Model
SC15G

Sales code:
104G8533

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**13.20 kg / 29.10lbs**
Displacement	**15.28 cm3 / 0.93cu.in**
Compressors on pallet	**80**

General – Configurations With SC15G

–	**Conf. 1**	**Conf. 2**	**Conf. 3**	**Conf. 4**
Motor configuration	CSIR	CSIR	CSIR	CSIR
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	VDE, CCC, EAC, KC	VDE, CCC, EAC, KC, UL	VDE, CCC	VDE, CCC, UL
Starting torque	HST	HST	HST	HST
Refrigerant	R134a	R134a	R513A	R513A
Application	LBP+MBP+HBP	LBP	LBP+MBP+HBP	LBP
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

Application Notes

- Electrical equipment is included and pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor

Model
SC15G

Sales code:
104G8533

Compressor Design

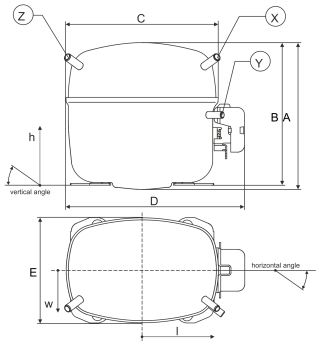
Oil type	**POE**	Winding resistance main	**5.13 Ohm**
Oil viscosity	**22cSt**	Winding resistance aux	**13.51 Ohm**
Oil quantity	**507 / 17.14fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,410 cm3 / 47.68fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

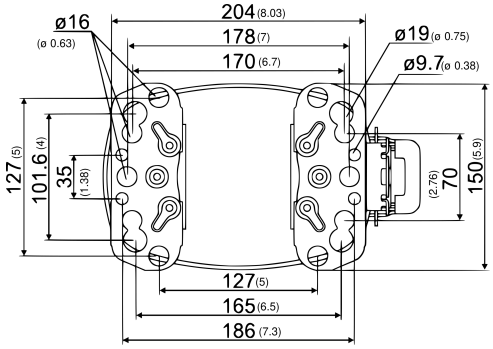
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



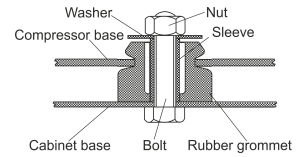
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in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

Mounting Accessories

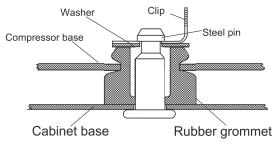


Dimensions in mm [in]

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
SC15G Configuration 1

Sales code:
104G8533

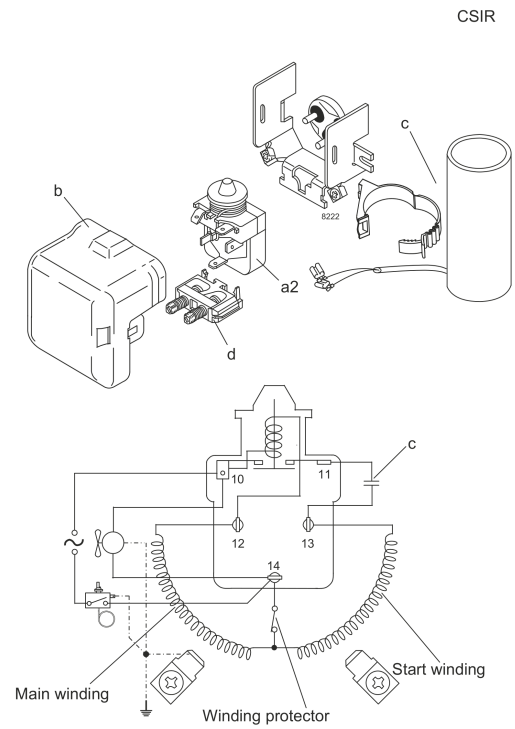
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**LBP+MBP+HBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC, EAC, 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 3m/s

