

Model

SC18FTX

Sales code:

104G8805

Compressor Data

Refrigerant(s)	R134a
Refr. charge - tech. limit	1300g / 45.86oz
Weight	13.80 kg / 30.42lbs
Displacement	17.69 cm3 / 1.08cu.in
Compressors on pallet	80



General – Configurations With SC18FTX

-	Conf. 1	Conf. 2
Motor configuration	CSIR	CSIR
Power supply (nominal)	220-240 V/50 Hz	208-230 V/60 Hz
Number of phases	1	1
Voltage range	187-254 V	198-254 V
Approvals	CCC, EAC, VDE, KC	CCC, EAC, VDE, KC
Starting torque	HST	HST
Refrigerant	R134a	R134a
Application	LBP	LBP
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

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Compressor Design

Oil type	POE	Winding resistance main	3.700 Ohm
Oil viscosity	22cSt	Winding resistance aux	13.70 Ohm
Oil quantity	550 / 18.60fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,460 cm ³ / 49.37fl.oz	Max. discharge temp.	135°C / 275°F
Motor protection	internal		

Compressor Dimensions

Housing

A Height	219mm / 8.62in
B Height	213mm / 8.39in
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 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]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

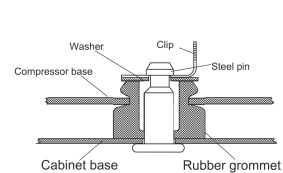
Mounting Accessories



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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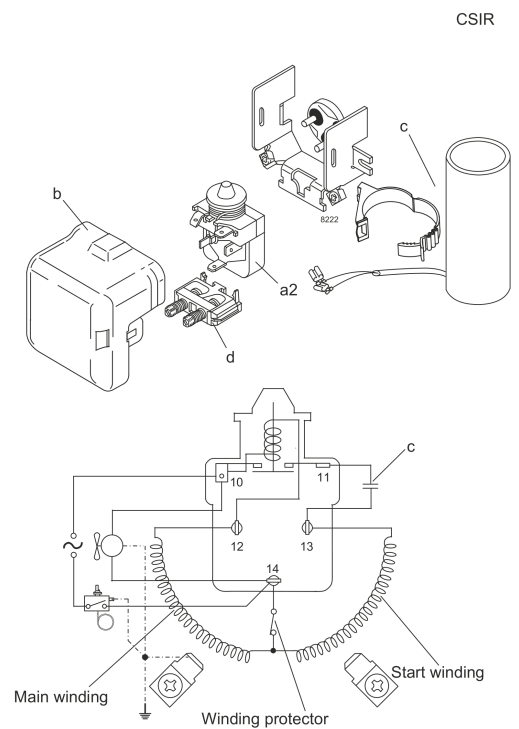
Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-254 V
Starting torque	HST
Approvals	CCC, EAC, VDE, KC
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 - 43°C / 50 - 109°F
 Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
 fan 3m/s

