

Model

Designation	SC12CL	115V/60Hz 1~	Sales code:	104L1612
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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	13,1kg / 28,9lbs		
Motor protection	1# internal		
Winding resistance main	0,98Ω (at 25°C)		
Winding resistance aux	4,18Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	140°C / 284°F		



General - Configurations with SC12CL

	Conf. 1
Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz
Number of phases	1
Voltage range	103-127V
Approvals	UL
Starting torque	HST
Note	Electrical equipment will be pre-assembled to compressor.

Applications with SC12CL

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

Electrical data - Configurations with SC12CL

	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	240μF
LRA (locked rotor amps / 4s)	23,4A
RLA (rated load amps / 1s)	4,3A
Cut in current	23,4A

Model

Designation

SC12CL

115V/60Hz 1~

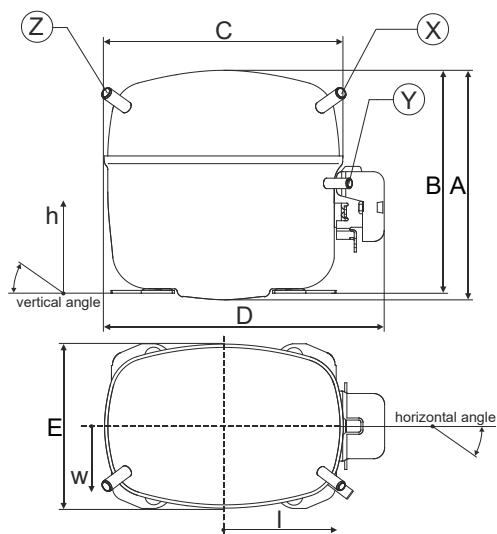
Sales code:

104L1612

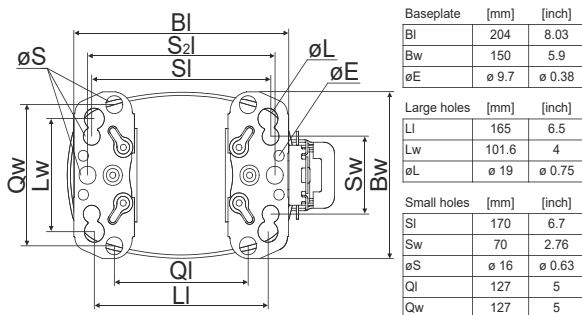
Compressor dimensions

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

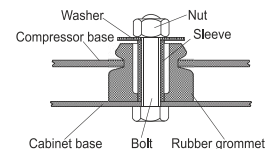
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material	copper	copper	copper
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55	115/100/63	-107/183/55
[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



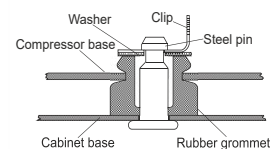
Compressor fixation



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

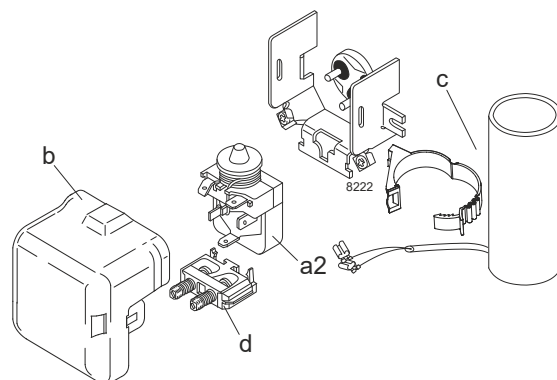
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Configuration

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Refrigerant	R404A
Application	LBP
Voltage range	103-127V
Starting torque	HST
Approvals	UL

