

Model
SC15F

Sales code:
104G8500

Compressor Data

Refrigerant(s)	R134a
Refr. charge - tech. limit	1300g / 45.86oz
Weight	12.60 kg / 27.78lbs
Displacement	15.28 cm3 / 0.93cu.in
Compressors on pallet	80



General – Configurations With SC15F

-	Conf. 1	Conf. 2
Motor configuration	CSIR	RSIR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1
Voltage range	198-254 V	198-254 V
Approvals	VDE, EAC	VDE, EAC
Starting torque	HST	LST
Refrigerant	R134a	R134a
Application	LBP+MBP	LBP+MBP
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
- 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	6.900 Ohm
Oil viscosity	22cSt	Winding resistance aux	10.90 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

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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 1

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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

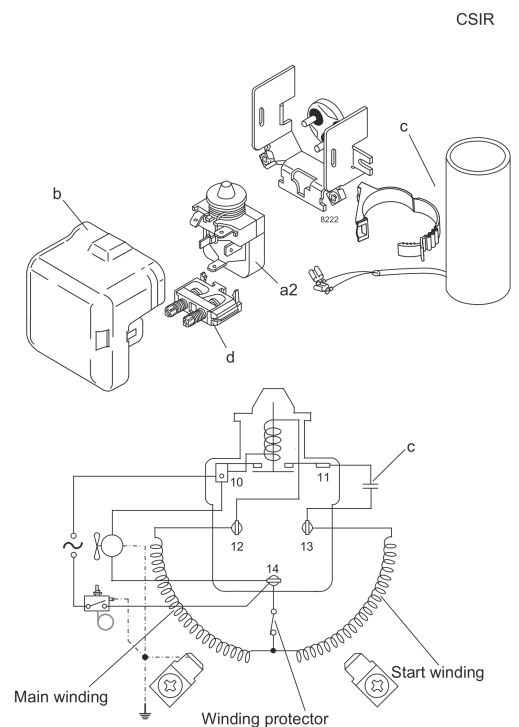
Ambient temperature range: 10 - 38°C / 50 - 100°F

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

System Cooling

fan 1,5m/s

Electrical Accessories / Wiring Diagram



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Components

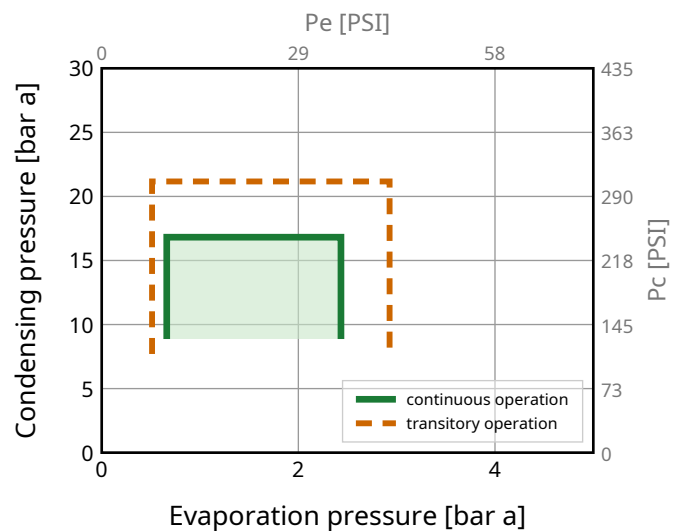
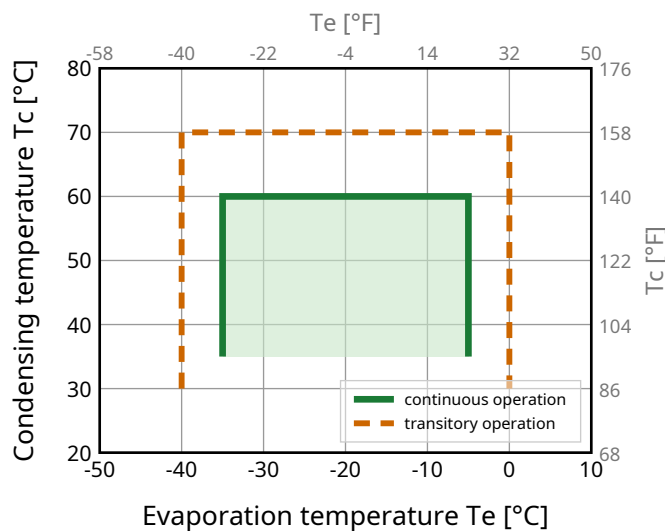
a2 assy. relay 117U6003

c start capacitor (80µF) 117U5017

d cord relief 103N1004

b plastic cover 103N2009

Operation Pressure Range



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Configuration 1

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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	324	1104	278	1.10	3.77	293	1.99	6.28	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	230	784	198	0.84	2.85	275	1.93	5.48	CECOMAF LBP
-35 -31	40 104	20 68	40 104	161	550	139	0.78	2.67	206	1.72	3.53	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	283	966	243	0.95	3.25	297	1.99	7.43	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	393	1340	338	1.35	4.60	291	2.00	7.62	AHAM LBP
-25 -13	45 113	32 89.6	45 113	302	1030	260	1.07	3.66	281	1.95	6.53	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	147	502	126	0.72	2.46	204	1.70	3.17
-30	-22	214	732	184	0.89	3.04	241	1.81	4.63
-25	-13	302	1030	260	1.07	3.66	281	1.95	6.53
-20	-4	409	1396	352	1.26	4.31	324	2.10	8.87
-15	5	536	1830	461	1.45	4.94	370	2.24	11.66
-10	14	683	2330	587	1.63	5.56	419	2.36	14.91
-5	23	849	2897	730	1.81	6.16	470	2.42	18.63

