Model
SC15GH

Sales code:
104G8534

Compressor Data

Refrigerant(s)	**R1234yf / R513A**
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	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	198-254 V	198-254 V	198-254 V	198-254 V
Approvals	VDE	VDE	VDE	VDE
Starting torque	HST	HST	HST	HST
Refrigerant	R1234yf	R1234yf	R513A	R513A
Application	HBP	HBP	HBP	HBP
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

Model
SC15GH

Sales code:
104G8534

Compressor Design

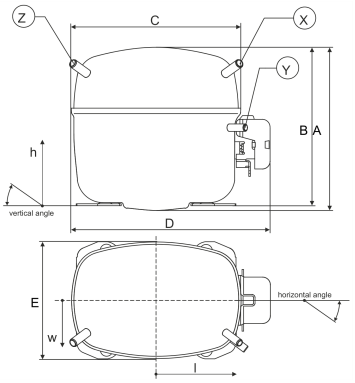
Oil type	**POE**	Winding resistance main	**4.400 Ohm**
Oil viscosity	**22cSt**	Winding resistance aux	**14.00 Ohm**
Oil quantity	**500 / 16.91fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,410 cm3 / 47.68fl.oz**	Max. discharge temp.	**140°C / 284°F**

Compressor Dimensions

Housing

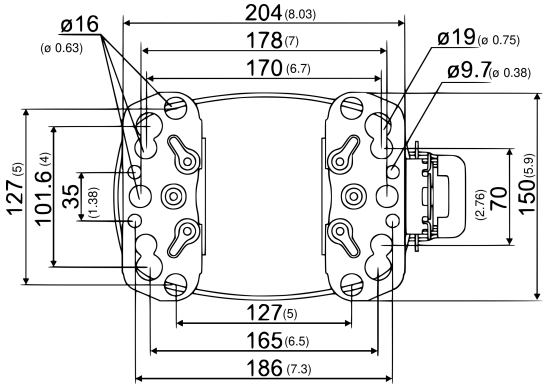
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



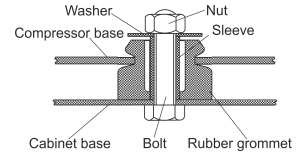
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in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

Mounting Accessories

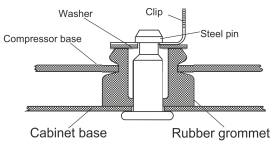


Dimensions in mm [in]

