

Model
SC12CNX.2

Sales code:
104H7270

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	150g / 5.29oz
Weight	13.20 kg / 29.10lbs
Displacement	12.87 cm3 / 0.79cu.in
Compressors on pallet	80



General - Configurations With SC12CNX.2

-	Conf. 1
Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz
Number of phases	1
Voltage range	95-135 V
Approvals	UL, VDE, EAC
Starting torque	HST
Refrigerant	R290
Application	LBP+MBP
Hot gas defrost	OK
Long interval pull down	OK

Application Notes

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

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Compressor Design

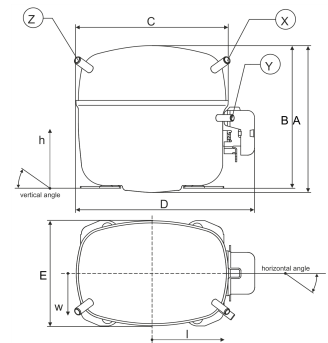
Oil type	POE	Winding resistance main	1 Ohm
Oil viscosity	22cSt	Winding resistance aux	4.2 Ohm
Oil quantity	500 / 16.91fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,510 cm ³ / 51.06fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

Housing

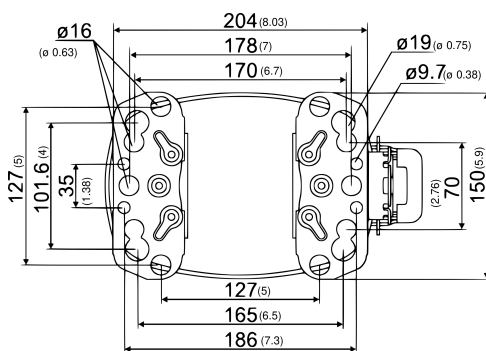
A Height	209mm / 8.23in
B Height	203mm / 7.99in
C Length shell	218mm / 8.58in
D Length w. cover	255mm / 10.04in
E Width	151mm / 5.94in

[Find 3D Model here](#)

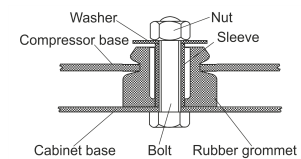


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 9.54–9.72 / 0.38–0.38in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

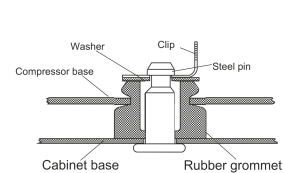
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	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

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Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	95-135 V
Starting torque	HST
Approvals	UL, VDE, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	240 µF
LRA (locked rotor amps / 4s/ U(N))	23.4 A
RLA (rated load amps / 1s/ U(N))	4.3 A
Cut in current (U(N))	23.4 A

Ambient/ machine room temperatures minimum /maximum

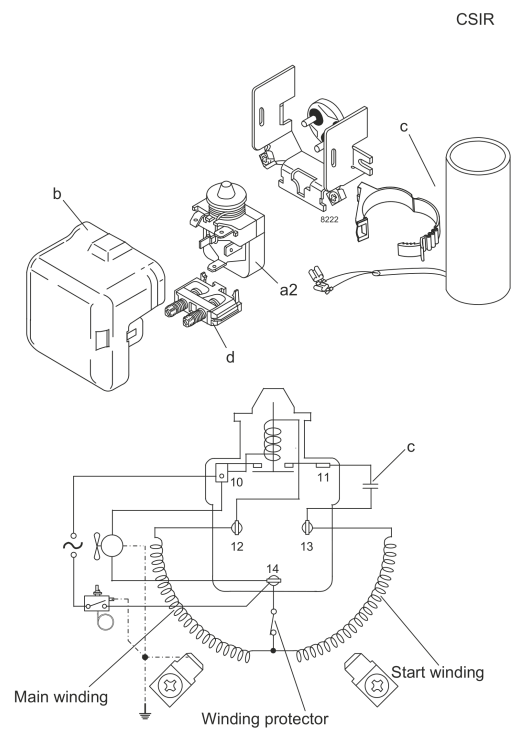
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