Electrical accessories / wiring diagram

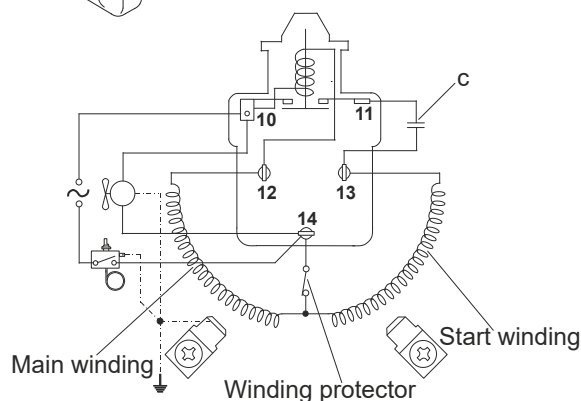
CSIR



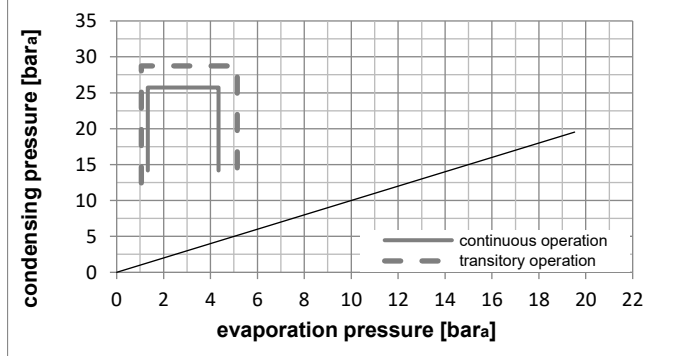
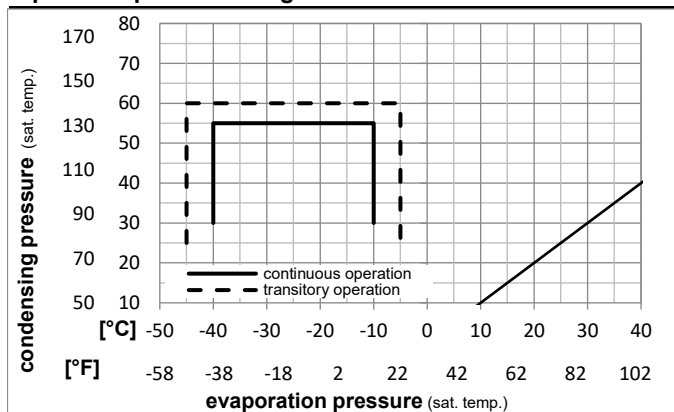
Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°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	fan 3m/s	n/a	n/a



Operation pressure range



Components (will be pre-assembled)

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

Model

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Optimization + standard conditions

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

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.	Liquid temp.	Cooling capacity	COP	EER	Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]						P1	I	Ref. mass flow	
[°C]																
[°F]																
	-23	54	32	32	696,4	2378	599,4	1,11	3,78	0,95	629,0	6,84	16,23	ASHRAE LBP		
	-10	130	90	90												
	-25	55	32	55	462,5	1579	398,0	0,78	2,66	0,67	594,1	6,60	14,45	cecomaf LBP		
	-13	131	90	131												
	-35	40	20	40	326,1	1114	280,7	0,75	2,55	0,64	437,3	5,74	8,86	EN12900 LBP		
	-31	104	68	104												
	-23	49	4,4	49	514,1	1756	442,4	0,82	2,79	0,70	629,6	6,80	18,20	ARI540 LBP		
	-10	120	40	120												
	-23	41	32	32	774,4	2645	666,5	1,24	4,24	1,07	623,1	6,78	18,04	AHAM LBP		
	-10	105	90	90												
	-35	45	32	45	281,8	962	242,5	0,68	2,31	0,58	417,3	5,60	7,53	opt		
	-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]	-40	-40	146,2	499	125,8	0,48	1,62	0,41	307,6	5,26	3,90
cond. pressure	-34	-30	297,5	1016	256,0	0,69	2,37	0,60	428,5	5,64	7,96
pc= 45/113	-29	-20	463,0	1581	398,5	0,87	2,97	0,75	532,7	6,15	12,44
return gas temp.	-23	-10	647,8	2212	557,5	1,03	3,52	0,89	628,2	6,79	17,51
RGT= 32/90	-21	-5	749,0	2558	644,6	1,11	3,79	0,95	675,3	7,15	20,31
liquid temp	-15	5	972,2	3320	836,7	1,26	4,29	1,08	773,2	7,97	26,56
Tliq= 45/113	-10	14	1200,2	4099	1032,9	1,38	4,71	1,19	871,2	8,82	33,05
[°C / °F]	-40	-40	25,3	86	21,7	0,12	0,42	0,11	204,8	4,90	0,78
cond. pressure	-34	-30	179,9	614	154,8	0,49	1,66	0,42	369,5	5,43	5,57
pc= 55/131	-29	-20	341,9	1168	294,3	0,67	2,30	0,58	508,1	6,07	10,64
return gas temp	-23	-10	516,4	1764	444,4	0,82	2,80	0,71	629,0	6,84	16,17
RGT= 32/90	-21	-5	609,9	2083	524,9	0,89	3,04	0,77	685,2	7,28	19,17
liquid temp	-15	5	812,5	2775	699,3	1,02	3,49	0,88	794,6	8,23	25,77
Tliq= 55/131	-10	14	1016,2	3471	874,6	1,14	3,88	0,98	895,0	9,20	32,53