Single
Packs

Single Pack SC15GH 220-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4183**

Position	Title	Code	Amount
1	Compressor SC15GH	104G8561	1
2	Starting relay	117U6011	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5017	1
4	Cord relief	103N1004	1
5	Cover	103N2008	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
SC15GH

Sales code:
104G8561

Compressor Data

Refrigerant(s)	**R134a / 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	220-240 V/50 Hz	208-230 V/60 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, UL, CCC, KC	VDE, UL, CCC	VDE, UL, CCC, KC	VDE, UL, CCC
Starting torque	HST	HST	HST	HST
Refrigerant	R134a	R513A	R134a	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:
104G8561

Compressor Design

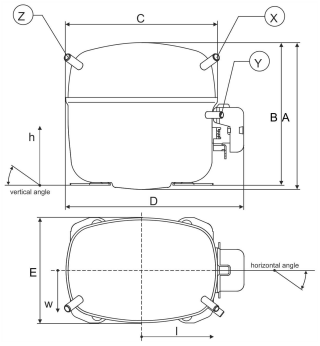
Oil type	**POE**	Winding resistance main	**4.4 Ohm**
Oil viscosity	**22cSt**	Winding resistance aux	**14 Ohm**
Oil quantity	**504 / 17.04fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,410 cm3 / 47.68fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

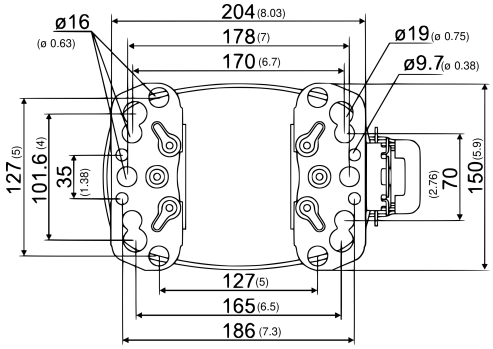
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



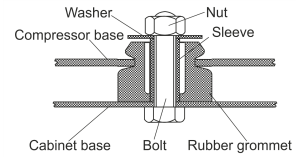
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in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

Mounting Accessories

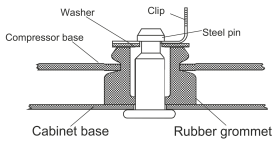


Dimensions in mm [in]

