNE	EHE
				KUE
Rated control circuit voltage (Uc)			24...60	48...130
Rated operational voltage	Conforming to IEC 60947-1	V	690	
	Conforming to UL, CSA	V	600	
AC supply at 20°C	Consumption inrush	VA	15	25
	Consumption sealed	VA	0.9	1.3
	Consumption sealed	mA	28	15
	Heat dissipation	W	0.6	0.8
DC supply at 20°C	Consumption inrush	W	14	24
	Consumption sealed	mA	23	13
	Heat dissipation	W	0.6	0.8
Max operating time ⁽²⁾	Closing "C"	ms	50 ±5 ms	
	Opening "O"	ms	20...90 ms	
EMC immunity			Meets IEC 60947-4-1 standard, table 12	
EMC emission		IEC 60947-4-1 §9.4.3	Environment A ⁽¹⁾	
Maximum operating rate at ambient temperature ≤ 60°C		cycle/h	3600	
Mechanical durability at Uc In millions of operating cycles			15	

⁽¹⁾ Use of this product in EMC environment B may require mitigation measures to avoid unwanted disturbance.

⁽²⁾ The closing time "C" is measured from the moment the coil supply is switched on to closure of the main poles. The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separates.

TeSys Control

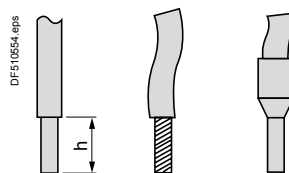
Deca Advanced, Deca Contactors

Characteristics

Power circuit connections

SNAP IN terminal connections Deca, Deca Advanced contactors

Bare cables



Contactors type			LC1	D09A...D12A (3P)	D18A...D32A (3P)
	h	mm		10	12
Flexible cable	1 conductor	mm ²		0.5 ⁽¹⁾ ...4	0.75...6
	without cable end	2 conductors	mm ²	0.5 ⁽¹⁾ ...4	0.75...6
Flexible cable	1 conductor	mm ²		0.5...2.5	0.75...4
	with cable end	2 conductors	mm ²	0.5...2.5	0.75...4
Solid cable	1 conductor	mm ²		0.5...2.5	0.75...4
	without cable end	2 conductors	mm ²	0.5...2.5	0.75...4

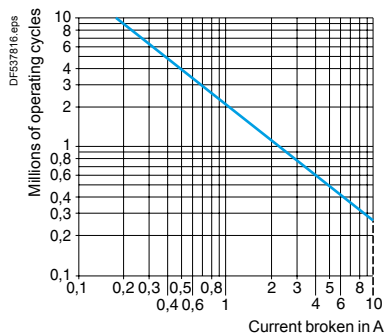
Control circuit connections

Connection by cable (tightening via SNAP IN) Deca, Deca Advanced contactors

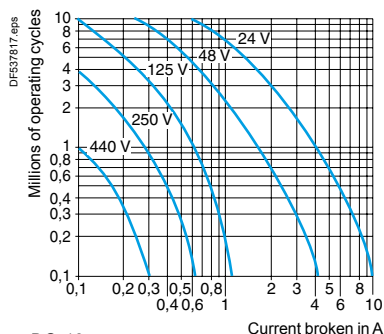
Flexible cable	1 conductor	mm ²	0.5 ⁽¹⁾ ...4
	without cable end	2 conductors	mm ²
Flexible cable	1 conductor	mm ²	0.5...2.5
	with cable end	2 conductors	mm ²
Solid cable	1 conductor	mm ²	0.5...2.5
	without cable end	2 conductors	mm ²

(1) For flexible cables with thin single conductors, it is recommended to use cable ends for preventing the wire from being damaged or severed by the spring.

Characteristics of auxiliary contacts incorporated in the contactor				
Mechanically linked contacts	Conforming to IEC 60947-5-1			Each contactor has 2 N/O and N/C contacts mechanically linked on the same movable contact holder
Mirror contact	Conforming to IEC 60947-4-1			The N/C contact on each contactor represents the state of the power contacts and can be connected to a PREVENTA safety module
Rated operational voltage (Ue)	Up to		V	690
Rated insulation voltage (Ui)	Conforming to IEC 60947-1		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 $\lambda = 10^{-8}$	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		A	~: 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)



AC-15



DC-13

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 ($\cos \phi 0.7$) = 10 times the power broken ($\cos \phi 0.4$).

Operating cycles	V	24	48	115	230	400	440	600
1 million	VA	60	120	280	560	960	1050	1440
3 million	VA	16	32	80	160	280	300	420
10 million	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 load.

