

SK range

l a u n c h c a t a l o g u e










*GROUPE SCHNEIDER*

# Conversion table

 SQUARE D P range   Telemecanique SK range

 Telemecanique E range   Telemecanique SK range

 SQUARE D , P range	Composition	 Telemecanique , SK range
<b>Mini-contactors</b>		
PC1-10E	3P+N+D 25A	LC1-SK0600●● + LA1-SK10
PC1-01E	3P+N+D 5A	LC1-SK0600●● + LA1-SK01
<b>Mini-contactors for modular panels</b>		
PC3-10EN	3P+N+D 25A	LC1-SKGC310●●
PC3-01EN	3P+N+D 5A	LC1-SKGC301●●
PCS1-00EN	3P	LC1-SKGC200●●
<b>Mini-control relays</b>		
PR1-20E	2P	CA2-SK20●●
PR1-11E	1P+N+D 11A	CA2-SK11●●
PRD1-20E	2P	CA3-SK20●●
PRD1-11E	1P+N+D 11A	CA3-SK11●●
<b>Mini-control relays with alternating contacts</b>		
PHA	2P	CA2-SKE20●●
<b>Instantaneous auxiliary contact blocks</b>		
PV11	1P+N+D 11A	LA1-SK11
PV20	2P	LA1-SK20
PV02	2P	LA1-SK02
<b>Suppressor module</b>		
PZV48	 4P+N+D 48A	LA4-SKE1E
PZV250	 4P+N+D 250A	LA4-SKE1U
PZD	 4P+N+D 250A	LA4-SKC1U

 Telemecanique , E range	Composition	 Telemecanique , SK range							
<b>Mini-contactors</b>									
LC1-EC03● and LC1-EE03●	3P+N+D 25A	LC1-SKGC310●●							
LC1-EC09● and LC1-EE09●	3P+N+D 5A	LC1-SKGC301●●							
LC1-EC08● and LC1-EE08●	3P+N+D 5A	LC1-SKGC400●●							
<b>a.c. coil voltages 50/60 Hz</b>									
Volts ~	24	48	110	120	220	230	240	380	400
Code	B7	E7	F7	G7	M7	P7	U7	Q7	V7
<b>d.c. coil voltages</b>									
Volts —	12	24	36	48	72				
Code	JD	BD	CD	ED	SD				

# Contactors

Mini-contactors and mini-control relays, SK range

Contents

**Conversion table** ..... inside front cover

## Mini-contactors

● Characteristics ..... 2 to 5

Mini-contactors for use in categories AC-3 and AC-1

● References ..... 6 and 7

Mini-contactors for use in modular panels

● References ..... 8

● Dimensions, mounting, schemes ..... 9

## Mini-control relays

● Characteristics ..... 10 and 11

Mini-control relays, width 27 mm

● References ..... 12 and 13

Mini-control relays with alternating contacts, width 45 mm

● References ..... 14

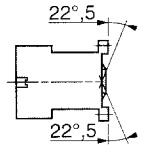
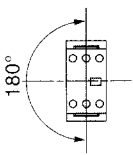
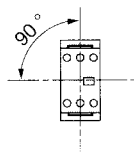
● Dimensions, mounting, schemes ..... 15

# Contactors

## Mini-contactors LC1-SK and LP1-SK

### Characteristics

#### Environment

<b>Rated insulation voltage (Ui)</b>	Conforming to IEC 947, VDE 0110 gr C, V BS 5424, CSA 22-2 n° 14, UL 508	690	
<b>Conforming to standards</b>	IEC 947, NF C 63-110, VDE 0660, BS 5424		
<b>Approvals</b>	UL, CSA		
<b>Protective treatment</b>	Conforming to IEC 68 (DIN 50015)	"TC" (Klimafest, Climateproof)	
<b>Degree of protection</b>	Conforming to VDE 0106	Protection against direct finger contact	
<b>Ambient air temperature around the device</b>	Storage	°C - 50...+ 70	
	Operation	°C - 20...+ 50	
<b>Maximum operating altitude</b>	Without derating	m 2000	
<b>Operating position</b>	<b>Vertical axis</b>	<b>Horizontal axis</b>	
			
	Without derating	Without derating	
<b>Cabling, screw clamp terminals</b>		min	max
	Solid conductor	mm <sup>2</sup> 1 x 1.5 or 2 x 1.5	1 x 6 or 2 x 4
	Flexible cable without cable end	mm <sup>2</sup> 1 x 0.5 or 2 x 0.35	1 x 6 or 2 x 2.5
	Flexible cable with cable end	mm <sup>2</sup> 1 x 0.35 or 2 x 0.35	1 x 6 or 2 x 1.5
<b>Tightening torque</b>	Pozidriv n° 1 head	N.m 0.8	
<b>Terminal referencing</b>	Conforming to standards En 50005	—	

# Contactors

## Mini-contactors LC1-SK and LP1-SK

### Characteristics (continued)

#### Pole characteristics

Type			LC1, LP1-SK06	LC1-SKGC2	LC1-SKGC3 et 4
Conventional thermal current (I <sub>th</sub> )	For ambient temperature ≤ 55 °C	A	12	20	20
Rated operational frequency		Hz	50/60		
Frequency limits of the operational current		Hz	Up to 400		
Rated operational voltage (U <sub>e</sub> )		V	690		
Rated making capacity	I rms conforming to NF C 63-110 and IEC 947	A	66	50	85
Rated breaking capacity (for U <sub>e</sub> ≤ 400 V)	Conforming to NF C 63-110 & IEC 947 (I rms)	A	52	40	68
Short time rating	In free air for a time "t" from cold state (θ ≤ 55 °C)	A	50	40	60
Short-circuit protection	gl fuse U ≤ 440 V	A	16	20	20
Average impedance per pole	At I <sub>th</sub> and 50 Hz	mΩ	4	4	4
Maximum rated operational current	for a temperature ≤ 55 °C				
	AC-3 (1) (U <sub>e</sub> ≤ 400 V)	A	6	5	9
	AC-1	A	12	20	20
Utilisation in category AC-1 resistive circuits, heating, lighting (U <sub>e</sub> ≤ 440 V)	Increase in operational current by paralleling of poles	A	20	32	32

