

Model
SC12G

Sales code:
104G7250

Compressor Data

Refrigerant(s)	R134a / R513A
Refr. charge - tech. limit	1300g / 45.86oz
Weight	13.10 kg / 28.88lbs
Displacement	12.87 cm3 / 0.79cu.in
Compressors on pallet	80



General – Configurations With SC12G

-	Conf. 1	Conf. 2
Motor configuration	CSIR	CSIR
Power supply (nominal)	115 V/60 Hz	115 V/60 Hz
Number of phases	1	1
Voltage range	103-127 V	103-127 V
Approvals	UL	UL
Starting torque	HST	HST
Refrigerant	R134a	R513A
Application	LBP+MBP+HBP	LBP+MBP+HBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

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

Model
SC12G

Sales code:
104G7250

Compressor Design

Oil type	POE	Winding resistance main	1.000 Ohm
Oil viscosity	22cSt	Winding resistance aux	4.20 Ohm
Oil quantity	500 / 16.91fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,460 cm ³ / 49.37fl.oz	Max. discharge temp.	135°C / 275°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 8.11–8.29 / 0.32–0.33in	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

Model

SC12G

Configuration 1

Sales code:

104G7250

Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R134a
Application	LBP+MBP+HBP
Voltage range	103-127 V
Starting torque	HST
Approvals	UL
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

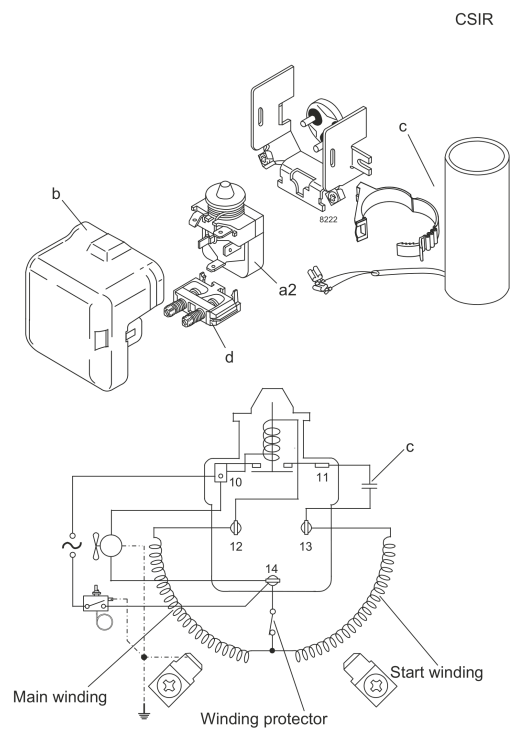
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 1,5m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

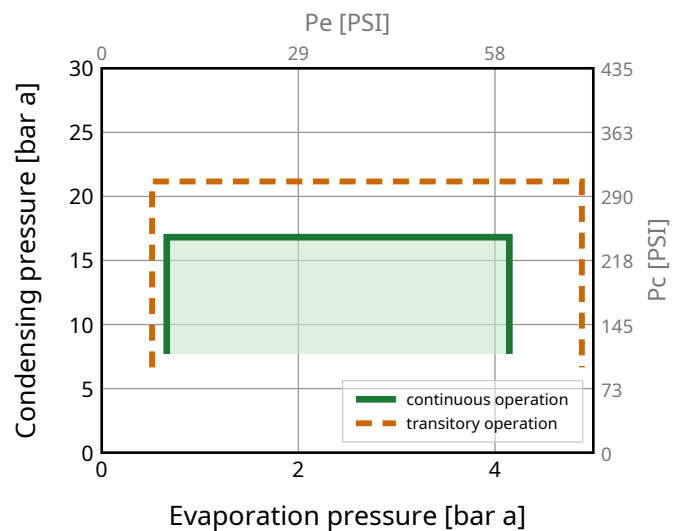
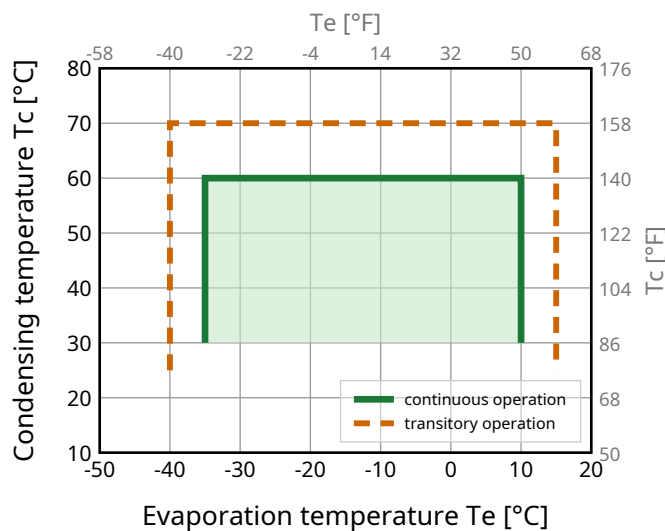
a2 relay 117U6020

