

Model

Designation	SC12CLX	220-240V/60Hz 1~	Sales code:	104L2672
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R507
Oil viscosity	32cST	Displacement	12,87cm ³ / 0,79cu.in
Oil quantity	499cm ³ / 16,9fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1510cm ³ / 51,1fl.oz		
Weight	13,8kg / 30,4lbs		
Motor protection	1# internal		
Winding resistance main	3,7Ω (at 25°C)		
Winding resistance aux	14Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with SC12CLX

	Conf. 1
Motorconfiguration	CSIR
Power supply (nominal)	208-230V/60Hz
Number of phases	1
Voltage range	198-254V
Approvals	UL, KC
Starting torque	HST
Note	- / -

Applications with SC12CLX

	Conf. 1
Refrigerant	R404A
Application	LBP
System cooling	fan 3m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with SC12CLX

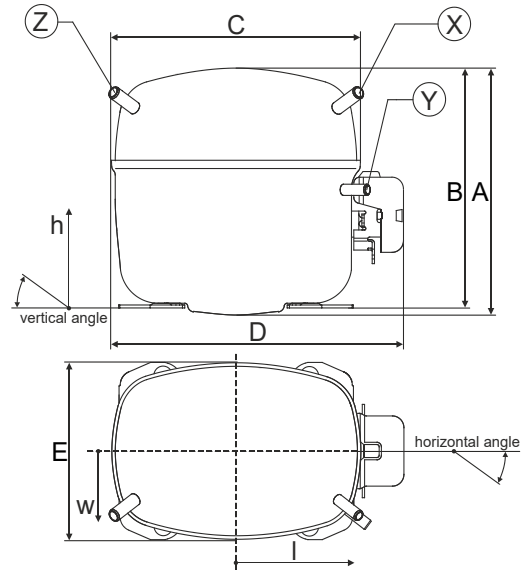
	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	80μF
LRA (locked rotor amps / 4s)	23,4A
RLA (rated load amps / 1s)	4,3A
Cut in current	23,4A

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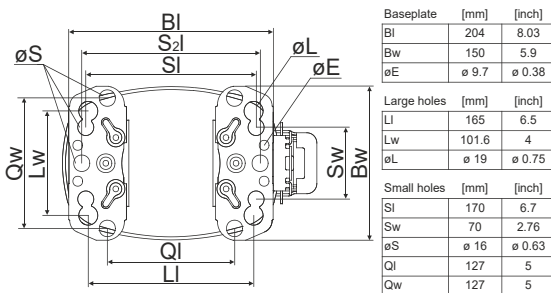
Compressor dimensions

Housing	A Height	219mm / 8,62in
	B Height	213mm / 8,39in
	C Length shell	239mm / 9,41in
	D Length w. cover	255mm / 10,04in
	E Width	151mm / 5,94in

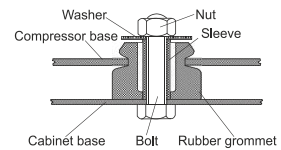


Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63	-107/193/55
	[in]	4,2/7,6/2,2	4,5/4,3/2,5	-4,2/7,6/2,2
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

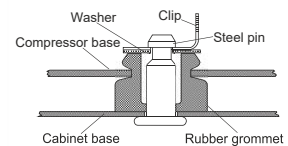
Compressor fixation



Bolt joint



Snap-on



Mounting accessories

	one comp.	multi pack
Bolt joint M6 ø16mm	118-1917	118-1918
Bolt joint ø1/4" ø16mm	118-1946	
Bolt joint ø1/4" ø19mm	118-1949	
Snap-on ø7,3 ø16mm	118-1947	118-1919

Application notes

LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.

Model

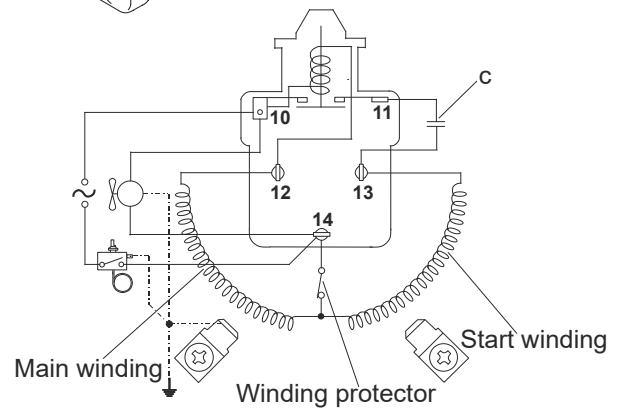
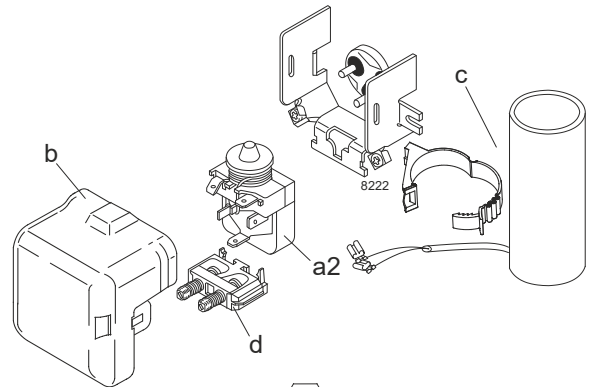
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Application	LBP
Voltage range	198-254V
Starting torque	HST
Approvals	UL KC