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

-35	-31	100	341	86	0.54	1.84	186	1.67	2.38
-30	-22	155	529	133	0.68	2.31	229	1.78	3.69
-25	-13	230	784	198	0.84	2.85	275	1.93	5.48
-20	-4	325	1108	279	1.00	3.42	324	2.11	7.76
-15	5	439	1498	378	1.17	3.97	377	2.28	10.54
-10	14	573	1955	493	1.33	4.52	432	2.44	13.81
-5	23	726	2479	625	1.48	5.06	490	2.56	17.61

Model

SC15F

Configuration 2

Sales code:

104G8500

Configuration

Motor configuration	RSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE, EAC
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
RLA (rated load amps / 1s/ U(N))	-/-A

Ambient/ machine room temperatures minimum /maximum

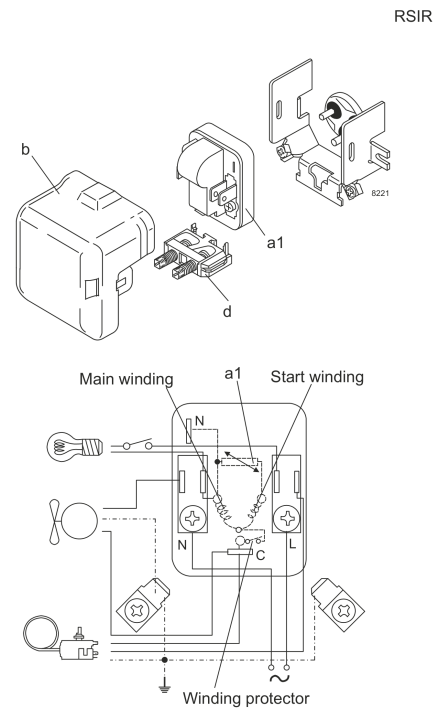
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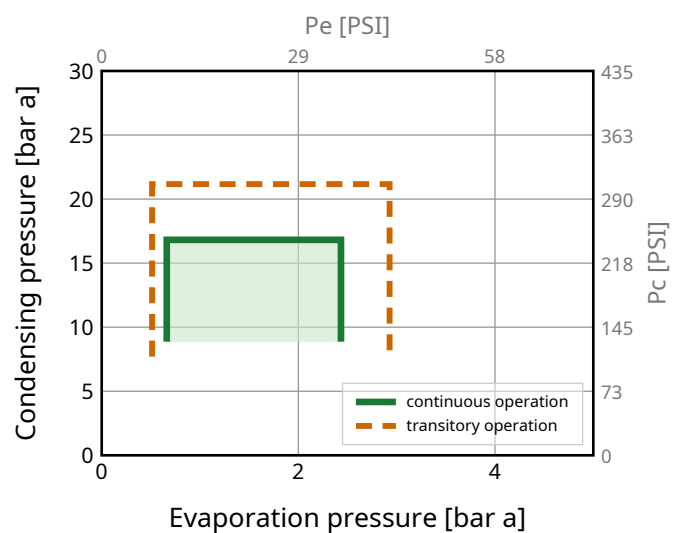
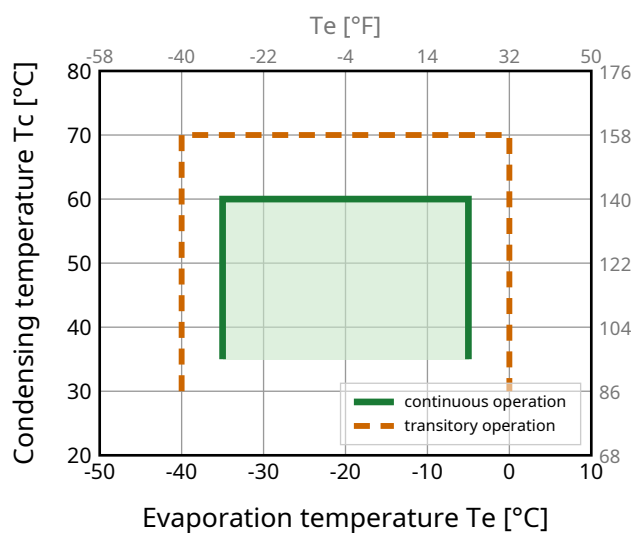
Components

a1 PTC starter (220V, 250ohm, 6.3mm) 103N0011

d cord relief 103N1004

b plastic cover 103N2009

Operation Pressure Range



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