

Model

SC21CNX.2

Sales code:

104H8166

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	150g / 5.29oz
Weight	14.10 kg / 31.09lbs
Displacement	20.95 cm3 / 1.28cu.in
Compressors on pallet	80



General – Configurations With SC21CNX.2

-	Conf. 1
Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz
Number of phases	1
Voltage range	198-254 V
Approvals	VDE, CCC
Starting torque	HST
Refrigerant	R290
Application	LBP
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

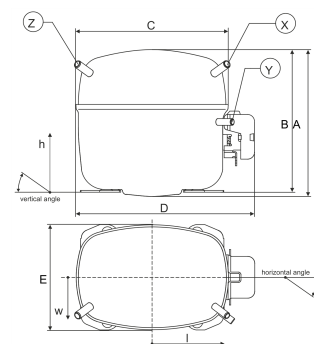
Oil type	POE	Winding resistance main	3.3 Ohm
Oil viscosity	32cSt	Winding resistance aux	16 Ohm
Oil quantity	550 / 18.60fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,410 cm3 / 47.68fl.oz	Max. discharge temp.	135°C / 275°F
Motor protection	internal		

Compressor Dimensions

Housing

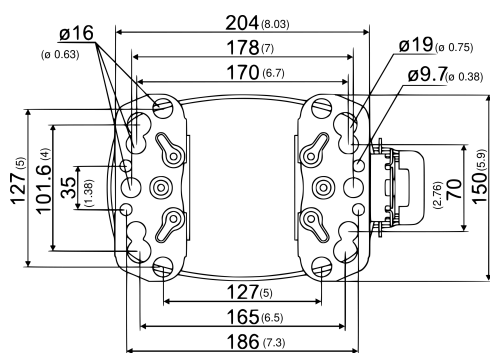
A Height	219mm / 8.62in
B Height	213mm / 8.39in
C Length shell	218mm / 8.58in
D Length w. cover	255mm / 10.04in
E Width	151mm / 5.94in

[Find 3D Model here](#)



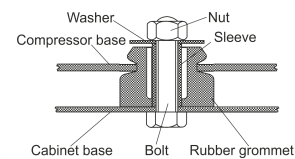
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

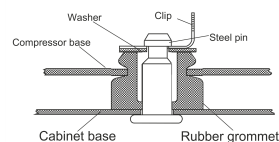


Dimensions in mm [in]

Bolt joint



Snap-on



	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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Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, CCC
Starting device type	relay
Run capacitor	-/-
Start capacitor	125 µF
LRA (locked rotor amps / 4s/ U(N))	25 A
RLA (rated load amps / 1s/ U(N))	4.5 A
Cut in current (U(N))	25 A

Ambient/ machine room temperatures minimum /maximum

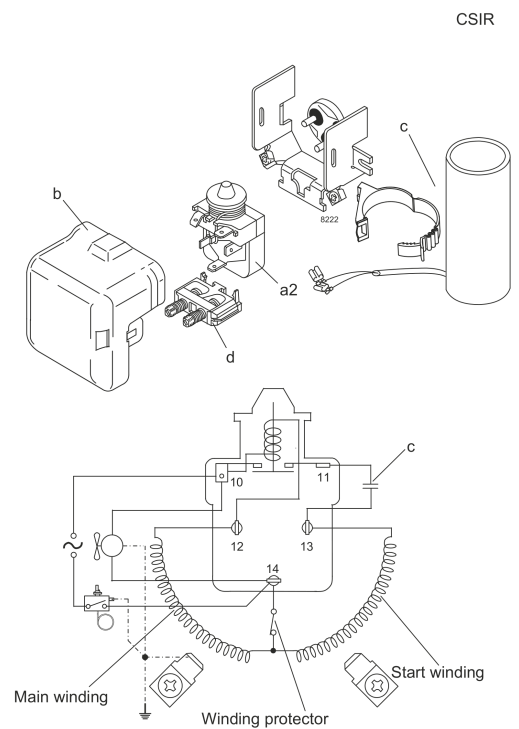
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