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:
104G8561

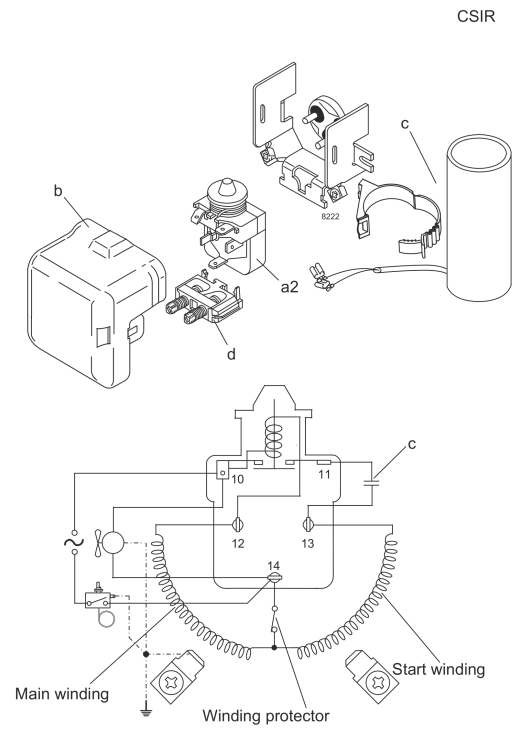
Configuration

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, UL, CCC, 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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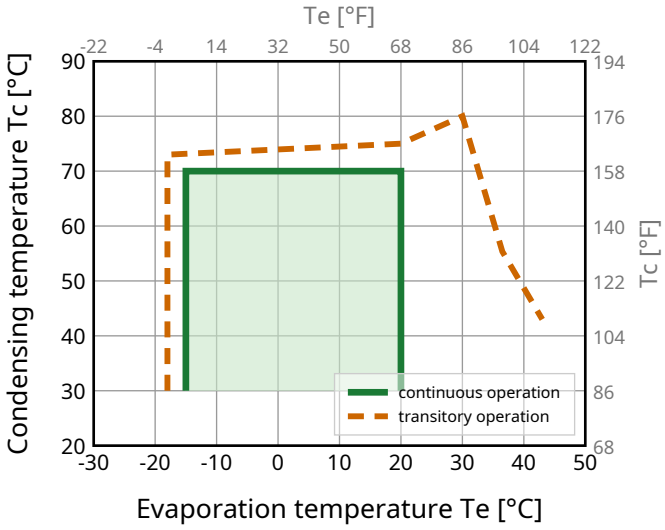
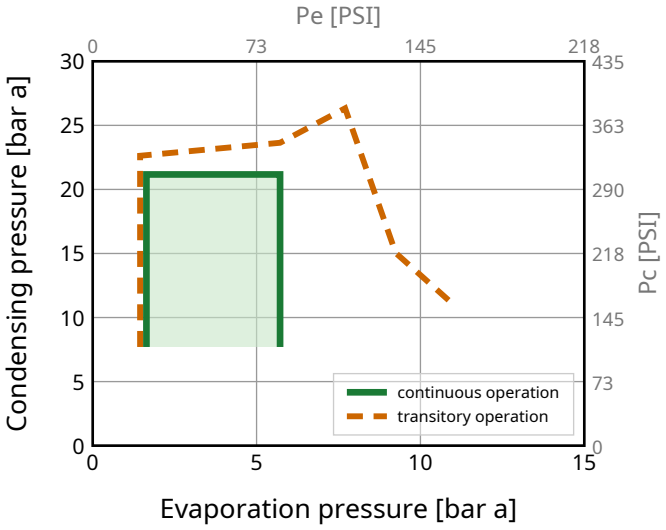
Components
a2 relay 117U6011
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC15GH Configuration 1

Sales code:
104G8561

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]	
-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**
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**

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]
-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

Model
SC15GH Configuration 2

Sales code:
104G8561

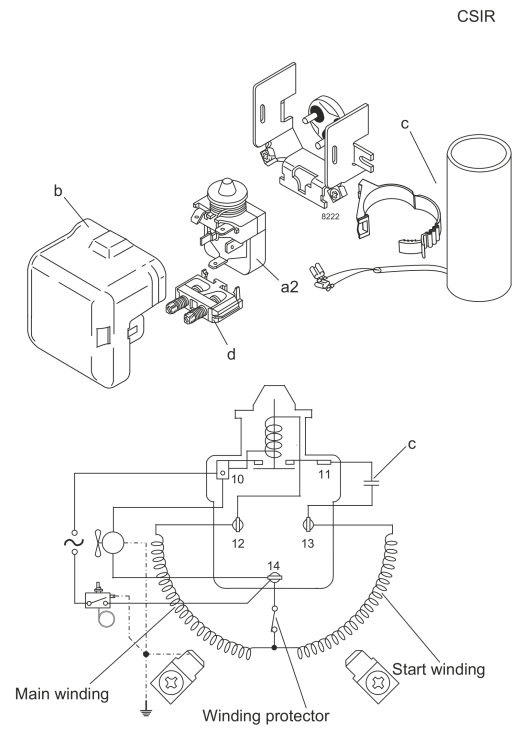
Configuration

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, UL, CCC**
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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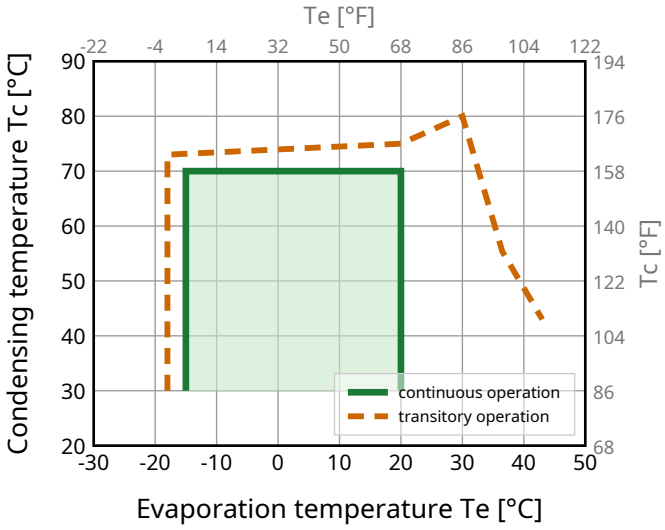
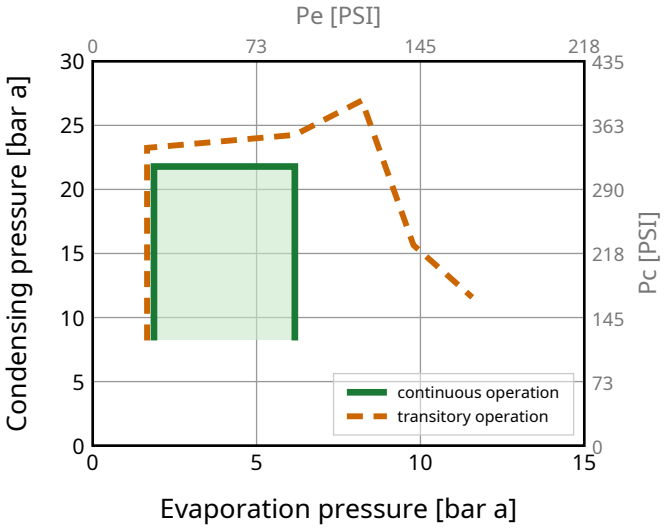
Components
a2 relay 117U6011
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC15GH Configuration 2