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

Model
SC15GH Configuration 1

Sales code:
104G8534

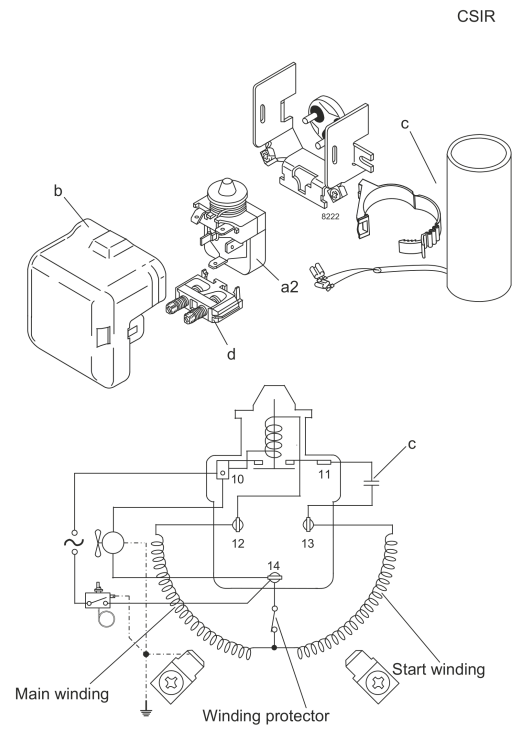
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R1234yf**
Application	**HBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE**
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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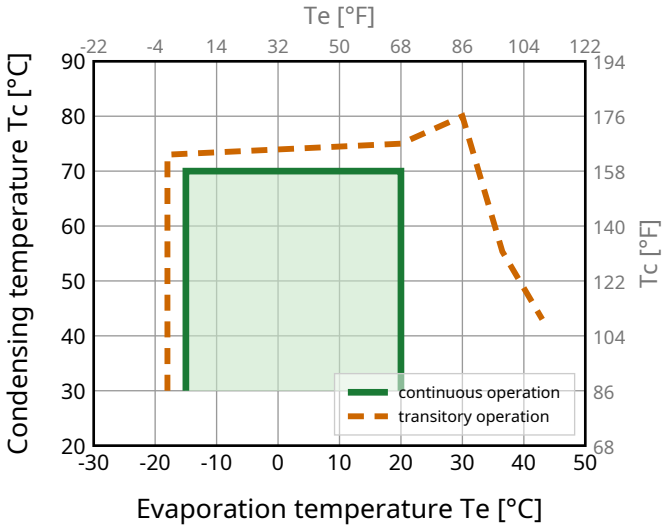
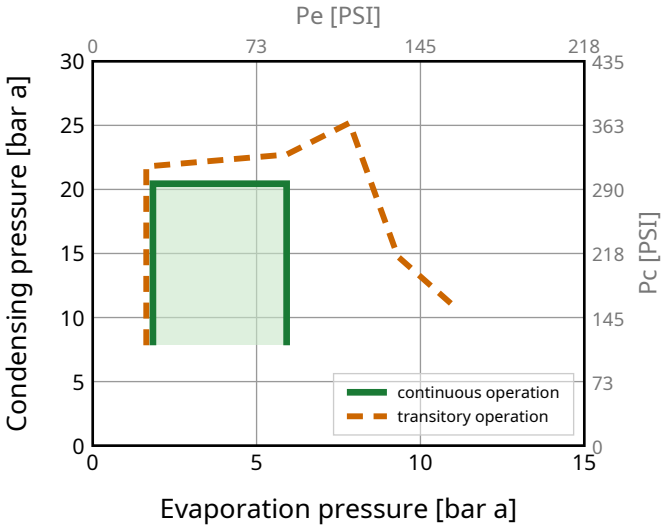
Components
a2 relay 117U7011
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC15GH Configuration 1

Sales code:
104G8534

Standard Conditions

R1234yf, 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]	
7.2 45	54.4 129.9	35 95	46.1 115	**1350**	4605	1161	**2.39**	8.15	565	3.08	37.16	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**1086**	3706	934	**1.95**	6.66	556	3.04	34.09	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**1114**	3801	958	**2.09**	7.13	533	2.95	36.16	**EN12900 HBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**742**	2532	638	**1.60**	5.46	464	2.69	20.04	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**554**	1889	476	**1.28**	4.38	432	2.58	16.99	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**640**	2185	551	**1.54**	5.25	416	2.52	18.98	**EN12900 MBP**

Performance Tables

R1234yf, 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]
-15	5	**524**	1788	451	**1.42**	4.83	370	2.37	14.16
-10	14	**678**	2313	583	**1.63**	5.56	416	2.52	18.41
-5	23	**858**	2926	738	**1.88**	6.43	455	2.66	23.42
0	32	**1065**	3634	916	**2.19**	7.47	487	2.78	29.27
5	41	**1303**	4444	1120	**2.56**	8.73	509	2.86	36.08
10	50	**1572**	5364	1352	**3.02**	10.29	522	2.91	43.94
15	59	**1876**	6402	1614	**3.59**	12.25	522	2.90	53.01
20	68	**2217**	7564	1907	**4.34**	14.80	511	2.84	63.43

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

-15	5	**421**	1438	362	**1.12**	3.83	376	2.40	12.87
-10	14	**554**	1889	476	**1.28**	4.38	432	2.58	16.99
-5	23	**707**	2413	608	**1.47**	5.01	481	2.76	21.84
0	32	**884**	3016	760	**1.69**	5.76	523	2.91	27.50
5	41	**1086**	3706	934	**1.95**	6.66	556	3.04	34.09
10	50	**1316**	4491	1132	**2.27**	7.75	580	3.14	41.74
15	59	**1576**	5378	1355	**2.66**	9.09	592	3.18	50.59
20	68	**1868**	6374	1607	**3.16**	10.78	591	3.18	60.84