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	—	—

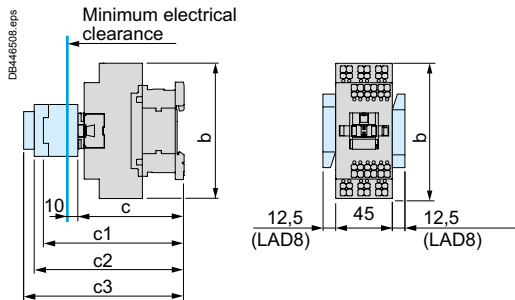
Environment				
Contact block type (not dust/damp protected)				LADN**A
Conforming to standards				IEC/EN 60947-5-1, GB/T 14048.5, UL 60947-5-1, CSA C22.2 n° 60947-5-1
Product certifications				CB Scheme, CCC, CE, UKCA, cULus
Degree of protection	Conforming to IEC 60529			Protection against direct finger contact IP 20
Ambient air temperature around the device	Storage		°C	-60...+80
	Operation		°C	-5...+60
Maximum operating altitude	Without derating		m	3000
SNAP IN terminal connections	Flexible or solid cable without cable end	1 conductor	mm²	0.5 ⁽¹⁾ ...4
		2 conductors	mm²	0.5 ⁽¹⁾ ...4
	Flexible cable with cable end	1 conductor	mm²	0.5...2.5
		2 conductors	mm²	0.5...2.5
	Solid cable without cable end	1 conductor	mm²	0.5...2.5
		2 conductors	mm²	0.5...2.5
Instantaneous contact characteristics				
Number of contacts				2 or 4
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		A	10
Rated making capacity	Conforming to IEC 60947-5-1	I rms	A	~: 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)
Overlap time	Guaranteed between N/C and N/O contacts on LADC22		ms	1.5
Mechanical durability	In millions of operating cycles			30
Operational power of contacts				See page B8/94 of TeSys Catalog, ref. MKTED210011EN.
Degree of pollution				3

TeSys Control

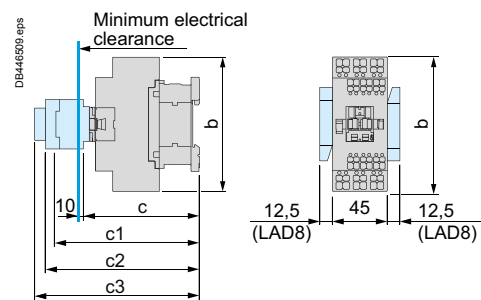
Deca Contactors

Dimensions

LC1D09A...D12A (3-pole) - a.c coil

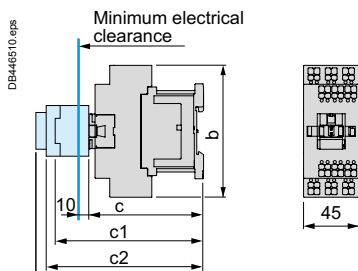


LC1D18A...D32A (3-pole) - a.c coil

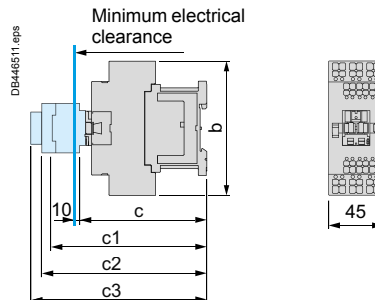


LC1	D09A...D12A	D18A...D32A
b without add-on blocks	107	110
c without cover or add-on blocks	84	90
with cover, without add-on blocks	86	92
c1 with LADN or C (2 or 4 contacts)	117	123
c2 with LAD6K10	129	135
c3 with LADT, R, S	137	143
with LADT, R, S and sealing cover	141	147
with LADN●●R (2 or 4 contacts)	120	126

LC1D09A...D12A (3-pole) - d.c coil



LC1D18A...D32A (3-pole) - d.c coil



LC1	D09A...D12A	LC1D18A...D32A
b	107	110
c without cover or add-on blocks	93	99
with cover, without add-on blocks	95	101
c1 with LADN or C (2 or 4 contacts)	126	132
c2 with LAD6K10	138	144
c3 with LADT, R, S	146	152
with LADT, R, S and sealing cover	150	156

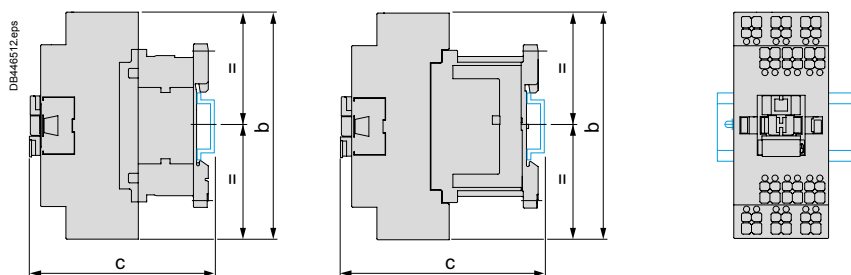
Mounting

LC1D09A...D32A

a.c. coil

d.c. coil

On mounting rail NSYSR200B, NSYSR200BD or NSYSR200
(width 35 mm)

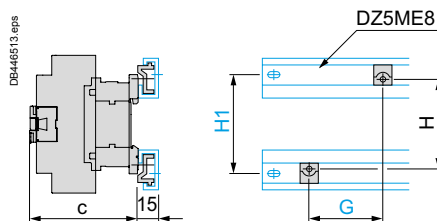


Control circuit:	a.c.		d.c.	
LC1	LC1D09A...D12A	LC1D18A...D32A	LC1D09A...D12A	LC1D18A...D32A
b	107	110	107	110
c (NSYSDR200B or NSYSDR200BD) ⁽¹⁾	88	94	97	103
c (NSYSDR200) ⁽¹⁾	96	102	105	110