(1) For LC1 contactors

#### Auxiliary contact characteristics of mini contactors and instantaneous contact blocks

Rated operational voltage (U <sub>e</sub> )	Up to	V	690
Rated insulation voltage (U <sub>i</sub> )	Conforming to IEC 947, BS 5424, VDE 0110 group C, CSA C 22-2 n° 14	V	690
Conventional thermal current (I <sub>th</sub> )	For ambient temperature ≤ 55 °C	A	10
Frequency of operational current		Hz	Up to 400
Short-circuit protection	To IEC 947 and VDE 0660, gl fuse	A	10

#### Operational power of contacts conforming to IEC 947

##### a.c. supply, category AC-15

Electrical durability (valid up to 3600 operating cycles per hour) on an inductive load such as the coil of an electromagnet: making current (cos φ 0.7) = 10 times the breaking current (cos φ 0.4).

##### d.c. supply, category DC-13

Electrical durability (valid up to 1200 operating cycles per hour) on an inductive load such as the coil of an electromagnet, without economy resistor, the time constant increasing with the load.

1 million operating cycles  
3 million operating cycles  
10 million operating cycles  
Occasional making capacity

	24	48	110/	220/	380/		24	48	110	220	440	
V	24	48	127	230	400	440	V	24	48	110	220	440
VA	48	96	240	440	800	880	W	120	80	60	52	51
VA	17	34	86	158	288	317	W	55	38	30	28	26
VA	7	14	36	66	120	132	W	15	11	9	8	7
VA	1000	2050	5000	10000	14000	13000	W	720	600	400	300	230

# Contactors

## Mini-contactors LC1-SK and LP1-SK

### Characteristics (continued)

#### Control circuit characteristics

Type			LC1-SK06, LC1-SKGC2	LC1-SKGC3 and 4	LP1-SK06
<b>Rated control circuit voltage</b> (Uc)		<b>V</b>	~ 24...400		~ 12...72
<b>Control voltage limits</b> (≤ 55 °C) single voltage coil	For operation		0.85...1.1 Uc		0.85...1.1 Uc
	For drop-out		≥ 0.20 Uc		≥ 0.10 Uc
<b>Average coil consumption</b> at 20 °C and at Uc	Inrush		16 VA	23 VA	2.2 W
	Sealed		4.2 VA	4.9 VA	2.2 W
<b>Heat dissipation</b>		<b>W</b>	1.4	1.5	2.2
<b>Operating time</b> at 20 °C and at Uc	Between coil energisation and : - opening of the N/C contacts - closing of the N/O contacts	<b>ms</b>	8...16		10...18
		<b>ms</b>	7...14		8...12
	Between coil de-energisation and : - opening of the N/O contacts - closing of the N/C contacts	<b>ms</b>	6...8		4...6
		<b>ms</b>	8...10		6...8
<b>Maximum operating rate</b>	In operating cycles per hour		1200		1200
<b>Mechanical durability at Uc</b> In millions of operating cycles	50/60 Hz coil		10		–
	~ coil		–		10

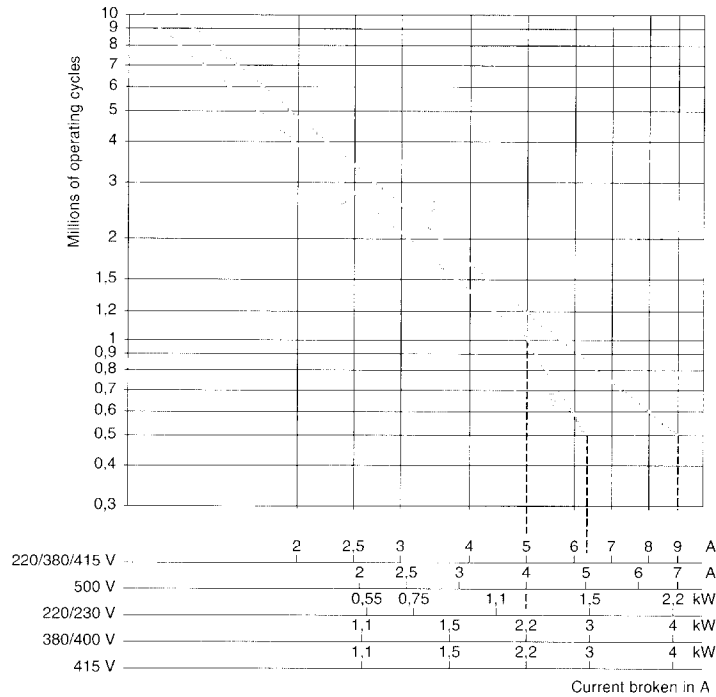
# Contactors

## Mini-contactors LC1-SK and LP1-SK

### Contactor selection guide according to required electrical durability

#### Use in category AC-3 ( $U_e \leq 440$ V)

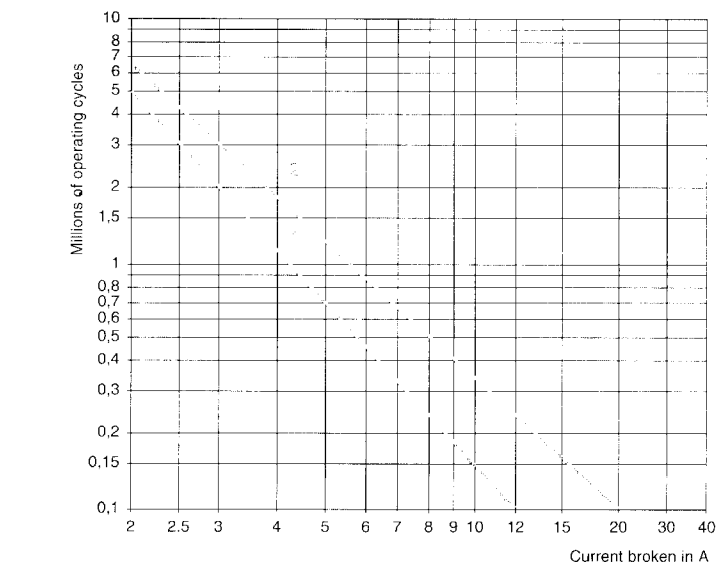
Control of 3-phase asynchronous squirrel cage motors with breaking whilst running. The current broken ( $I_c$ ) in category AC-3 is equal to the rated operational current ( $I_e$ ) of the motor.



