Single
Packs

Single Pack SC15FT 220-240V 50/60Hz CSIR

Single pack code number: **195B4097**

Position	Title	Code	Amount
1	Compressor SC15FT	104G8505	1
2	Starting relay	117U6005	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5017	1
4	Cord relief	103N1004	1
5	Cover	103N2009	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
SC15FT

Sales code:
104G8505

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)

Model
SC15FT

Sales code:
104G8505

Compressor Design

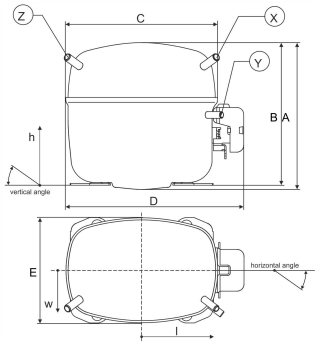
Oil type	**POE**	Winding resistance main	**5.13 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**13.51 Ohm**
Oil quantity	**556 / 18.80fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,410 cm3 / 47.68fl.oz**	Max. discharge temp.	**135°C / 275°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

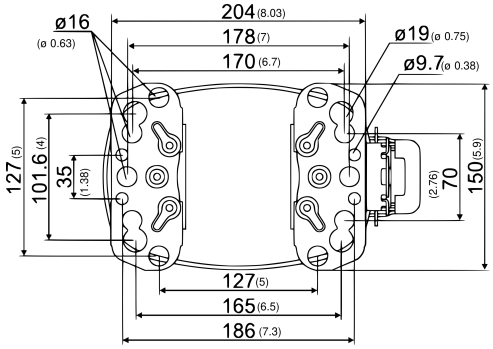
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



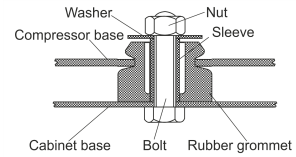
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

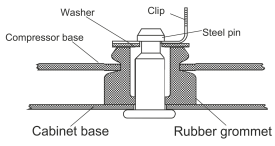


Dimensions in mm [in]