c start capacitor (240µF) 117U5023

d cord relief 103N1004

b plastic cover 103N2008

Operation Pressure Range



Model
SC12G

Configuration 1

Sales code:
104G7250

Standard Conditions

R134a, 115 V/60 Hz, CSIR, fan 1,5m/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]	
-25 -13	55 131	32 89.6	55 131	202	690	174	0.73	2.49	277	4.99	4.82	CECOMAF LBP
-35 -31	40 104	20 68	40 104	131	448	113	0.64	2.20	204	4.92	2.87	EN12900 LBP
-10 14	55 131	32 89.6	55 131	562	1919	484	1.27	4.32	444	5.82	13.56	CECOMAF MBP
-10 14	45 113	20 68	45 113	670	2288	577	1.59	5.44	420	5.71	15.64	EN12900 MBP
5 41	55 131	32 89.6	55 131	1151	3927	990	1.90	6.48	606	7.00	28.27	CECOMAF HBP
5 41	50 122	20 68	50 122	1206	4116	1038	2.09	7.14	577	6.85	30.26	EN12900 HBP

Performance Tables

R134a, 115 V/60 Hz, CSIR, fan 1,5m/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]
-35	-31	118	403	101	0.61	2.08	194	4.81	2.54
-30	-22	197	673	170	0.81	2.75	244	4.92	4.25
-20	-4	403	1374	346	1.20	4.09	336	5.24	8.73
-10	14	694	2370	597	1.65	5.64	420	5.71	15.17
0	32	1100	3753	946	2.17	7.42	506	6.34	24.27
10	50	1646	5618	1416	2.74	9.36	600	7.11	36.85

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

-35	-31	43	145	37	0.28	0.97	150	4.61	1.01
-30	-22	117	398	100	0.54	1.85	216	4.78	2.77
-20	-4	303	1033	260	0.90	3.08	335	5.23	7.24
-10	14	562	1919	484	1.27	4.32	444	5.82	13.56
0	32	924	3151	794	1.68	5.72	551	6.57	22.52
10	50	1414	4823	1216	2.13	7.27	663	7.47	35.02

Model

SC12G

Configuration 2

Sales code:

104G7250

Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R513A
Application	LBP+MBP+HBP
Voltage range	103-127 V
Starting torque	HST
Approvals	UL
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

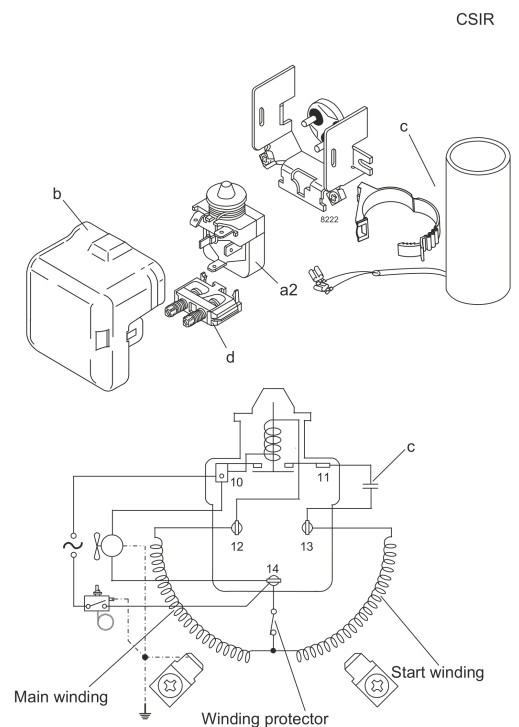
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 1,5m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