Electrical Accessories / Wiring Diagram



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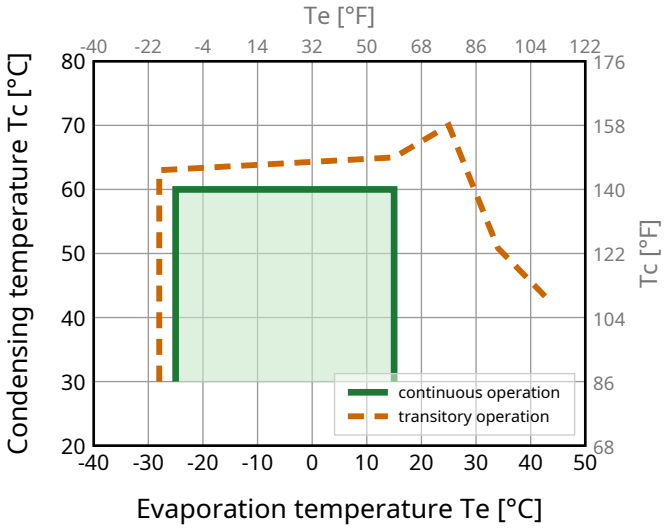
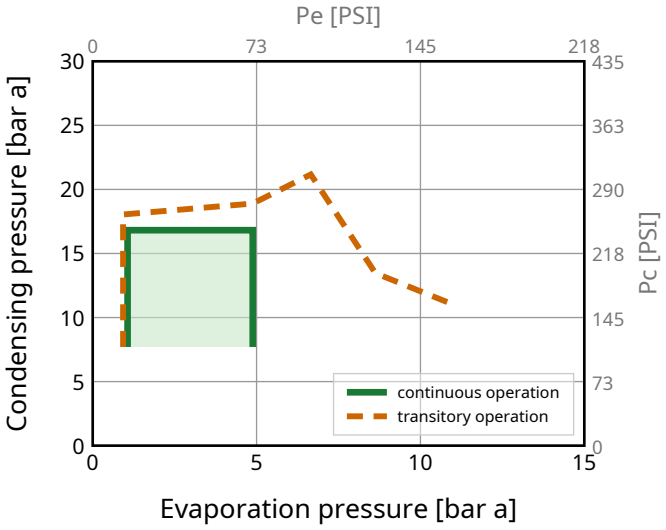
Components (already pre-assembled)
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model
SC15G Configuration 1

Sales code:
104G8533

Standard Conditions

R134a, 220 V/50 Hz, CSIR, fan 3m/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	**304**	1038	262	**1.10**	3.76	276	2.27	5.90	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**740**	2526	637	**1.56**	5.34	474	2.91	16.12	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1343**	4582	1155	**2.19**	7.49	612	3.50	29.73	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**142**	483	122	**0.77**	2.61	185	1.95	3.10	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**645**	2202	555	**1.58**	5.41	407	2.66	15.05	**EN12900 MBP**
5 41	50 122	20 68	50 122	**1157**	3947	995	**2.01**	6.86	575	3.30	29.02	**EN12900 HBP**

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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	**272**	927	234	**1.08**	3.70	251	2.19	5.88
-20	-4	**380**	1297	327	**1.27**	4.33	299	2.33	8.24
-10	14	**668**	2281	575	**1.64**	5.60	407	2.66	14.60
0	32	**1060**	3617	912	**2.07**	7.07	512	3.01	23.39
10	50	**1564**	5338	1345	**2.64**	9.01	592	3.39	35.02
15	59	**1862**	6353	1601	**3.02**	10.31	616	3.59	42.06

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

-25	-13	**214**	730	184	**0.83**	2.83	258	2.21	5.10
-20	-4	**312**	1064	268	**0.99**	3.38	315	2.40	7.46
-10	14	**566**	1931	487	**1.30**	4.43	436	2.78	13.65
0	32	**906**	3093	780	**1.65**	5.62	550	3.20	22.10
10	50	**1343**	4581	1155	**2.12**	7.22	634	3.64	33.26
15	59	**1600**	5457	1376	**2.43**	8.28	659	3.88	40.04