- 1 LC1-SKGC2
- 2 LC1-SKGC3 and 4
- 3 and 4 LC1-SK06
- 5 only up to 415 V

#### Use category AC-1 ( $U_e \leq 440$ V)

Control of resistive circuits ( $\cos \varphi \geq 0.95$ ). The current broken ( $I_c$ ) in category AC-1 is equal to the current ( $I_e$ ) normally drawn by the load.



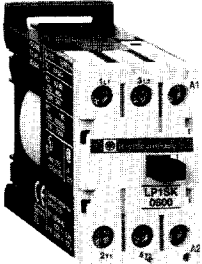
- 1 LC1-SK06
- 2 LC1-SKGC

# Contactors

## Mini-contactors LC1-SK and LP1-SK

### References

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



LC1-SK06

### Mini-contactors for motor control (AC-3)

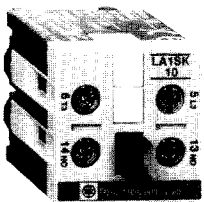
Standard power ratings of 3-phase motors 50/60 Hz in category AC-3 (1)			Rated operational voltage in AC-3 up to 400 V	Number of poles	Instantaneous auxiliary contacts	Basic reference. Complete with code indicating control circuit voltage (2)	Weight
220 V	280 V	660 V	A				kg
kW	kW	kW					
1.1	2.2	2.2	6	2	-	LC1-SK0600●●	0.132

### Mini-contactors for use in category AC-1

Non inductive loads maximum current ( $\theta \leq 55^\circ\text{C}$ ) utilisation category AC-1	Control circuit supply	Number of poles	Instantaneous auxiliary contacts	Basic reference. Complete with code indicating control circuit voltage (2)	Weight
A					kg
12	a.c.				
	d.c.	2	-	LP1-SK0600●●▲	0.132

### Add-on block with 1 power pole (for 3-phase circuits)

For use on contactor	Number of poles	Instantaneous auxiliary contacts	Reference	Weight
				kg
LC1-SK06 clip-on front mounting	1			
	1	-	LA1-SK01	0.022



LA1-SK10

**Note :** Auxiliary contact blocks and coil suppressor module, see next page.

(1) For use in category AC-3, and for 3-phase circuits, fit an add-on block with 1 power pole onto the contactor see above (to be ordered separately).

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

#### Mini-contactors LC1-SK

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

#### Mini-contactors LP1-SK

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

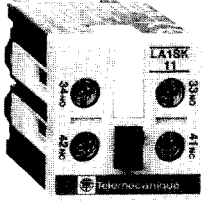
▲ Available 1<sup>st</sup> quarter 1996

# Contactors



Mini-contactors LC1-SK and LP1-SK  
Instantaneous auxiliary contacts and coil suppressor modules

## References

### Instantaneous auxiliary contact blocks



LA1-SK11

Clip-on front mounting					
For use on contactors	Maximum number of blocks per contactor	Composition		Reference	Weight
					kg
LC1-SK06	1	2	–	LA1-SK20	0.022
		–	2	LA1-SK02	0.022
		1	1	LA1-SK11	0.022

### Coil suppressor module



LA4-SK1

Clip-on fixing and electrical connection on right-hand side, without use of tools					
For use on contactors	Type	For voltages	Unit reference	Weight	
				kg	
LC1-SK06 and LP1-SK06	Varistor (1)	~ and — 24 V...48 V	LA4-SKE1E	0.003	
		~ and — 110 V...250 V	LA4-SKE1U	0.003	
	Diode (2)	— 24 V...250 V	LA4-SKC1U	0.003	

(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).

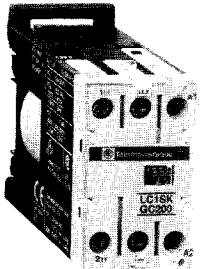
(2) No overvoltage or oscillating frequency.

Slight increase in drop-out time (1.1 to 1.5 times the normal time).

# Contactors

Mini-contactor LC1-SKGC, for use in modular panels

## References



LC1-SKGC200

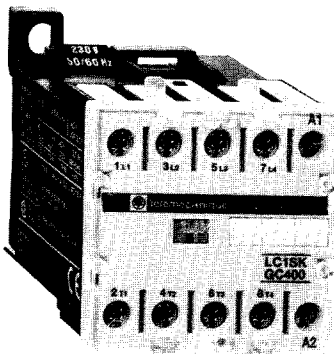
- Mounting on 35 mm rail or fixing by four Ø 4 screws, except for LC1-SKGC 200.
- Connection by screw clamp terminals.
- Mini-contactor fitted with transparent, sealable protective cover to prevent front face access

### 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 <b>A</b>	Non inductive loads category AC-1 maximum current <b>A</b> ≤ 50 °C	Composition 	Basic reference. Complete with code indicating control circuit voltage (1)	Weight  kg
220 V <b>kW</b>	380 V <b>kW</b>	660 V <b>kW</b>					
-	-	-	5	20	2 - -	<b>LC1-SKGC200●●</b>	0.132

### Mini-contactors, width 45 mm

1.1	4	4	9	20	3 1 -	<b>LC1-SKGC310●●</b>	0.175
					3 - 1	<b>LC1-SKGC301●●</b>	0.175
					4 - -	<b>LC1-SKGC400●●</b>	0.175



LC1-SKGC400

### Coil suppressor module

#### 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	Weight  kg
<b>LC1-SK06 and LP1-SK06</b>	Varistor (2)	~ and --- 24...48 V	10	<b>LA4-SKE1E</b>	0.003
		~ and --- 110...250 V	10	<b>LA4-SKE1U</b>	0.003
	Diode (3)	--- 24...250 V	10	<b>LA4-SKC1U</b>	0.003



LA4-SK●1●

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

Volts ~      **24**      **48**      **110**      **120**      **220**      **230**      **240**      **380**      **400**

Code      **B7**      **E7**      **F7**      **G7**      **M7**      **P7**      **U7**      **Q7**      **V7**

(2) 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).

