Single
Packs

Single Pack SC10GH 220-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4073**

Position	Title	Code	Amount
1	Compressor SC10GH	104G8041	1
2	Starting relay	117U6005	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
SC10GH

Sales code:
104G8041

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**12.80 kg / 28.22lbs**
Displacement	**10.29 cm3 / 0.63cu.in**
Compressors on pallet	**80**

General – Configurations With SC10GH

–	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
SC10GH

Sales code:
104G8041

Compressor Design

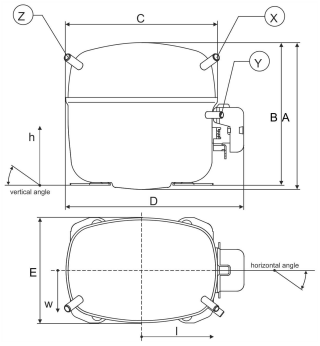
Oil type	**POE**	Winding resistance main	**5.13 Ohm**
Oil viscosity	**22cSt**	Winding resistance aux	**13.51 Ohm**
Oil quantity	**504 / 17.04fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,510 cm3 / 51.06fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

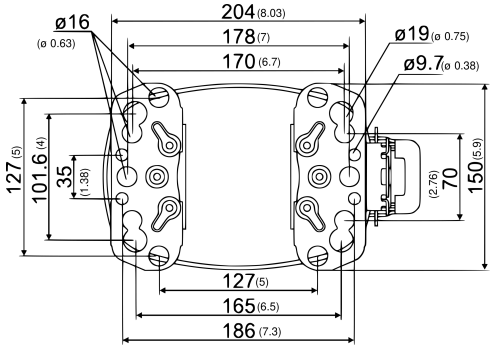
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



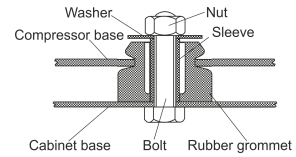
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in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

Mounting Accessories

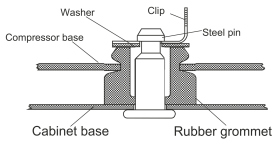


Dimensions in mm [in]