Sales code:
104G8561

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]	
-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**
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**

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 3

Sales code:
104G8561

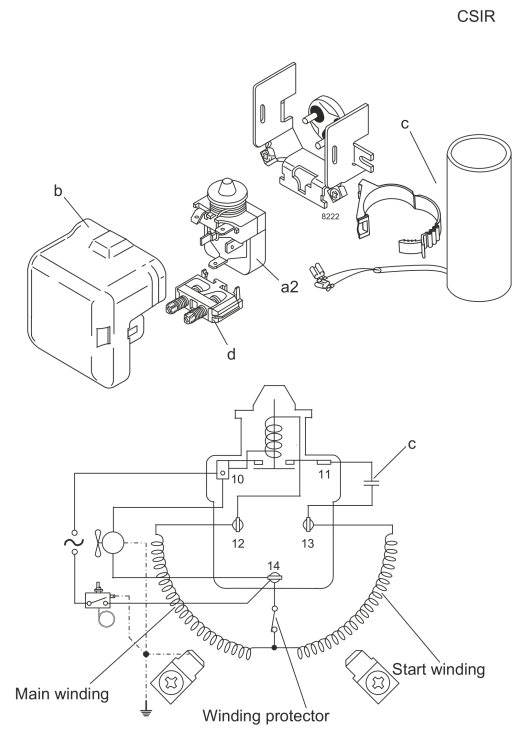
Configuration

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, UL, CCC, 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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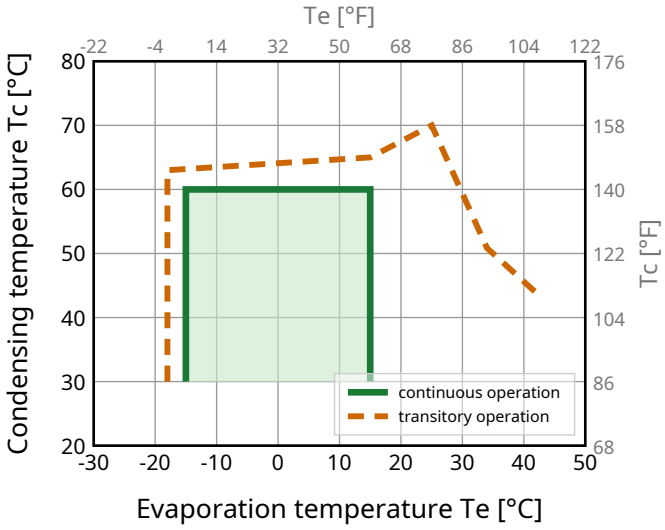
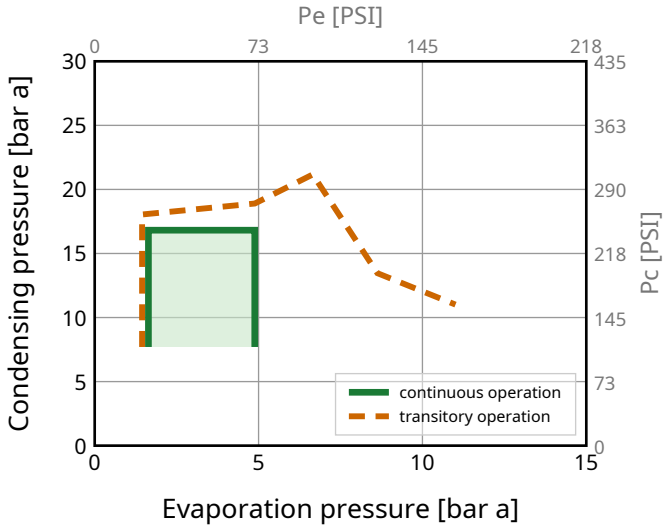
Components
a2 relay 117U6011
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model Sales code:

