

Model

Designation	SC12CLX.2	115V/60Hz 1~	Sales code:	104L1686
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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	500cm 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	13,2kg / 29,1lbs		
Motor protection	1# internal		
Winding resistance main	1Ω (at 25°C)		
Winding resistance aux	4,2Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SC12CLX.2

Conf. 1

Motor configuration	CSIR
Power supply (nominal)	115V/60Hz
Number of phases	1
Voltage range	103-127V
Approvals	UL
Starting torque	HST
Note	- / -

Applications with SC12CLX.2

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.2

Conf. 1

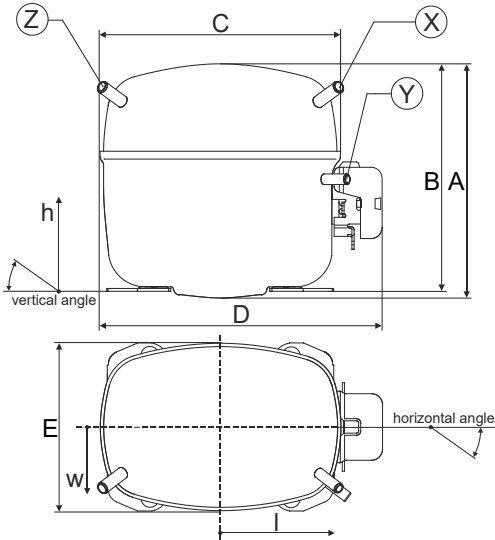
Starting device type	relay
Run capacitor	-/-
Start capacitor	240μF
LRA (locked rotor amps / 4s/ U(N))	39,7A
RLA (rated load amps / 1s/ U(N))	7,6A
Cut in current (U(N))	39,7A

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Compressor dimensions

Housing	A Height	209mm / 8,23in
	B Height	203mm / 7,99in
	C Length shell	218mm / 8,58in
	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]	107/183/55	115/100/63	-107/183/55
	[in]	4,2/7,2/2,2	4,5/3,9/2,5	-4,2/7,2/2,2
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



Compressor fixation

Baseplate	[mm]	[inch]
BI	204	8.03
Bw	150	5.9
øE	ø 9.7	ø 0.38

Large holes	[mm]	[inch]
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75

Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63
QI	127	5
Qw	127	5

Bolt joint

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

Provision for PE Grounding is located at the PE Stamp on the compressor

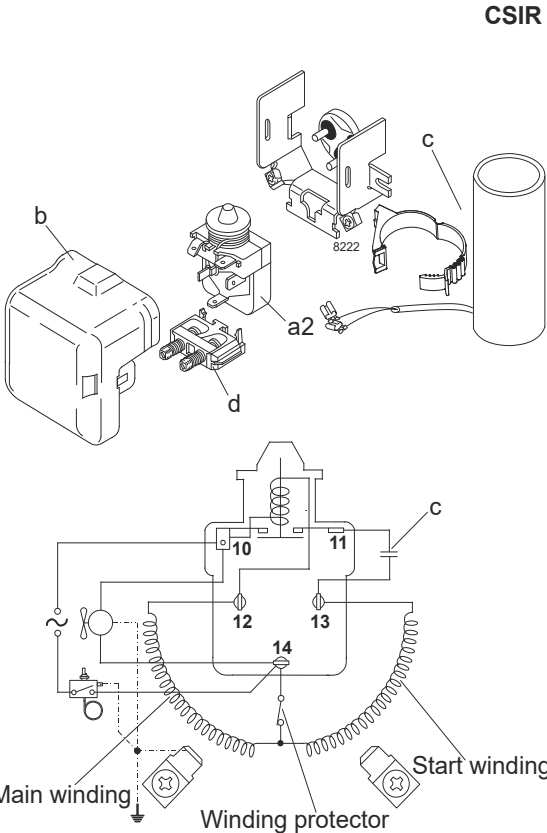
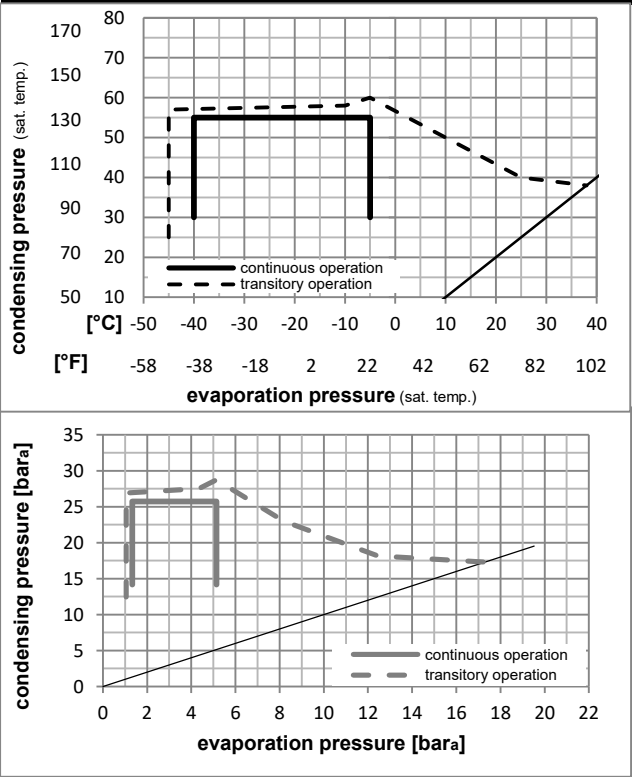
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Configuration	Electrical accessories / wiring diagram			
Motor configuration	CSIR	CSIR		
Power supply (nominal)	115V/60Hz 1~			
Refrigerant	R404A			
Application	LBP			
Voltage range	103-127V			
Starting torque	HST			
Approvals	UL			

