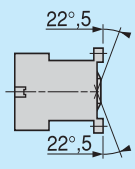
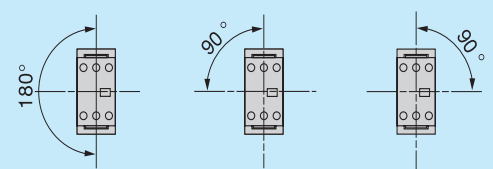


Environment			
Rated insulation voltage (Ui)	Conforming to 60947, VDE 0110 gr C, BS 5424, CSA 22-2 n° 14, UL 508	V	690
Conforming to standards			IEC 60947, NF C 63-110, VDE 0660, BS 5424
Approvals			UL, CSA
Protective treatment	Conforming to IEC 60068 (DIN 50015)		"TC" (Klimafest, Climateproof)
Degree of protection	Conforming to VDE 0106		Protection against direct finger contact
Ambient air temperature around the device	Storage	°C	- 50...+ 70
	Operation	°C	- 20...+ 50
Maximum operating altitude	Without derating	m	2000
Operating position			<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Vertical axis</p>  <p>Without derating</p> </div> <div style="text-align: center;"> <p>Horizontal axis</p>  <p>Without derating</p> </div> </div>
Cabling, screw clamp terminals			Min
	Solid conductor	mm²	1 x 1.5 or 2 x 1.5
	Flexible cable without cable end	mm²	1 x 0.5 or 2 x 0.35
	Flexible cable with cable end	mm²	1 x 0.35 or 2 x 0.35
			Max
			1 x 6 or 2 x 4
			1 x 6 or 2 x 2.5
			1 x 6 or 2 x 1.5
Tightening torque	Pozidriv n° 1 head	N.m	0.8
Terminal referencing			Conforming to standards En 50005

Pole characteristics			
Conventional thermal current (I_{th})	For ambient temperature ≤ 55 °C	A	12
Rated operational frequency		Hz	50/60
Frequency limits of the operational current		Hz	Up to 400
Rated operational voltage (U_e)		V	690
Rated making capacity	I rms conforming to NF C 63-110 and IEC 60947	A	66
Rated breaking capacity (for U_e ≤ 400 V)	Conforming to NF C 63-110 and IEC 60947 (I rms)	A	52
Short time rating	In free air for a time "t" from cold state (θ ≤ 55 °C)	A	50
Short-circuit protection	gl fuse U ≤ 440 V	A	16
Average impedance per pole	At I _{th} and 50 Hz	mΩ	4
Maximum rated operational current			
For a temperature ≤ 55 °C	AC-3 (1) (U _e ≤ 400 V)	A	6
	AC-1	A	12
Utilisation in category AC-1 resistive circuits, heating, lighting (U_e ≤ 440 V)	Increase in operational current by paralleling of poles	A	20

Auxiliary contact characteristics of add-on blocks			
Rated operational voltage (U_e)	Up to	V	690
Rated insulation voltage (U_i)	Conforming to IEC 60947, BS 5424, VDE 0110 group C, CSA C 22-2 n° 14	V	690
Conventional thermal current (I_{th})	For ambient temperature ≤ 55 °C	A	10
Frequency of operational current		Hz	Up to 400
Short-circuit protection	Conforming to IEC 60947 and VDE 0660, gl fuse	A	10

	a.c. supply, category AC-15						d.c. supply, category DC-13						
	V	24	48	110/127	220/230	380/400	440	V	24	48	110	220	440
1 million operating cycles	VA	48	96	240	440	800	880	W	120	80	60	52	51
3 million operating cycles	VA	17	34	86	158	288	317	W	55	38	30	28	26
10 million operating cycles	VA	7	14	36	66	120	132	W	15	11	9	8	7
Occasional making capacity	VA	1000	2050	5000	10000	14000	13000	W	720	600	400	300	230

