

Model
SC18G

Sales code:
104G7800

Compressor Data

Refrigerant(s)	R134a / R513A
Refr. charge - tech. limit	1300g / 45.86oz
Weight	13.80 kg / 30.42lbs
Displacement	17.69 cm3 / 1.08cu.in
Compressors on pallet	80



General – Configurations With SC18G

-	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	95-135 V	95-135 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

- Protector and cover are included and pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor

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Compressor Design

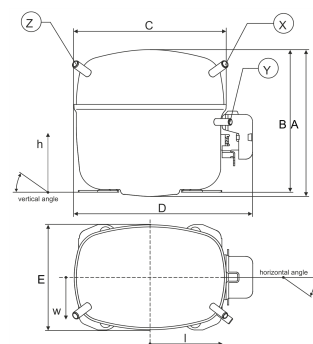
Oil type	POE	Winding resistance main	0.700 Ohm
Oil viscosity	22cSt	Winding resistance aux	2.70 Ohm
Oil quantity	550 / 18.60fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,460 cm3 / 49.37fl.oz	Max. discharge temp.	135°C / 275°F
Motor protection	external		

Compressor Dimensions

Housing

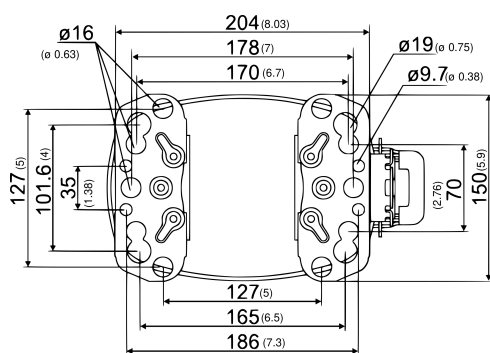
A Height	219mm / 8.62in
B Height	213mm / 8.39in
C Length shell	218mm / 8.58in
D Length w. cover	255mm / 10.04in
E Width	151mm / 5.94in

[Find 3D Model here](#)



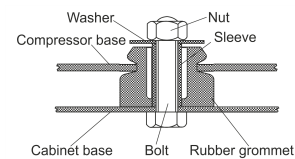
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 9.54–9.72 / 0.38–0.38in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

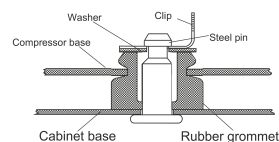


Dimensions in mm [in]

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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Configuration 1

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Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R134a
Application	LBP+MBP+HBP
Voltage range	95-135 V
Starting torque	HST
Approvals	UL
Starting device type	relay
Run capacitor	-/-
Start capacitor	410 µF
LRA (locked rotor amps / 4s/ U(N))	56.8 A
RLA (rated load amps / 1s/ U(N))	9.8 A
Cut in current (U(N))	56.8 A

Ambient/ machine room temperatures minimum /maximum

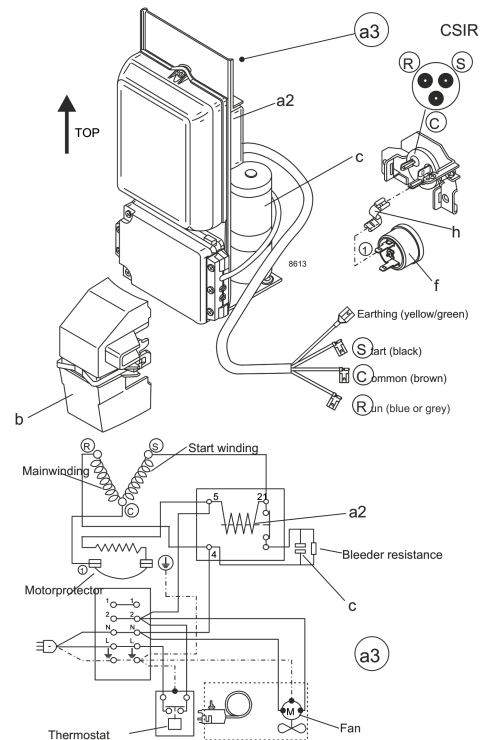
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components (protector + ~holder + cover: pre assembled)