Model
SC15GH Configuration 2

Sales code:
104G8534

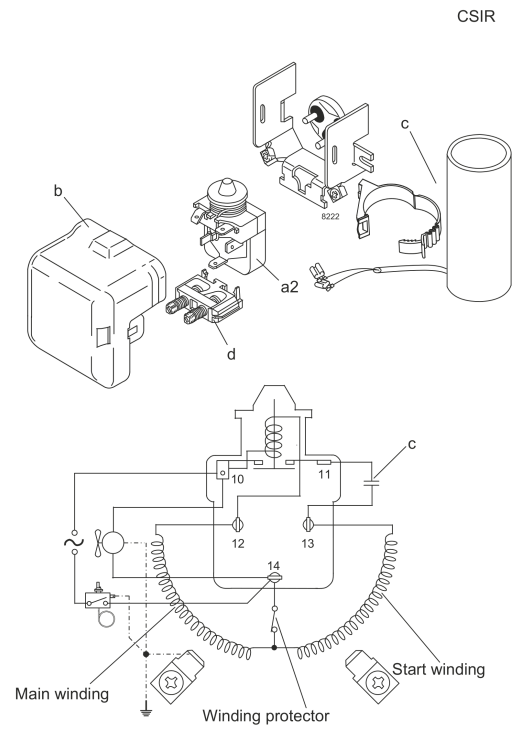
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R1234yf**
Application	**HBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE**
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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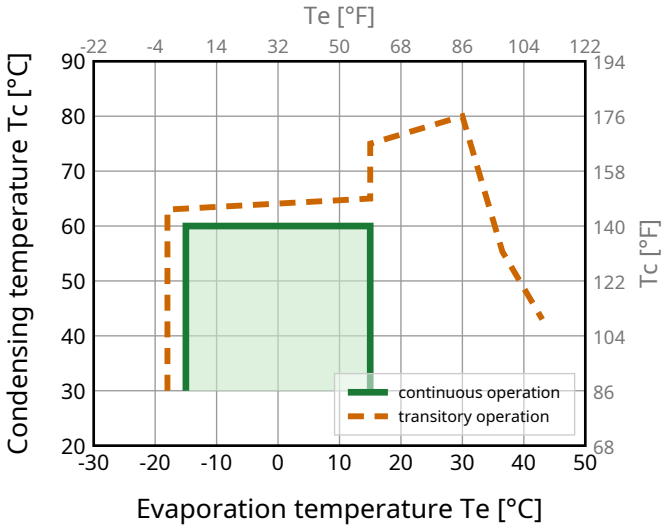
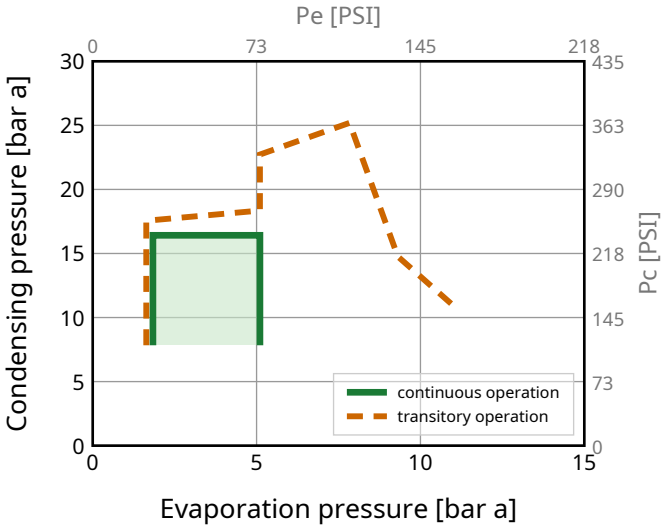
Components
a2 relay 117U7011
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC15GH Configuration 2

Sales code:
104G8534

Standard Conditions

R1234yf, 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]	
7.2 45	54.4 129.9	35 95	46.1 115	**1551**	5291	1334	**2.38**	8.11	652	3.61	42.70	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**1233**	4207	1060	**1.96**	6.69	628	3.52	38.70	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**1269**	4331	1092	**2.12**	7.22	600	3.41	41.20	**EN12900 HBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**789**	2691	678	**1.66**	5.67	474	2.96	21.30	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**579**	1975	498	**1.34**	4.56	433	2.82	17.76	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**673**	2295	578	**1.59**	5.43	423	2.79	19.94	**EN12900 MBP**