(1) *With safety cover.*

LC1D09A...D32A

On 2 mounting rails DZ5MB

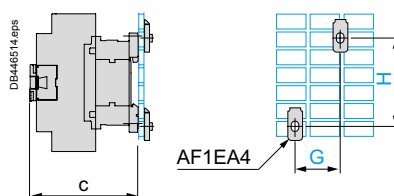


Control circuit: a.c

LC1	LC1D09A...D12A	LC1D18A...D32A
c with cover	86	92
G	35	35
H	60	60
H1	70	70

LC1D09A...D32A

On pre-slotted mounting plate AM1 PA, PB, PC

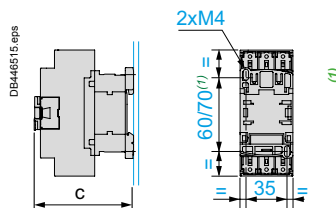


Control circuit: a.c

LC1	LC1D09A...D12A	LC1D18A...D32A
c with cover	86	92
G	35	35
H	60/70	60/70

LC1D09A...D32A

Panel mounted



Control circuit: a.c

LC1	LC1D09A...D12A	LC1D18A...D32A
c with cover	86	92

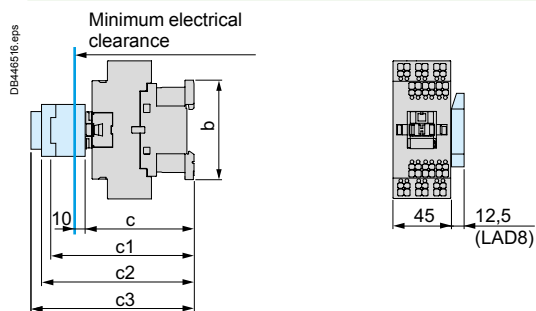
(1) for DC coil: 70 mm only.

TeSys Control

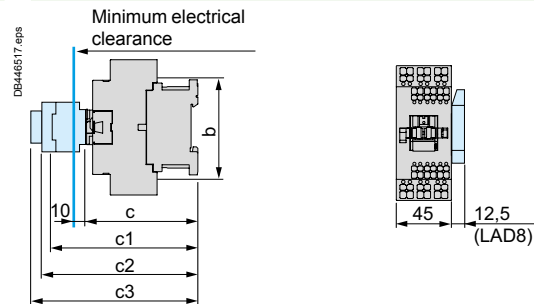
Deca Contactors

Dimensions

LC1D09A...D12A (3-pole), with AC/DC compatible coil



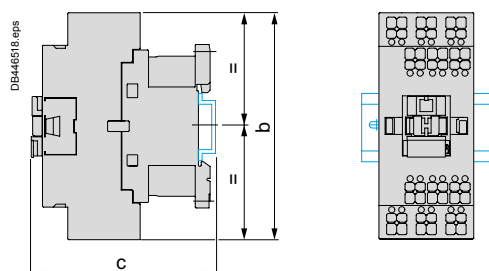
LC1D18A...D32A (3-pole), with AC/DC compatible coil



LC1	LC1D09A...D12A	LC1D18A...D32A
b without add-on blocks	107	110
c without cover or add-on blocks	84	90
with cover, without add-on blocks	86	92
c1 with LADN or C (2 or 4 contacts)	117	123
c2 with LAD6K10	129	135
c3 with LADT, R, S	137	143
with LADT, R, S and sealing cover	141	147

LC1D09A...D32A (3-pole), with AC/DC compatible coil

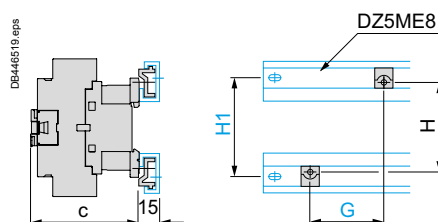
On mounting rail NSYSR200B, NSYSR200BD or NSYSR200 (width 35 mm)



LC1	LC1D09A...D12A	LC1D18A...D32A
b	107	110
c (NSYSR200B or NSYSR200BD)	88	94
c (NSYSR200)	96	102

LC1D09A...D32A (3-pole), with AC/DC compatible coil

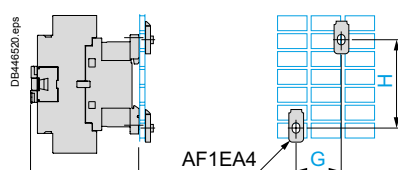
On 2 mounting rails DZ5MB



LC1	LC1D09A...D12A	LC1D18A...D32A
c with cover	86	92
G	35	35
H	60	60
H1	70	70

LC1D09A...D32A (3-pole), with AC/DC compatible coil

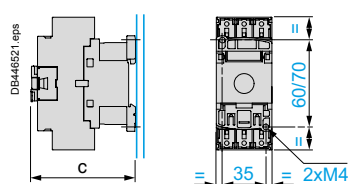
On pre-slotted mounting plate AM1PA, PB, PC