Bolt joint



Snap-on



	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
SC15FT Configuration 1

Sales code:
104G8505

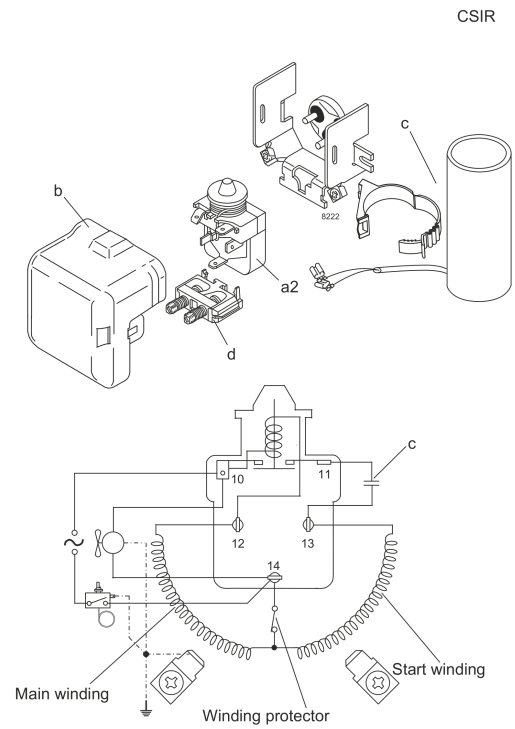
Configuration

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



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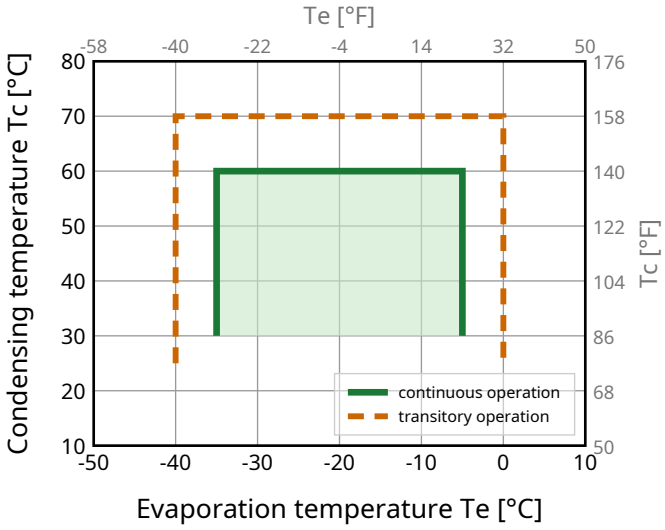
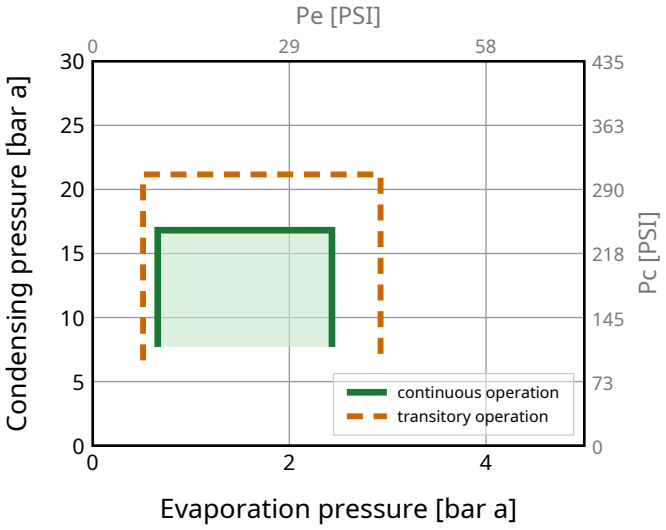
Components
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model

SC15FT Configuration 1

Sales code:

104G8505

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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	ṁ
[°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:
104G8505

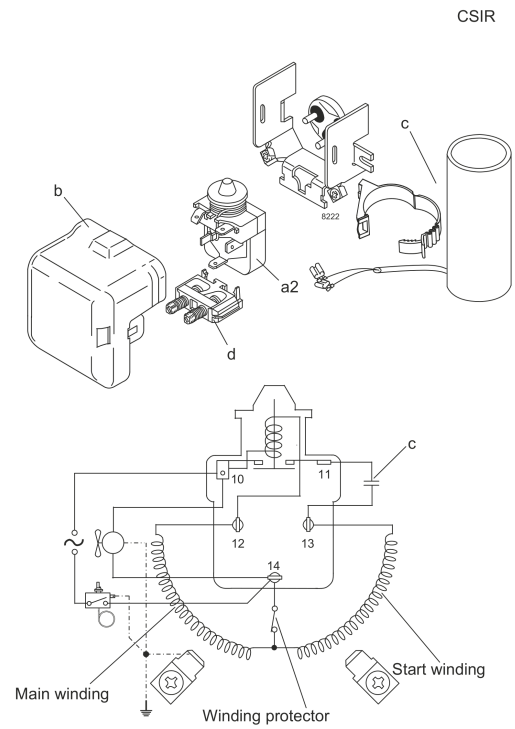
Configuration

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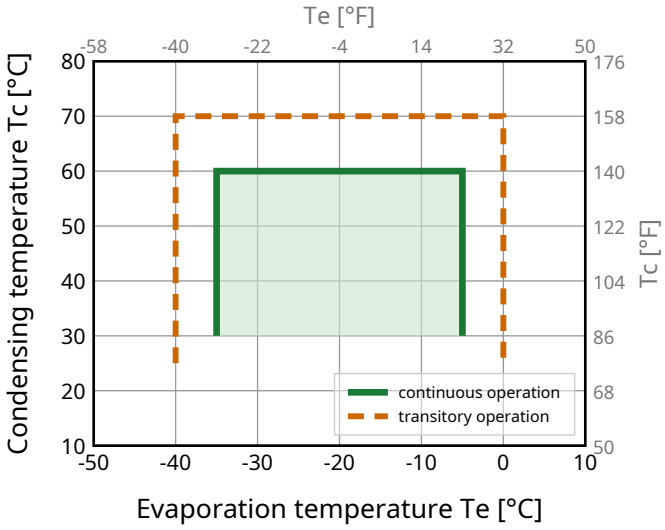
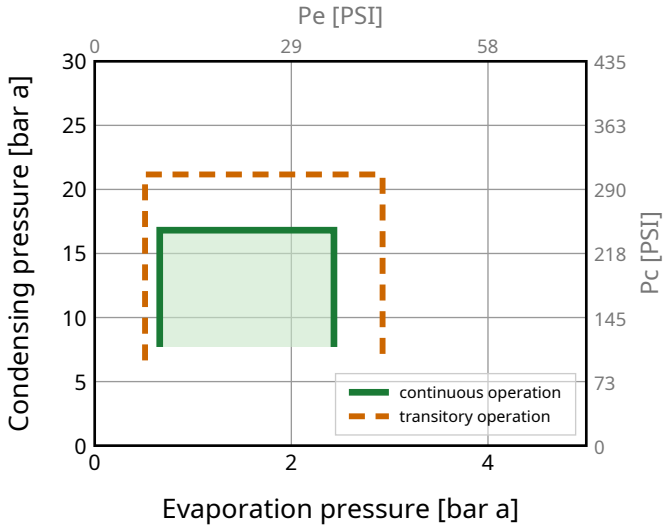
Components
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model
SC15FT Configuration 2