Model
SC15G Configuration 2

Sales code:
104G8533

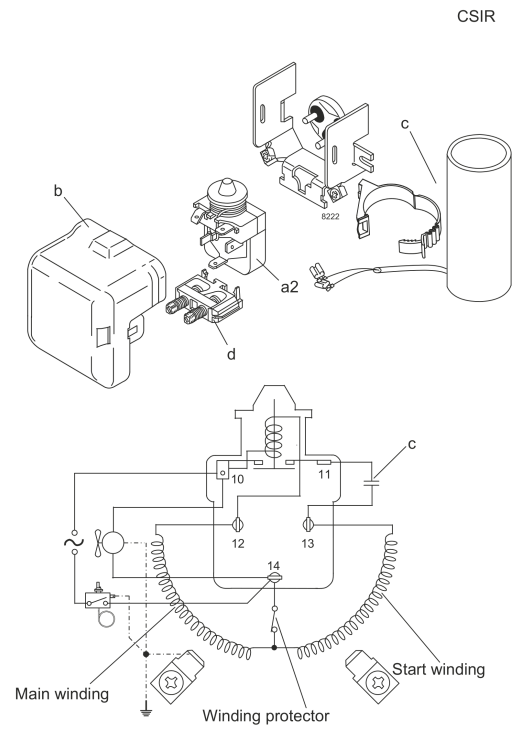
Configuration

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	**VDE, CCC, EAC, KC, UL**
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 3m/s

Electrical Accessories / Wiring Diagram



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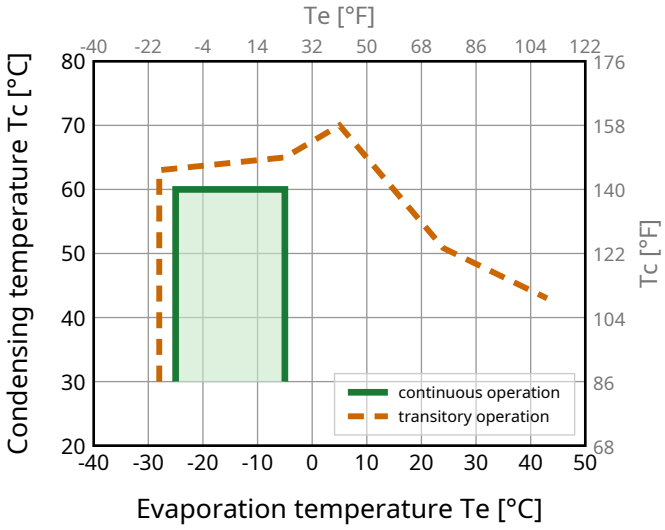
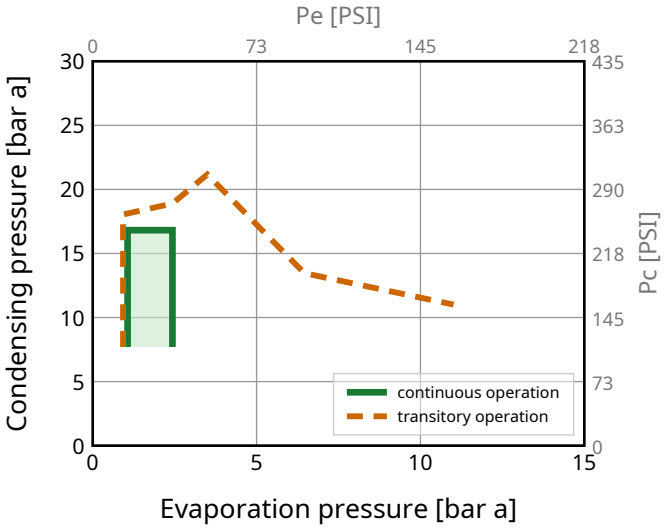
Components (already pre-assembled)
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model
SC15G Configuration 2