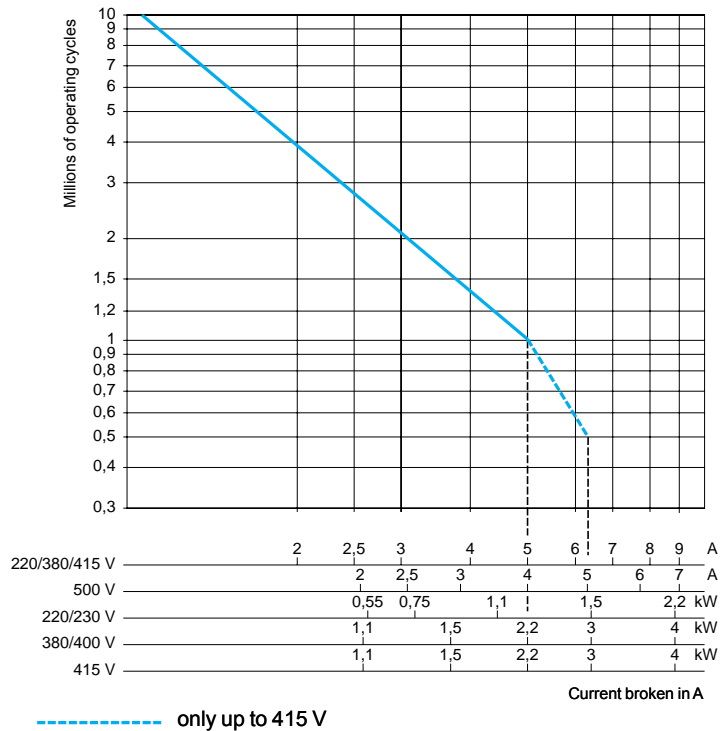
(1) For LC1 contactors.

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

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

Control of 3-phase asynchronous squirrel cage motors with breaking whilst running.

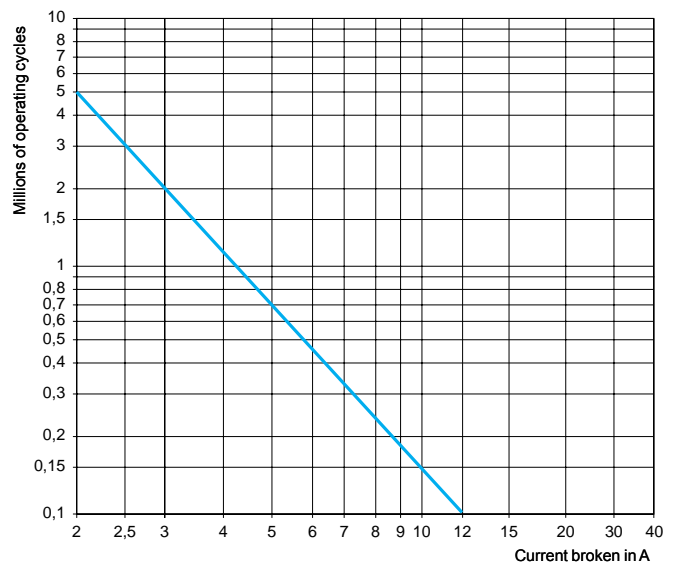
The current broken (I_c) in category AC-3 is equal to the rated operational current (I_e) of the motor.



Use in 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.



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



LC1 SK06

Mini-contactors for motor in category AC-3						Instantaneous auxiliary contacts	Basic reference. Complete with code indicating control circuit voltage (2)	Weight
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				
220 V	380 V	660 V	6	2	-	-	LC1 SK0600●●	kg
230 V	415 V	690 V						
kW	kW	kW	A					
1.1	2.2	2.2	6	2	-	-	LC1 SK0600●●	0.132

Mini-contactors for motor in category AC-1						Instantaneous auxiliary contacts	Basic reference. Complete with code indicating control circuit voltage (2)	Weight
Non inductive loads maximum current (θ ≤ 55 °C) utilisation category AC-1	Control circuit supply	Number of poles						
A								kg
12	a.c.	2	-	-	LC1 SK0600●●	0.132		
	d.c.	2	-	-	LP1 SK0600●●	0.132		



LA1 SK10

Add-on block with 1 power pole (for 3-phase circuits)						Reference	Weight
For use on contactor	Number of poles	Instantaneous auxiliary contacts					
LC1 SK06 clip-on front mounting	1	1	-	LA1 SK10	0.022		
	1	-	1	LA1 SK01	0.022		

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

- (1) For use in AC-3 category and 3-phase circuits, an LA1 SK●● auxiliary contact block should be ordered separately for mounting on the contactor.
 (2) Standard control circuit voltages (variable delivery times, please consult your Regional Sales Office):

Mini-contactors LC1 SK									
Volts ~ 50/60 Hz	24	48	110	120	220	230	240	380	400
Code	B7	E7	F7	G7	M7	P7	U7	Q7	V7
Mini-contactors LP1 SK									
Volts ---	12	24	36	48	72				
Code	JD	BD	CD	ED	SD				

Contactors

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



LA1 SK11



LA4 SK01

Instantaneous auxiliary contact blocks

Clip-on front mounting

For use on contactor	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 modules

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

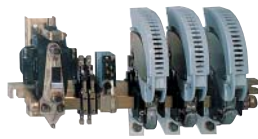
For use on contactors	Type	For voltages	Sold in lots of	Unit reference	Weight
					kg
LC1 SK06 and LP1 SK06	Varistor (1)	~ and ≡ 24 V...48 V	10	LA4 SKE1E	0.003
		~ and ≡ 110 V...250 V	10	LA4 SKE1U	0.003
	Diode (2)	≡ 24 V...250 V	10	LA4 SKC1U	0.003

(1) Protection provided by limiting the transient voltage to 2 U_c 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).

