

Model

SC15FT

Sales code:

104G8506

Compressor Data

Refrigerant(s)	R134a
Refr. charge - tech. limit	1300g / 45.86oz
Weight	12.90 kg / 28.44lbs
Displacement	15.28 cm³ / 0.93cu.in
Compressors on pallet	80



General – Configurations With SC15FT

–	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motor configuration	CSIR	CSIR	RSIR	RSIR
Power supply (nominal)	220-240 V/50 Hz	208-230 V/60 Hz	220-240 V/50 Hz	208-230 V/60 Hz
Number of phases	1	1	1	1
Voltage range	187-254 V	198-254 V	187-254 V	198-254 V
Approvals	CCC, EAC, VDE, KC	CCC, EAC, VDE, KC	CCC, EAC, VDE, KC	CCC, EAC, VDE, KC
Starting torque	HST	HST	LST	LST
Refrigerant	R134a	R134a	R134a	R134a
Application	LBP	LBP	LBP	LBP
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

Application Notes

- Provision for PE Grounding is located at the PE Stamp on the compressor
- F1 at 43 °C ambient temperature possible at 220 V nominal (187-242 V)

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Compressor Design

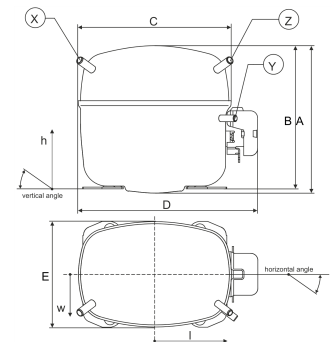
Oil type	POE	Winding resistance main	5.13 Ohm
Oil viscosity	22cSt	Winding resistance aux	13.51 Ohm
Oil quantity	550 / 18.60fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,410 cm ³ / 47.68fl.oz	Max. discharge temp.	135°C / 275°F
Motor protection	internal		

Compressor Dimensions

Housing

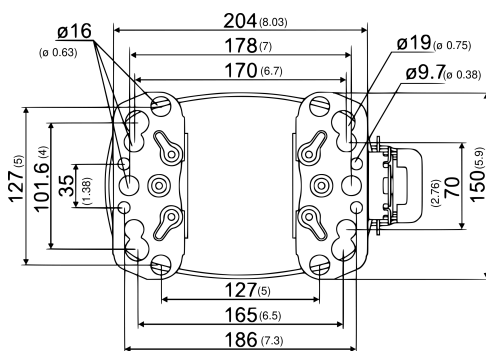
A Height	209mm / 8.23in
B Height	203mm / 7.99in
C Length shell	218mm / 8.58in
D Length w. cover	255mm / 10.04in
E Width	151mm / 5.94in

[Find 3D Model here](#)

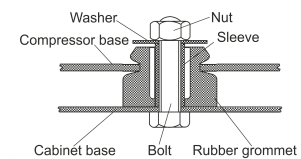


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

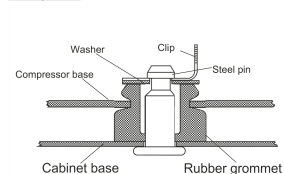
Mounting Accessories



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

Model
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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
Voltage range	187-254 V
Starting torque	HST
Approvals	CCC, EAC, VDE, KC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	16.2 A
RLA (rated load amps / 1s/ U(N))	3.1 A
Cut in current (U(N))	16.2 A

