

Model

Designation	SC18F	220-240V/50Hz 1~	Sales code:	104G8800
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	22cST	Displacement	17,69cm ³ / 1,08cu.in
Oil quantity	550cm ³ / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1410cm ³ / 47,7fl.oz		
Weight	13,1kg / 28,9lbs		
Motor protection	1# internal		
Winding resistance main	5,13Ω (at 25°C)		
Winding resistance aux	13,51Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SC18F

	Conf. 1
Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz
Number of phases	1
Voltage range	198-254V
Approvals	VDE, EAC
Starting torque	HST
Note	- / -

Applications with SC18F

	Conf. 1
Refrigerant	R134a
Application	LBP+MBP
System cooling	fan 1,5m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with SC18F

	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	80μF
LRA (locked rotor amps / 4s)	
RLA (rated load amps / 1s)	-/-A
Cut in current	

Model

Designation

SC18F

220-240V/50Hz 1~

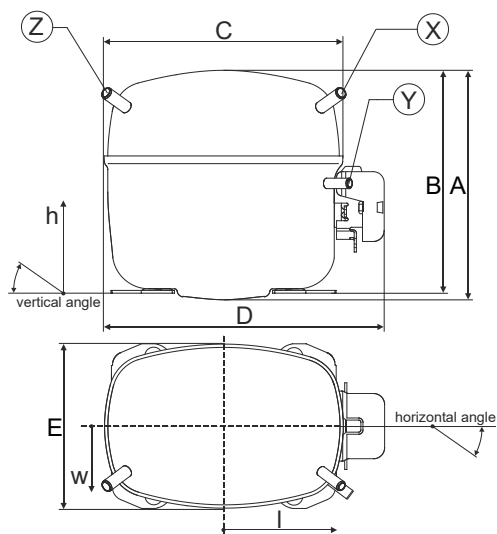
Sales code:

104G8800

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

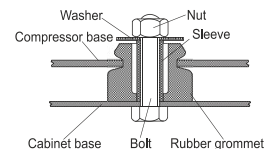
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	ø 8,11-8,29	ø 6,11-6,29	ø 6,11-6,29
(i:inside, o:outside) [in]	ø 0,32-0,33	ø 0,24-0,25	ø 0,24-0,25
Material	copper	copper	copper
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55	115/100/63	-107/183/55
[in]	4,2/7,2/2,2	4,5/3,9/2,5	-4,2/7,2/2,2
Straight tube l. [mm]	12	12	12
[in]	0,5	0,5	0,5



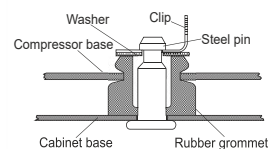
Compressor fixation



Bolt joint



Snap-on



Mounting accessories

	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

Application notes

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

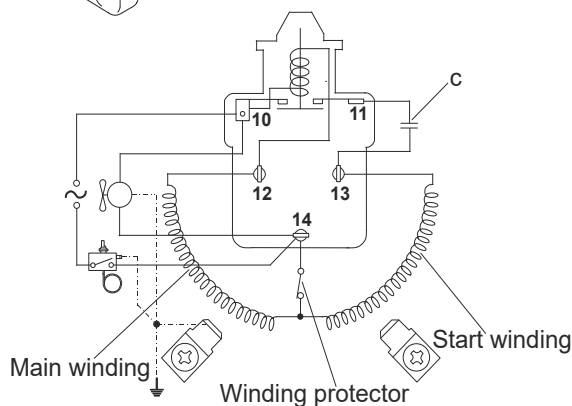
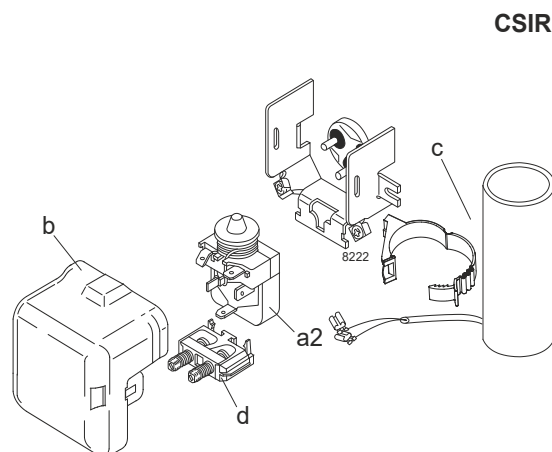
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Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE EAC

Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 38°C / 50 - 101°F

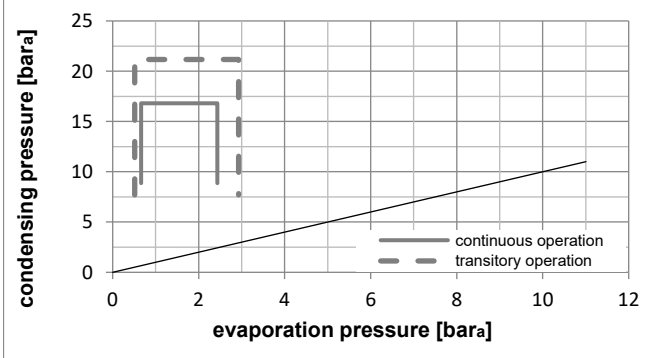
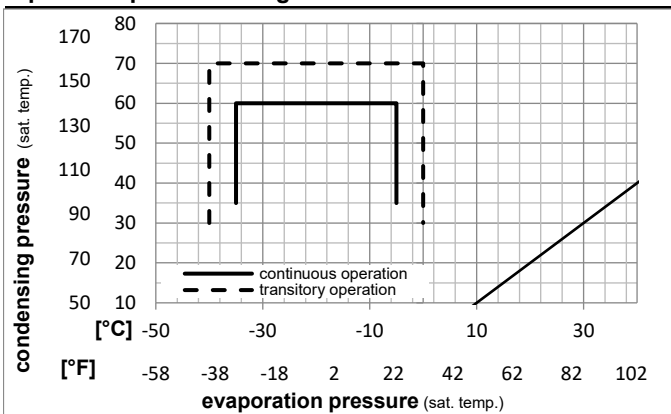
Machine room temperature range: 10 - 43°C / 50 - 110°F

Compressor cooling: fan 1,5m/s

Operation Limits

Can be used as a HBP compressor with 240V 50Hz mains (216-254V).

Operation pressure range



Components

a2	relay	117U6005
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation **SC18F** **220-240V/50Hz** Conf. 1 Sales code: **104G8800**

Optimization + standard conditions

R134a, 220V/50Hz, CSIR, fan 1,5m/s, VDE, EAC

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	[W]	[A]	[kg/h]						
[°C]	[°F]																						
-23	54	32	32		388,0	1325	333,9	1,17	3,99	1,01	332,2	2,35	7,53								ASHRAE LBP		
-10	130	90	90																				
-25	55	32	55		280,2	957	241,1	0,90	3,06	0,77	312,9	2,29	6,70								cecomaf LBP		
-13	131	90	131																				
-35	40	20	40		187,5	640	161,4	0,84	2,86	0,72	223,8	2,11	4,11								EN12900 LBP		
-31	104	68	104																				
-23	49	4,4	49		323,7	1106	278,6	0,97	3,32	0,84	332,7	2,35	8,55								ARI540 LBP		
-10	120	40	120																				
-23	41	32	32		452,1	1544	389,1	1,39	4,75	1,20	325,2	2,31	8,78								AHAM LBP		
-10	105	90	90																				
-35	45	32	45		168,1	574	144,7	0,76	2,60	0,66	220,8	2,10	3,63								opt		
-31	113	90	113																				

Performance tables

R134a, 220V/50Hz, CSIR, fan 1,5m/s, VDE, EAC

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	168,1	574	144,7	0,76	2,60	0,66	220,8	2,10	3,63
cond. pressure	-30	-22	246,6	842	212,2	0,93	3,17	0,80	265,7	2,18	5,33
pc= 45/113	-25	-13	346,8	1184	298,4	1,11	3,78	0,95	313,3	2,29	7,51
return gas temp.	-23	-10	385,8	1317	332,0	1,17	3,99	1,01	330,0	2,33	8,36
RGT= 32/90	-20	-4	468,6	1600	403,3	1,29	4,40	1,11	363,4	2,43	10,18
liquid temp	-15	5	612,1	2090	526,7	1,47	5,02	1,27	416,0	2,59	13,34
Tliq= 45/113	-5	23	963,5	3291	829,2	1,83	6,23	1,57	527,9	2,95	21,19
[°C / °F]	-35	-31	128,9	440	110,9	0,63	2,14	0,54	206,1	2,04	3,07
cond. pressure	-30	-22	193,7	662	166,7	0,75	2,56	0,65	258,1	2,15	4,62
pc= 55/131	-25	-13	280,2	957	241,1	0,90	3,06	0,77	312,9	2,29	6,70
return gas temp	-23	-10	314,5	1074	270,7	0,95	3,23	0,82	332,1	2,35	7,53
RGT= 32/90	-20	-4	388,3	1326	334,1	1,05	3,58	0,90	370,2	2,46	9,31
liquid temp	-15	5	517,9	1769	445,7	1,20	4,11	1,04	430,0	2,65	12,47
Tliq= 55/131	-5	23	841,6	2874	724,3	1,51	5,17	1,30	556,3	3,05	20,46