LC1	LC1D09A...D12A	LC1D18A...D32A
c with cover	86	92
G	35	35
H	60/70	60/70

LC1D09A...D32A (3-pole), with AC/DC compatible coil

Panel mounted

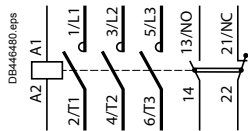


LC1	LC1D09A...D12A	LC1D18A...D32A
c with cover	86	92

Contactors

Deca, Deca Advanced 3-pole contactors (References: pages A2/26 to A2/26)

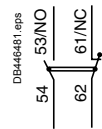
LC1D09A to D32A



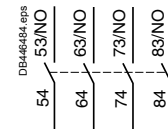
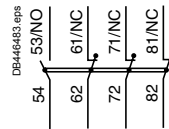
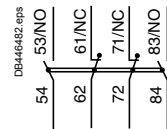
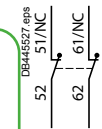
Front mounting add-on contact blocks

Instantaneous auxiliary contacts for Deca, Deca Advanced contactors (References: page A2/26)

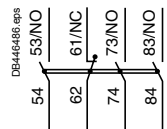
1 N/O + 1 N/C LADN11A 2 N/O LADN20A



2 N/C LADN02A 2 N/O + 2 N/C LADN22A 1 N/O + 3 N/C LADN13A 4 N/O LADN40A

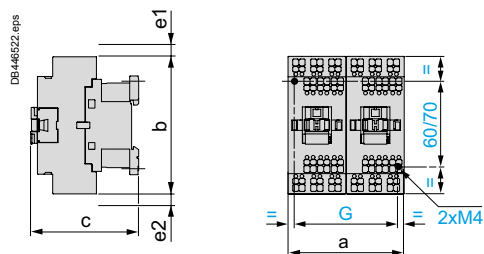


4 N/C LADN04A 3 N/O + 1 N/C LADN31A



Contactors

Reverser/Changeover LC1D09A to D32A Deca, Deca Advanced contactors 2 x LC1D09A to D32A



2 x LC1	a	b	c ⁽¹⁾	e1	e2	G
D09A...12A AC, AC/DC	90	107	86	—	—	80
D09A...D12A DC	90	107	95	—	—	80
D18A...D32A AC, AC/DC	90	110	92	—	—	80
D18A...D32A DC	90	110	101	—	—	80

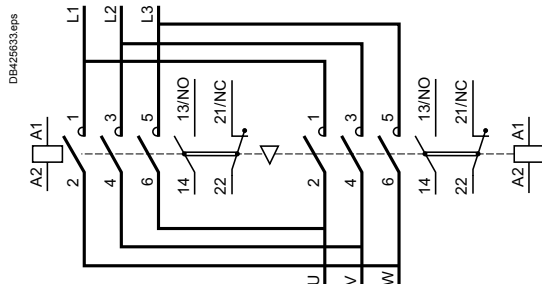
⁽¹⁾ With safety cover, without add-on block.

Schemes

Reversing contactors for motor control

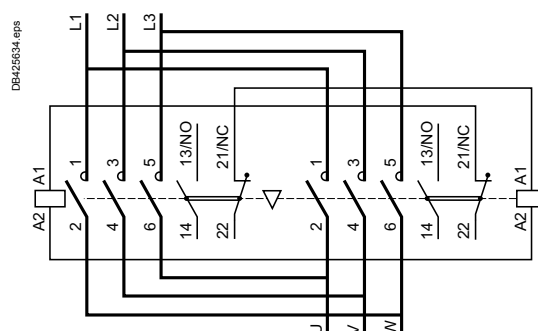
LC2D09A...D32A Deca, Deca Advanced contactors

Horizontally mounted



LAD9V0A Deca, Deca Advanced contactors

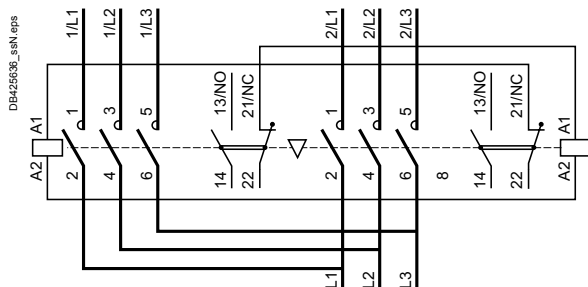
With electrical interlocking



Changeover contactor pairs Deca contactors

LAD9V0A

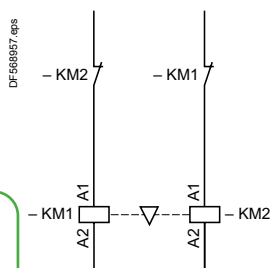
With integral electrical interlocking



Electrical interlocking of Deca, Deca Advanced reversing contactors fitted with:

Mechanical interlock without integral electrical contacts

LAD9V2



Control
relays

TeSys Deca Control Relays

Relays 5 Contacts, Simultaneous Action

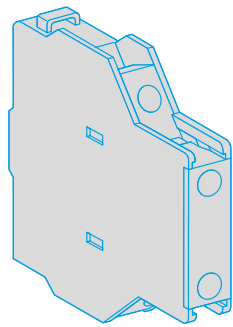


A3/3

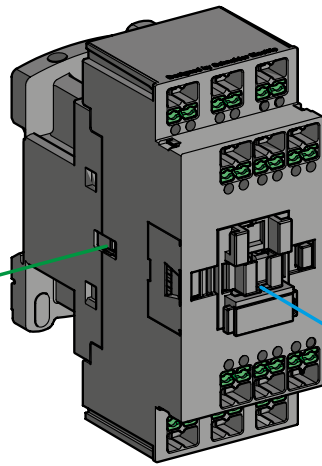
Note: For auxiliaries please refer to pages A2/6 and A2/7.