Sales code:
104G8533

Standard Conditions

R134a, 230 V/60 Hz, CSIR, fan 3m/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	**370**	1264	319	**1.07**	3.64	347	2.03	7.19	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**882**	3010	759	**1.63**	5.58	540	2.73	19.21	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1561**	5327	1343	**2.27**	7.75	688	3.41	34.56	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**168**	573	144	**0.94**	3.22	178	1.56	3.67	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**786**	2682	676	**1.69**	5.76	466	2.47	18.33	**EN12900 MBP**
5 41	50 122	20 68	50 122	**1334**	4550	1147	**2.11**	7.19	633	3.17	33.45	**EN12900 HBP**

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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	**347**	1183	298	**1.15**	3.93	301	1.91	7.50
-20	-4	**480**	1636	412	**1.34**	4.59	357	2.08	10.40
-15	5	**635**	2168	546	**1.54**	5.26	412	2.27	13.82
-10	14	**814**	2778	700	**1.75**	5.97	466	2.47	17.78
-5	23	**1016**	3465	873	**1.97**	6.71	517	2.67	22.28

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

-25	-13	**262**	894	225	**0.79**	2.71	330	1.99	6.25
-20	-4	**376**	1285	324	**0.97**	3.31	388	2.17	9.01
-15	5	**515**	1757	443	**1.15**	3.93	447	2.37	12.36
-10	14	**677**	2310	582	**1.34**	4.57	506	2.59	16.32
-5	23	**862**	2943	742	**1.53**	5.22	563	2.82	20.90

Model
SC15G Configuration 3

Sales code:
104G8533

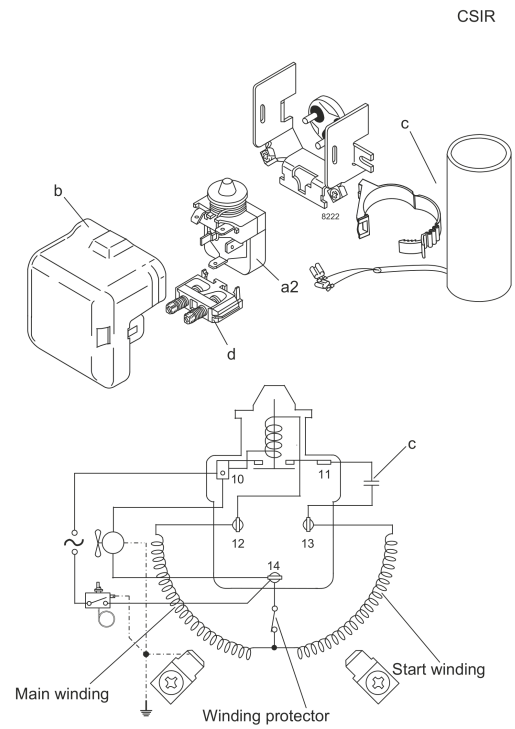
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**LBP+MBP+HBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC**
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 3m/s

Electrical Accessories / Wiring Diagram



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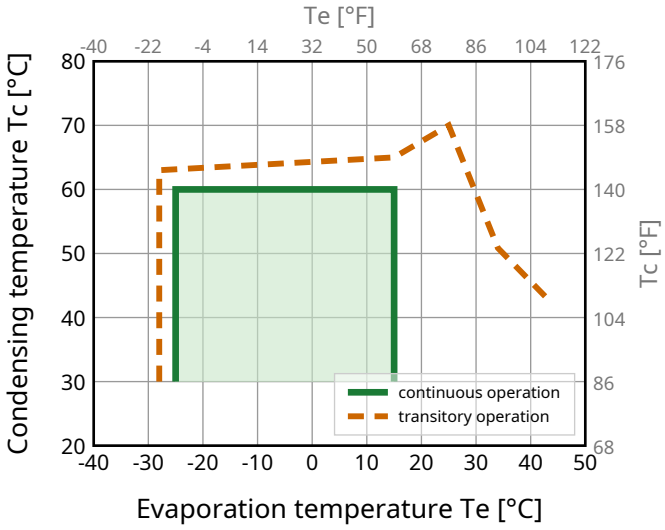
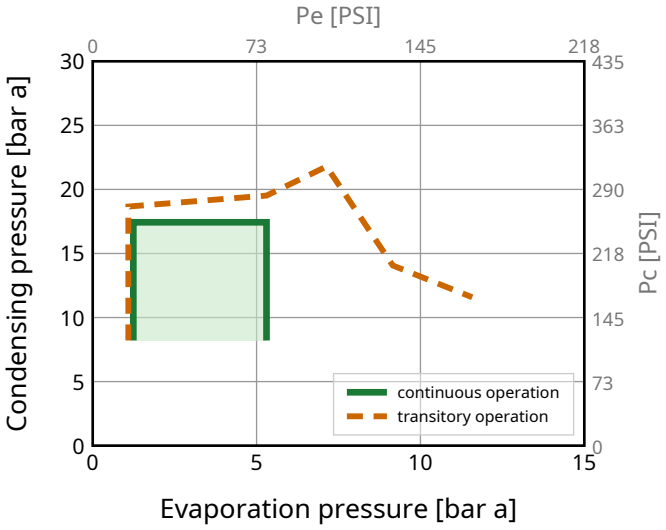
Components (already pre-assembled)
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model
SC15G Configuration 3