Performance Tables

R1234yf, 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]
-15	5	**528**	1801	454	**1.43**	4.88	369	2.63	14.27
-10	14	**712**	2430	612	**1.69**	5.75	423	2.79	19.34
-5	23	**932**	3180	802	**1.96**	6.69	476	2.96	25.45
0	32	**1191**	4065	1025	**2.26**	7.72	527	3.14	32.74
5	41	**1493**	5095	1284	**2.60**	8.86	575	3.32	41.36
10	50	**1842**	6286	1584	**2.97**	10.13	620	3.49	51.49
15	59	**2242**	7649	1928	**3.39**	11.55	662	3.64	63.33

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

-15	5	**431**	1470	370	**1.17**	3.99	368	2.63	13.15
-10	14	**579**	1975	498	**1.34**	4.56	433	2.82	17.76
-5	23	**759**	2591	653	**1.52**	5.20	498	3.04	23.45
0	32	**976**	3331	840	**1.73**	5.91	564	3.27	30.38
5	41	**1233**	4207	1060	**1.96**	6.69	628	3.52	38.70
10	50	**1534**	5233	1319	**2.22**	7.57	692	3.76	48.64
15	59	**1882**	6421	1618	**2.50**	8.53	753	4.01	60.41

Model
SC15GH Configuration 3

Sales code:
104G8534

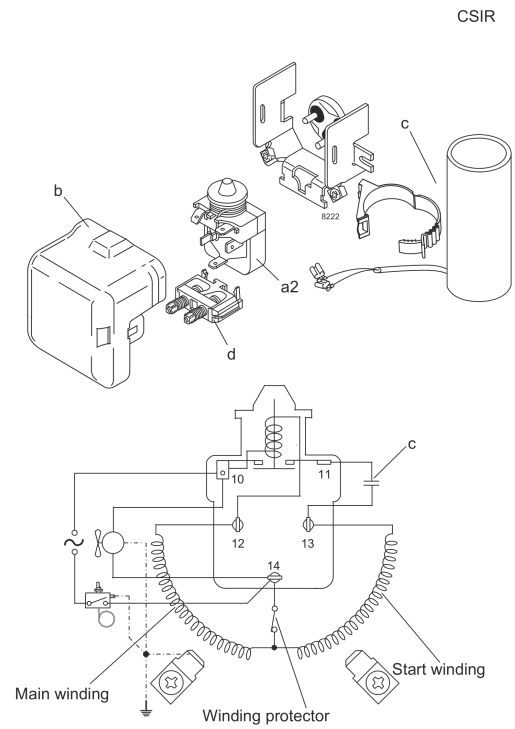
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**HBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE**
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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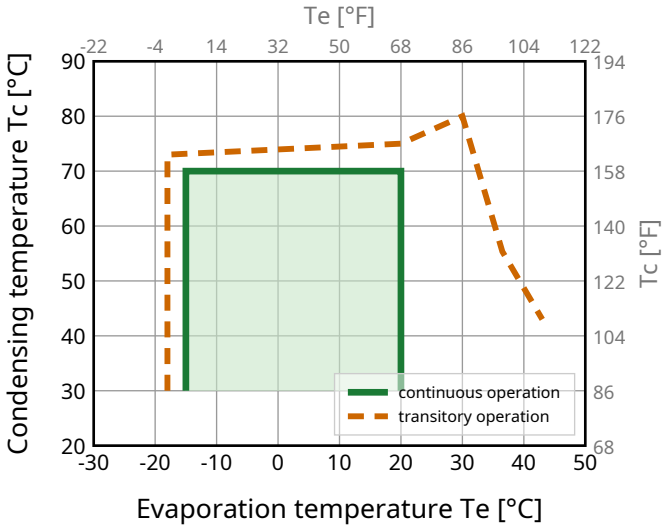
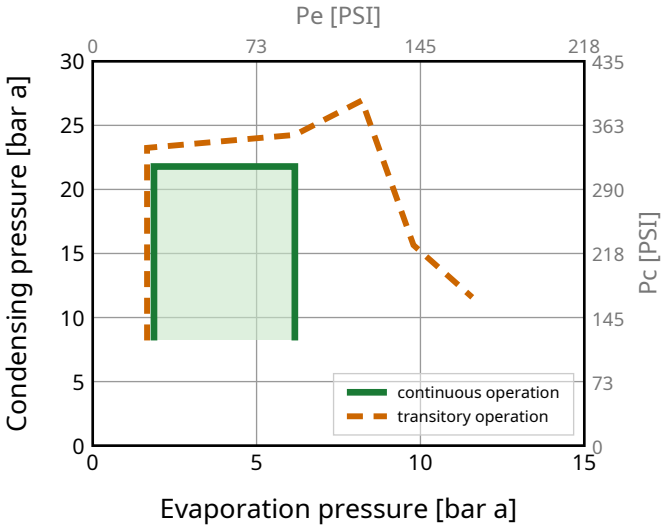
Components
a2 relay 117U7011
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC15GH Configuration 3