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
SC10GH Configuration 1

Sales code:
104G8041

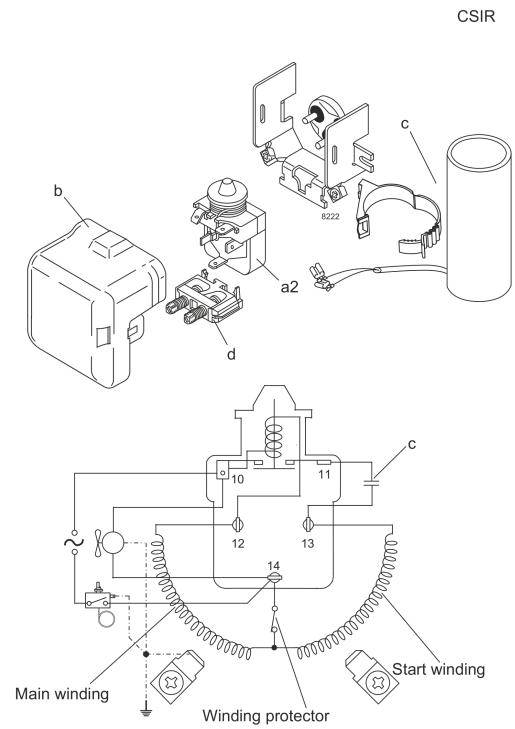
Configuration

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))	**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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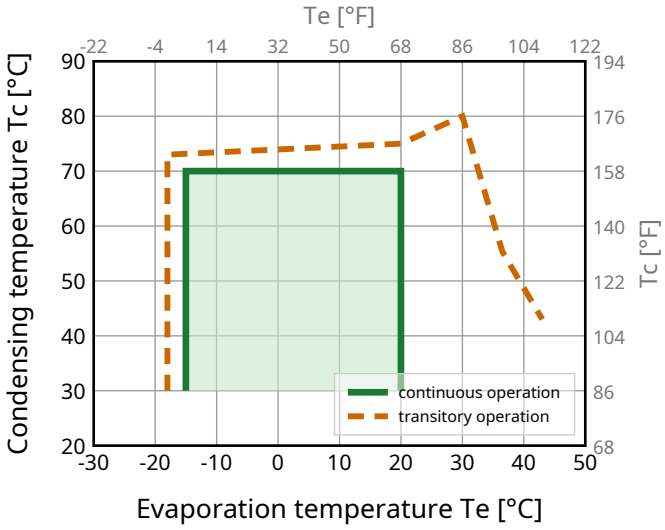
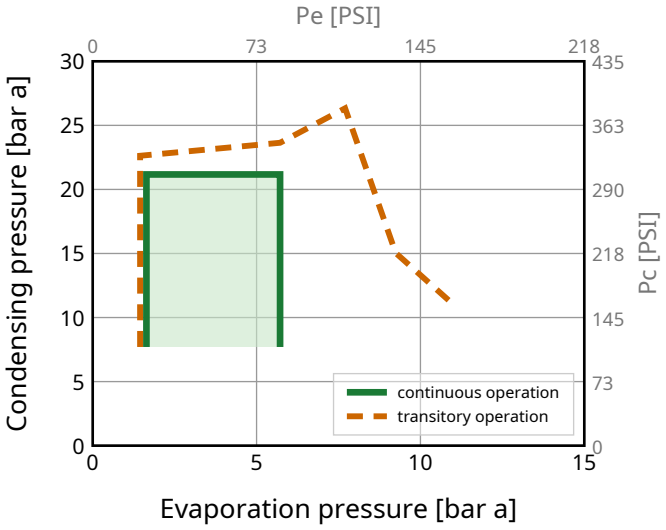
Components
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC10GH Configuration 1

Sales code:
104G8041

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	**480**	1639	413	**1.56**	5.33	308	2.72	10.46	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**352**	1202	303	**1.25**	4.28	281	2.57	8.49	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**408**	1392	351	**1.51**	5.16	270	2.51	9.52	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**924**	3153	795	**2.27**	7.76	406	3.34	20.45	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**762**	2599	655	**1.93**	6.58	395	3.26	18.71	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**796**	2716	685	**2.12**	7.22	376	3.13	19.97	**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	**294**	1005	253	**1.26**	4.31	233	2.34	6.41
-10	14	**423**	1442	364	**1.57**	5.34	270	2.51	9.23
-5	23	**564**	1925	485	**1.86**	6.35	303	2.68	12.38
0	32	**723**	2466	621	**2.17**	7.41	333	2.85	15.94
5	41	**902**	3076	775	**2.51**	8.58	359	3.01	20.02
10	50	**1104**	3768	950	**2.90**	9.90	381	3.17	24.72
15	59	**1334**	4553	1148	**3.35**	11.41	399	3.33	30.15
20	68	**1596**	5445	1372	**3.86**	13.16	414	3.48	36.45

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

-15	5	**233**	795	200	**0.99**	3.38	235	2.34	5.59
-10	14	**352**	1202	303	**1.25**	4.28	281	2.57	8.49
-5	23	**478**	1630	411	**1.48**	5.05	323	2.81	11.58
0	32	**613**	2092	527	**1.70**	5.80	361	3.03	14.95
5	41	**762**	2599	655	**1.93**	6.58	395	3.26	18.71
10	50	**927**	3164	797	**2.18**	7.43	426	3.48	22.97
15	59	**1113**	3798	957	**2.46**	8.39	453	3.70	27.86
20	68	**1323**	4514	1138	**2.78**	9.49	476	3.92	33.52