a3 SC starter kit 117-7053

f ext. protector (T0761/46) 117U3212

h protector holder 117U0439

b plastic cover + clamp 117U1021

Alternative components

a2 potential relay (RVA 7AA3R) 117-7441

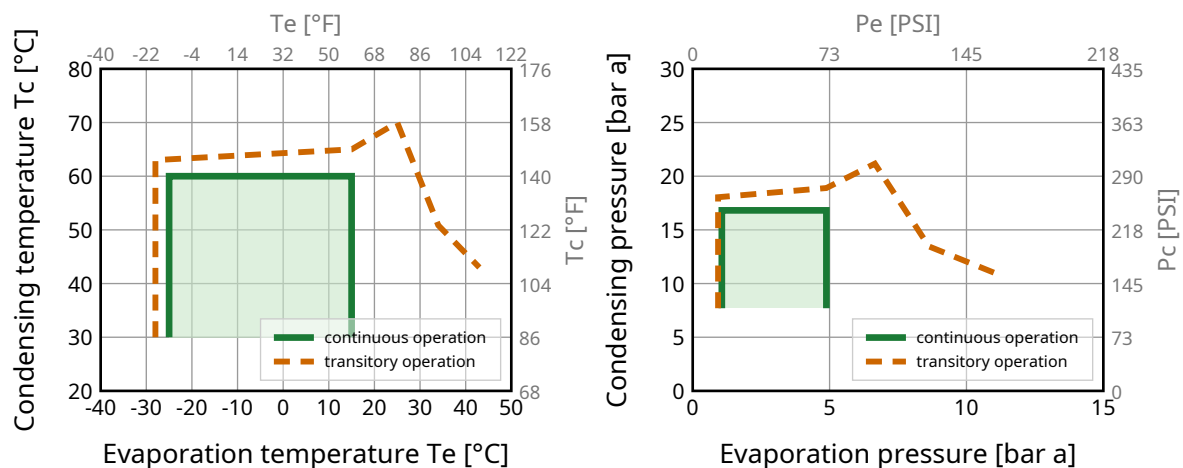
c start capacitor (410µF, 6.3mm) 117U5042

f ext. protector (T0761/46) 117U3212

h protector holder 117U0439

b plastic cover + clamp 117U1021

Operation Pressure Range



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Configuration 1

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Standard Conditions

R134a, 115 V/60 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]	
-25 -13	55 131	32 89.6	55 131	264	900	227	0.71	2.44	369	6.54	6.29	CECOMAF LBP
-35 -31	40 104	20 68	40 104	184	628	158	0.64	2.19	287	6.26	4.03	EN12900 LBP
-10 14	55 131	32 89.6	55 131	782	2668	673	1.23	4.20	635	8.04	18.85	CECOMAF MBP
-10 14	45 113	20 68	45 113	912	3110	784	1.45	4.94	630	7.93	21.25	EN12900 MBP
5 41	55 131	32 89.6	55 131	1514	5164	1302	1.72	5.88	879	9.81	37.18	CECOMAF HBP
5 41	50 122	20 68	50 122	1578	5382	1357	1.84	6.28	857	9.62	39.57	EN12900 HBP

Performance Tables

R134a, 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	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	404	1379	348	0.96	3.28	420	6.75	8.74
-20	-4	562	1919	484	1.14	3.89	493	7.11	12.19
-10	14	944	3221	812	1.50	5.11	630	7.93	20.62
0	32	1447	4936	1244	1.91	6.51	758	8.87	31.92
10	50	2111	7202	1815	2.39	8.14	884	9.92	47.25
15	59	2516	8585	2164	2.65	9.06	948	10.49	56.84

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

-25	-13	264	900	227	0.71	2.44	369	6.54	6.29
-20	-4	421	1437	362	0.91	3.12	461	7.01	10.08
-10	14	782	2668	673	1.23	4.20	635	8.04	18.85
0	32	1238	4223	1064	1.55	5.29	799	9.19	30.18
10	50	1828	6239	1573	1.91	6.51	959	10.46	45.30
15	59	2188	7464	1881	2.11	7.19	1039	11.14	54.75

Model

SC18G

Configuration 2

Sales code:

104G7800

Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R513A
Application	LBP+MBP+HBP
Voltage range	95-135 V
Starting torque	HST
Approvals	UL
Starting device type	relay
Run capacitor	-/-
Start capacitor	410 µF
LRA (locked rotor amps / 4s/ U(N))	56.8 A
RLA (rated load amps / 1s/ U(N))	9.8 A
Cut in current (U(N))	56.8 A

