Single
Packs

Single Pack SC21G 220-240V 50/60Hz CSCR

Single pack code number: **195B4840**

Position	Title	Code	Amount
1	Compressor SC21G	104G8148	1
2	SC starting device (550mm)	117-7039	1
3	Cord relief	103N1004	1
4	Cover	103N2008	1
5	Snap-on in quantities | ø7,3 | ø16mm	118-1919	1

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Model
SC21G

Sales code:
104G8148

Compressor Data

Refrigerant(s)	**R1234yf / R513A**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**13.60 kg / 29.98lbs**
Displacement	**20.95 cm3 / 1.28cu.in**
Compressors on pallet	**80**



General – Configurations With SC21G

–	**Conf. 1**	**Conf. 2**	**Conf. 3**	**Conf. 4**
Motor configuration	CSCR	CSCR	CSCR	CSCR
Power supply (nominal)	220-240 V/50 Hz	208-230 V/60 Hz	220-240 V/50 Hz	220-240 V/60 Hz
Number of phases	1	1	1	1
Voltage range	198-254 V	198-253 V	187-254 V	198-253 V
Approvals	UL	UL	UL	UL
Starting torque	HST	HST	HST	HST
Refrigerant	R1234yf	R1234yf	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

- Provision for PE Grounding is located at the PE Stamp on the compressor

Model
SC21G

Sales code:
104G8148

Compressor Design

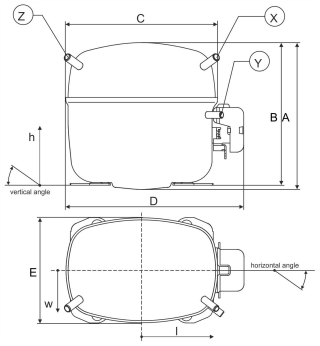
Oil type	**POE**	Winding resistance main	**3.5 Ohm**
Oil viscosity	**22cSt**	Winding resistance aux	**13 Ohm**
Oil quantity	**550 cm3 / 18.60fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

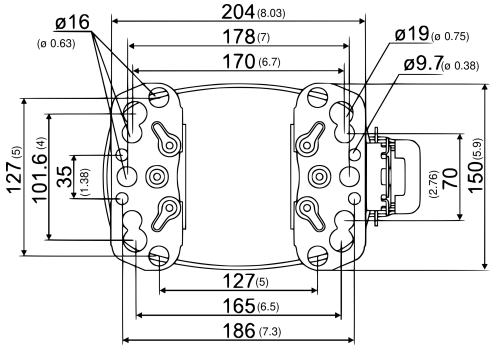
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



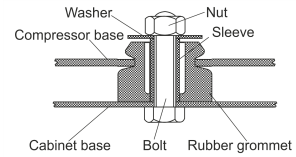
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

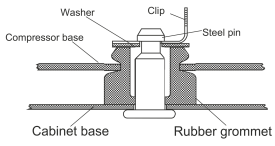


Dimensions in mm [in]

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
SC21G Configuration 1

Sales code:
104G8148

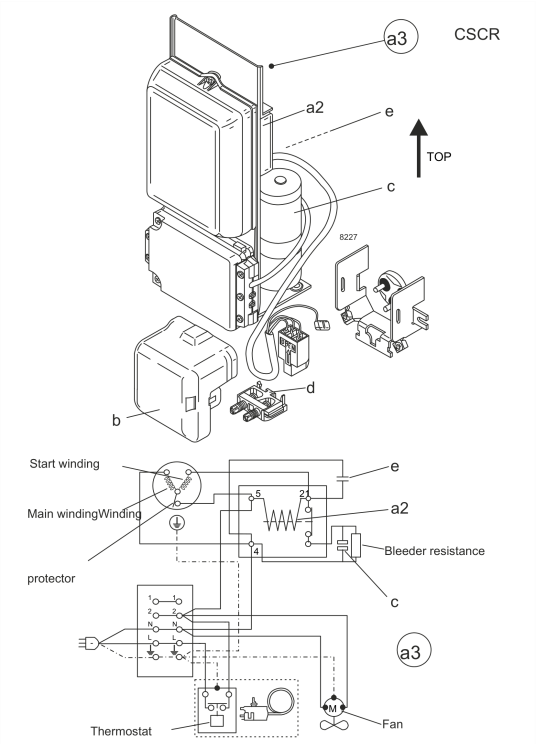
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R1234yf**
Application	**LBP+MBP+HBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**22 A**
RLA (rated load amps / 1s/ U(N))	**3.9 A**
Cut in current (U(N))	**22 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