SC15GH Configuration 3 **104G8561**

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]	
-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**
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**

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]
-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

Model
SC15GH Configuration 4

Sales code:
104G8561

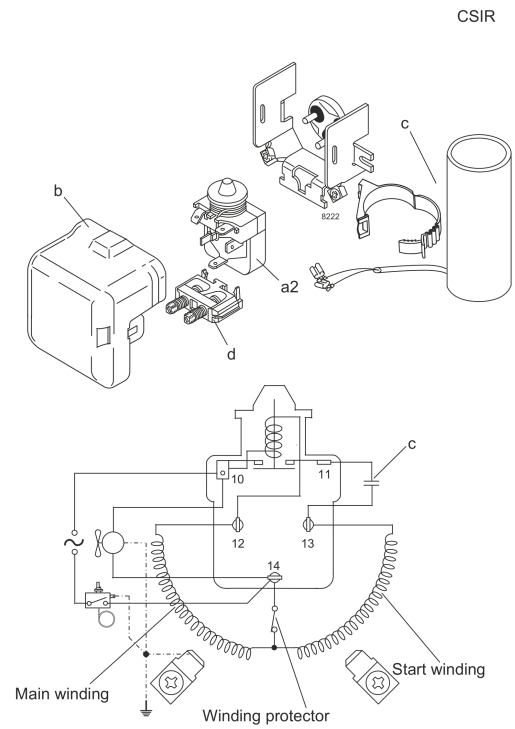
Configuration

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, UL, CCC**
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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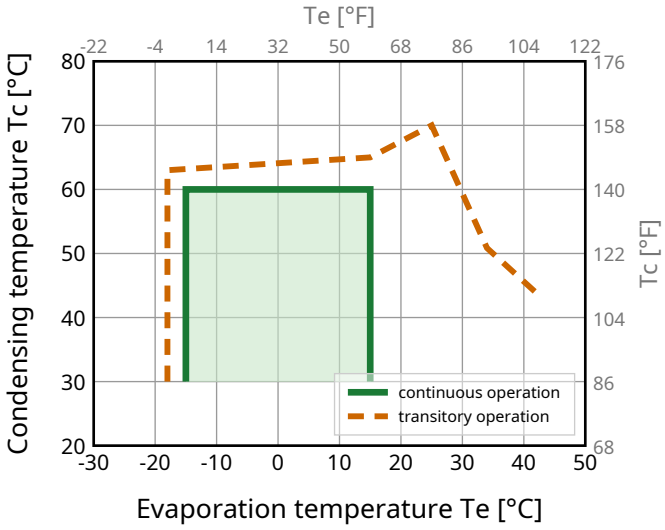
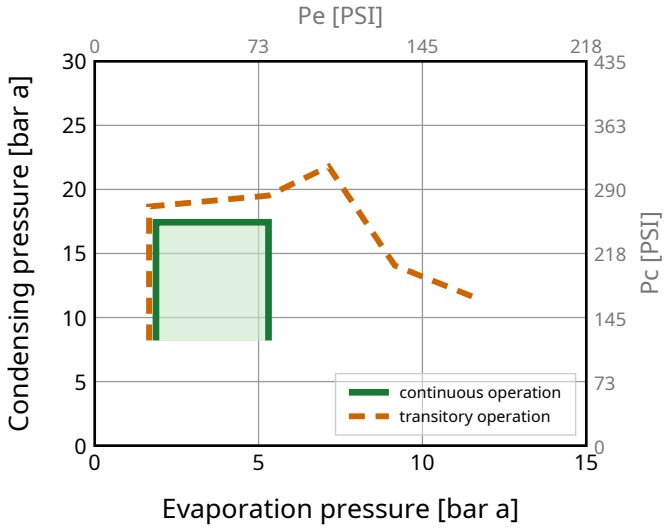
Components
a2 relay 117U6011
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model

SC15GH Configuration 4

Sales code:

104G8561

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]	
-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**
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**

