

Model

SC18F

Sales code:

104G8800

Compressor Data

Refrigerant(s)	R134a
Refr. charge - tech. limit	1300g / 45.86oz
Weight	13.10 kg / 28.88lbs
Displacement	17.69 cm3 / 1.08cu.in
Compressors on pallet	80



General – Configurations With SC18F

-	Conf. 1
Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz
Number of phases	1
Voltage range	198-254 V
Approvals	VDE, EAC
Starting torque	HST
Refrigerant	R134a
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
- Can be used as a HBP compressor with 240 V 50 Hz mains (216-254 V).

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Compressor Design

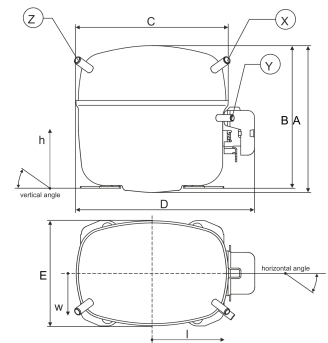
Oil type	POE	Winding resistance main	5.13 Ohm
Oil viscosity	22cSt	Winding resistance aux	13.51 Ohm
Oil quantity	550 / 18.60fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,410 cm ³ / 47.68fl.oz	Max. discharge temp.	135°C / 275°F
Motor protection	internal		

Compressor Dimensions

Housing

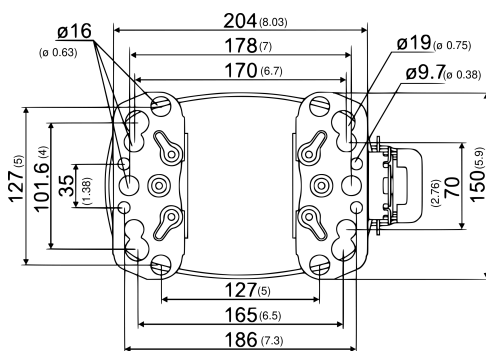
A Height	209mm / 8.23in
B Height	203mm / 7.99in
C Length shell	218mm / 8.58in
D Length w. cover	255mm / 10.04in
E Width	151mm / 5.94in

[Find 3D Model here](#)

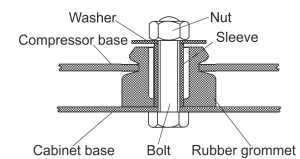


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

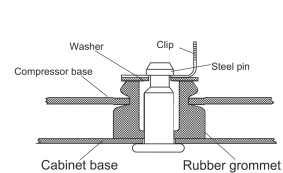
Mounting Accessories



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)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
RLA (rated load amps / 1s/ U(N))	-/-A

Ambient/ machine room temperatures minimum /maximum

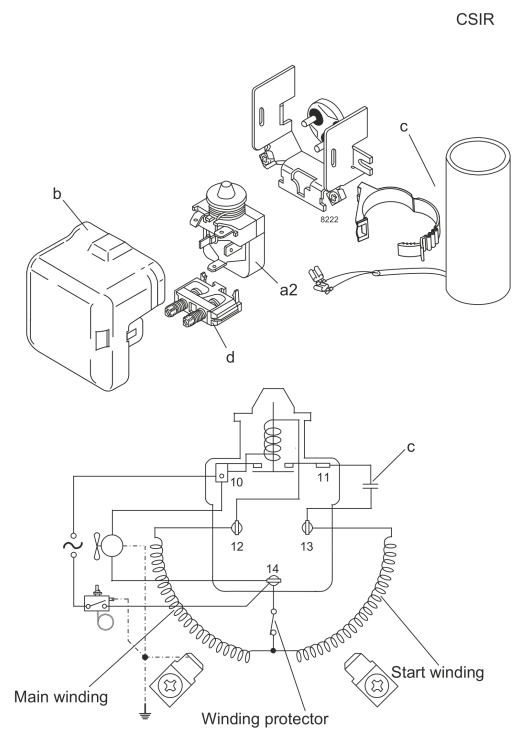
Ambient temperature range: 10 - 38°C / 50 - 100°F

Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling

fan 1,5m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

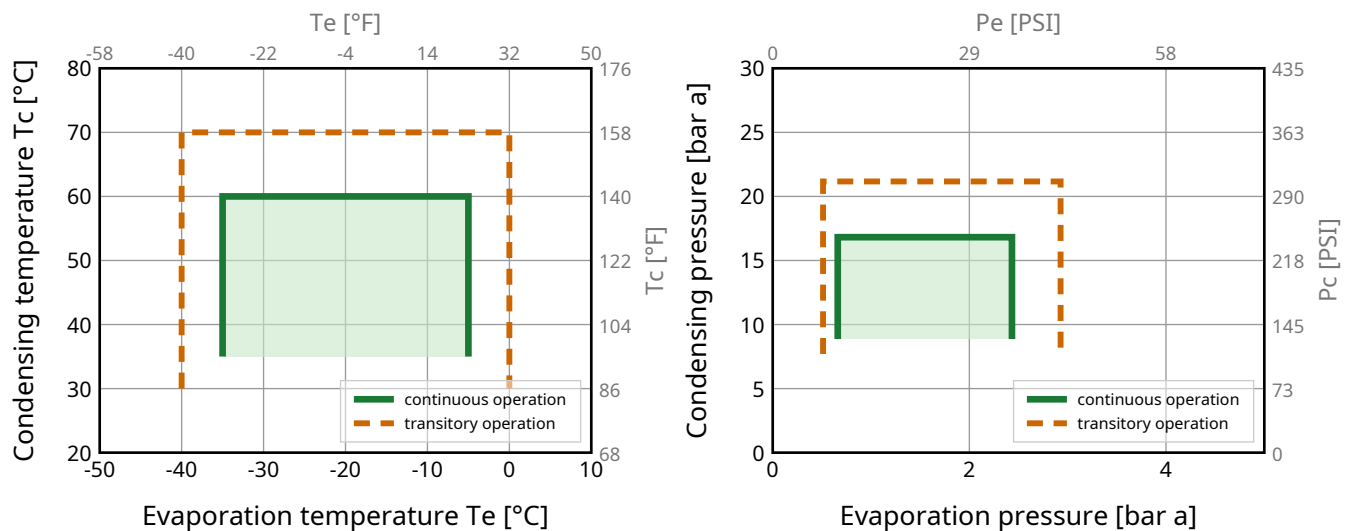
a2 relay 117U6005

c start capacitor (80µF) 117U5017

d cord relief 103N1004

b plastic cover 103N2009

Operation Pressure Range



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Standard Conditions

R134a, 220 V/50 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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	388	1325	334	1.17	3.98	333	2.35	7.53	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	280	956	241	0.90	3.05	313	2.29	6.68	CECOMAF LBP
-35 -31	40 104	20 68	40 104	188	641	162	0.84	2.86	224	2.11	4.11	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	326	1113	281	0.98	3.34	333	2.35	8.56	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	453	1545	389	1.39	4.75	326	2.31	8.78	AHAM LBP
-35 -31	45 113	32 89.6	45 113	168	574	145	0.76	2.60	221	2.10	3.62	opt LBP

Performance Tables

R134a, 220 V/50 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	168	574	145	0.76	2.60	221	2.10	3.62
-30	-22	247	841	212	0.93	3.17	266	2.18	5.32
-25	-13	347	1183	298	1.11	3.78	313	2.29	7.50
-20	-4	469	1599	403	1.29	4.40	363	2.42	10.16
-15	5	612	2088	526	1.47	5.02	416	2.58	13.31
-10	14	777	2651	668	1.65	5.63	471	2.76	16.97
-5	23	964	3287	829	1.82	6.23	528	2.95	21.14

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

-35	-31	129	440	111	0.63	2.14	206	2.04	3.06
-30	-22	194	661	167	0.75	2.56	258	2.15	4.61
-25	-13	280	956	241	0.90	3.05	313	2.29	6.68
-20	-4	388	1325	334	1.05	3.58	370	2.46	9.29
-15	5	518	1767	445	1.20	4.11	430	2.65	12.43
-10	14	669	2283	575	1.36	4.64	492	2.85	16.13
-5	23	842	2872	724	1.51	5.16	556	3.05	20.39