Sales code:
104G8505

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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	ṁ
[°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

Model
SC15FT Configuration 3

Sales code:
104G8505

Configuration

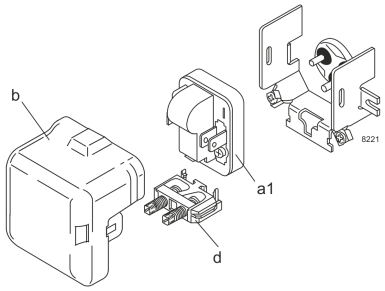
Motor configuration	**RSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**LBP**
Voltage range	**187-254 V**
Starting torque	**LST**
Approvals	**CCC, EAC, VDE, KC**
Starting device type	**PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
RLA (rated load amps / 1s/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

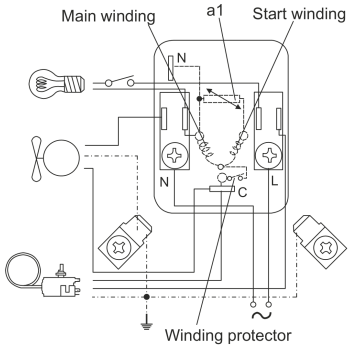
Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 1,5m/s

Electrical Accessories / Wiring Diagram

RSIR





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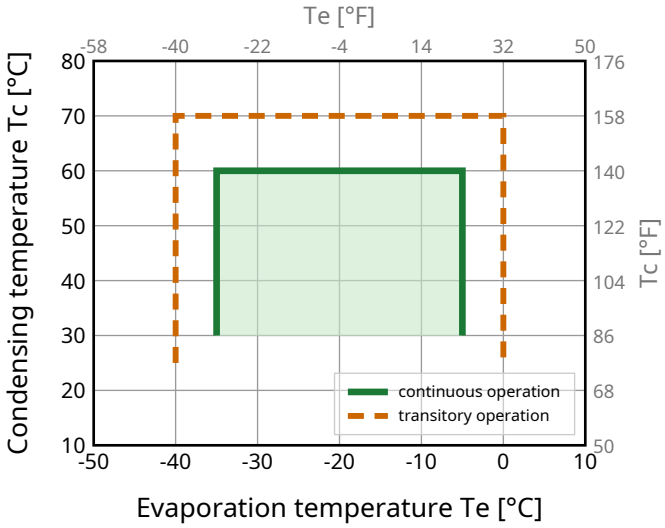
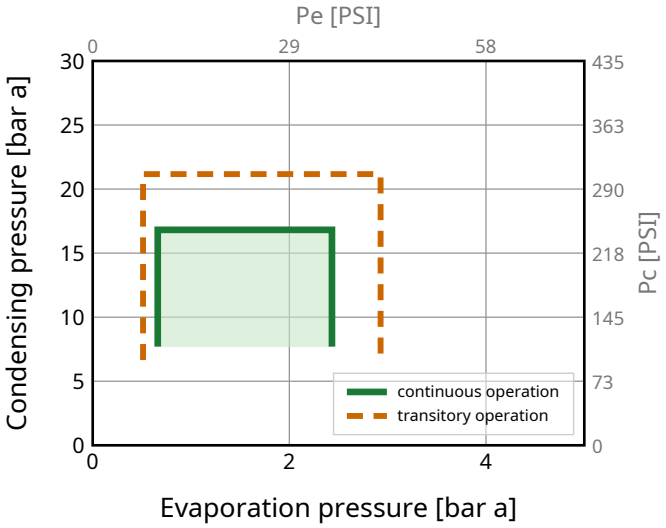
Components
a1 PTC starter (220V, 25Ohm, 6.3mm) 103N0011
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model

SC15FT Configuration 3

Sales code:

104G8505

Standard Conditions

R134a, 220 V/50 Hz, RSIR, fan 1,5m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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, RSIR, fan 1,5m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°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 4