Electrical accessories / wiring diagram

CSIR

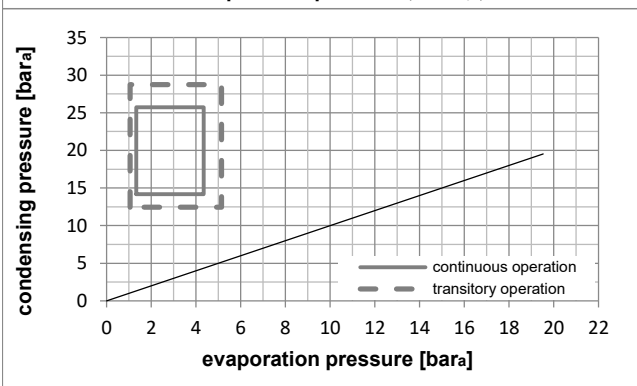
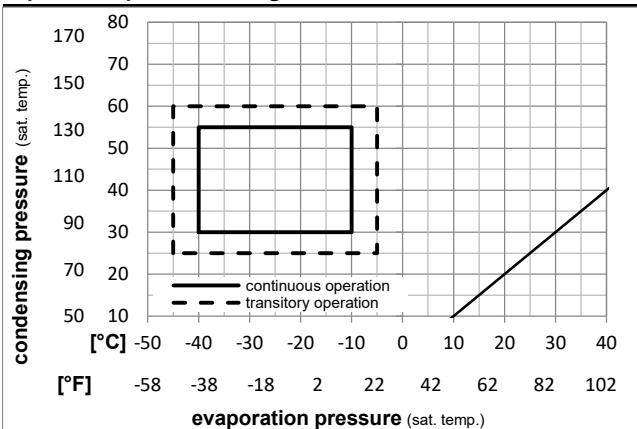


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	n/a	n/a
38°C / 100°F	fan 3m/s	n/a	n/a
43°C / 110°F	n/a	n/a	n/a

Operation pressure range



Components

a2	relay	117U6019
c	start capacitor (80µF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2008

Alternative components

a2	relay	117U6019
c	start capacitor i-pack 40# (80µF)	117U5067
d	cord relief	103N1004
b	plastic cover	103N2008

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Optimization + standard conditions

R404A, 220V/60Hz, CSIR, fan 3m/s, UL, KC

Evaporating pressure (saturation temperature)		Condensing pressure (saturation temperature)				Return gas temp.		Liquid temp.		Cooling capacity			COP	EER	Power consumption		Ref. mass flow m	ASHRAE LBP
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	[kg/h]						
[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]						
-23,3	54,4	32,2	32,2	696,4	2378	599,4	1,23	4,20	1,06	566,2	3,35	16,23	ASHRAE LBP					
-10	130	90	90															
-25	55	32	55	462,5	1579	398,0	0,86	2,95	0,74	534,7	3,24	14,45	cecomaf LBP					
-13	131	89,6	131															
-35	40	20	40	326,1	1114	280,7	0,83	2,83	0,71	393,7	2,81	8,86	EN12900 LBP					
-31	104	68	104															
-23,3	48,9	4,44	48,9	514,1	1756	442,4	0,91	3,10	0,78	566,7	3,34	18,20	ARI540 LBP					
-10	120	40	120															
-23,3	40,6	32,2	32,2	774,4	2645	666,5	1,38	4,72	1,19	560,8	3,33	18,04	AHAM LBP					
-10	105	90	90															
-35	45	32	45	281,8	962	242,5	0,75	2,56	0,65	375,6	2,75	7,53	opt					
-31	113	89,6	113															

Performance tables

R404A, 220V/60Hz, CSIR, fan 3m/s, UL, KC

pe	Cooling capacity			COP	EER	P1	I	m			
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-40	-40	146,2	499	125,8	0,53	1,80	0,45	276,9	2,58	3,90
cond. pressure	-34,4	-30	297,5	1016	256,0	0,77	2,63	0,66	385,7	2,77	7,96
pc= 45/113	-28,9	-20	463,0	1581	398,5	0,97	3,30	0,83	479,5	3,02	12,44
return gas temp.	-23,3	-10	647,8	2212	557,5	1,15	3,91	0,99	565,5	3,33	17,51
RGT= 32/90	-20,6	-5	749,0	2558	644,6	1,23	4,21	1,06	607,9	3,51	20,31
liquid temp	-15	5	972,2	3320	836,7	1,40	4,77	1,20	696,0	3,91	26,56
Tliq= 45/113	-10	14	1200,2	4099	1032,9	1,53	5,23	1,32	784,1	4,32	33,05
[°C / °F]	-40	-40	25,3	86	21,7	0,14	0,47	0,12	184,4	2,40	0,78
cond. pressure	-34,4	-30	179,9	614	154,8	0,54	1,85	0,47	332,6	2,66	5,57
pc= 55/131	-28,9	-20	341,9	1168	294,3	0,75	2,55	0,64	457,4	2,98	10,64
return gas temp	-23,3	-10	516,4	1764	444,4	0,91	3,12	0,79	566,1	3,36	16,17
RGT= 32/90	-20,6	-5	609,9	2083	524,9	0,99	3,38	0,85	616,8	3,57	19,17
liquid temp	-15	5	812,5	2775	699,3	1,14	3,88	0,98	715,2	4,04	25,77
Tliq= 55/131	-10	14	1016,2	3471	874,6	1,26	4,31	1,09	805,6	4,51	32,53