(3) No overvoltage or oscillating frequency.

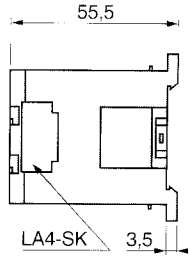
Slight increase in drop-out time (1.1 to 1.5 times the normal time).

# Contactors

## Mini-contactors LC1-SK and LP1-SK

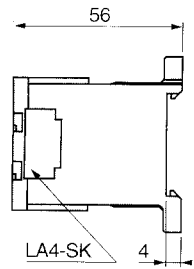
### Dimensions, mounting, schemes

#### Dimensions Mini-contactors LC1-SKGC2

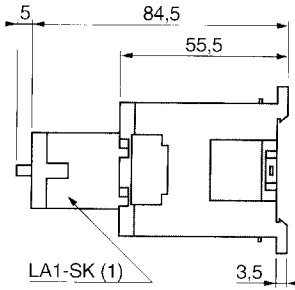


(1) On LC1-SK06

#### LC1-SKGC3 and 4 on panel

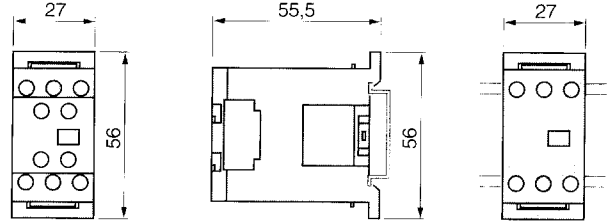


#### LC1, LP1-SK06



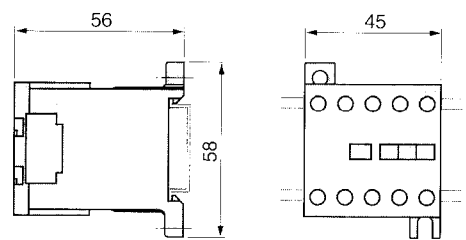
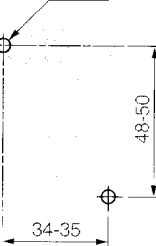
#### Mounting

on rail AM1-DP200 or AM1-DE200 (≈ 35 mm)

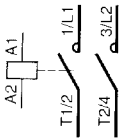


on rail AM1-DP200 or AM1-DE200 (≈ 35 mm)

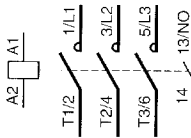
2xOM4



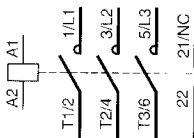
#### Schemes 2-pole mini-contactors LC1-SKGC2 LC1 and LP1-SK06



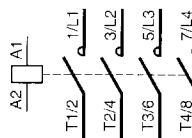
#### 3-pole mini-contactors LC1-SKGC310



#### LC1-SKGC301



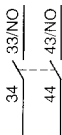
#### 4-pole mini-contactors LC1-SKGC400



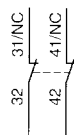
#### Add-on power pole block 1-pole + 1 N/O aux. LA1-SK10 1-pole + 1 N/C aux. LA1-SK01



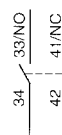
#### Instantaneous auxiliary contacts 2 N/O LA1-SK20



#### 2 N/C LA1-SK02



#### 1 N/O + 1 N/C LA1-SK11

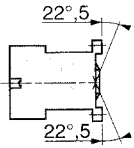
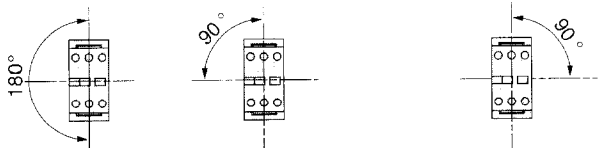


# Control relays

Mini-control relays CA2-SK, CA2-SKE and CA3-SK

## Characteristics

### Environment

<b>Rated insulation voltage (Ui)</b>	Conforming to IEC 947, VDE 0110 gr C, BS 5424, CSA 22-2 n° 14, UL 508	<b>V</b>	690
<b>Conforming to standards</b>	IEC 947, NF C 63-110, VDE 0660, BS 5424		
<b>Approvals</b>	UL, CSA		
<b>Protective treatment</b>	Conforming to IEC 68 (DIN 50015)	"TC" (Klimafest, Climateproof)	
<b>Degree of protection</b>	Conforming to VDE 0106	Protection against direct finger contact	
<b>Ambient air temperature around the device</b>	Storage	<b>°C</b>	- 50...+ 70
	Operation	<b>°C</b>	- 20...+ 50
<b>Maximum operating altitude</b>	Without derating	<b>m</b>	2000
<b>Operating position</b>	<b>Vertical axis</b>		
	<b>Horizontal axis</b>		
	Without derating	Without derating	

<b>Cabling, screw clamp terminals</b>			<b>min</b>	<b>max</b>
	Solid conductor	<b>mm<sup>2</sup></b>	1 x 1.5 or 2 x 1.5	1 x 6 or 2 x 4
	Flexible cable without cable end	<b>mm<sup>2</sup></b>	1 x 0.5 or 2 x 0.35	1 x 6 or 2 x 2.5
	Flexible cable with cable end	<b>mm<sup>2</sup></b>	1 x 0.35 or 2 x 0.35	1 x 6 or 2 x 1.5
<b>Tightening torque</b>	Pozidriv n° 1 head	<b>N.m</b>	0.8	
<b>Terminal referencing</b>	To standards En 50005 and EN 50011	Up to 4 contacts		