Sales code:
104G8505

Configuration

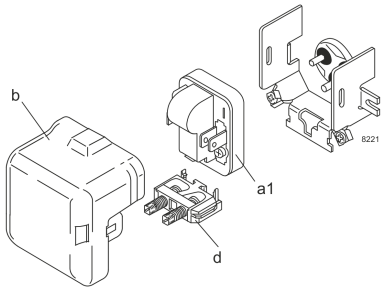
Motor configuration	**RSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R134a**
Application	**LBP**
Voltage range	**198-254 V**
Starting torque	**LST**
Approvals	**CCC, EAC, VDE, KC**
Starting device type	**PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
RLA (rated load amps / 1s/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

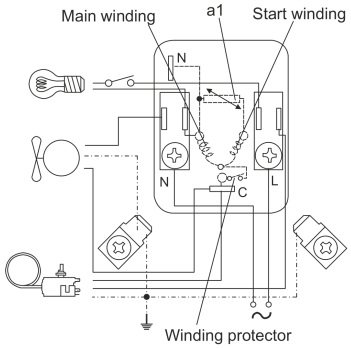
Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 1,5m/s

Electrical Accessories / Wiring Diagram

RSIR

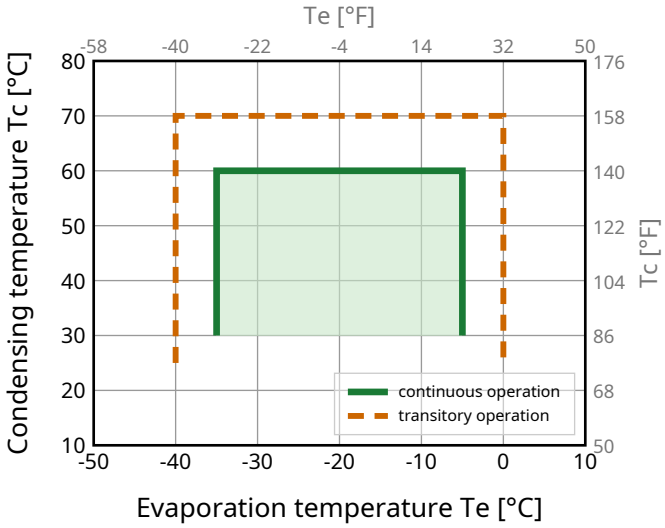


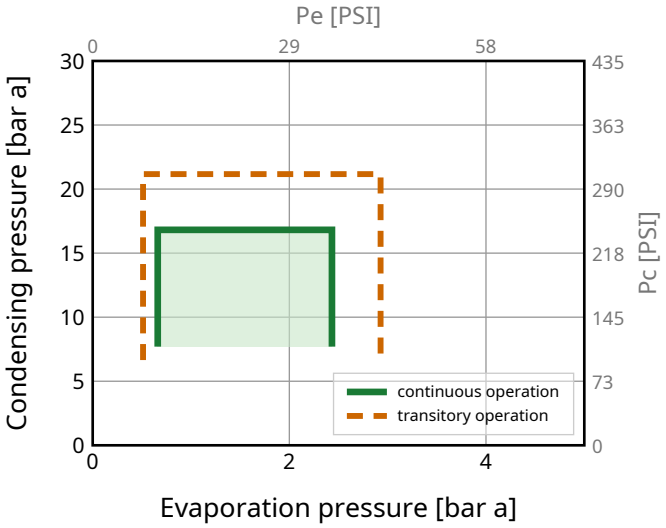


View full size

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

Operation Pressure Range





Model

SC15FT Configuration 4

Sales code:

104G8505

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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

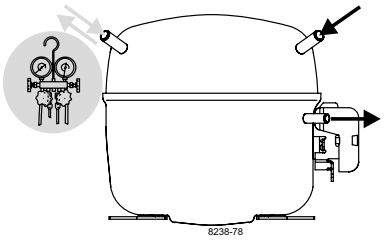
R134a, 220 V/60 Hz, RSIR, fan 1,5m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°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