Ambient/ machine room temperatures minimum /maximum

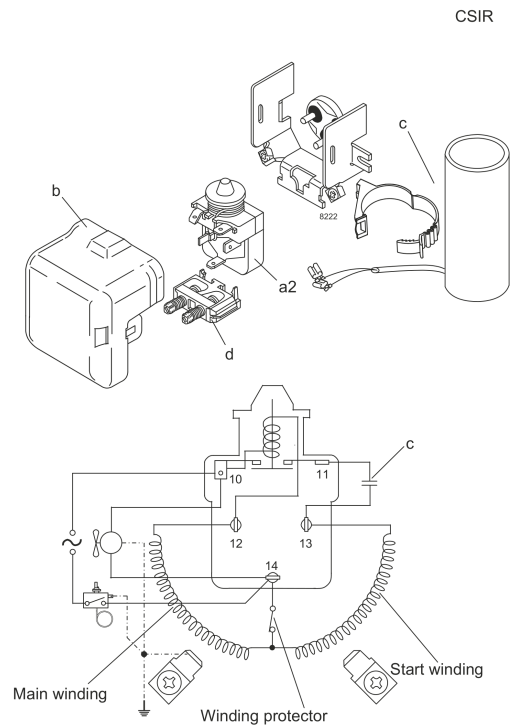
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 1,5m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

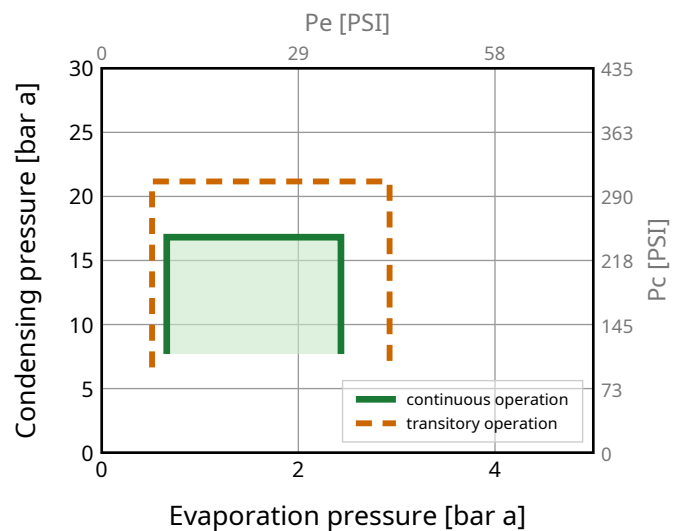
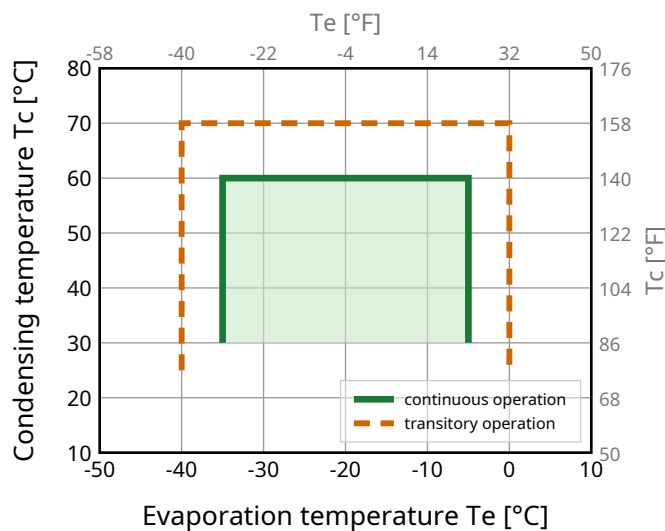
a2 relay 117U6005

c start capacitor (80µF) 117U5017

d cord relief 103N1004

b plastic cover 103N2009

Operation Pressure Range



Model
SC15FT

Configuration 1

Sales code:
104G8506

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	385	1313	331	1.18	4.03	326	2.46	7.47	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	280	955	241	0.90	3.07	311	2.42	6.68	CECOMAF LBP
-35 -31	40 104	20 68	40 104	189	644	162	0.81	2.77	233	2.23	4.13	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	322	1098	277	0.99	3.39	324	2.45	8.44	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	432	1474	372	1.37	4.66	316	2.42	8.38	AHAM LBP
-35 -31	45 113	32 89.6	45 113	173	590	149	0.75	2.55	231	2.23	3.72	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	173	590	149	0.75	2.55	231	2.23	3.72
-30	-22	248	845	213	0.92	3.14	269	2.31	5.34
-25	-13	339	1158	292	1.10	3.76	308	2.40	7.34
-20	-4	450	1536	387	1.30	4.43	347	2.51	9.76
-15	5	583	1989	501	1.50	5.12	388	2.65	12.68
-10	14	739	2523	636	1.72	5.87	430	2.80	16.15
-5	23	922	3147	793	1.95	6.64	474	2.98	20.24

