

Model

SC15GH

Sales code:

104G8573

Compressor Data

Refrigerant(s)	R134a
Refr. charge - tech. limit	1300g / 45.86oz
Weight	13.00 kg / 28.66lbs
Displacement	15.28 cm3 / 0.93cu.in
Compressors on pallet	80



General – Configurations With SC15GH

-	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	198-254 V	198-254 V
Approvals	VDE, CCC, UL, KC	VDE, CCC, UL, KC
Starting torque	HST	HST
Refrigerant	R134a	R134a
Application	HBP	HBP
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	4.400 Ohm
Oil viscosity	22cSt	Winding resistance aux	14.50 Ohm
Oil quantity	500 / 16.91fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,410 cm³ / 47.68fl.oz	Max. discharge temp.	140°C / 284°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](#)



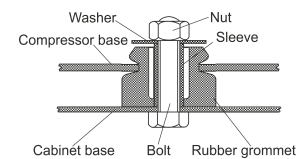
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

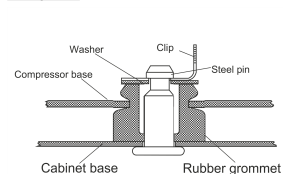


Dimensions in mm [in]

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

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Configuration 1

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Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	HBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, CCC, UL, KC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	19 A
RLA (rated load amps / 1s/ U(N))	3.9 A
Cut in current (U(N))	19 A

Ambient/ machine room temperatures minimum /maximum

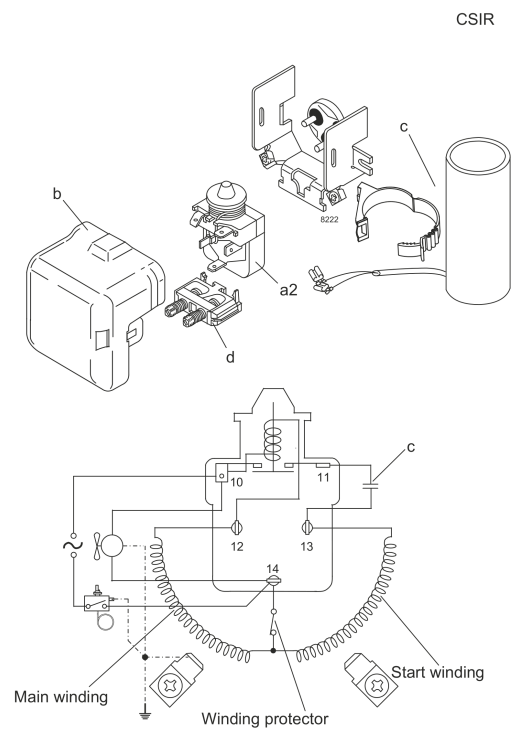
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

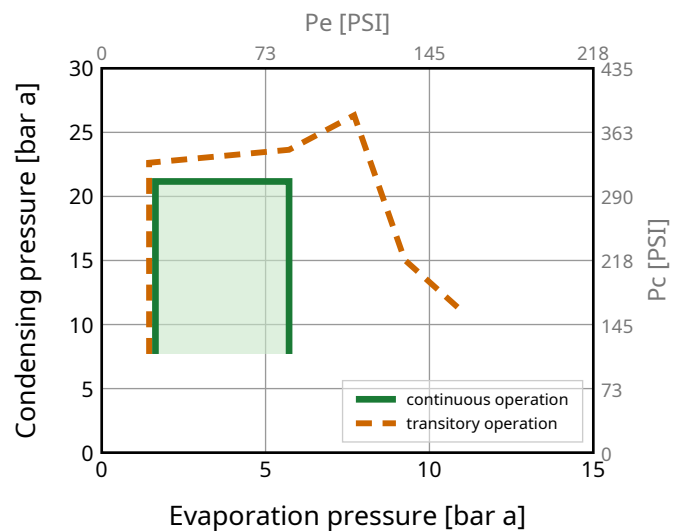
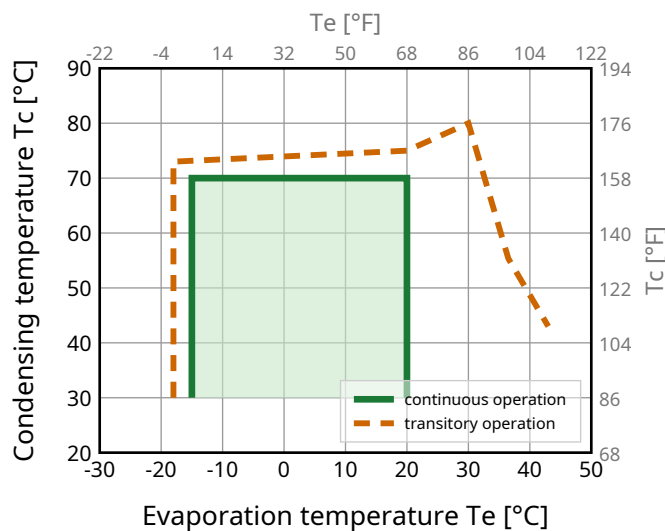
a2 relay 117U6011