Ambient/ machine room temperatures minimum /maximum

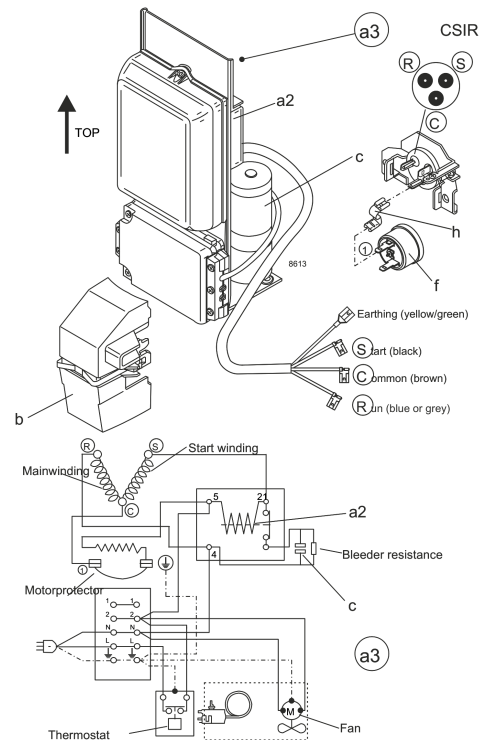
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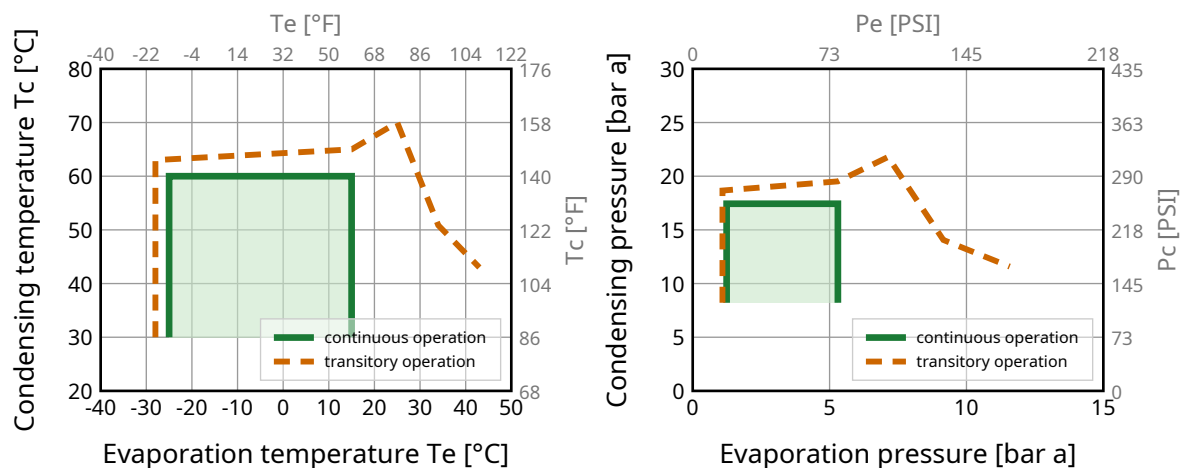
c start capacitor (410µF, 6.3mm) 117U5042

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h protector holder 117U0439

b plastic cover + clamp 117U1021

Operation Pressure Range



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Standard Conditions

R513A, 115 V/60 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]	
-25 -13	55 131	32 89.6	55 131	287	978	247	0.72	2.47	395	6.58	7.94	CECOMAF LBP
-35 -31	40 104	20 68	40 104	211	720	181	0.79	2.69	267	5.73	5.30	EN12900 LBP
-10 14	55 131	32 89.6	55 131	813	2774	699	1.20	4.09	678	8.44	22.81	CECOMAF MBP
-10 14	45 113	20 68	45 113	949	3238	816	1.42	4.83	671	8.39	25.70	EN12900 MBP
5 41	55 131	32 89.6	55 131	1534	5234	1319	1.67	5.69	920	10.04	43.99	CECOMAF HBP
5 41	50 122	20 68	50 122	1589	5421	1366	1.77	6.04	897	9.89	46.85	EN12900 HBP

Performance Tables

R513A, 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	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	442	1509	380	1.00	3.42	442	6.88	10.95
-20	-4	606	2069	521	1.15	3.93	526	7.44	15.05
-10	14	996	3398	856	1.48	5.06	671	8.39	24.93
0	32	1501	5121	1291	1.88	6.41	798	9.24	38.02
10	50	2162	7376	1859	2.34	7.98	924	10.06	55.67
15	59	2563	8745	2204	2.59	8.83	990	10.51	66.72

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

-25	-13	287	978	247	0.72	2.47	395	6.58	7.94
-20	-4	449	1531	386	0.90	3.08	497	7.25	12.47
-10	14	813	2774	699	1.20	4.09	678	8.44	22.81
0	32	1264	4312	1087	1.50	5.13	840	9.52	35.93
10	50	1841	6282	1583	1.84	6.28	1000	10.57	53.34
15	59	2190	7471	1883	2.02	6.89	1084	11.12	64.20