Sales code:
104G8533

Standard Conditions

R513A, 220 V/50 Hz, CSIR, fan 3m/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	**338**	1152	290	**1.13**	3.86	298	2.71	7.39	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**778**	2654	669	**1.55**	5.29	502	3.26	19.39	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1382**	4714	1188	**2.16**	7.37	640	3.75	35.11	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**159**	541	136	**0.80**	2.72	199	2.60	3.99	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**672**	2293	578	**1.56**	5.31	432	3.04	18.20	**EN12900 MBP**
5 41	50 122	20 68	50 122	**1166**	3977	1002	**1.94**	6.60	602	3.61	34.37	**EN12900 HBP**

Performance Tables

R513A, 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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	**298**	1015	256	**1.10**	3.76	270	2.65	7.36
-20	-4	**410**	1399	353	**1.28**	4.37	320	2.75	10.18
-10	14	**705**	2406	606	**1.63**	5.57	432	3.04	17.65
0	32	**1100**	3753	946	**2.04**	6.97	538	3.38	27.86
10	50	**1602**	5468	1378	**2.60**	8.86	617	3.67	41.27
15	59	**1897**	6471	1631	**2.97**	10.13	639	3.76	49.37

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

-25	-13	**232**	793	200	**0.83**	2.83	280	2.67	6.43
-20	-4	**332**	1134	286	**0.98**	3.34	339	2.80	9.24
-10	14	**588**	2008	506	**1.27**	4.33	464	3.14	16.51
0	32	**926**	3158	796	**1.60**	5.46	579	3.52	26.32
10	50	**1352**	4613	1163	**2.05**	6.98	661	3.84	39.17
15	59	**1601**	5463	1377	**2.35**	8.01	682	3.95	46.94

Model
SC15G Configuration 4

Sales code:
104G8533

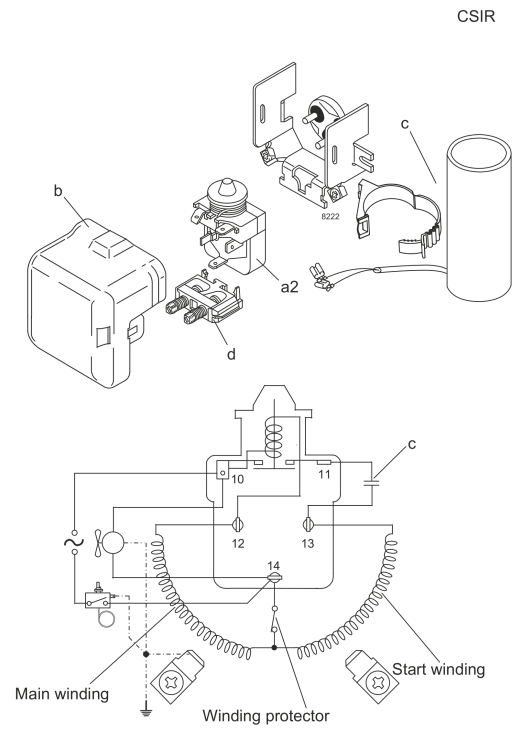
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R513A**
Application	**LBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC, UL**
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 3m/s