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

-35	-31	126	429	108	0.56	1.93	223	2.22	2.99
-30	-22	197	673	170	0.74	2.52	267	2.31	4.69
-25	-13	280	955	241	0.90	3.07	311	2.42	6.68
-20	-4	376	1285	324	1.06	3.61	356	2.54	9.01
-15	5	489	1668	421	1.21	4.14	403	2.69	11.74
-10	14	620	2115	533	1.38	4.69	451	2.86	14.95
-5	23	772	2633	664	1.54	5.26	500	3.05	18.70

Model
SC15FT

Configuration 2

Sales code:
104G8506

Configuration

Motor configuration	CSIR
Power supply (nominal)	208-230 V/60 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	198-254 V
Starting torque	HST
Approvals	CCC, EAC, VDE, KC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	16.2 A
RLA (rated load amps / 1s/ U(N))	3.1 A
Cut in current (U(N))	16.2 A

Ambient/ machine room temperatures minimum /maximum

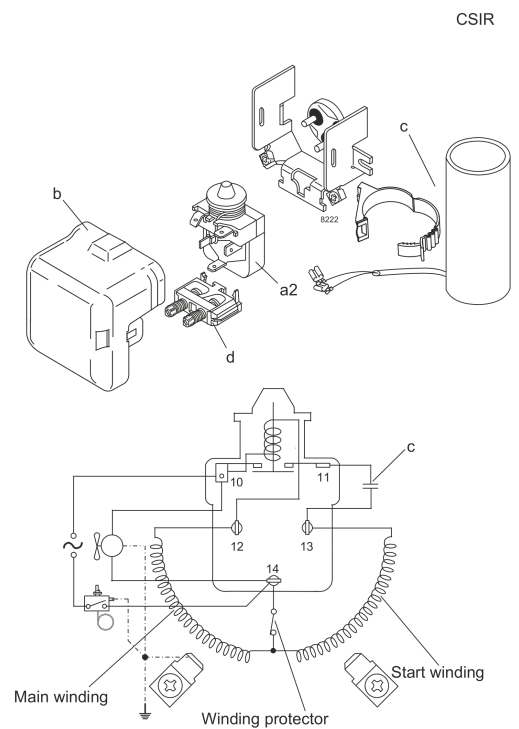
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 1,5m/s