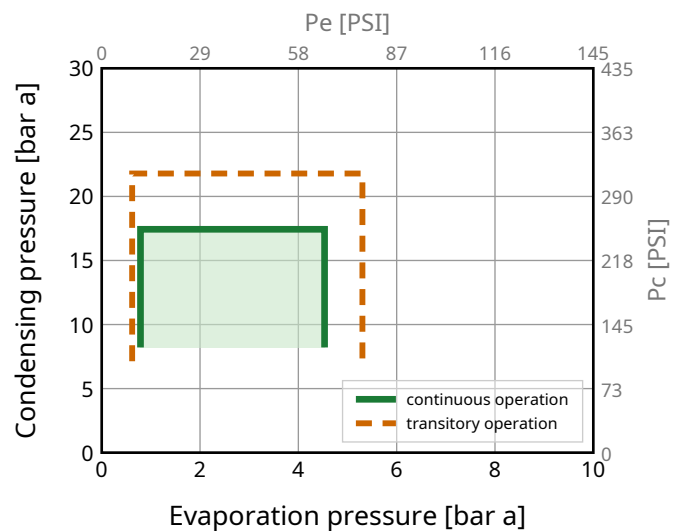
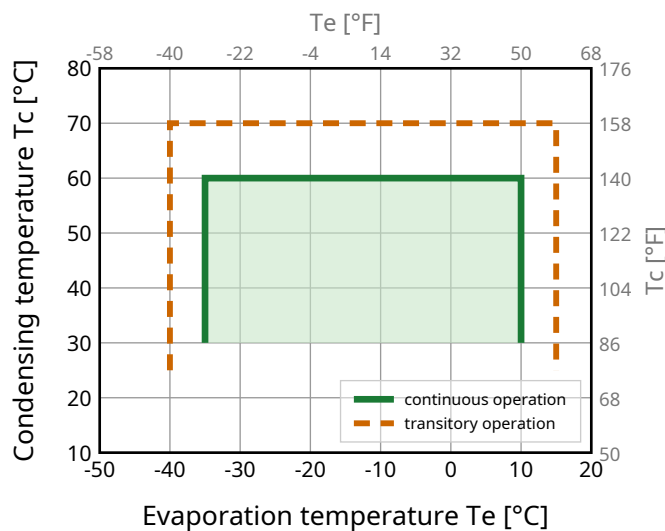
a2 relay 117U6020

c start capacitor (240µF) 117U5023

d cord relief 103N1004

b plastic cover 103N2008

Operation Pressure Range



Model
SC12G

Configuration 2

Sales code:
104G7250

Standard Conditions

R513A, 115 V/60 Hz, CSIR, fan 1,5m/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]	
-25 -13	55 131	32 89.6	55 131	221	753	190	0.76	2.59	291	4.11	6.12	CECOMAF LBP
-35 -31	40 104	20 68	40 104	162	552	139	0.76	2.61	212	3.59	4.07	EN12900 LBP
-10 14	55 131	32 89.6	55 131	563	1921	484	1.27	4.33	443	5.12	15.80	CECOMAF MBP
-10 14	45 113	20 68	45 113	666	2274	573	1.58	5.38	422	4.98	18.05	EN12900 MBP
5 41	55 131	32 89.6	55 131	1137	3879	978	1.88	6.42	604	6.18	32.61	CECOMAF HBP
5 41	50 122	20 68	50 122	1174	4004	1009	2.02	6.89	581	6.03	34.60	EN12900 HBP

Performance Tables

R513A, 115 V/60 Hz, CSIR, fan 1,5m/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]
-35	-31	136	464	117	0.67	2.27	204	3.55	3.35
-30	-22	209	712	180	0.85	2.89	247	3.83	5.15
-20	-4	409	1395	352	1.23	4.18	334	4.40	10.15
-10	14	699	2386	601	1.66	5.65	422	4.98	17.50
0	32	1101	3756	947	2.15	7.33	513	5.58	27.89
10	50	1635	5578	1406	2.71	9.24	604	6.18	42.10

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

-35	-31	86	294	74	0.45	1.52	194	3.48	2.37
-30	-22	146	498	125	0.60	2.06	242	3.79	4.03
-20	-4	314	1070	270	0.92	3.14	341	4.44	8.71
-10	14	563	1921	484	1.27	4.33	443	5.12	15.80
0	32	916	3124	787	1.67	5.68	550	5.82	26.04
10	50	1392	4750	1197	2.11	7.21	659	6.54	40.33