Model
SC10GH Configuration 2

Sales code:
104G8041

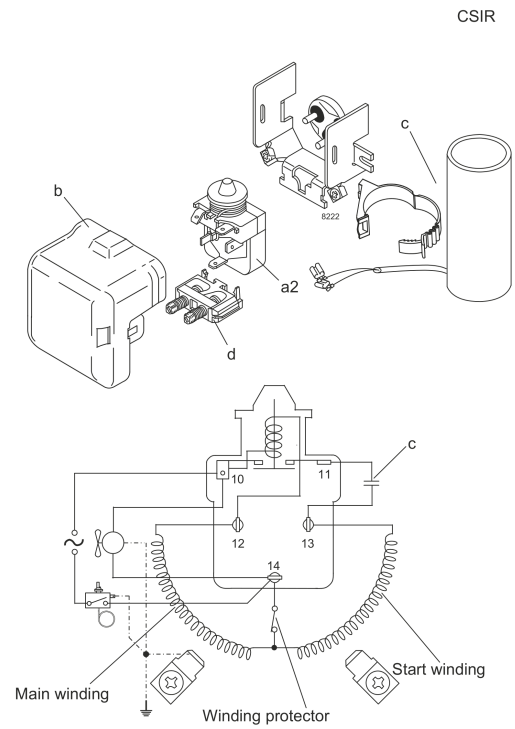
Configuration

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))	**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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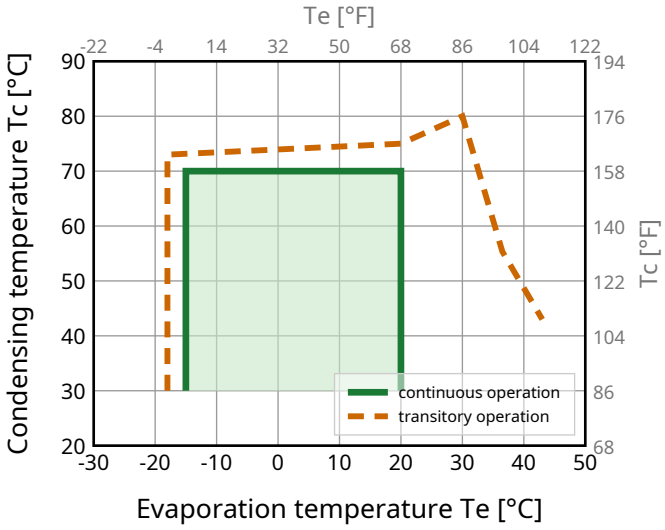
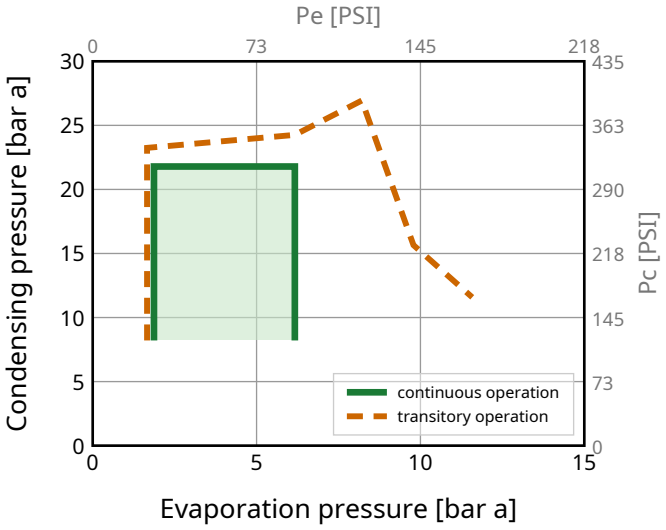
Components
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC10GH Configuration 2

Sales code:
104G8041

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	**505**	1722	434	**1.55**	5.28	326	2.87	12.58	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**366**	1249	315	**1.23**	4.18	299	2.70	10.27	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**425**	1450	366	**1.48**	5.06	286	2.62	11.51	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**951**	3245	818	**2.24**	7.65	424	3.49	24.16	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**772**	2635	664	**1.87**	6.38	413	3.42	22.15	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**802**	2737	690	**2.04**	6.96	393	3.29	23.65	**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	**314**	1072	270	**1.26**	4.31	248	2.38	7.83
-10	14	**446**	1521	383	**1.56**	5.31	286	2.62	11.16
-5	23	**590**	2013	507	**1.84**	6.29	320	2.83	14.85
0	32	**750**	2559	645	**2.15**	7.32	350	3.02	19.00
5	41	**929**	3170	799	**2.48**	8.46	375	3.18	23.72
10	50	**1131**	3860	973	**2.86**	9.74	396	3.31	29.14
15	59	**1360**	4641	1170	**3.29**	11.22	414	3.42	35.41
20	68	**1619**	5523	1392	**3.79**	12.92	427	3.51	42.68