### Control circuit characteristics

Type		<b>CA2-SK</b>	<b>CA2-SKE</b>	<b>CA3-SK</b>
<b>Rated control circuit voltage (Uc)</b>	<b>V</b>	~ 24...400		~ 12...72
<b>Control voltage limits</b> (≤ 50 °C) single voltage coil	For operation	0.85...1.1 Uc		0.85...1.1 Uc
	For drop-out	≥ 0.20 Uc		≥ 0.10 Uc
<b>Average coil consumption</b> at 20 °C and at Uc	Inrush	16 VA	23 VA	2.2 W
	Sealed	4.2 VA	4.9 VA	2.2 W
<b>Heat dissipation</b>	<b>W</b>	1.4	1.5	2.2
<b>Operating time</b> at 20 °C and at Uc	Between coil energisation and :			
	- opening of the N/C contacts	<b>ms</b>	8...16	10...18
	- closing of the N/O contacts	<b>ms</b>	7...14	8...12
	Between coil de-energisation and :			
- opening of the N/O contacts	<b>ms</b>	6...8	4...6	
- closing of the N/C contacts	<b>ms</b>	8...10	6...8	
<b>Maximum operating rate</b>	In operating cycles per hour	1200		1200
<b>Mechanical durability at Uc</b> In millions of operating cycles	50/60 Hz coil	10		-
	Standard ~ coil	-		10

# Control relays

Mini-control relays CA2-SK, CA2-SKE and CA3-SK

Characteristics (continued)

## Auxiliary contact characteristics of mini-control relays and instantaneous contact blocks

<b>Rated operational voltage (Ue)</b>	Up to	<b>V</b>	690
<b>Rated insulation voltage (Ui)</b>	Conforming to IEC 947, BS 5424, VDE 0110 group C, CSA C 22-2 n° 14	<b>V</b>	690
<b>Conventional thermal current (Ith)</b>	For ambient temperature ≤ 55 °C	<b>A</b>	10
<b>Frequency of operational current</b>		<b>Hz</b>	Up to 400
<b>Short-circuit protection</b>	To IEC 947 and VDE 0660, gl fuse	<b>A</b>	10

### Operational power of contacts conforming to IEC 947

#### a.c. supply, category AC-15

Electrical durability (valid up to 3600 operating cycles per hour) on an inductive load such as the coil of an electromagnet: making current ( $\cos \varphi 0.7$ ) = 10 times the breaking current ( $\cos \varphi 0.4$ ).

#### d.c. supply, category DC-13

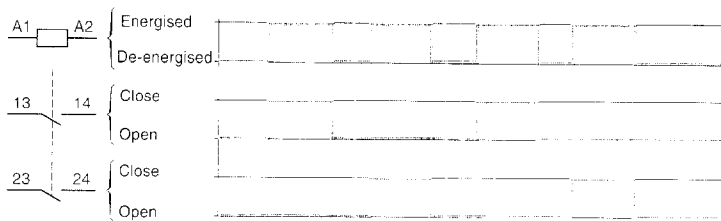
Electrical durability (valid up to 1200 operating cycles per hour) on an inductive load such as the coil of an electromagnet, without economy resistor, the time constant increasing with the load.

1 million operating cycles  
3 million operating cycles  
10 million operating cycles  
Occasional making capacity

	24	48	110/	220/	380/	
<b>V</b>	24	48	110/	220/	380/	
<b>VA</b>	48	96	240	440	800	880
<b>VA</b>	17	34	86	158	288	317
<b>VA</b>	7	14	36	66	120	132
<b>VA</b>	1000	2050	5000	10000	14000	13000
<b>V</b>	24	48	110	220	440	
<b>W</b>	120	80	60	52	51	
<b>W</b>	55	38	30	28	26	
<b>W</b>	15	11	9	8	7	
<b>W</b>	720	600	400	300	230	

## Function diagram

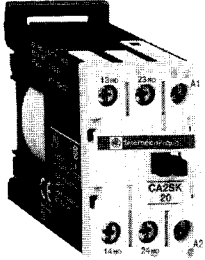
### Mini-control relays with alternating contacts CA2-SKE20



# Control relays

## Mini-control relays CA2-SK and CA3-SK

### References



CA2-SK20

### Mini-control relays

- Width of control relays 27 mm.
- Mounting on 35 mm rail.
- Screw clamp terminals.

Control circuit supply	Auxiliary contacts	Basic reference. Complete with code indicating control circuit voltage (1)	Weight
			kg
a.c. supply	2 -	<b>CA2-SK20●●</b>	0.132
	1 1	<b>CA2-SK11●●</b>	0.132
d.c. supply	2 -	<b>CA3-SK20●●</b>	0.132
	1 1	<b>CA3-SK11●●</b>	0.132

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

#### Mini-control relays CA2-SK

Volts ~	24	48	110	120	220	230	240	380	400
Code	B7	E7	F7	G7	M7	P7	U7	Q7	V7

#### Mini-control relays CA3-SK

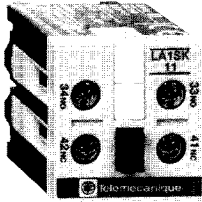
Volts —	12	24	36	48	72
Code	JD	BD	CD	ED	SD

# Control relays

Mini-control relays CA2-SK and CA3-SK  
Instantaneous auxiliary contacts and coil suppressor module



## References

### Instantaneous auxiliary contact blocks



LA1-SK11

#### Clip-on front mounting

For use on control relays	Maximum number of blocks per contactor	Composition		Reference	Weight
					kg
CA2-SK20	1	2	–	LA1-SK20	0.022
		–	2	LA1-SK02	0.022
		1	1	LA1-SK11	0.022

### Suppressor module



LA4-SK01

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

For use on control relays	Type	For voltages	Size in units of	Unit reference	Weight
					kg
CA2-SK and CA3-SK	Varistor (1)	~ and = 24 V...48 V	10	LA4-SKE1E	0.003
		~ and = 110 V...250 V	10	LA4-SKE1U	0.003
	Diode (2)	= 24 V...250 V	10	LA4-SKC1U	0.003

(1) Protection provided by limiting the transient voltage to 2 U<sub>c</sub> 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).

