

Single Pack SC15F 220-240V 50Hz CSIR

Single pack code number: **195B4110**

Position	Title	Code	Amount
1	Compressor SC15F	104G8500	1
2	Starting relay	117U6003	1
3	Starting capacitor (80 μ F 220V, 6.3mm)	117U5017	1
4	Cord relief	103N1004	1
5	Cover	103N2009	1
6	Bolt joint for one compressor M6 \varnothing 16mm	118-1917	1

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Model

Designation	SC15F	220-240V/50Hz 1~	Sales code:	104G8500
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	22cST	Displacement	15,28cm ³ / 0,93cu.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	12,6kg / 27,8lbs		
Motor protection	1# internal		
Winding resistance main	6,9Ω (at 25°C)		
Winding resistance aux	11Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SC15F

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	RSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	VDE, EAC	VDE, EAC
Starting torque	HST	LST
Note	- / -	

Applications with SC15F

	Conf. 1	Conf. 2
Refrigerant	R134a	R134a
Application	LBP+MBP	LBP+MBP
System cooling	fan 1,5m/s	fan 1,5m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Electrical data - Configurations with SC15F

	Conf. 1	Conf. 2
Starting device type	relay	PTC
Run capacitor	-/-	-/-
Start capacitor	80μF	-/-
LRA (locked rotor amps / 4s)		
RLA (rated load amps / 1s)	-/-A	-/-A
Cut in current		

Model

Designation

SC15F

220-240V/50Hz 1~

Sales code:

104G8500

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

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

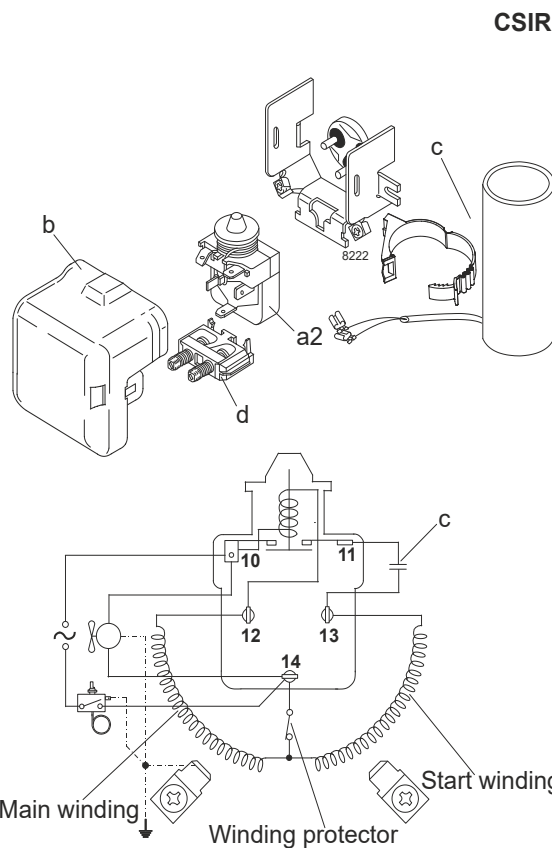
Model

Designation	SC15F	220-240V/50Hz	Conf. 1	Sales code:	104G8500
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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

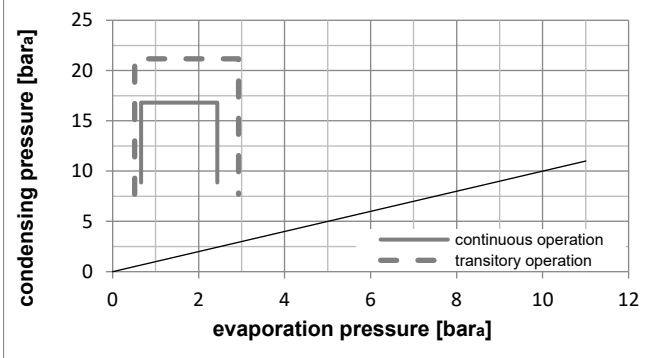
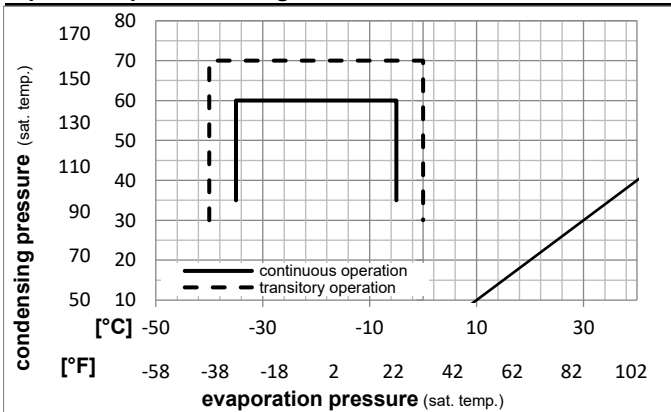
Machine room temperature range: 10 - 43°C / 50 - 110°F