Applications	Equipment based on standard contactors					Equipment requiring low consumption contactors which can be switched directly from solid state outputs	
							
Rated operational current AC-3 <hr/> AC-1	6 A <hr/> 12 A	6...16 A <hr/> 20 A	9...150 A <hr/> 25...200 A	115...800 A <hr/> 200...1600 A	750...1800 A <hr/> 800...2750 A	6...12 A <hr/> 20 A	9...25 A <hr/> 20...40 A
Rated operational voltage	690 V	690 V	690 V	1000 V	1000 V	690 V	690 V
Number of poles	2 or 3	3 or 4	3 or 4	2, 3 or 4	1...4	3 or 4	3
Contactor type references	LC1 SK LP1 SK	LC1 K LC7 K LP1 K	LC1 D	LC1 F	LC1 B	LP4 K	LC1 D
Pages	0239Q/2 and 0239Q/3		0246Q/2 and 0246Q/3	0204Q/2 and 0204Q/3		24402/3	0247Q/2 and 0247Q/3

Equipment requiring magnetic latching contactors	Motors, resistive circuits, rotor short-circuiting devices, electro lifting magnets, hoisting, mines, ⚡ motors, high operating rates. Variable composition bar mounted contactors.	Induction heating, heating of metal or of a metal part in a channel or crucible furnace by induction of a.c. currents. Contactors for induction heating applications	Applications conforming to "NATO" specifications and references. Shockproof contactors	Protection of reversing variable speed controllers for d.c. motors. Fast acting contactors.
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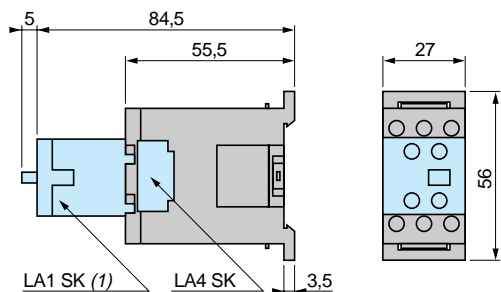


150...1800 A	80...1800 A	–	12...630 A	–
250...2750 A	80...2750 A	80...16 300 A	25...850 A	–
1000 V	~ 1000 V ⚡ 440 or 1500 V	3000 V	690 V or 1000 V	~ 1000 V ⚡ 1050 V
1...4	1...6	1...8	3 or 4	2 or 4
CR1 F CR1 B	CV●	CE● CS●	LC1 D●G LP1 D●G LC1 FG●●●	CR3 ●B
26003/2 to 26007/3	0236Q/2 and 0236Q/3	Please consult your Regional Sales Office		

Dimensions

Mini-contactors

LC1 and LP1 SK06



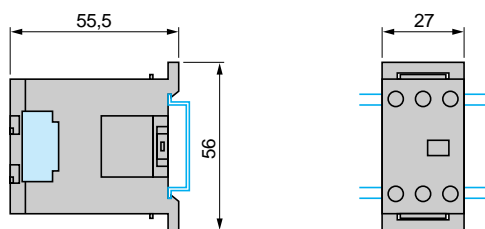
(1) Only on LC1 SK06.

Mounting

Mini-contactors

LC1 and LP1 SK06

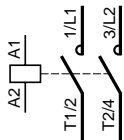
On mounting rail AM1 DP200 or AM1 DE200 (└ 35 mm)



Schemes

2-pole mini-contactors

LC1 and LP1 SK06



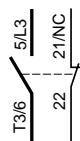
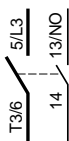
Add-on power pole block

1 pole + 1 "N/O" aux.

1 pole + 1 "N/C" aux.

LA1 SK10

LA1 SK01



Instantaneous auxiliary contacts

2 "N/O"

2 "N/C"

1 "N/O" + 1 "N/C"

LA1 SK20

LA1 SK02

LA1 SK11