Technical Data for Designers

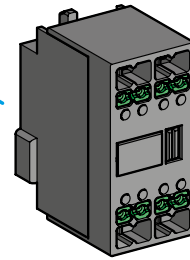
A3/5



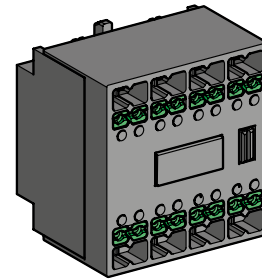
LAD8N
(Screw terminals)



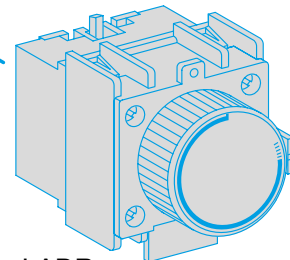
CAD...A



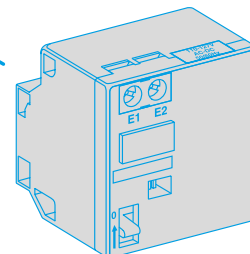
LADN11A



LADN22A



LADR
LADS
LADT
(Screw terminals)



LAD6K
(Screw terminals)

Note: Other accessories like Side contact blocks, Time delay auxiliary contact blocks, Mechanical latch blocks are available in screw terminals version. Please refer to Tesys Catalog ref. MKTED210011EN, pages B8/36 to B8/39 for more details.

PF125620.png



CAD50A●●

Control relays for connection by SNAP IN terminals

Type	Number of contacts	Composition	Basic reference, to be completed by adding the control voltage code
Instantaneous	5	5 —	CAD50A●●
		3 2	CAD32A●●

Standard control circuit voltages

(for other voltages, please consult your Regional Sales Office)

a.c. supply

Volts	12	24	32	42	48	100	110	115	120	127	200	208	220	230	240	277	380	400	415	440	480	500	600	690
-------	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LC1D09...D32

50/60 Hz	J7	B7	C7	D7	E7	K7	F7	FE7	G7	FC7	L7	LE7	M7	P7	U7	W7	Q7	V7	N7	R7	T7	S7	X7	Y7
----------	----	----	----	----	----	----	----	-----	----	-----	----	-----	----	----	----	----	----	----	----	----	----	----	----	----

d.c. supply

Volts	12	24	36	48	60	72	100	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	KD	FD	GD	MD	UD	RD
-----------------	----	----	----	----	----	----	----	----	----	----	----	----

Low consumption d.c. supply

Volts	12	20	24	48	72	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	JL	ZL	BL	EL	SL	FL	ML	UL
-----------------	----	----	----	----	----	----	----	----

Instantaneous auxiliary contact blocks

For use in normal operating environments

For use in normal operating environments					
Number of contacts	Maximum number per relay		Composition		Reference
	Clip-on mounting				
	front	side			
2	1	–	1	1	LADN11A
	–	1 on LH side	1	1	LAD8N11 ⁽²⁾
	1	–	2	–	LADN20A
	–	1 on LH side	2	–	LAD8N20 ⁽²⁾
	1	–	–	2	LADN02A
	–	1 on LH side	–	2	LAD8N02 ⁽²⁾
4 ⁽¹⁾	1	–	2	2	LADN22A
			1	3	LADN13A
			4	–	LADN40A
			–	4	LADN04A
			3	1	LADN31A

⁽¹⁾ Blocks with 4 auxiliary contacts cannot be used on low consumption control relays.

⁽²⁾ These contact blocks are in screw version only and allowed with AC coil control relay only.