Electrical Accessories / Wiring Diagram



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Components

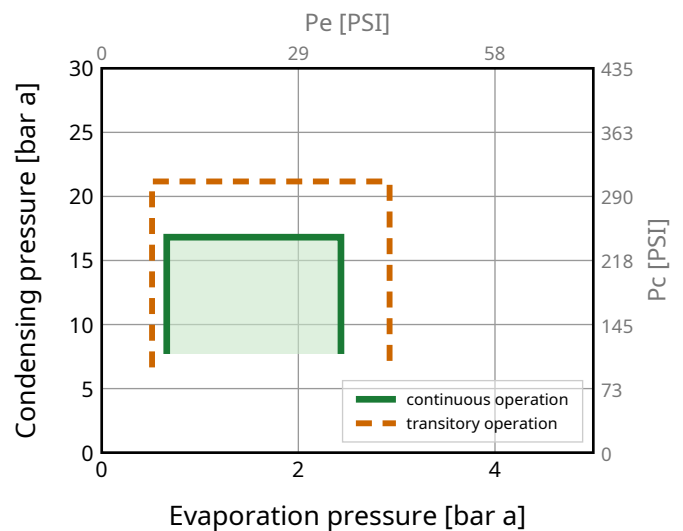
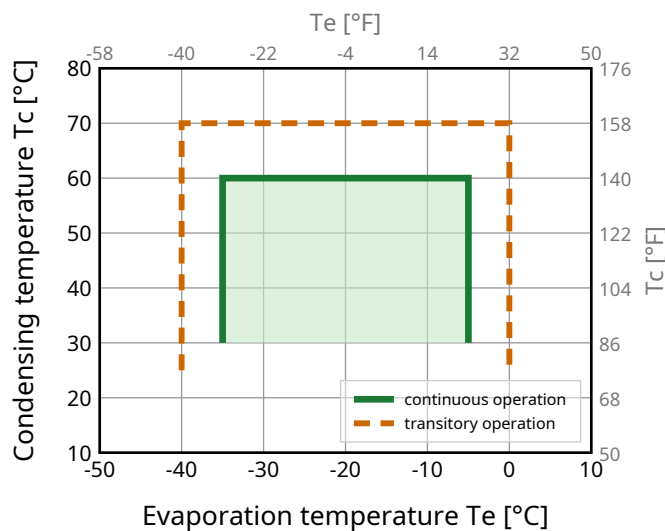
a2 relay 117U6005

c start capacitor (80µF) 117U5017

d cord relief 103N1004

b plastic cover 103N2009

Operation Pressure Range



Model
SC15FT

Configuration 2

Sales code:
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Standard Conditions

R134a, 220 V/60 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	452	1542	389	1.20	4.09	377	2.34	8.77	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	330	1124	283	0.93	3.16	356	2.27	7.86	CECOMAF LBP
-35 -31	40 104	20 68	40 104	234	799	201	0.91	3.11	257	1.96	5.12	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	380	1298	327	1.01	3.45	376	2.33	9.98	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	525	1792	452	1.41	4.81	372	2.32	10.19	AHAM LBP
-35 -31	45 113	32 89.6	45 113	211	721	182	0.85	2.89	250	1.94	4.55	opt LBP

Performance Tables

R134a, 220 V/60 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	211	721	182	0.85	2.89	250	1.94	4.55
-30	-22	298	1018	257	0.98	3.35	304	2.10	6.44
-25	-13	406	1385	349	1.14	3.88	357	2.27	8.78
-20	-4	537	1832	462	1.31	4.47	410	2.45	11.64
-15	5	694	2370	597	1.50	5.14	461	2.63	15.11
-10	14	882	3009	759	1.72	5.87	513	2.83	19.26
-5	23	1103	3762	948	1.96	6.68	563	3.04	24.19

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

-35	-31	154	524	132	0.67	2.27	231	1.87	3.65
-30	-22	235	802	202	0.80	2.73	294	2.07	5.59
-25	-13	330	1124	283	0.93	3.16	356	2.27	7.86
-20	-4	440	1503	379	1.05	3.60	418	2.48	10.54
-15	5	571	1948	491	1.20	4.08	478	2.70	13.71
-10	14	724	2472	623	1.35	4.60	537	2.92	17.46
-5	23	904	3083	777	1.52	5.17	596	3.16	21.90

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Configuration 3

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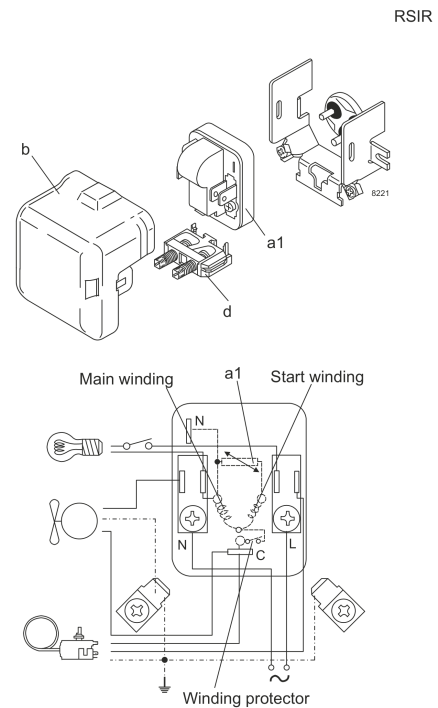
Configuration