Sales code:
104G8534

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]	
7.2 45	54.4 129.9	35 95	46.1 115	**1425**	4862	1225	**2.37**	8.08	602	3.29	36.20	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**1155**	3940	993	**1.95**	6.67	591	3.24	33.12	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**1194**	4073	1027	**2.11**	7.21	565	3.12	35.20	**EN12900 HBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**773**	2638	665	**1.59**	5.42	487	2.77	19.28	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**581**	1981	499	**1.29**	4.39	451	2.61	16.29	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**675**	2303	580	**1.55**	5.31	434	2.53	18.27	**EN12900 MBP**

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]
-15	5	**544**	1857	468	**1.42**	4.85	383	2.30	13.56
-10	14	**708**	2416	609	**1.63**	5.57	434	2.53	17.73
-5	23	**899**	3068	773	**1.89**	6.44	477	2.72	22.63
0	32	**1121**	3825	964	**2.19**	7.48	511	2.88	28.40
5	41	**1378**	4701	1185	**2.56**	8.75	537	3.00	35.17
10	50	**1674**	5711	1440	**3.02**	10.29	555	3.08	43.11
15	59	**2013**	6868	1731	**3.57**	12.18	564	3.12	52.40
20	68	**2399**	8185	2063	**4.25**	14.51	564	3.12	63.25

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

-15	5	**439**	1497	377	**1.13**	3.86	388	2.32	12.24
-10	14	**581**	1981	499	**1.29**	4.39	451	2.61	16.29
-5	23	**745**	2541	641	**1.47**	5.02	506	2.86	21.02
0	32	**935**	3190	804	**1.69**	5.77	553	3.07	26.58
5	41	**1155**	3940	993	**1.95**	6.67	591	3.24	33.12
10	50	**1409**	4806	1211	**2.27**	7.75	620	3.37	40.81
15	59	**1700**	5802	1462	**2.65**	9.05	641	3.46	49.86
20	68	**2034**	6941	1750	**3.12**	10.64	653	3.52	60.51