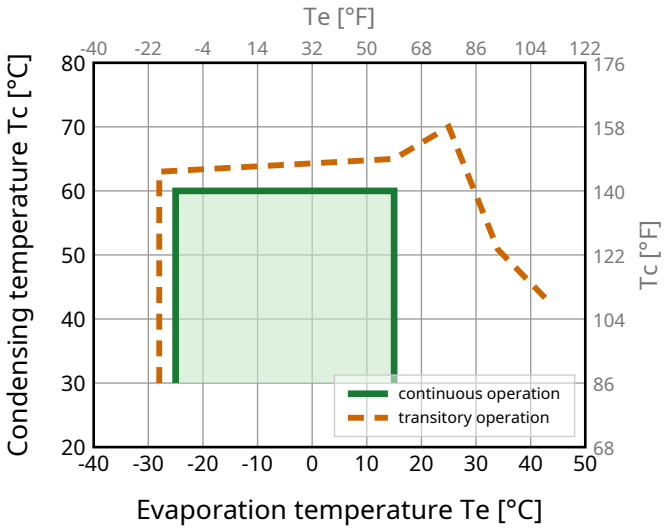


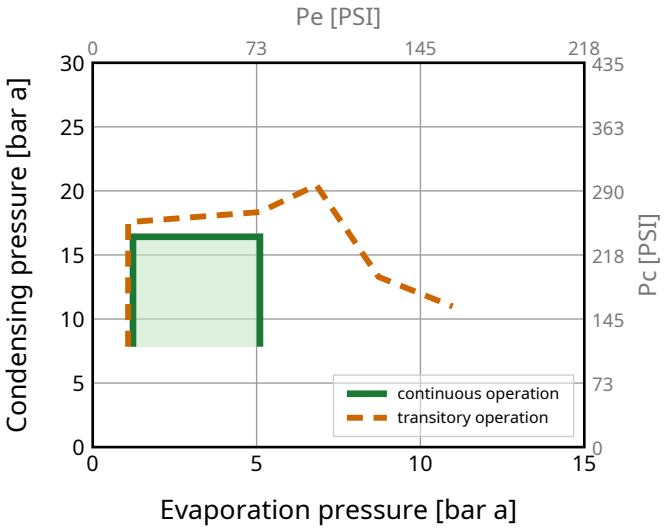
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Components
a3 SC starter kit (550mm) 117-7039
b plastic cover 103N2008
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7043

Operation Pressure Range





Model
SC21G Configuration 1

Sales code:
104G8148

Standard Conditions

R1234yf, 220 V/50 Hz, CSCR, 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	**508**	1735	437	**1.27**	4.35	399	2.35	11.97	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1048**	3576	901	**1.68**	5.73	625	3.19	28.31	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1838**	6270	1580	**2.38**	8.12	772	3.82	50.60	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**250**	855	215	**0.91**	3.12	274	1.99	6.86	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**925**	3155	795	**1.59**	5.43	582	3.02	27.41	**EN12900 MBP**
5 41	50 122	20 68	50 122	**1526**	5206	1312	**2.06**	7.03	741	3.69	49.52	**EN12900 HBP**

Performance Tables

R1234yf, 220 V/50 Hz, CSCR, 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	**453**	1545	389	**1.13**	3.85	401	2.35	12.15
-20	-4	**599**	2045	515	**1.29**	4.41	464	2.57	16.13
-10	14	**979**	3341	842	**1.68**	5.74	582	3.02	26.59
0	32	**1476**	5035	1269	**2.17**	7.40	680	3.42	40.56
10	50	**2089**	7129	1797	**2.80**	9.54	747	3.71	58.39
15	59	**2440**	8326	2099	**3.19**	10.88	765	3.79	68.94