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

Operation pressure range



Components		
a2	relay	117U6020
c	start capacitor (240μF)	117U5023
d	cord relief	103N1004
b	plastic cover	103N2008

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Optimization + standard conditions

R404A, 115V/60Hz, CSIR, fan 3m/s, UL

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption																																																																														
Return gas temp.					Current consumption						Ref. mass flow																																																																														
Liquid temp.					Cooling capacity						COP				EER				P1				I				ṁ																																																														
pe					pc					RGT					Tliq					[W]					[Btu/h]					[kcal/h]					[W/W]					[Btu/Wh]					[kcal/Wh]					[W]					[A]					[kg/h]																													
[°C]					-23					54					32					32					723,4					2471					622,6					1,14					3,89					0,98					634,4					7,20					16,86					ASHRAE LBP																			
[°F]					-10					130					90					90																																																																					
[°C]					-25					55					32					55					485,9					1659					418,1					0,80					2,75					0,69					604,1					7,00					15,18					cecomaf LBP																			
[°F]					-13					131					90					131																																																																					
[°C]					-35					40					20					40					371,8					1270					319,9					0,84					2,86					0,72					444,0					6,10					10,10					EN12900 LBP																			
[°F]					-31					104					68					104																																																																					
[°C]					-23					49					4,4					49					537,8					1837					462,8					0,86					2,93					0,74					627,0					7,16					19,04					ARI540 LBP																			
[°F]					-10					120					40					120																																																																					
[°C]					-23					41					32					32					812,5					2775					699,2					1,33					4,53					1,14					613,2					7,09					18,93					AHAM LBP																			
[°F]					-10					105					90					90																																																																					
[°C]					-35					45					32					45					334,2					1141					287,6					0,77					2,62					0,66					435,0					6,03					8,93					opt																			
[°F]					-31					113					90					113																																																																					

Performance tables

R404A, 115V/60Hz, CSIR, fan 3m/s, UL

	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]	-34	-30	348,4	1190	299,8	0,78	2,68	0,67	444,4	6,08	9,32
cond. pressure	-34	-30	348,4	1190	299,8	0,78	2,68	0,67	444,4	6,08	9,32
pc= 45/113	-29	-20	501,7	1713	431,7	0,94	3,21	0,81	534,6	6,57	13,48
return gas temp.	-23	-10	678,5	2317	583,9	1,09	3,73	0,94	621,2	7,12	18,33
RGT= 32/90	-21	-5	777,0	2654	668,7	1,17	3,99	1,01	664,8	7,43	21,07
liquid temp	-15	5	997,2	3406	858,2	1,32	4,51	1,14	755,7	8,10	27,24
Tliq= 45/113	-5	23	1483,0	5065	1276,3	1,57	5,36	1,35	945,3	9,48	41,23
[°C / °F]	-34	-30	235,9	806	203,0	0,57	1,94	0,49	415,2	5,95	7,30
cond. pressure	-34	-30	235,9	806	203,0	0,57	1,94	0,49	415,2	5,95	7,30
pc= 55/131	-29	-20	376,8	1287	324,3	0,71	2,43	0,61	529,6	6,54	11,72
return gas temp	-23	-10	535,6	1829	461,0	0,84	2,88	0,73	635,1	7,21	16,78
RGT= 32/90	-21	-5	623,1	2128	536,3	0,91	3,10	0,78	686,1	7,56	19,59
liquid temp	-15	5	816,9	2790	703,0	1,04	3,54	0,89	787,6	8,34	25,91
Tliq= 55/131	-5	23	1240,8	4238	1067,9	1,26	4,31	1,09	982,6	9,91	40,16