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

-15	5	**245**	837	211	**0.97**	3.32	252	2.40	6.84
-10	14	**366**	1249	315	**1.23**	4.18	299	2.70	10.27
-5	23	**492**	1678	423	**1.44**	4.92	341	2.96	13.88
0	32	**626**	2136	538	**1.65**	5.63	379	3.20	17.80
5	41	**772**	2635	664	**1.87**	6.38	413	3.42	22.15
10	50	**934**	3187	803	**2.11**	7.20	443	3.61	27.06
15	59	**1115**	3805	959	**2.38**	8.11	469	3.77	32.70
20	68	**1319**	4499	1134	**2.69**	9.16	491	3.91	39.22

Model
SC10GH Configuration 3

Sales code:
104G8041

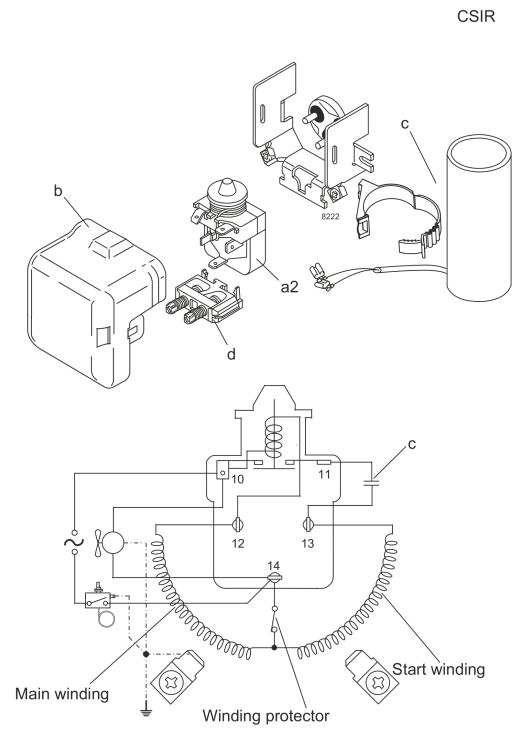
Configuration

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))	**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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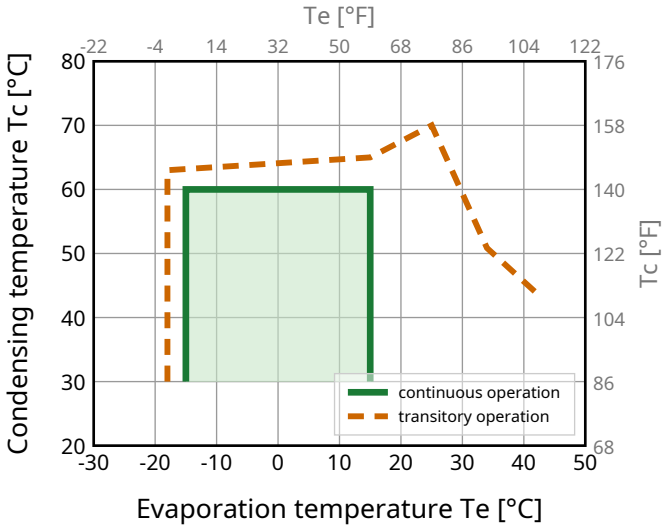
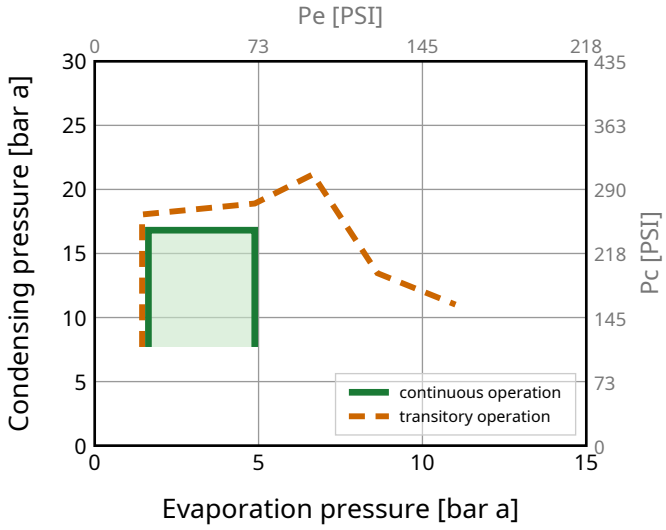
Components
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC10GH Configuration 3