TeSys Control

Deca Control relays

Product references

CAD32AB7	CAD50AJ7
CAD32ABD	CAD50AJD
CAD32ABL	CAD50AJL
CAD32AC7	CAD50AK7
CAD32ACD	CAD50AKD
CAD32AD7	CAD50AL7
CAD32AE7	CAD50ALE7
CAD32AED	CAD50AM7
CAD32AEL	CAD50AMD
CAD32AF7	CAD50AML
CAD32AFC7	CAD50AN7
CAD32AFD	CAD50AND
CAD32AFE7	CAD50AP7
CAD32AFL	CAD50AQ7
CAD32AG7	CAD50AR7
CAD32AGD	CAD50ARD
CAD32AJ7	CAD50AS7
CAD32AJD	CAD50ASD
CAD32AJL	CAD50ASL
CAD32AK7	CAD50AT7
CAD32AKD	CAD50AU7
CAD32AL7	CAD50AUD
CAD32ALE7	CAD50AUL
CAD32AM7	CAD50AV7
CAD32AMD	CAD50AW7
CAD32AML	CAD50AX7
CAD32AN7	CAD50AY7
CAD32AND	CAD50AZL
CAD32AP7	LADN02A
CAD32AQ7	LADN04A
CAD32AR7	LADN11A
CAD32ARD	LADN13A
CAD32AS7	LADN20A
CAD32ASD	LADN22A
CAD32ASL	LADN31A
CAD32AT7	LADN40A
CAD32AU7	
CAD32AUD	
CAD32AUL	
CAD32AV7	
CAD32AW7	
CAD32AX7	
CAD32AY7	
CAD32AZL	
CAD50AB7	
CAD50ABD	
CAD50ABL	
CAD50AC7	
CAD50ACD	
CAD50AD7	
CAD50AE7	
CAD50AED	
CAD50AEL	
CAD50AF7	
CAD50AFC7	
CAD50AFD	
CAD50AFE7	
CAD50AFL	
CAD50AG7	
CAD50AGD	

Control
relays

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

Technical Data for Designers

Contents

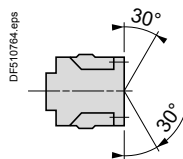
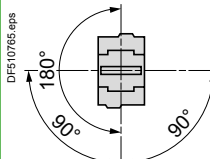
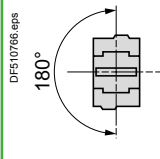
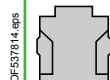
Deca Control relays:

- > characteristics A3/6 to A3/8
- > curves A3/9
- > dimensions A3/10
- > schemes A3/11

TeSys Control

Deca Control relays

Characteristics

Environment						
Control relay type				CAD●●A ~	CAD●●A ---	CAD●●A --- 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, GB/T 14048.5, UL 60947-5-1, CSA C22.2 n° 60947-5-1			
Product certifications			CB Scheme, CCC, CE, UKCA, cULus			
Degree of protection	Conforming to IEC 60529		Front face protected against direct finger contact IP 20		Protection against direct finger contact IP 20	
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	
SNAP IN connections	Flexible conductor without cable end	1 conductor	mm ²	0.5 ⁽³⁾ ...4	0.5 ⁽³⁾ ...4	
		2 conductors	mm ²	0.5 ⁽³⁾ ...4	0.5 ⁽³⁾ ...4	
	Flexible conductor with cable end	1 conductor	mm ²	0.5...2.5	0.5...2.5	
		2 conductors	mm ²	0.5...2.5	0.5...2.5	
	Solid conductor without cable end	1 conductor	mm ²	0.5...2.5	0.5...2.5	
		2 conductors	mm ²	0.5...2.5	0.5...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.

⁽³⁾ For flexible cables with thin single conductors, it is recommended to use cable ends for preventing the wire from being damaged or severed by the spring.

Control circuit characteristics					
Control relay type			CAD●●A ~	CAD●●A ≡	CAD●●A 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	ms	4...19	55 ± 15 %	67 ± 15 %
	- opening of the N/C contacts				
	- closing of the N/O contacts	ms	12...22	63 ± 15 %	77 ± 15 %
	Between coil de-energisation and	ms	4...12	20 ± 20 %	27 ± 20 %
	- opening of the N/O contacts				
	- 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

TeSys Control

Deca Control relays

Characteristics

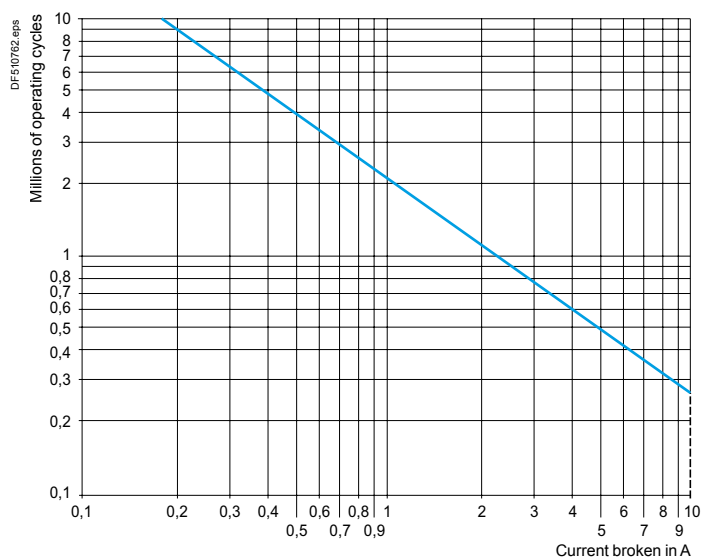
Characteristics of instantaneous contacts incorporated in the control relay				
Number of contacts			5	
Rated operational voltage (Ue)	Up to	V	690	
Rated insulation voltage (Ui)	Conforming to IEC 60947-5-1	V	690	
	Conforming to UL, CSA	V	600	
Conventional thermal current (Ith)	For ambient temperature ≤ 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)	
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.	