c start capacitor (80µF) 117U5017

d cord relief 103N1004

b plastic cover 103N2008

Operation Pressure Range



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Configuration 1

Sales code:
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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]	
7.2 45	54.4 129.9	35 95	46.1 115	1385	4725	1191	2.40	8.20	576	3.19	30.65	ASHRAE HBP
5 41	55 131	32 89.6	55 131	1139	3887	980	2.02	6.88	565	3.14	27.98	CECOMAF HBP
5 41	50 122	20 68	50 122	1185	4042	1019	2.19	7.49	540	3.03	29.71	EN12900 HBP
-6.7 20	54.4 129.9	35 95	46.1 115	736	2512	633	1.60	5.47	460	2.67	16.03	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	559	1906	480	1.32	4.50	424	2.50	13.47	CECOMAF MBP
-10 14	45 113	20 68	45 113	648	2212	557	1.58	5.41	409	2.44	15.12	EN12900 MBP

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]
-15	5	511	1743	439	1.42	4.85	359	2.21	11.11
-10	14	671	2291	577	1.64	5.60	409	2.44	14.66
-5	23	860	2933	739	1.90	6.50	452	2.63	18.86
0	32	1080	3685	929	2.22	7.57	487	2.79	23.83
5	41	1337	4561	1150	2.60	8.87	514	2.91	29.69
10	50	1634	5574	1405	3.06	10.45	534	3.00	36.56
15	59	1975	6739	1698	3.63	12.38	544	3.05	44.62
20	68	2365	8070	2034	4.33	14.78	546	3.06	54.03

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

-15	5	417	1422	359	1.15	3.93	362	2.22	10.01
-10	14	559	1906	480	1.32	4.50	424	2.50	13.47
-5	23	723	2468	622	1.51	5.16	478	2.75	17.53
0	32	916	3124	787	1.74	5.94	526	2.96	22.32
5	41	1139	3887	980	2.02	6.88	565	3.14	27.98
10	50	1398	4771	1203	2.35	8.01	596	3.28	34.65
15	59	1698	5792	1460	2.75	9.37	618	3.39	42.49
20	68	2041	6964	1755	3.23	11.02	632	3.45	51.71

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Configuration 2

Sales code:
104G8573

Configuration

Motor configuration	CSIR
Power supply (nominal)	208-230 V/60 Hz 1~
Refrigerant	R134a
Application	HBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, CCC, UL, KC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	19 A
RLA (rated load amps / 1s/ U(N))	3.9 A
Cut in current (U(N))	19 A

Ambient/ machine room temperatures minimum /maximum

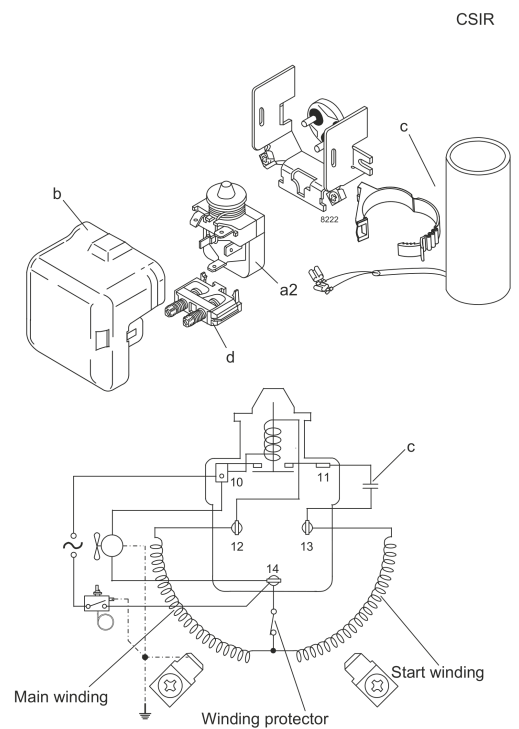
Ambient temperature range: 10 - 43°C / 50 - 109°F