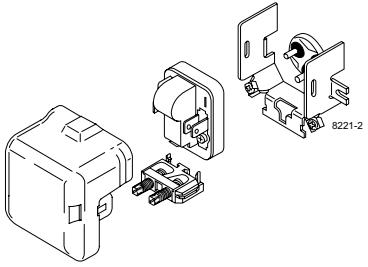
SC Compressors

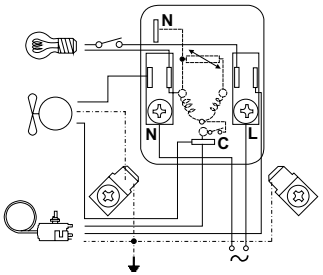
SECOP

Keep electrical equipment clear from oil, chemicals, and water

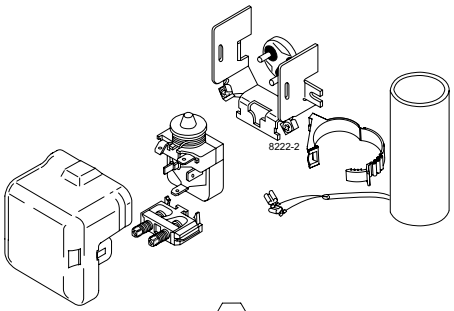
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

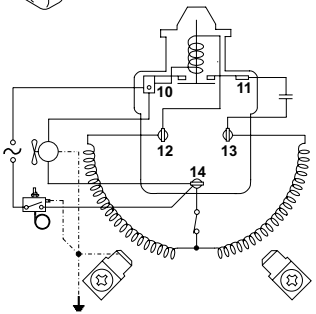
RSIR



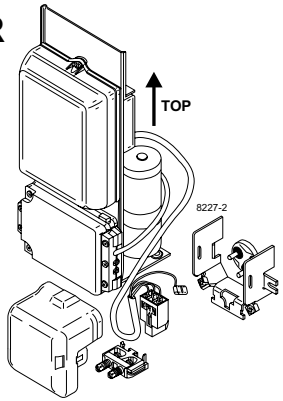


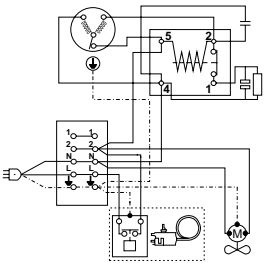
CSIR

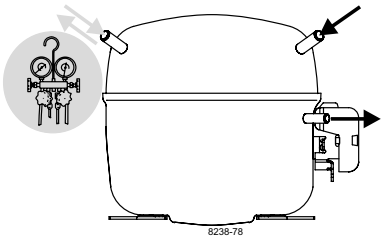




CSCR







SC Compressors

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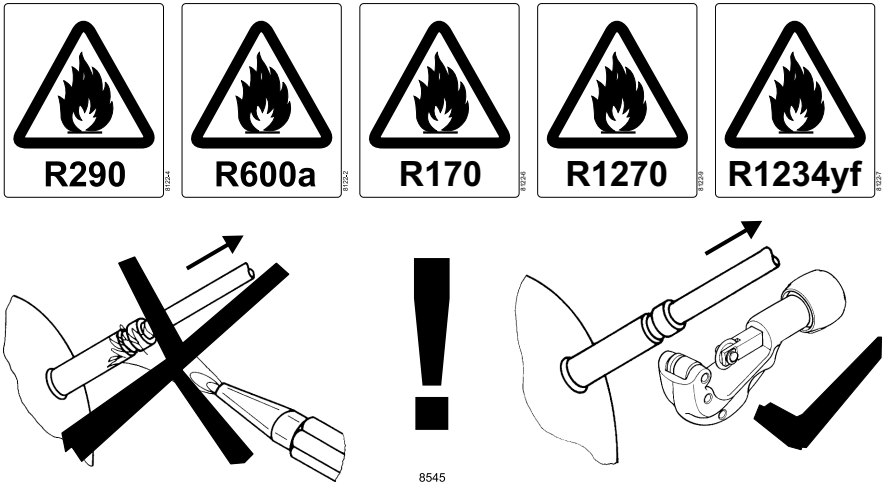
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



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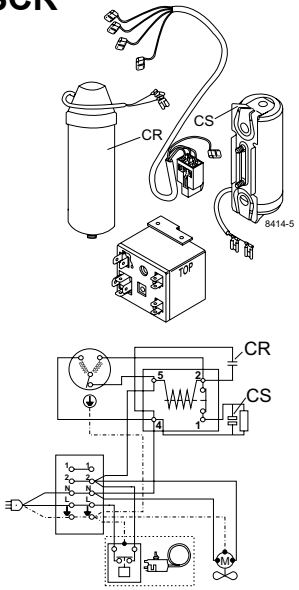

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. www.secop.com**