a2 relay 117U7013

c start capacitor (125µF) 117U5012

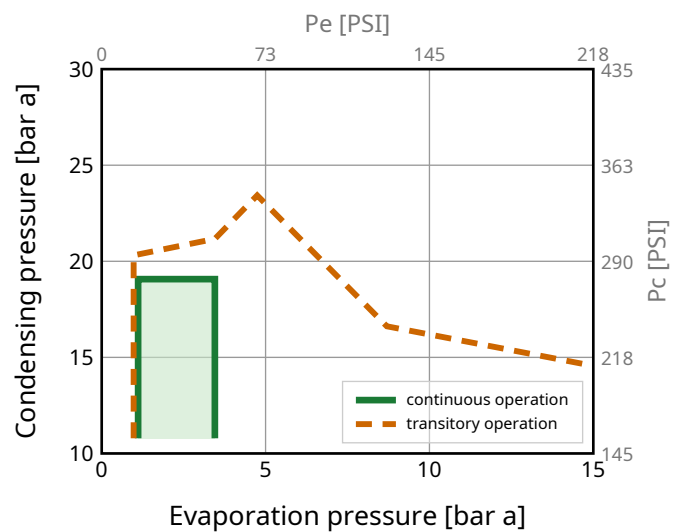
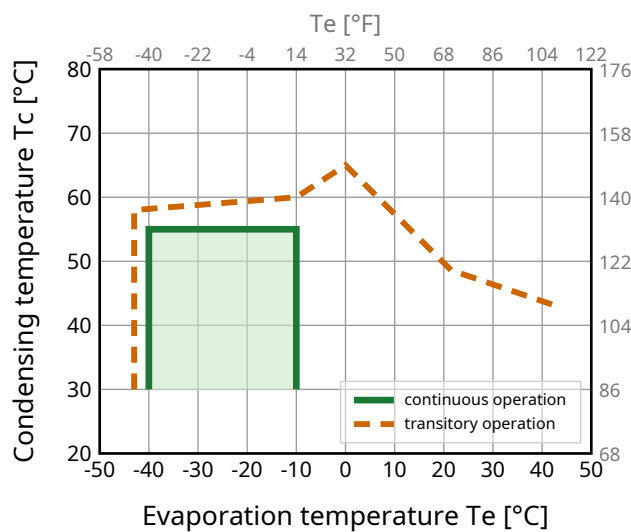
d cord relief 103N1004

b plastic cover 103N2009

Alternative components

c start capacitor (125µF) 117U5069

Operation Pressure Range



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Standard Conditions

R290, 220 V/50 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	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	966	3295	830	1.46	4.98	662	4.19	9.81	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	716	2442	616	1.12	3.82	639	4.10	8.97	CECOMAF LBP
-35 -31	40 104	20 68	40 104	541	1845	465	1.09	3.72	496	3.59	6.21	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	772	2633	664	1.19	4.06	649	4.11	10.71	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	1011	3448	869	1.57	5.36	643	4.01	10.27	AHAM LBP
-35 -31	45 113	32 89.6	45 113	492	1678	423	1.00	3.42	491	3.58	5.54	opt LBP

Performance Tables

R290, 220 V/50 Hz, CSIR, fan 3m/s

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

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	339	1155	291	0.79	2.68	431	3.43	3.81
-35	-31	492	1678	423	1.00	3.42	491	3.58	5.54
-30	-22	654	2231	562	1.18	4.02	555	3.76	7.39
-25	-13	828	2826	712	1.33	4.54	623	3.98	9.39
-20	-4	1020	3480	877	1.47	5.01	695	4.23	11.60
-15	5	1233	4206	1060	1.60	5.45	772	4.52	14.08
-10	14	1471	5018	1265	1.72	5.87	855	4.84	16.89

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

-40	-40	219	748	188	0.47	1.62	462	3.39	2.72
-35	-31	372	1270	320	0.73	2.48	512	3.59	4.64
-30	-22	536	1830	461	0.94	3.20	571	3.83	6.70
-25	-13	716	2442	616	1.12	3.82	639	4.10	8.97
-20	-4	914	3120	786	1.28	4.35	717	4.41	11.51
-15	5	1137	3878	978	1.41	4.82	804	4.75	14.38
-10	14	1387	4732	1193	1.54	5.25	901	5.13	17.64