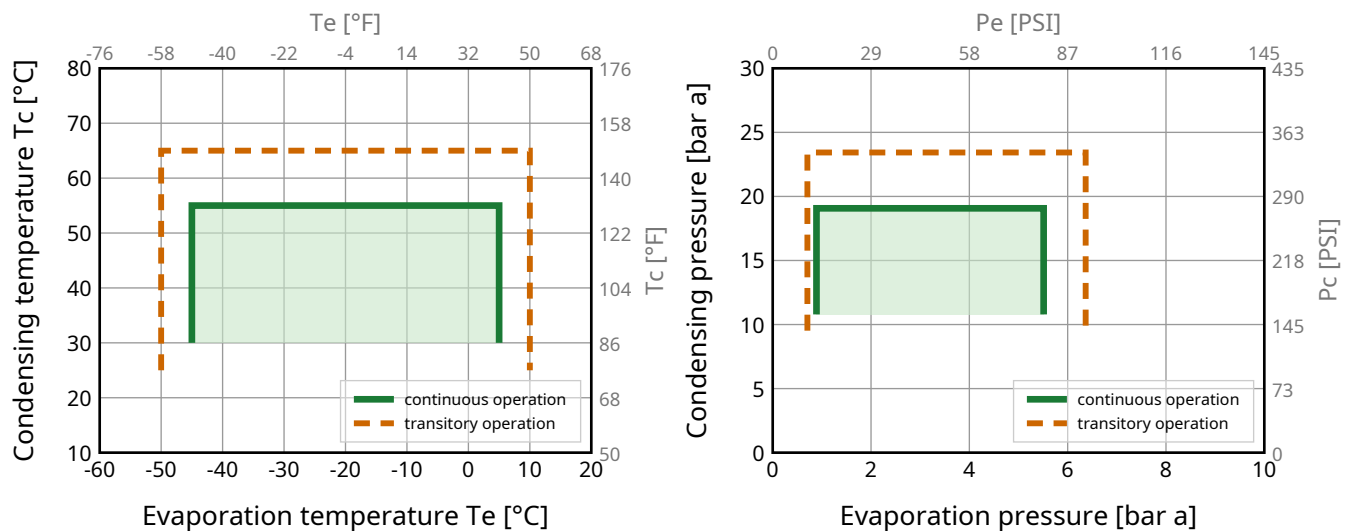
a2 relay 117U7020

c start capacitor (240µF) 117U5023

d cord relief 103N1004

b plastic cover 103N2008

Operation Pressure Range



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Standard Conditions

R290, 115 V/60 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	$\dot{m}$	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	615	2099	529	1.29	4.42	475	6.11	6.25	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	449	1533	386	0.98	3.35	458	6.00	5.63	CECOMAF LBP
-35 -31	40 104	20 68	40 104	335	1143	288	0.97	3.30	346	5.42	3.85	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	1190	4061	1024	1.87	6.39	635	7.30	13.63	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	936	3193	805	1.53	5.23	610	7.07	11.90	CECOMAF MBP
-10 14	45 113	20 68	45 113	1042	3557	896	1.89	6.43	553	6.74	12.83	EN12900 MBP

Performance Tables

R290, 115 V/60 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	$\dot{m}$
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-45	-49	131	446	112	0.58	1.97	226	4.99	1.47
-40	-40	212	724	182	0.74	2.51	288	5.20	2.39
-30	-22	420	1434	361	1.07	3.64	393	5.66	4.75
-20	-4	704	2404	606	1.47	5.01	480	6.18	8.02
-10	14	1084	3698	932	1.96	6.69	553	6.74	12.44
0	32	1577	5380	1356	2.54	8.68	620	7.35	18.34
5	41	1872	6388	1610	2.87	9.78	653	7.68	21.94

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-45	-49	60	205	52	0.34	1.17	175	4.75	0.75
-40	-40	137	467	118	0.53	1.82	257	5.04	1.70
-30	-22	329	1123	283	0.83	2.83	397	5.67	4.11
-20	-4	589	2010	507	1.15	3.92	513	6.34	7.42
-10	14	936	3193	805	1.53	5.23	610	7.07	11.90
0	32	1388	4736	1194	2.00	6.81	696	7.85	17.90
5	41	1660	5663	1427	2.25	7.69	736	8.26	21.59