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	assy. relay	117U6003
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation **SC15F** **220-240V/50Hz** Conf. 1 Sales code: **104G8500**

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	Current consumption		Ref. mass flow				
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]							[W]	[A]	[kg/h]	ASHRAE LBP					
-23	-10	54	130	32	90	323,1	1103	278,0	1,11	3,78	0,95	292,2	1,99	6,27	ASHRAE LBP					
-25	-13	55	131	32	90	229,9	785	197,9	0,84	2,86	0,72	275,1	1,93	5,50	cecomaf LBP					
-35	-31	40	104	20	68	161,1	550	138,6	0,78	2,67	0,67	206,3	1,72	3,53	EN12900 LBP					
-23	-10	49	120	4,4	40	280,8	959	241,7	0,95	3,23	0,81	296,7	1,99	7,42	ARI540 LBP					
-23	-10	41	105	32	90	392,1	1339	337,4	1,35	4,60	1,16	290,9	2,00	7,61	AHAM LBP					
-35	-31	45	113	32	90	147,0	502	126,5	0,72	2,46	0,62	203,9	1,70	3,17	opt					

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	147,0	502	126,5	0,72	2,46	0,62	203,9	1,70	3,17
cond. pressure	-30	-22	214,5	733	184,6	0,89	3,04	0,77	240,9	1,81	4,64
pc= 45/113	-25	-13	301,9	1031	259,9	1,07	3,67	0,92	281,0	1,95	6,54
return gas temp.	-23	-10	336,2	1148	289,3	1,14	3,89	0,98	295,4	2,00	7,29
RGT= 32/90	-20	-4	409,2	1398	352,2	1,26	4,31	1,09	324,2	2,10	8,89
liquid temp	-15	5	536,2	1831	461,5	1,45	4,95	1,25	370,1	2,24	11,69
Tliq= 45/113	-5	23	849,0	2900	730,7	1,81	6,17	1,55	470,2	2,42	18,67
[°C / °F]	-35	-31	100,0	342	86,1	0,54	1,84	0,46	186,0	1,67	2,38
cond. pressure	-30	-22	155,0	529	133,4	0,68	2,31	0,58	228,9	1,78	3,70
pc= 55/131	-25	-13	229,9	785	197,9	0,84	2,86	0,72	275,1	1,93	5,50
return gas temp	-23	-10	259,9	888	223,7	0,89	3,05	0,77	291,5	1,99	6,22
RGT= 32/90	-20	-4	324,6	1109	279,4	1,00	3,42	0,86	324,4	2,11	7,79
liquid temp	-15	5	439,0	1499	377,8	1,17	3,98	1,00	376,8	2,28	10,57
Tliq= 55/131	-5	23	726,5	2481	625,2	1,48	5,06	1,28	490,2	2,56	17,66

Model

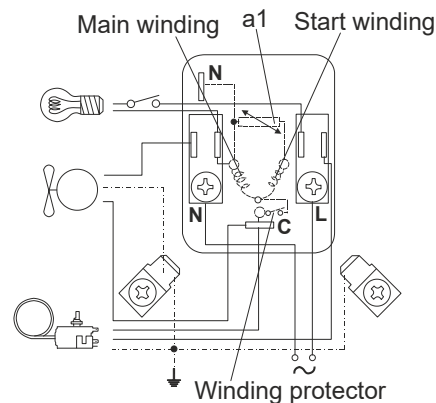
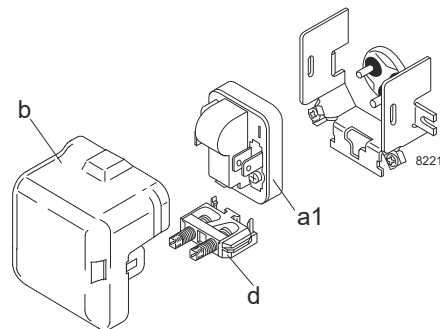
Designation	SC15F	220-240V/50Hz	Conf. 2	Sales code:	104G8500
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Configuration