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

-25	-13	**355**	1211	305	**0.95**	3.26	372	2.26	10.75
-20	-4	**470**	1604	404	**1.06**	3.62	443	2.50	14.29
-10	14	**788**	2689	678	**1.36**	4.63	581	3.02	24.19
0	32	**1224**	4176	1053	**1.74**	5.94	702	3.52	38.09
10	50	**1778**	6067	1529	**2.23**	7.63	795	3.92	56.39
15	59	**2100**	7164	1806	**2.54**	8.66	827	4.05	67.40

Model
SC21G Configuration 2

Sales code:
104G8148

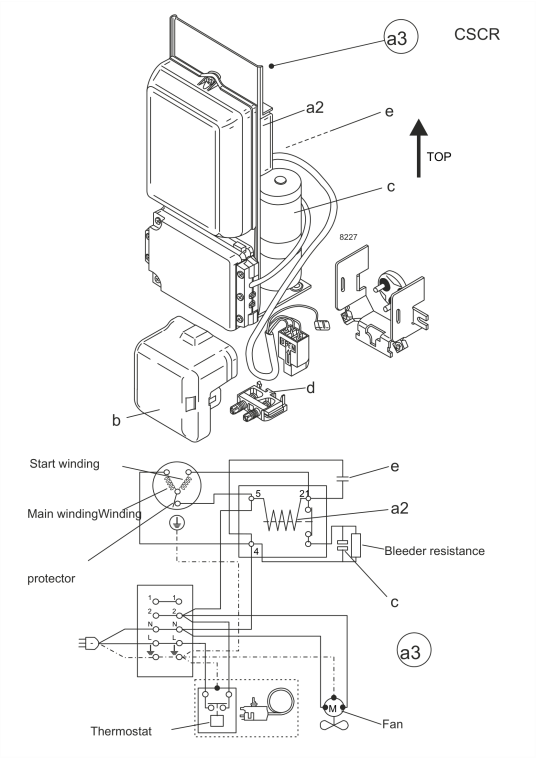
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R1234yf**
Application	**LBP**
Voltage range	**198-253 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**22 A**
RLA (rated load amps / 1s/ U(N))	**3.9 A**
Cut in current (U(N))	**22 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