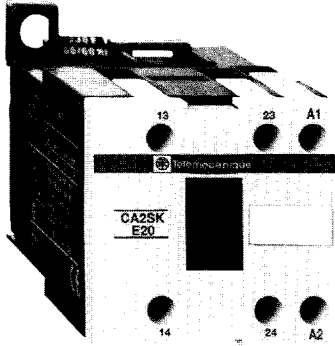
# Control relays

## Mini-control relay CA2-SKE with alternating contacts

### References

This mini-control relay with alternating contacts, see function diagram page 11, 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 Ø 4 screws
- Screw clamp terminals.
- Cannot be fitted with front mounted auxiliary contact block.
- Cannot be fitted with coil suppressor module.



CA2-SKE20

Control circuit supply	Auxiliary contacts	Basic reference. Complete with code indicating control circuit voltage (1)	Weight
a.c.	2	CA2-SKE20●●	0.175 kg

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

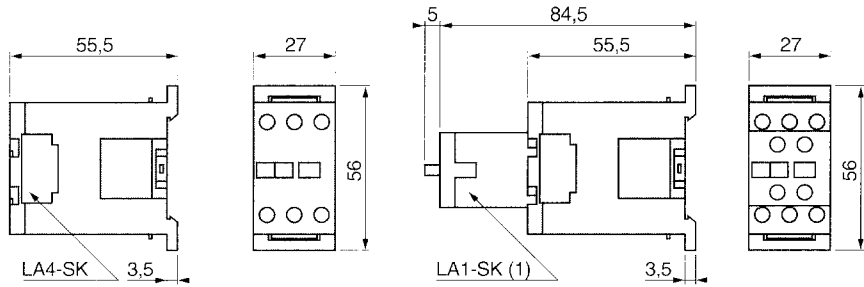
Volts ~ 50/60 Hz	24	48	110	120	220	230	240	380	400
Code	B7	E7	F7	G7	M7	P7	U7	Q7	V7

# Control relays

Mini-control relays CA2-SK, CA2-SKE and CA3-SK

Dimensions, mounting, schemes

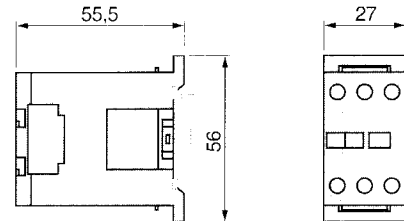
## Dimensions Mini-control relays CA2-SK and CA3-SK



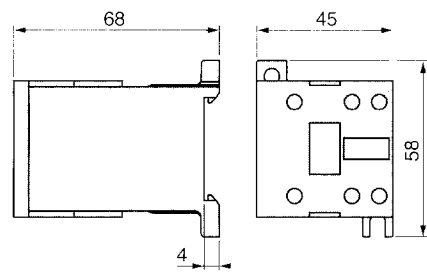
(1) On CA2-SK20

## Mounting

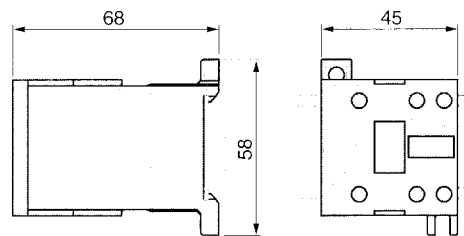
On rail AM1-DP200 or AM1-DE200  
( $\approx$  35 mm)



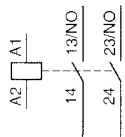
## CA2-SKE On panel



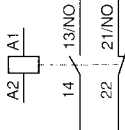
On rail AM1-DP200 or AM1-DE200  
( $\approx$  35 mm)