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 ($\cos \varphi 0.7$) = 10 times the power broken ($\cos \varphi 0.4$).

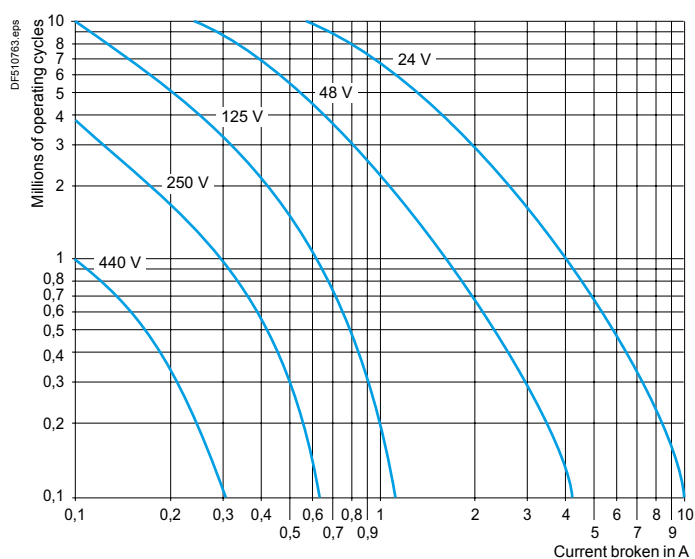
	V	24	48	115	230	400	440	600
1 million operating cycles	VA	60	120	280	560	960	1050	1440
3 million operating cycles	VA	16	32	80	160	280	300	420
10 million operating cycles	VA	4	8	20	40	70	80	100



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	—	—



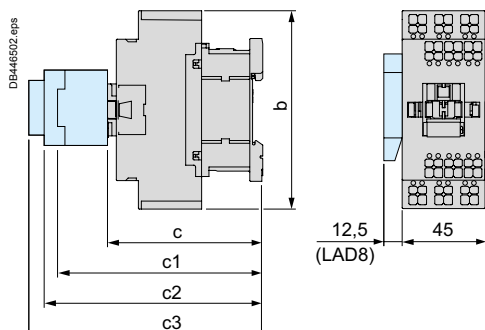
TeSys Control

Deca Control relays

Dimensions and mounting

Dimensions

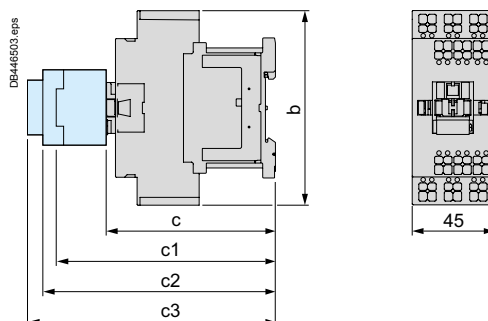
CAD●●A ~



CAD●●A	32
	50
b	107
c without cover or add-on blocks	84
with cover, without add-on blocks	86
c1 with LADN or C (2 or 4 contacts)	117
c2 with LAD6K10	129
c3 with LADT, R, S	137
with LADT, R, S and sealing cover	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●●A --- or LC (low consumption)

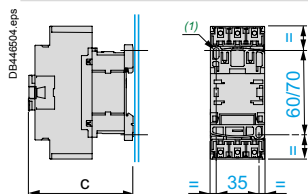


CAD●●A	32
	50
b	107
c without cover or add-on blocks	93
with cover, without add-on blocks	95
c1 with LADN or C (2 or 4 contacts)	126
c2 with LAD6K10	138
c3 with LADT, R, S	146
with LADT, R, S and sealing cover	150

Mounting

CAD●●A

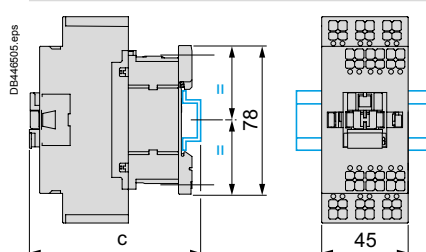
Panel mounted



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

(1) 2 elongated holes 4.5 x 9.

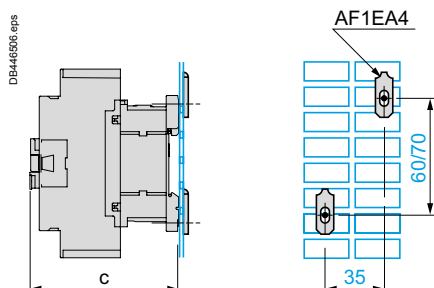
Mounted on rail NSYDR200BD or NSYDR200



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

(2) With cover.