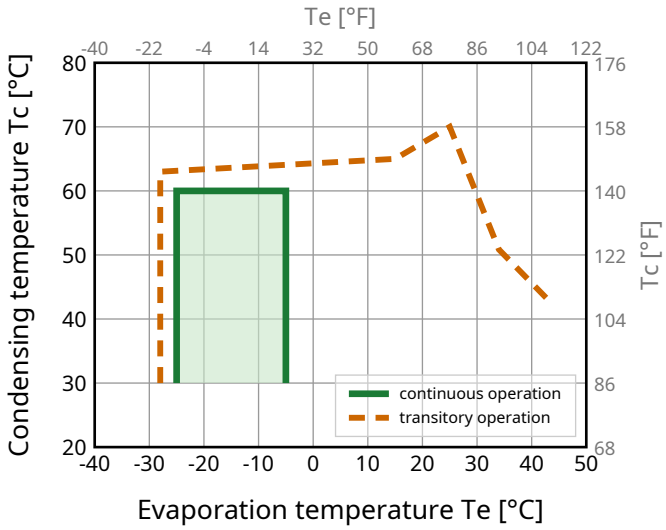


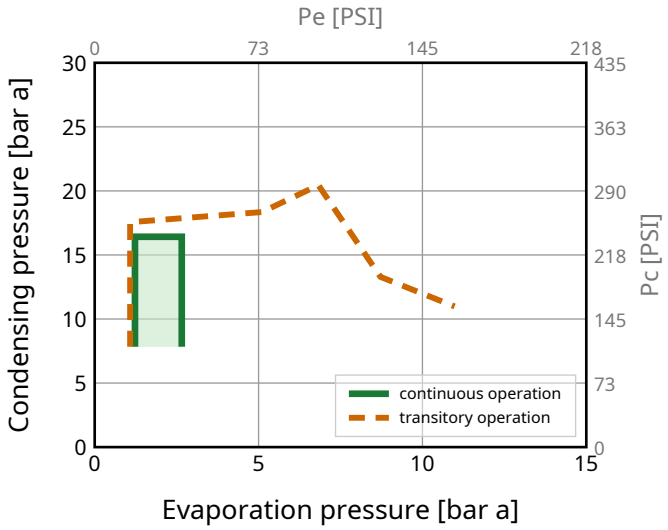
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Components
a3 SC starter kit (550mm) 117-7039
b plastic cover 103N2008
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7043

Operation Pressure Range





Model Sales code:

SC21G Configuration 2 **104G8148**

Standard Conditions

R1234yf, 230 V/60 Hz, CSCR, 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	**535**	1824	460	**1.11**	3.80	480	2.43	12.59	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1176**	4011	1011	**1.66**	5.67	708	3.35	31.75	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**2136**	7289	1837	**2.34**	7.99	912	4.23	58.82	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**265**	903	228	**0.84**	2.85	316	1.86	7.25	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**988**	3369	849	**1.57**	5.36	629	3.02	29.27	**EN12900 MBP**
5 41	50 122	20 68	50 122	**1722**	5876	1481	**1.99**	6.80	864	4.01	55.89	**EN12900 HBP**

Performance Tables

R1234yf, 230 V/60 Hz, CSCR, 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	**474**	1616	407	**1.08**	3.68	439	2.28	12.70
-20	-4	**633**	2158	544	**1.26**	4.31	501	2.51	17.03
-15	5	**822**	2806	707	**1.46**	4.97	564	2.75	22.22
-10	14	**1046**	3568	899	**1.66**	5.67	629	3.02	28.39
-5	23	**1306**	4455	1123	**1.88**	6.40	696	3.30	35.65

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

-25	-13	**368**	1254	316	**0.81**	2.75	457	2.34	11.13
-20	-4	**507**	1729	436	**0.97**	3.30	525	2.60	15.40
-15	5	**677**	2309	582	**1.14**	3.89	593	2.87	20.66
-10	14	**880**	3003	757	**1.33**	4.53	663	3.15	27.01
-5	23	**1120**	3823	964	**1.53**	5.21	733	3.45	34.60

Model
SC21G Configuration 3

Sales code:
104G8148

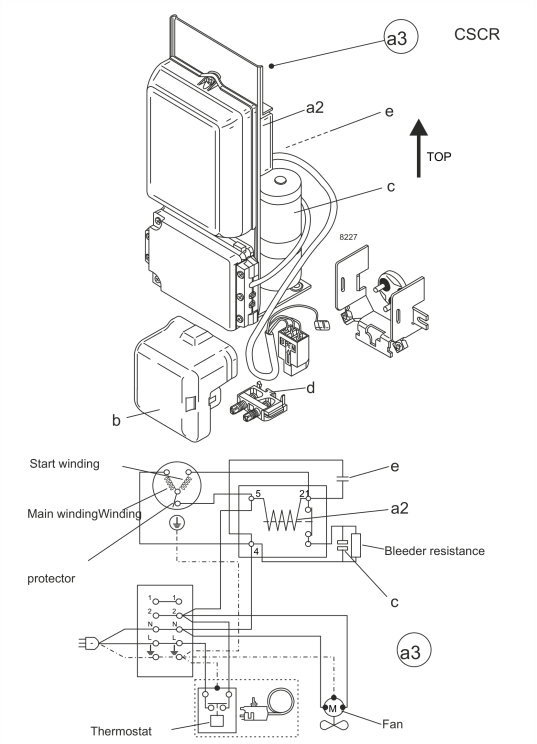
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**LBP+MBP+HBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**22 A**
RLA (rated load amps / 1s/ U(N))	**3.9 A**
Cut in current (U(N))	**22 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