Sales code:
104G8041

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	**555**	1893	477	**1.49**	5.07	374	2.52	12.08	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**420**	1435	362	**1.24**	4.22	340	2.37	10.14	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**516**	1762	444	**1.53**	5.23	337	2.19	12.04	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1036**	3536	891	**2.02**	6.88	514	3.26	22.94	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**849**	2896	730	**1.71**	5.84	496	3.18	20.85	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**909**	3100	781	**1.94**	6.62	468	2.91	22.79	**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	**421**	1436	362	**1.40**	4.77	301	2.05	9.15
-10	14	**535**	1825	460	**1.59**	5.42	337	2.19	11.68
-5	23	**674**	2299	580	**1.81**	6.17	373	2.35	14.79
0	32	**841**	2869	723	**2.06**	7.03	408	2.52	18.55
5	41	**1038**	3543	893	**2.35**	8.01	442	2.69	23.06
10	50	**1269**	4331	1092	**2.67**	9.12	475	2.88	28.41
15	59	**1537**	5244	1322	**3.04**	10.38	505	3.07	34.72

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

-15	5	**318**	1086	274	**1.11**	3.78	287	2.13	7.64
-10	14	**420**	1435	362	**1.24**	4.22	340	2.37	10.14
-5	23	**541**	1846	465	**1.38**	4.71	392	2.63	13.11
0	32	**683**	2330	587	**1.54**	5.24	444	2.90	16.65
5	41	**849**	2896	730	**1.71**	5.84	496	3.18	20.85
10	50	**1042**	3555	896	**1.91**	6.52	545	3.46	25.81
15	59	**1265**	4315	1088	**2.13**	7.27	593	3.76	31.66