Motor configuration	RSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-254 V
Starting torque	LST
Approvals	CCC, EAC, VDE, KC
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
RLA (rated load amps / 1s/ U(N))	-/-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 1,5m/s

Electrical Accessories / Wiring Diagram

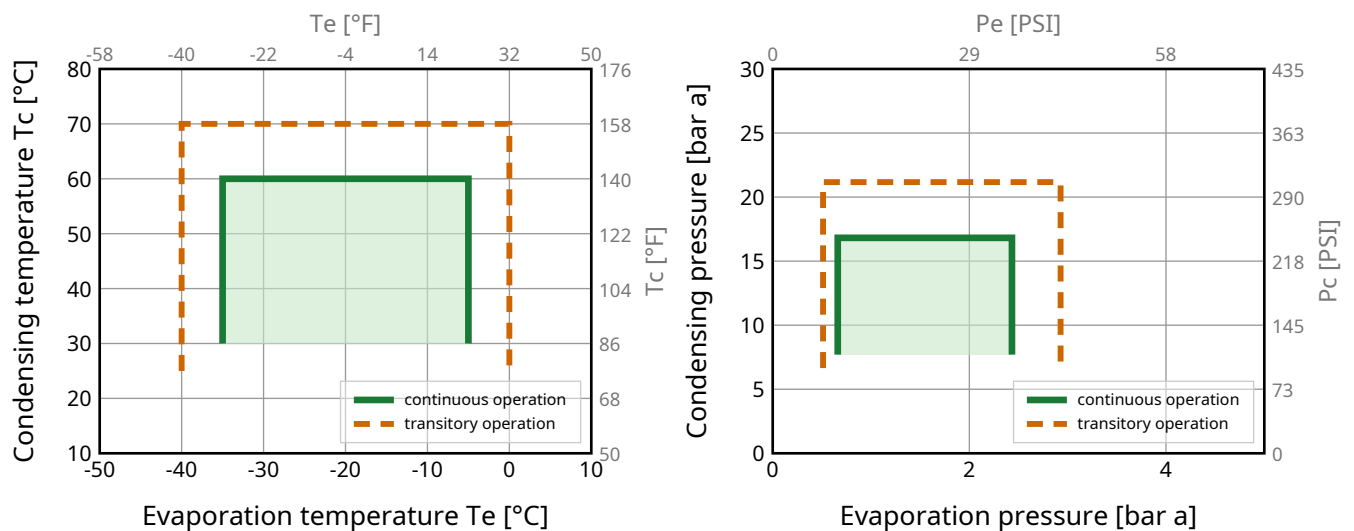


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Components

a1 PTC starter (220V, 250ohm, 6.3mm) 103N0011
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range



Model
SC15FT

Configuration 3

Sales code:
104G8506

Standard Conditions

R134a, 220 V/50 Hz, RSIR, 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	385	1313	331	1.18	4.03	326	2.46	7.47	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	280	955	241	0.90	3.07	311	2.42	6.68	CECOMAF LBP
-35 -31	40 104	20 68	40 104	189	644	162	0.81	2.77	233	2.23	4.13	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	322	1098	277	0.99	3.39	324	2.45	8.44	ARI540 LBP
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-35 -31	45 113	32 89.6	45 113	173	590	149	0.75	2.55	231	2.23	3.72	opt LBP

Performance Tables

R134a, 220 V/50 Hz, RSIR, 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]
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pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

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-5	23	772	2633	664	1.54	5.26	500	3.05	18.70

Model
SC15FT

Configuration 4

Sales code:
104G8506

Configuration

Motor configuration	RSIR
Power supply (nominal)	208-230 V/60 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	198-254 V
Starting torque	LST
Approvals	CCC, EAC, VDE, KC
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
RLA (rated load amps / 1s/ U(N))	-/-A