Electrical Accessories / Wiring Diagram

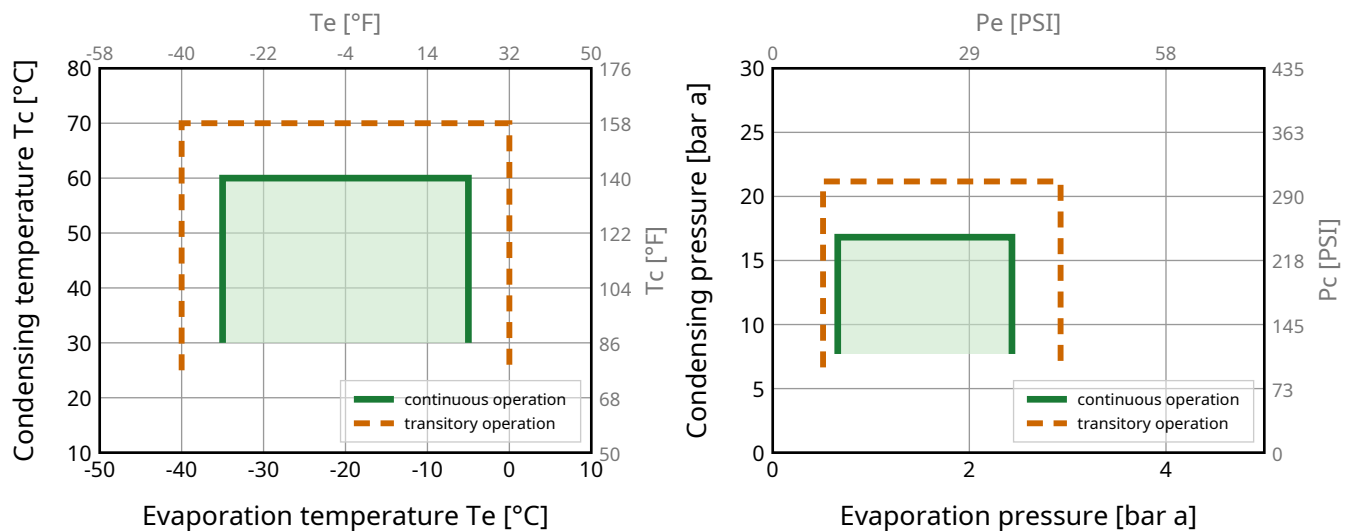


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Components

a2 relay 117U6019
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 3m/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	447	1524	384	1.17	3.98	383	2.94	8.67	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	325	1109	280	0.89	3.03	365	2.87	7.75	CECOMAF LBP
-35 -31	40 104	20 68	40 104	217	740	187	0.79	2.71	273	2.56	4.75	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	374	1274	321	0.98	3.35	381	2.93	9.80	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	503	1717	433	1.36	4.65	369	2.91	9.77	AHAM LBP
-25 -13	45 113	32 89.6	45 113	393	1342	338	1.09	3.71	362	2.87	8.51	opt LBP

Performance Tables

R134a, 220 V/50 Hz, CSIR, fan 3m/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	199	679	171	0.73	2.50	272	2.56	4.29
-30	-22	286	976	246	0.90	3.07	318	2.71	6.17
-25	-13	393	1342	338	1.09	3.71	362	2.87	8.51
-20	-4	524	1788	451	1.29	4.41	405	3.04	11.36
-15	5	682	2326	586	1.51	5.17	450	3.22	14.83
-10	14	869	2965	747	1.75	5.95	498	3.42	18.98
-5	23	1090	3717	937	1.98	6.76	550	3.63	23.91

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

-35	-31	144	492	124	0.56	1.91	257	2.52	3.42
-30	-22	229	780	197	0.73	2.49	313	2.69	5.44
-25	-13	325	1109	280	0.89	3.03	365	2.87	7.75
-20	-4	437	1490	376	1.05	3.58	416	3.07	10.44
-15	5	567	1934	488	1.22	4.15	466	3.27	13.61
-10	14	719	2453	618	1.39	4.74	517	3.49	17.33
-5	23	896	3056	770	1.57	5.35	571	3.72	21.71

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Configuration 2

Sales code:
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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
RLA (rated load amps / 1s/ U(N))	-/-A

Ambient/ machine room temperatures minimum /maximum

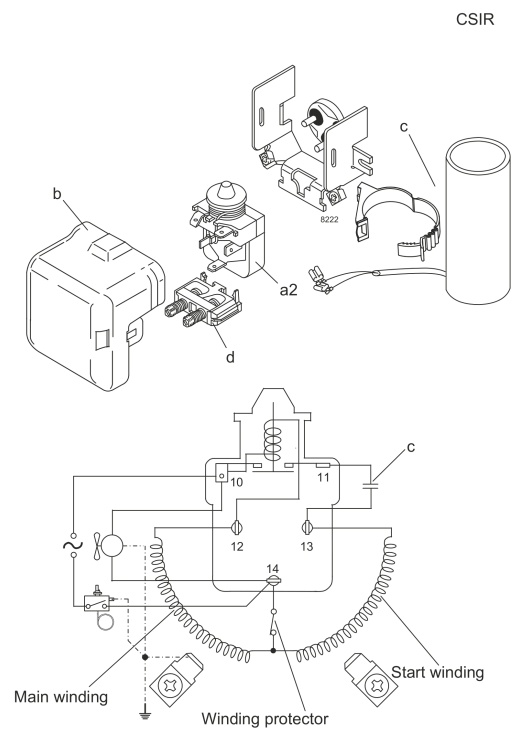
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