Mounted on plate AM1P



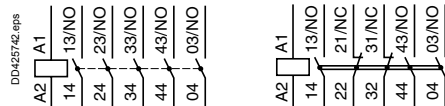
	CAD●●A ~	CAD●●A --- or LC
c with cover	86	95

Instantaneous auxiliary contacts

5 N/O 3 N/O + 2 N/C

CAD50A

CAD32A



Instantaneous auxiliary contact blocks

1 N/O + 1 N/C

2 N/O

2 N/C

LADN11A

LADN20A

LADN02A



2 N/O + 2F N/C

1 N/O + 3 N/C

4 N/O

4 N/C

3 N/O + 1 N/C

LADN22A

LADN13A

LADN40A

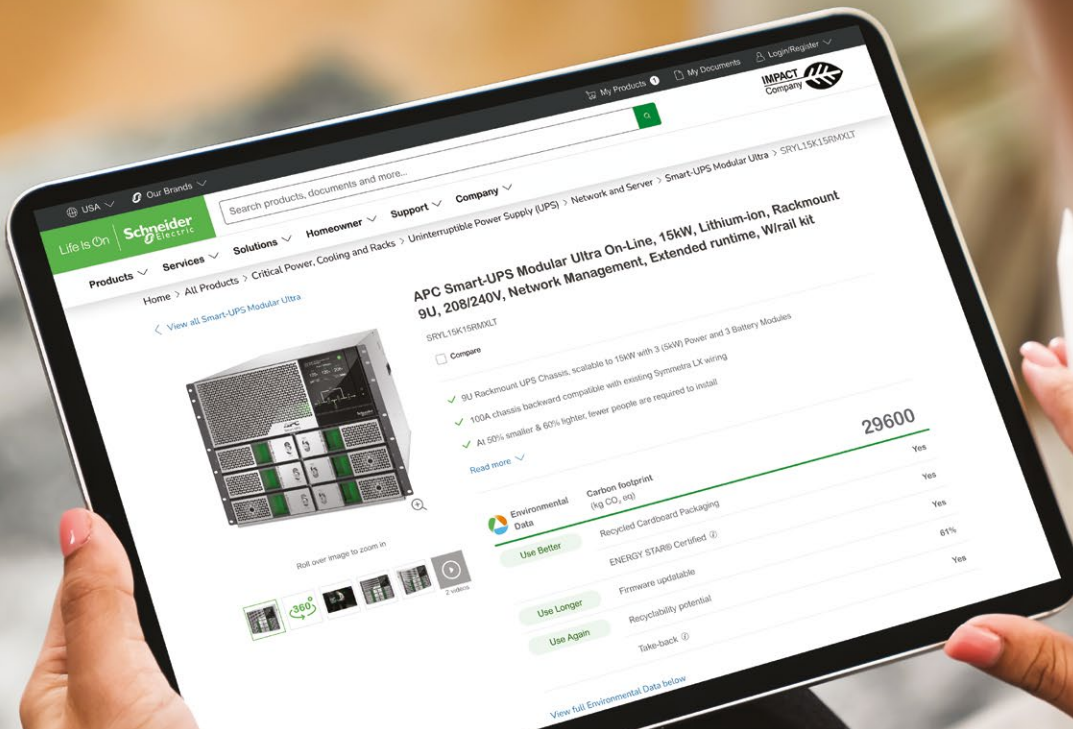
LADN04A

LADN31A





Environmental Data Program

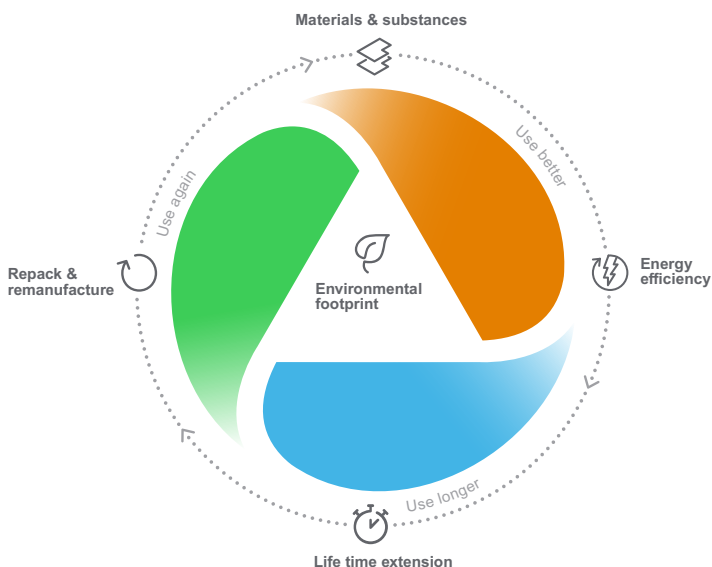


Next-level transparency for better-informed product choices

The Environmental Data Program is a framework for how we measure, categorize, and compare the environmental attributes and footprint of our products.

Using a rigorous, fact-based methodology, the program provides environmental data from across the product lifecycle.

Five data categories across the product lifecycle



Use Better: How sustainable a product is, including environmental footprint, materials and substances, packaging, and energy efficiency.

Use Longer: How a product's life time can be effectively extended in terms of reparability and updatability.

Use Again: How a product can be reused, from dismantling and remanufacturing to recyclability and manufacturer take back.

With this transparent, verified data, customers and partners are empowered to make conscious environmental choices and accurately evaluate and report on sustainability performance.

All our hardware offers have an associated environmental data available on se.com product pages.



Learn more about the
Environmental Data Program



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