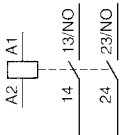
## Schemes CA2-SK20, CA3-SK20 2 N/O



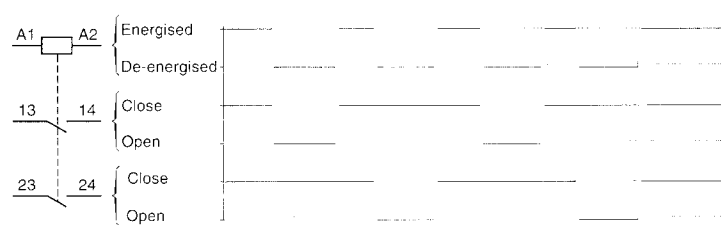
## CA2-SK11, CA3-SK11 1 N/O + 1 N/C



## CA2-SKE 2 N/O



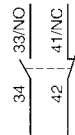
## CA2-SKE Function diagram



## Instantaneous auxiliary contacts 2 N/O 2 N/C LA1-SK20 LA1-SK02



## 1 N/O + 1 N/C LA1-SK11



# Telemecanique dans le monde



Filiale	Adresse	Téléphone (T) Télex (Tx) Télécopie (TI)	Filiale	Adresse	Téléphone (T) Télex (Tx) Télécopie (TI)
<b>Afrique du Sud</b>	Schneider S.A. (Pty) Ltd CNR Old Pretoria Road & Impala Road Eastgate Ext. 8, Sandton P.O Box 482 Bergvlei 2012	T : (27)11 804.14.21 et 11 802.52.72 TI : (27) 11 804.36.00	<b>Hongrie</b>	Groupe Schneider Fehervari ut 108-112 XI Kerulet 1116 Budapest	T : (36)1 181.19.20 TI : (36)1 181.01.80
<b>Algérie</b>	Merlin Gerin - Telemecanique 4, rue du Berry - El Mouradia Alger 16070	T : (213)2 54.00.98/99 Tx : (0408)62411 TI : (213)2 54.00.97	<b>Inde</b>	Groupe Schneider - Telemecanique Inde D27 - South Ext. Part II New Delhi 110 049	T : (91)11 646.76.58 Tx : 31-71282 TI : (91)11 646.50.80
<b>Allemagne</b>	Schneider Electric GmbH Gothaer Straße 29 - D-40880 Ratingen Postfach 101261 - D-40832 Ratingen	T : (49)2102 40.40 TI : (49)2102 40.42.56	<b>Indonésie</b>	PT Schneider Ometraco Ventura Building 8th Floor J.L. Let.Jend.TB Simatupang No.26- Jakarta 12430	T : (62)21 750.44.01 Tx : 47623 MGO IA TI : (62)21 750.43.97
<b>Antilles-Guyane</b>	Telemecanique - Merlin Gerin Immeuble Cottrell - Z.I. de la Lezarde 97232 Le Lamentin - Martinique	T : (596)51.06.00 TI : (596)51.11.26	<b>Iran</b>	Telemecanique Iran Ave Khabab Eslamboli-14th Str.n°5 POB15875-3547 15117 Téhéran	T : 215417 TI : (98)21 629 740
<b>Arabie Saoudite</b>	Groupe Schneider P.O.Box 42472 - Riyadh 11541	T : (966)1 479.20.69 TI : (966)1 476.24.16	<b>Irlande</b>	Schneider Electric Ireland Maynooth Road Celbridge - Co. Kildare	T : (353)1 627.40.30 TI : (353)1 627.08.59
<b>Argentine</b>	Schneider Argentina S.A. Viamonte 2850 - (1678) Caseros Pcia de Buenos Aires	T : (54)1 759.96.22 à 28 Tx : 26009 TI : (54)1 759.07.77	<b>Italie</b>	Telemecanique S.p.A. Via Orbetello 140 10148 Torino	T : (39)11 22.81.111 Tx : 220262 TI : (39)11 22.67.663
<b>Australie</b>	Schneider Pty Ltd Block Q, Regent Park Estate - Princes Rd East Regents Park NSW. 2143 - Sydney	T : (61)2 743.77.00 TI : (61)2 743.77.15	<b>Japon</b>	Schneider Electric Japan Ltd SK Bldg. Sendagaya 4-14-4, Sendagaya, Shibuya-ku - Tokyo 151	T : (81) 354.74.44.74 TI : (81) 354.74.44.70 et 354.74.44.80
<b>Autriche</b>	Schneider Austria (MGTE) Ges.m.b.H Birostrasse 11 A-1230 Wien	T : (43)1 61054 Tx : 131022 TI : (43)1 6105454	<b>Malaisie</b>	Schneider (M) SDN BHD 1st Floor, Kompleks Kemajuan, No.2 Jalan 19/1B 46300 Petaling Jaya - Selangor	T : (603) 756.93.62 TI : (603) 757.41.12
<b>Belgique</b>	Schneider MGTE N.V.-S.A. Dieweg 3 -1180 Bruxelles	T : (32)2 373.77.11 TI : (32)2 375.38.58	<b>Maroc</b>	Schneider Electric Maroc 26, rue Ibnou Khalikane Quartier Palmier - 20100 Casablanca	T : (212)2 99.08.48 à 58 TI : (212)2 99.08.68/69
<b>Brésil</b>	Telemecanique S.A. Avenidas das Nações Unidas. 23223 São Paulo SP CEP 04795-100	T : (55)11 524.52.33 Tx : 11.22800TMSA BR TI : (55)11 522.44.22	<b>Mexique</b>	Groupe Schneider México Calz. Rojo Gómez N° 1121 Col. Guadalupe del Moral- México 09300	T : (525)686.30.00 TI : (525)686.24.09
<b>Bulgarie</b>	Schneider Electric Bât. World Trade Center 36, Bd Dragan Tzankov - 1040 Sofia	T : (359)2 73.76.09 Tx : 24336 MERGES TI : (359)2 70.61.83	<b>Norvège</b>	Schneider A/S Solgaard Skog 2 - Postboks 128 1501 Moss	T : (47)69.24.97.00 TI : (47)69.25.78.71
<b>Canada</b>	Schneider Canada 19, Waterman Avenue M4 B1Y2 Toronto - Ontario	T : (1)416 752.80.20 TI : (1)416 752.42.03	<b>Nouvelle-Zélande</b>	Schneider Ltd 14 Charann Place - Avondale - POB 15355 New Lynn Auckland 7	T : (64)9 828.1099 TI : (64)9 828.2225
<b>Chili</b>	Schneider Electric Chile S.A. Hernando de Aguirre 159-Of.F Providencia - Santiago	T : (562)233.82.48 TI : (562)231.89.79	<b>Pays-Bas</b>	Schneider MGTE B.V. Waarderweg 40 - Postbus 836 2003 RV Haarlem	T : (31)23 12.41.24 TI : (31)23 12.41.00 et 23 12.41.10
<b>Chine</b>	Schneider Electric China Landmark Bldg. - Room 1801 8 North Dongsanhuan Road Beijing 100004	T : (86)1 506.69.03/04 TI : (86)1 500.50.13	<b>Pologne</b>	Schneider Electric Polska Sp.Z.o.o. Ul. Krzywickiego 34 02-078 - Warszawa	T : (48)2 625.40.36 TI : (48)2 625.14.83