Model
SC15GH Configuration 4

Sales code:
104G8534

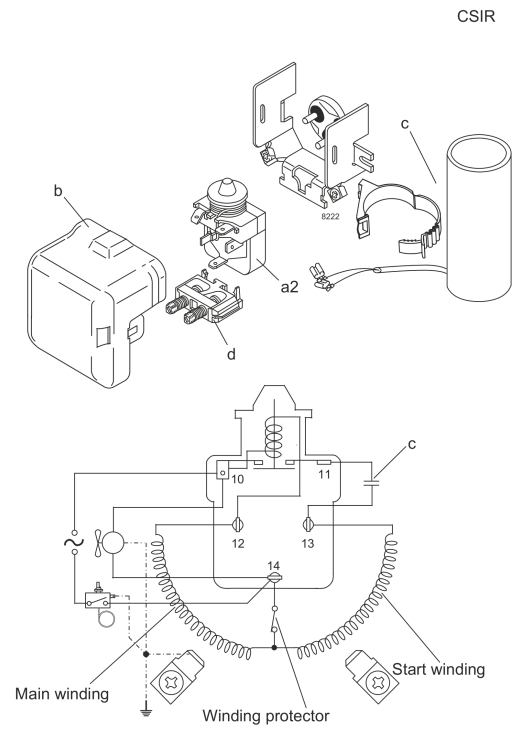
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R513A**
Application	**HBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE**
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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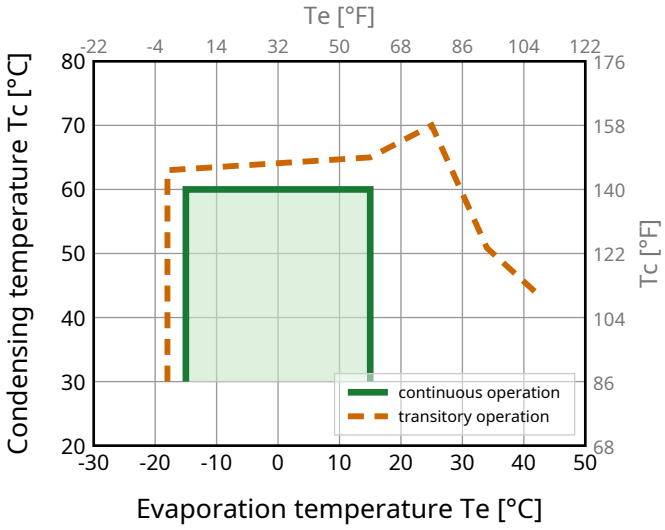
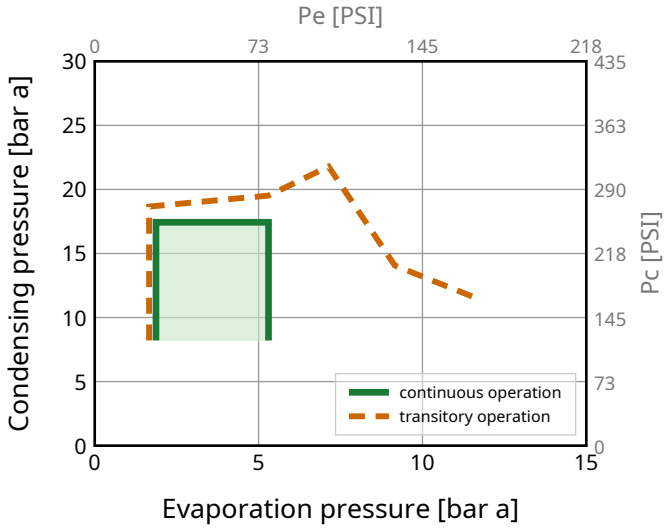
Components
a2 relay 117U7011
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC15GH Configuration 4

Sales code:
104G8534

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]	
7.2 45	54.4 129.9	35 95	46.1 115	**1639**	5593	1410	**2.36**	8.04	696	3.42	41.65	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**1313**	4481	1129	**1.97**	6.70	668	3.28	37.66	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**1362**	4649	1172	**2.14**	7.30	637	3.11	40.17	**EN12900 HBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**821**	2800	706	**1.65**	5.64	496	2.38	20.46	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**605**	2064	520	**1.34**	4.58	450	2.14	16.97	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**707**	2413	608	**1.61**	5.50	439	2.08	19.15	**EN12900 MBP**

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]
-15	5	**546**	1865	470	**1.44**	4.91	380	1.78	13.62
-10	14	**742**	2532	638	**1.69**	5.77	439	2.08	18.58
-5	23	**977**	3334	840	**1.97**	6.70	497	2.39	24.60
0	32	**1256**	4285	1080	**2.27**	7.73	554	2.68	31.82
5	41	**1583**	5401	1361	**2.60**	8.87	609	2.97	40.40
10	50	**1962**	6694	1687	**2.97**	10.13	661	3.24	50.53
15	59	**2398**	8181	2062	**3.38**	11.54	709	3.49	62.42

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

-15	5	**446**	1523	384	**1.18**	4.01	380	1.77	12.46
-10	14	**605**	2064	520	**1.34**	4.58	450	2.14	16.97
-5	23	**799**	2727	687	**1.53**	5.22	522	2.52	22.56
0	32	**1034**	3528	889	**1.74**	5.92	595	2.90	29.40
5	41	**1313**	4481	1129	**1.97**	6.70	668	3.28	37.66
10	50	**1642**	5601	1412	**2.22**	7.56	741	3.65	47.55
15	59	**2023**	6902	1740	**2.49**	8.51	811	4.02	59.31