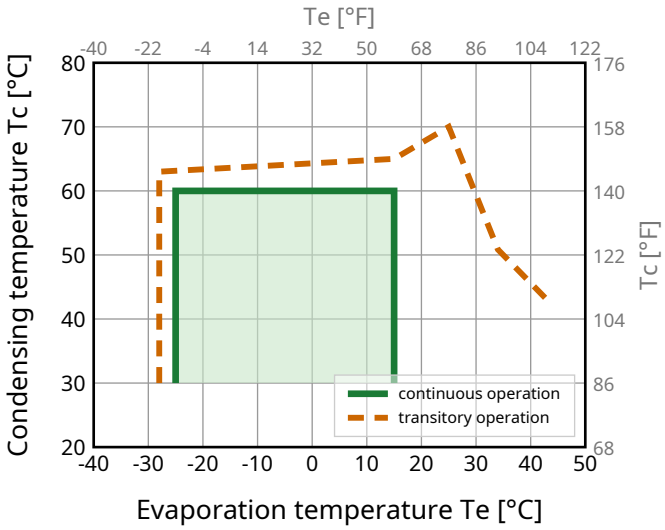


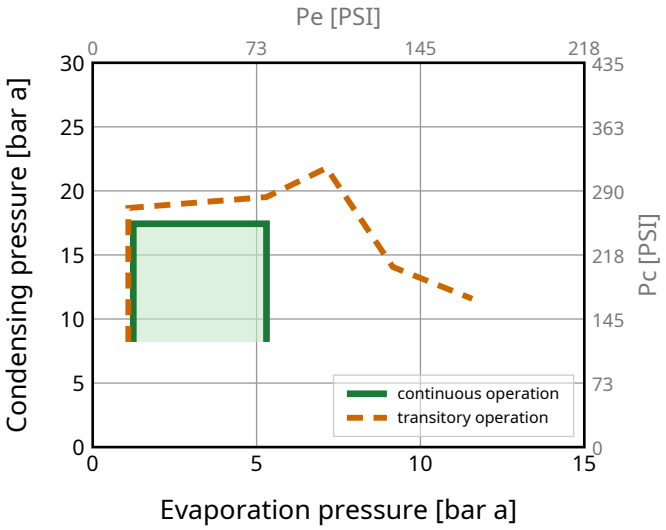
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Components
a3 SC starter kit (550mm) 117-7039
b plastic cover 103N2008
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7043

Operation Pressure Range





Model Sales code:

SC21G Configuration 3 **104G8148**

Standard Conditions

R513A, 220 V/50 Hz, CSCR, 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	**511**	1743	439	**1.24**	4.24	411	2.40	11.18	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1089**	3716	937	**1.66**	5.65	658	3.38	27.15	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1939**	6617	1668	**2.35**	8.00	826	4.06	49.27	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**249**	850	214	**0.89**	3.05	279	1.87	6.26	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**971**	3313	835	**1.59**	5.44	609	3.19	26.29	**EN12900 MBP**
5 41	50 122	20 68	50 122	**1635**	5579	1406	**2.07**	7.06	790	3.92	48.21	**EN12900 HBP**

Performance Tables

R513A, 220 V/50 Hz, CSCR, 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	**460**	1570	396	**1.12**	3.81	412	2.40	11.38
-20	-4	**615**	2097	529	**1.28**	4.37	479	2.67	15.26
-10	14	**1019**	3476	876	**1.67**	5.71	609	3.19	25.50
0	32	**1553**	5299	1336	**2.16**	7.36	720	3.63	39.34
10	50	**2222**	7581	1911	**2.78**	9.49	799	3.95	57.22
15	59	**2608**	8898	2243	**3.17**	10.83	822	4.04	67.89

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

-25	-13	**361**	1231	310	**0.94**	3.22	382	2.28	9.99
-20	-4	**483**	1648	415	**1.05**	3.60	458	2.59	13.43
-10	14	**823**	2809	708	**1.35**	4.61	609	3.19	23.10
0	32	**1294**	4416	1113	**1.73**	5.92	746	3.74	36.80
10	50	**1900**	6483	1634	**2.22**	7.58	855	4.17	55.05
15	59	**2255**	7694	1939	**2.52**	8.61	894	4.33	66.12