<b>Colombie</b>	Schneider de Colombia S.A. Avenida Eldorado Carrera 103 bis Bodega 2C - Bogota 6.D.E	T : (57)1 413.91.81 Tx : 43191 TI : (57)1 413.90.12	<b>Portugal</b>	Telemecanique - Automatismos Industriais, Lda Av.do Forte, 3 Edificio Suécia II, Piso 3-A Carnaxide - 2795 Linda A Velha	T : (351)1 417.29.78 Tx : 64300 TI : (351)1 417.30.66
<b>Corée du Sud</b>	Telko-Limited Samhan Bldg.(4.13,14th fl.) 891-43 Daechi-Dong Kangnam-Ku Séoul	T : (822) 562.14.51 Tx : 080 126119 TI : (822) 561.59.00	<b>Roumanie</b>	Schneider Electric Bdul Expozitiei nr.2 - World Trade Center Etaj 2 Camera 14 - Bucuresti - Sector 1	T : (40)1 212.26.02 TI : (40)1 210.68.23
<b>Costa Rica</b>	Schneider Centroamerica S.A. Apartado 4123 - 1000 San Jose	T : (506)232.60.55 TI : (506)232.04.26	<b>Russie</b>	Schneider 80, Leningradsky Prospekt 125178 Moscou	T : (7)502 224.50.51 Tx : 612400 TEMOS SU TI : (7)502 224.50.50
<b>Cuba</b>	Schneider Electric SA Calle 36 - N°306 Apto 1 Entre 3ra Y5Ta - Miramar - Playa Habana Cuba	T : (537) 33.12.17 Tx : 512.351 TI : (537) 33.12.17	<b>Singapour</b>	Schneider Singapore (Sales & Engineering) PTE Ltd. 18, New Industrial Road, # 03-00 Ventek Industrial Building - Singapore 1953	T : (65)286. 23.11 TI : (65)289.51.62
<b>Danemark</b>	Schneider Electric A/S Baltorpbakken 14 DK - 2750 Ballerup	T : (45)44 68.78.88 Tx : 35514 TI : (45)44 68.52.55	<b>Suède</b>	Schneider MGTE AB Drottninggatan 22 S-64283 Flen	T : (46)157.652.00 Tx : 64128 TI : (46)157.110.47
<b>Egypte</b>	Schneider Electric Egypte 5 El Orouba Street - Heliopolis-Le Caire POB 2658 El Horreya 11341	T : (20)2 417.42.13 et 2 291.51.63 TI : (20)2 417.42.18	<b>Suisse</b>	Schneider Electric (Suisse) AG Schermenwaldstrasse 11 - Postfach 3063 Ittigen	T : (41)31 917.33.33 TI : (41)31 917.33.55
<b>Emirats Arabes Unis</b>	Schneider Electric S.A. P.O.Box 43103 - Abu Dhabi	T : (971)2 34.00.81 TI : (971)2 34.72.33	<b>Taiwan</b>	Schneider Electric Taiwan Co., Ltd Suite 11-2, Presidential Financial Plaza, 11th Floor No.51, Keelung Road, Sec.2 - Taipei 110, R.O.C.	T : (886)2 733.14.64 Tx : 14903 TI : (886)2 733.64.10
<b>Espagne</b>	Schneider MGTE Pl. Dr. Letamendi, 5-7 08007 Barcelone	T : (34)3 484.31.00 TI : (34)3 484.45.65	<b>République Tchèque</b>	Schneider Elektropřístroj Sedlackova 6 397 12 Pisek	T : (42)362 76 111 TI : (42)362 36 01 TI : (42)362 58 20
<b>Equateur</b>	Schneider Electric Ecuador Av. 10 de Agosto 79/62 Y Cap Ramos 2NDO Piso - Quito	T : (593)2 40.73.73 TI : (593)2 40.73.65	<b>Thaïlande</b>	Schneider Siam Co. Ltd 20th Fl. Richmond Bldg. 75 Sukhumvit 26 Klongtoey - Bangkok 10110	T : (662)261 1893 à 99 TI : (662)261 1900
<b>Etats-Unis</b>	Square D Company Automation and control business Highway 64 East - Knightdale - NC 27 545 - Raleigh	T : (1)919 266.36.71 TI : (1)919 266.44.60	<b>Tunisie</b>	Telemecanique - Merlin Gerin 13, rue El Mansourah - Elmenzah IV 2080 Ariana - Tunis	T : (216)176.70.84 et 175.02.77 TI : (216)175.03.42
<b>Finlande</b>	Schneider Electric Oy Sinikalliontie 16 02630 Espoo	T : (358)0 61.55.22 TI : (358)0 61.55.23.76	<b>Turquie</b>	Schneider Elektrik Sanayi ve Ticaret A.S. Tütüncü Mehmet Efendi Cad.Göltztepe is Merkezi No. 110 Kat 1-2 81080 Göltztepe/Istanbul	T : (90)216.386.95.70 TI : (90)216.386.38.75
<b>France</b>	Schneider Electric SA 43-45, bd Franklin Roosevelt - BP 236 92504 Rueil-Malmaison Cedex	T : (33)1 41.29.80.00 Tx : 634175 TI : (33)1 47.08.01.59	<b>Ukraine</b>	Schneider 7, rue Goloseyevskaya 252039 Kiev	T : (7)044 264.38.07 Tx : 612041 TEKIV SU TI : (7)044 265.83.62
<b>Grande-Bretagne</b>	Schneider Limited University of Warwick Science Park Sir William Lyons Road - Coventry CV4 7EZ	T : (44)203 41.62.55 Tx : 317290 TI : (44)203 41.75.17	<b>Vénézuéla</b>	Schneider MG SD TE. S.A. Calle 5 Con Calle 9, Edificio Marte Piso 1 La Urbina - Caracas 1070	T : (582)241.13.44 TI : (582)242.43.30
<b>Grèce</b>	Schneider Electric AE 14e km - RN Athènes-Lamia GR - 14564 Kifissia	T : (30)1 80.77.703 Tx : 216913 TI : (30)1 80.72.803			
<b>Hong Kong</b>	Schneider Electric Hong Kong Ltd. 20/F North, Cornwall House - Taikoo Place 979 King's Road-Quarry Bay GPO Box 3215 Hong Kong	T : (852) 565.0621 Tx : 86508 TEAPHX TI : (852) 811.1029			

## Représentations:

Pour tous les pays du monde non mentionnés sur cette liste, a coordination est assurée par:

### Telemecanique Division Internationale

pour: Zones Europe Centrale et Orientale/CEI  
5, rue Nadar  
92566 Rueil Malmaison Cedex - France  
pour: Zones Afrique - Amérique du Sud - Asie - Caraïbes - Inde - Moyen Orient - Pacifique  
3, rue Eugène et Armand Peugeot  
92500 Rueil Malmaison - France

**Schneider Electric SA**

**Division Commerciale France - Telemecanique**

5, rue Nadar – 92566 Rueil-Malmaison Cedex  
Tél. : (1) 41 29 82 00 – Fax : (1) 47 51 73 84