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System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

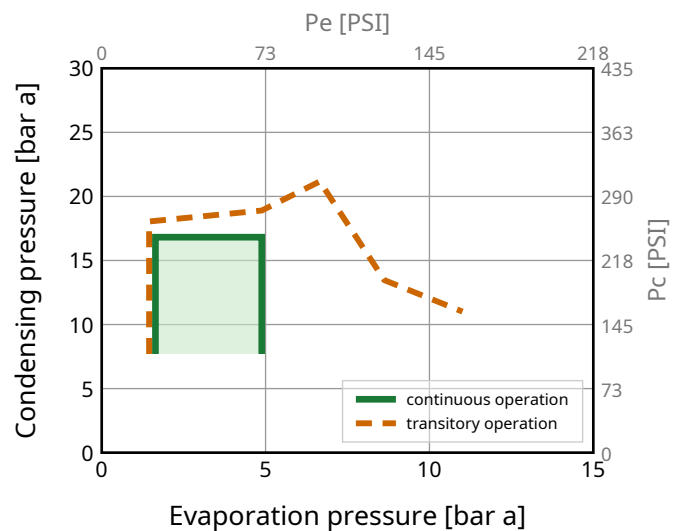
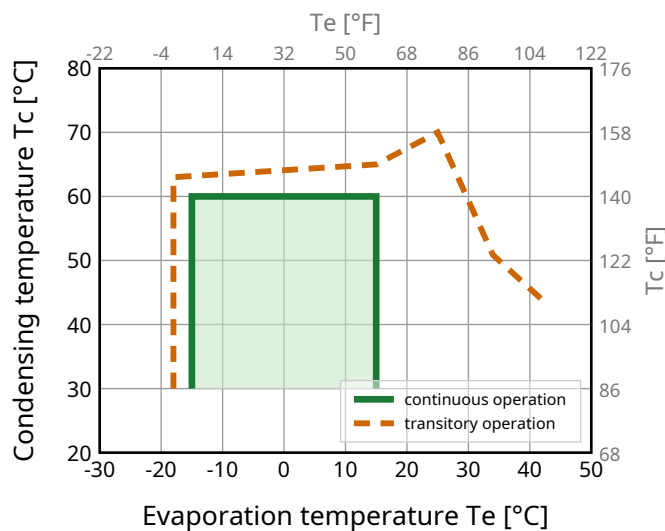
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c start capacitor (80µF) 117U5017

d cord relief 103N1004

b plastic cover 103N2008

Operation Pressure Range



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Configuration 2

Sales code:
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Standard Conditions

R134a, 230 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]	
7.2 45	54.4 129.9	35 95	46.1 115	1593	5434	1370	2.39	8.15	666	3.27	35.26	ASHRAE HBP
5 41	55 131	32 89.6	55 131	1295	4419	1114	2.03	6.92	639	3.13	31.81	CECOMAF HBP
5 41	50 122	20 68	50 122	1352	4612	1163	2.22	7.57	609	2.97	33.91	EN12900 HBP
-6.7 20	54.4 129.9	35 95	46.1 115	781	2664	671	1.67	5.68	469	2.24	17.00	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	582	1984	500	1.37	4.68	424	2.01	14.02	CECOMAF MBP
-10 14	45 113	20 68	45 113	679	2317	584	1.64	5.60	414	1.96	15.83	EN12900 MBP

Performance Tables

R134a, 230 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]
-15	5	513	1749	441	1.44	4.91	356	1.66	11.15
-10	14	703	2400	605	1.70	5.80	414	1.96	15.36
-5	23	934	3187	803	1.98	6.76	472	2.26	20.50
0	32	1210	4128	1041	2.29	7.82	528	2.55	26.70
5	41	1535	5238	1320	2.63	8.99	583	2.84	34.10
10	50	1915	6533	1647	3.02	10.29	635	3.11	42.85
15	59	2353	8027	2023	3.44	11.74	684	3.36	53.15

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

-15	5	425	1449	365	1.20	4.08	355	1.65	10.19
-10	14	582	1984	500	1.37	4.68	424	2.01	14.02
-5	23	776	2647	667	1.57	5.35	494	2.38	18.80
0	32	1012	3454	870	1.79	6.10	566	2.75	24.68
5	41	1295	4419	1114	2.03	6.92	639	3.13	31.81
10	50	1629	5560	1401	2.29	7.82	711	3.50	40.37
15	59	2020	6891	1737	2.58	8.82	782	3.87	50.55