Ambient/ machine room temperatures minimum /maximum

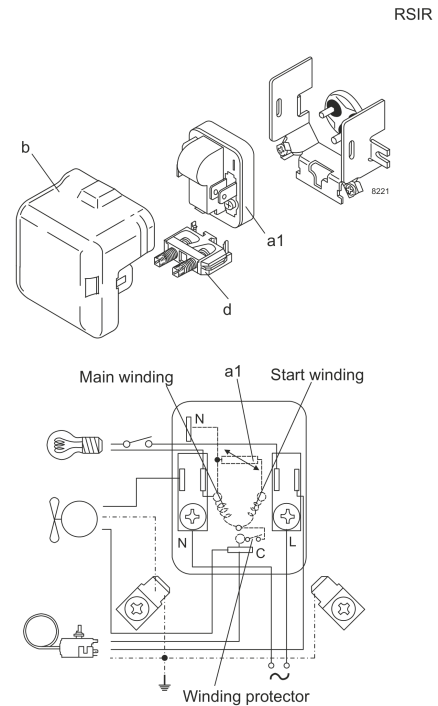
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System Cooling

fan 1,5m/s

Electrical Accessories / Wiring Diagram



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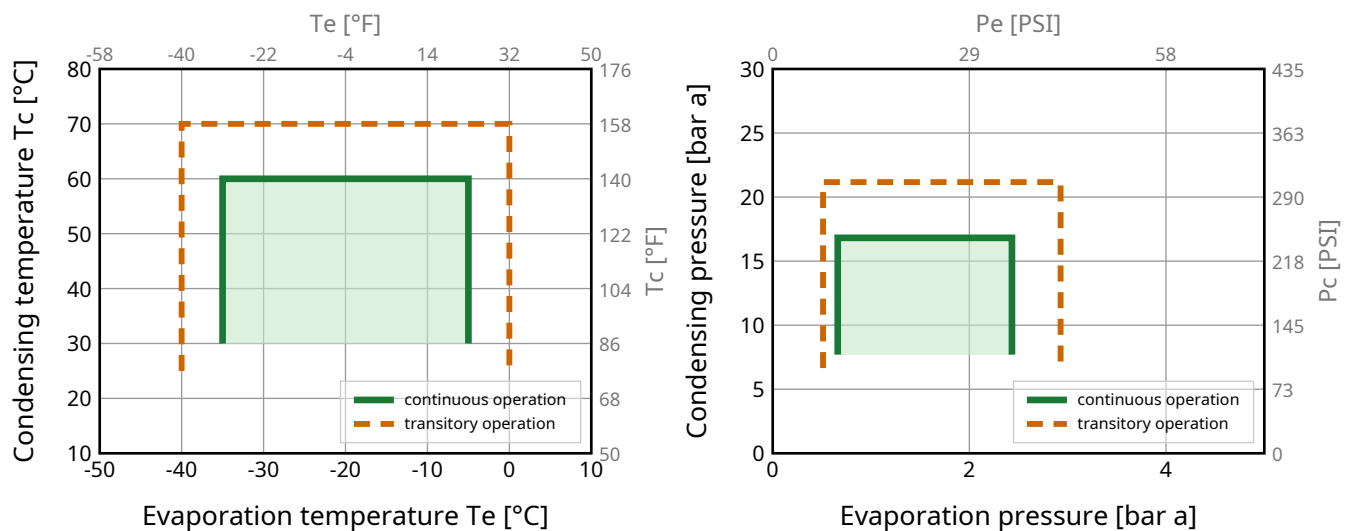
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d cord relief 103N1004

b plastic cover 103N2009

Operation Pressure Range



Model
SC15FT

Configuration 4

Sales code:
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Standard Conditions

R134a, 220 V/60 Hz, RSIR, fan 1,5m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
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R134a, 220 V/60 Hz, RSIR, fan 1,5m/s

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