Performance Tables

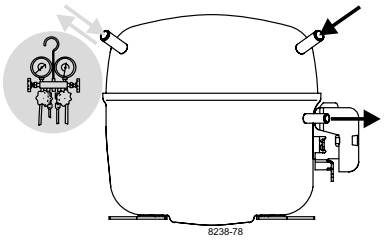
R513A, 230 V/60 Hz, CSIR, fan 3m/s

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



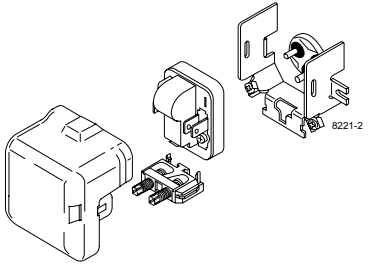
SC Compressors

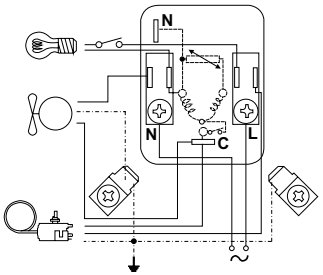
SECOP

Keep electrical equipment clear from oil, chemicals, and water

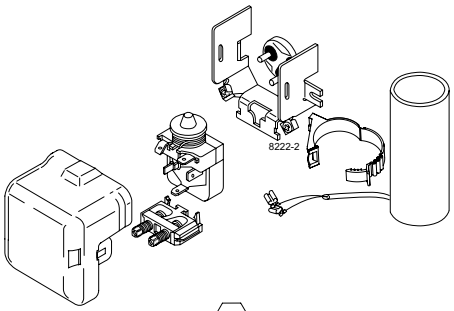
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

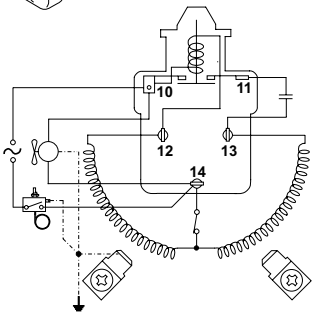
RSIR



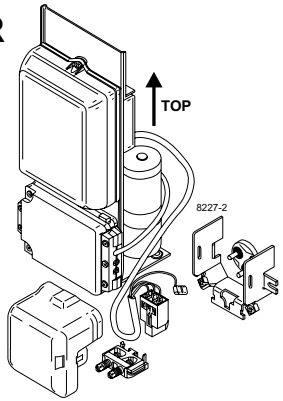


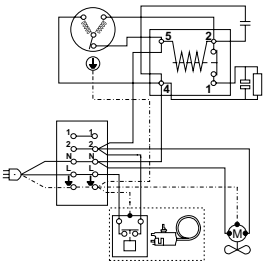
CSIR

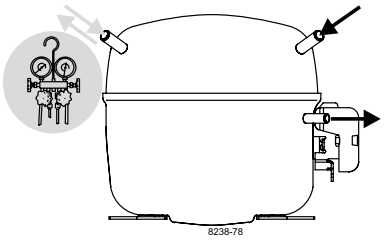




CSCR







SC Compressors

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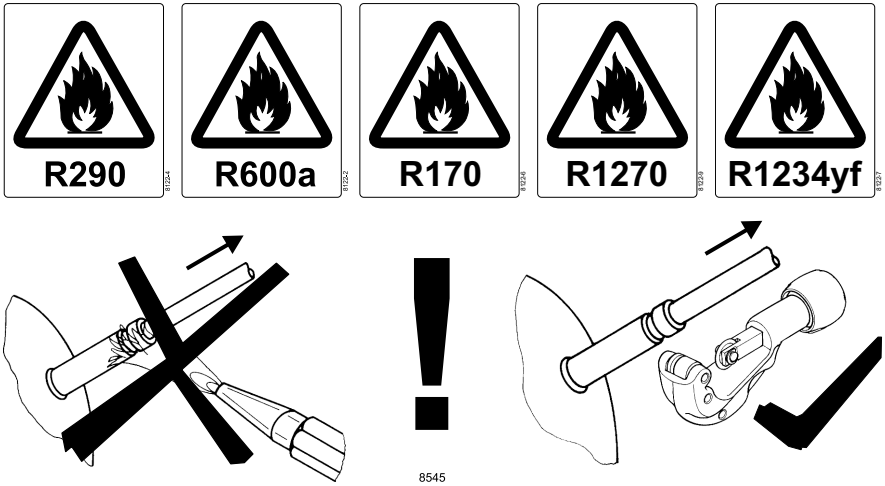
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



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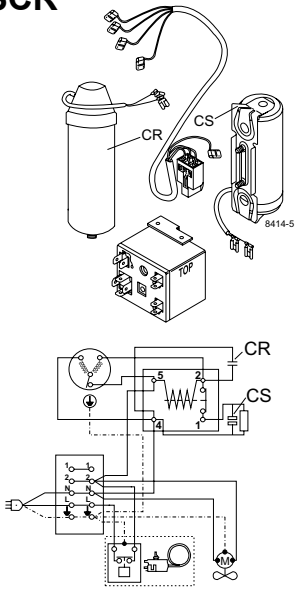

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be 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**