Electrical Accessories / Wiring Diagram



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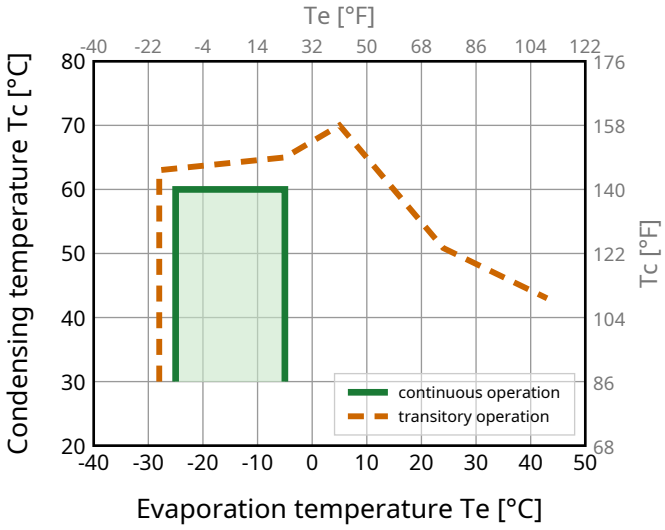
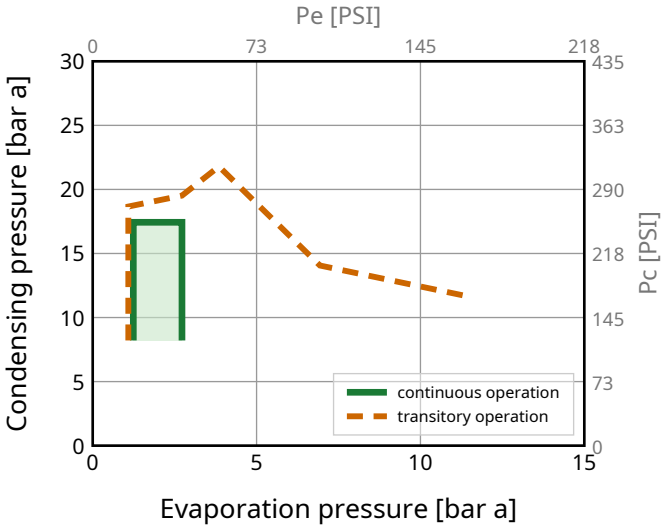
Components (already pre-assembled)
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model Sales code:

SC15G Configuration 4 **104G8533**

Standard Conditions

R513A, 230 V/60 Hz, CSIR, fan 3m/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	**411**	1401	353	**1.07**	3.66	383	2.19	8.99	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**925**	3156	796	**1.60**	5.47	577	2.94	23.06	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1603**	5470	1379	**2.22**	7.56	723	3.52	40.73	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**188**	640	161	**0.94**	3.20	200	1.48	4.71	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**818**	2790	703	**1.64**	5.60	498	2.64	22.14	**EN12900 MBP**
5 41	50 122	20 68	50 122	**1341**	4576	1153	**2.01**	6.86	666	3.29	39.55	**EN12900 HBP**

Performance Tables

R513A, 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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	**379**	1292	326	**1.15**	3.91	330	1.98	9.37
-20	-4	**516**	1762	444	**1.33**	4.55	387	2.21	12.82
-15	5	**676**	2308	582	**1.52**	5.20	444	2.43	16.85
-10	14	**858**	2927	738	**1.72**	5.88	498	2.64	21.47
-5	23	**1061**	3619	912	**1.93**	6.59	549	2.84	26.69

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

-25	-13	**284**	969	244	**0.78**	2.64	367	2.13	7.87
-20	-4	**401**	1368	345	**0.94**	3.22	425	2.35	11.14
-15	5	**541**	1845	465	**1.12**	3.81	484	2.58	15.09
-10	14	**703**	2397	604	**1.29**	4.42	543	2.81	19.71
-5	23	**886**	3024	762	**1.48**	5.04	600	3.04	25.02