Model
SC10GH Configuration 4

Sales code:
104G8041

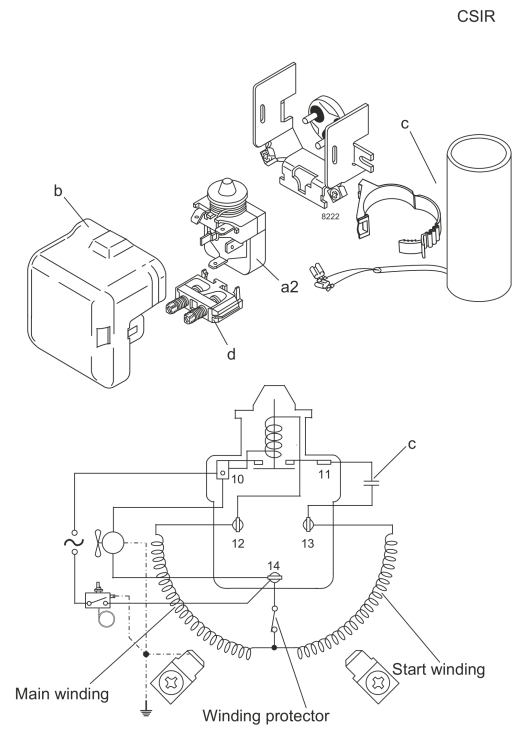
Configuration

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))	**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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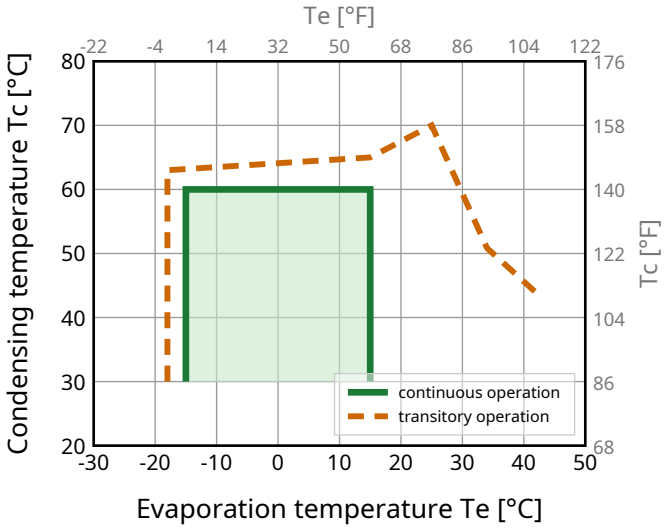
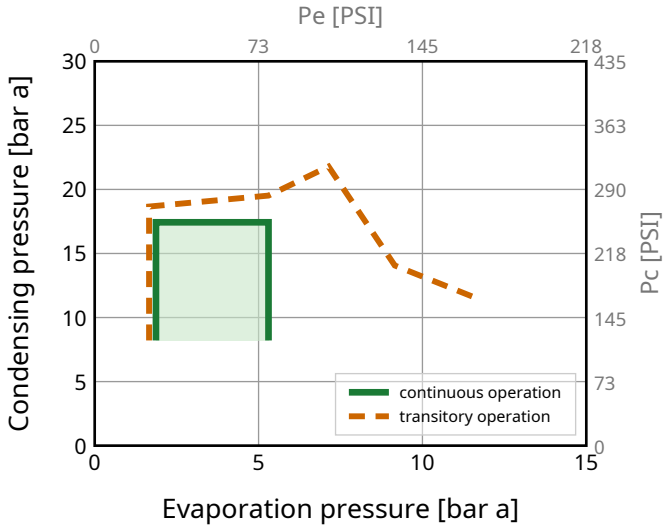
Components
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model

SC10GH Configuration 4

Sales code:

104G8041

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	**583**	1990	501	**1.47**	5.02	396	2.61	14.54	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**437**	1492	376	**1.21**	4.13	362	2.42	12.27	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**538**	1836	463	**1.50**	5.13	358	2.40	14.57	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1067**	3640	917	**1.99**	6.78	537	3.38	27.11	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**861**	2937	740	**1.66**	5.66	519	3.29	24.69	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**916**	3125	788	**1.87**	6.38	490	3.13	27.01	**EN12900 HBP**

Performance Tables

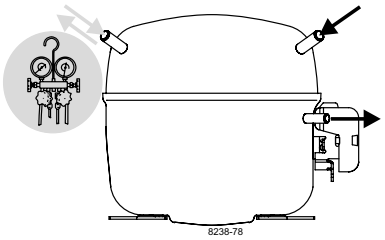
R513A, 230 V/60 Hz, CSIR, fan 3m/s

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	**449**	1531	386	**1.40**	4.77	321	2.20	11.18
-10	14	**564**	1926	485	**1.58**	5.38	358	2.40	14.13
-5	23	**705**	2405	606	**1.79**	6.10	394	2.60	17.74
0	32	**873**	2978	751	**2.03**	6.94	429	2.79	22.11
5	41	**1071**	3653	921	**2.31**	7.90	463	2.98	27.33
10	50	**1301**	4439	1119	**2.63**	8.98	494	3.15	33.51
15	59	**1567**	5345	1347	**2.99**	10.21	524	3.31	40.78

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

-15	5	**335**	1144	288	**1.09**	3.72	308	2.12	9.36
-10	14	**437**	1492	376	**1.21**	4.13	362	2.42	12.27
-5	23	**557**	1902	479	**1.34**	4.58	415	2.72	15.73
0	32	**698**	2380	600	**1.49**	5.09	468	3.00	19.84
5	41	**861**	2937	740	**1.66**	5.66	519	3.29	24.69
10	50	**1050**	3582	903	**1.85**	6.31	568	3.56	30.42
15	59	**1267**	4324	1090	**2.06**	7.03	615	3.82	37.16