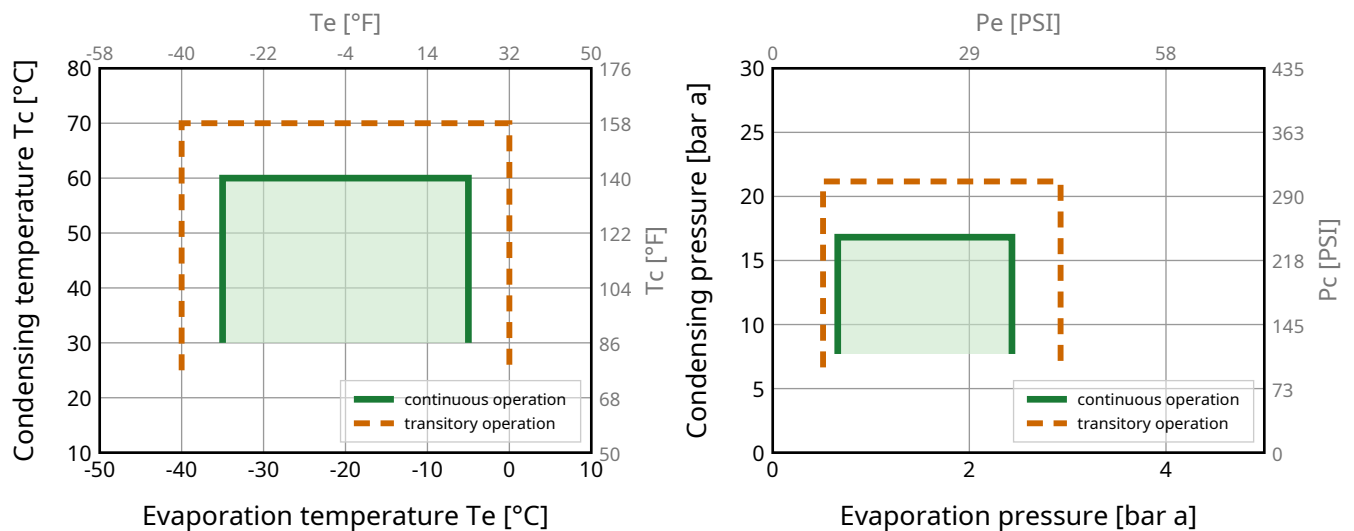
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Operation Pressure Range



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Configuration 2

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Standard Conditions

R134a, 220 V/60 Hz, CSIR, fan 3m/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	534	1822	459	1.20	4.10	444	2.77	10.36	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	390	1330	335	0.93	3.17	420	2.66	9.29	CECOMAF LBP
-35 -31	40 104	20 68	40 104	280	954	240	0.91	3.09	308	2.20	6.11	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	450	1535	387	1.01	3.45	444	2.77	11.80	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	619	2113	533	1.40	4.79	441	2.76	12.02	AHAM LBP
-25 -13	45 113	32 89.6	45 113	480	1636	412	1.13	3.87	423	2.68	10.37	opt LBP

Performance Tables

R134a, 220 V/60 Hz, CSIR, fan 3m/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	254	865	218	0.85	2.89	299	2.16	5.46
-30	-22	354	1209	305	0.98	3.34	362	2.42	7.64
-25	-13	480	1636	412	1.13	3.87	423	2.68	10.37
-20	-4	634	2162	545	1.31	4.48	483	2.94	13.74
-15	5	820	2798	705	1.52	5.17	541	3.21	17.84
-10	14	1042	3556	896	1.74	5.95	598	3.48	22.76
-5	23	1304	4450	1122	2.00	6.81	654	3.75	28.62

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

-35	-31	187	637	161	0.68	2.32	274	2.06	4.43
-30	-22	280	955	241	0.80	2.74	348	2.36	6.66
-25	-13	390	1330	335	0.93	3.17	420	2.66	9.29
-20	-4	520	1775	447	1.06	3.63	489	2.97	12.44
-15	5	675	2302	580	1.21	4.14	556	3.28	16.20
-10	14	857	2925	737	1.38	4.70	622	3.59	20.67
-5	23	1071	3655	921	1.56	5.33	686	3.90	25.96