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

Electrical accessories / wiring diagram

RSIR



Ambient/ machine room temperatures minimum /maximum

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

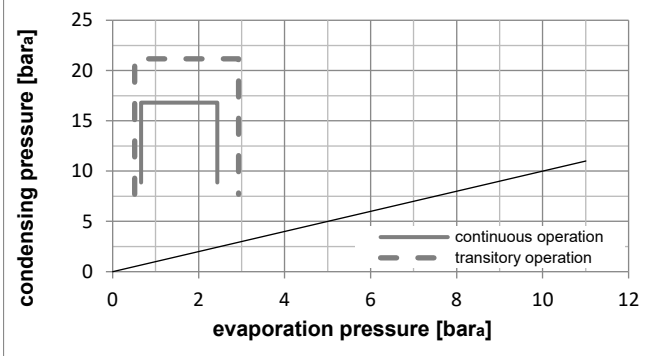
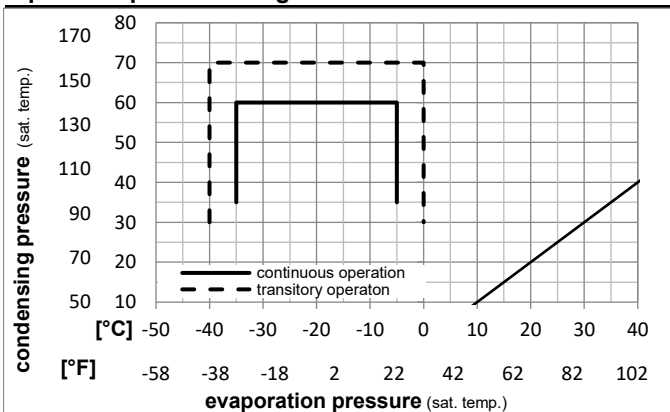
Machine room temperature range: 10 - 43°C / 50 - 110°F

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

a1	PTC starter (220V, 25Ohm, 6.3mm)	103N0011
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation	SC15F	220-240V/50Hz	Conf. 2	Sales code:	104G8500
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Optimization + standard conditions

R134a, 220V/50Hz, RSIR, 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			Ref. mass flow
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]			[W/W]	[Btu/Wh]	[kcal/Wh]			P1	I	m	
[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	ASHRAE LBP					
[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	ASHRAE LBP					
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-10	120	40	120										ARI540 LBP					
-23	41	32	32	392,1	1339	337,4	1,35	4,60	1,16	290,9	2,00	7,61	AHAM LBP					
-10	105	90	90										AHAM LBP					
-35	45	32	45	147,0	502	126,5	0,72	2,46	0,62	203,9	1,70	3,17	opt					
-31	113	90	113										opt					

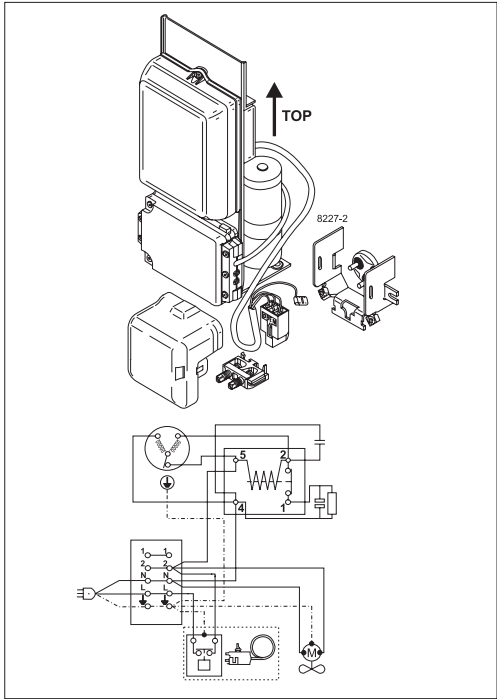
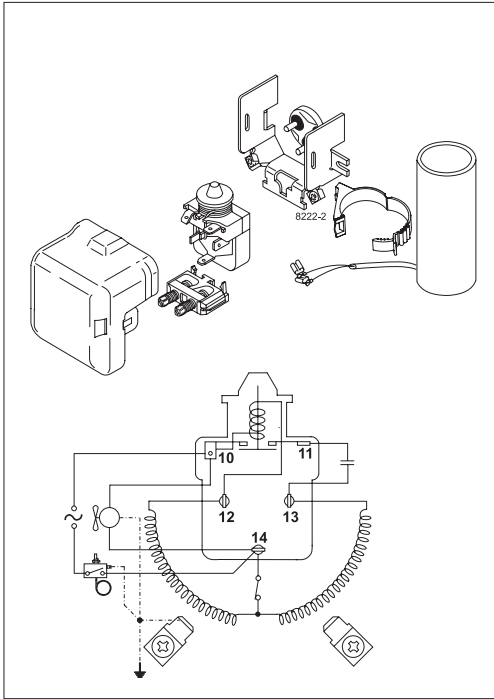
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pc= 45/113	-25	-13	301,9	1031	259,9	1,07	3,67	0,92	281,0	1,95	6,54
return gas temp.	-23	-10	336,2	1148	289,3	1,14	3,89	0,98	295,4	2,00	7,29
RGT= 32/90	-20	-4	409,2	1398	352,2	1,26	4,31	1,09	324,2	2,10	8,89
liquid temp	-15	5	536,2	1831	461,5	1,45	4,95	1,25	370,1	2,24	11,69
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liquid temp	-15	5	439,0	1499	377,8	1,17	3,98	1,00	376,8	2,28	10,57
Tliq= 55/131	-5	23	726,5	2481	625,2	1,48	5,06	1,28	490,2	2,56	17,66



SC Compressors





SC Compressors

Service/Repair – R290



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