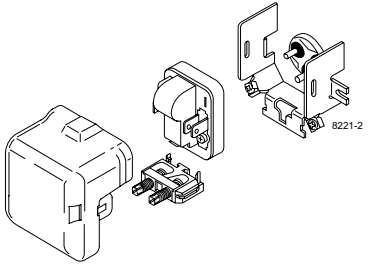
SC Compressors

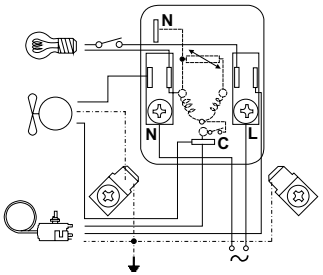
SECOP

Keep electrical equipment clear from oil, chemicals, and water

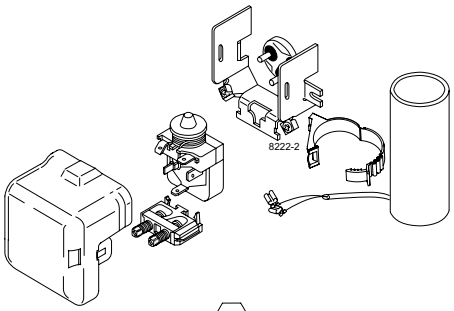
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

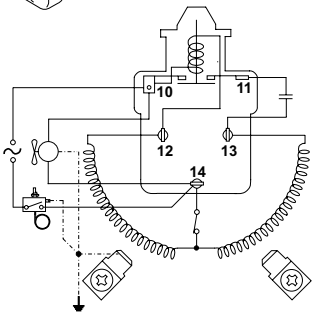
RSIR



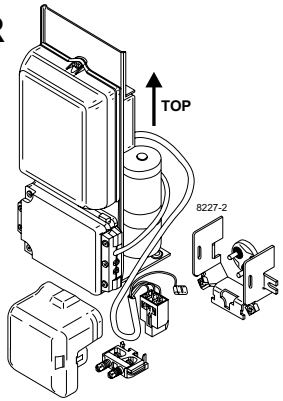


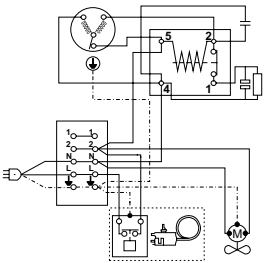
CSIR

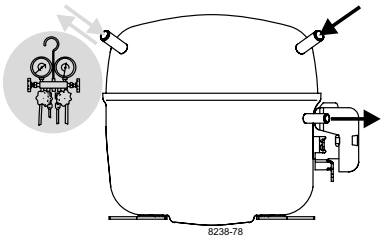




CSCR







SC Compressors

SECOP

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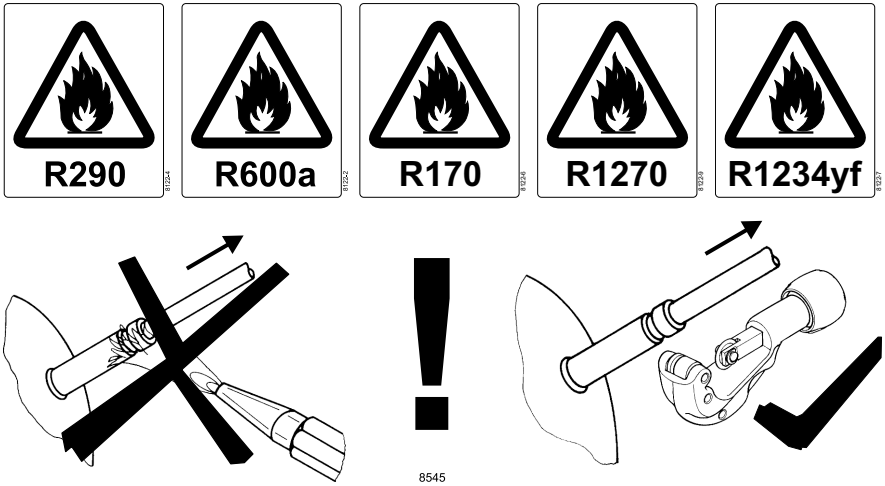
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



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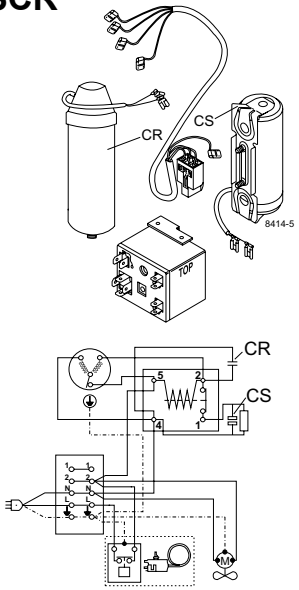

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be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