Model
SC21G Configuration 4

Sales code:
104G8148

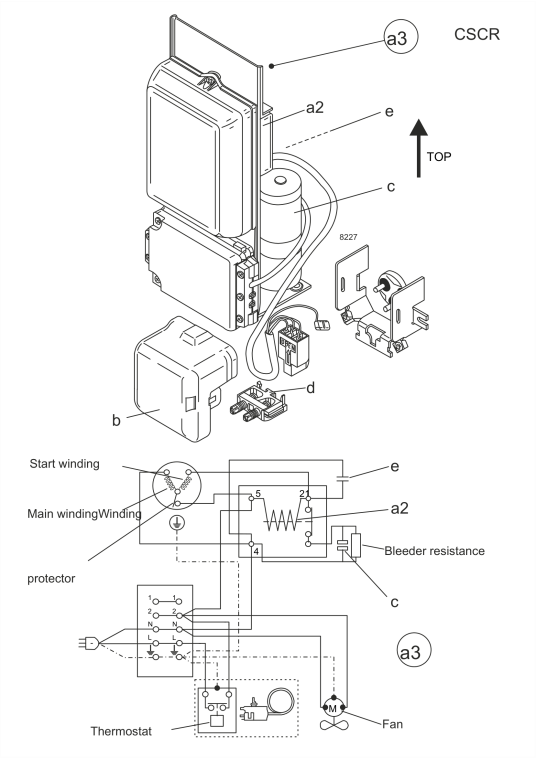
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/60 Hz 1~**
Refrigerant	**R513A**
Application	**LBP**
Voltage range	**198-253 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**22 A**
RLA (rated load amps / 1s/ U(N))	**3.9 A**
Cut in current (U(N))	**22 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

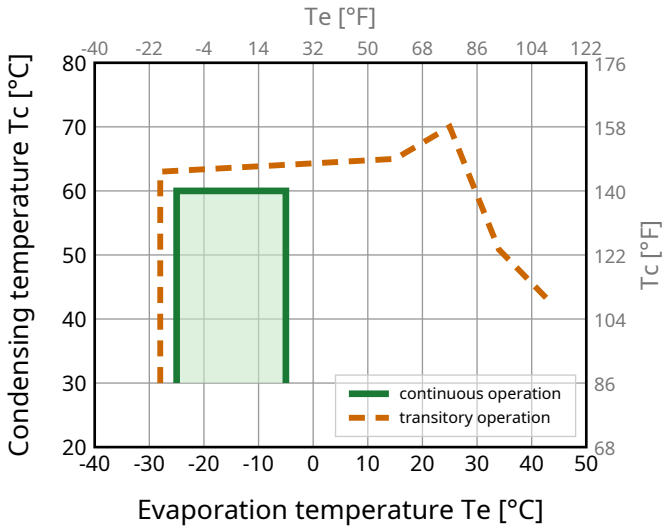


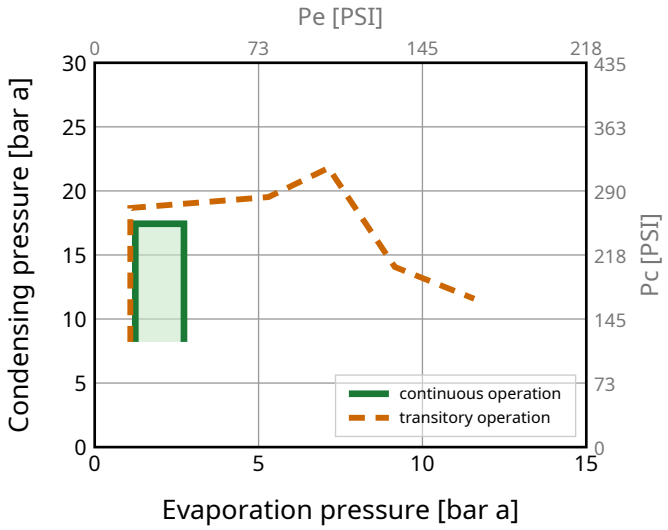
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Components
a3 SC starter kit (550mm) 117-7039
b plastic cover 103N2008
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7043

Operation Pressure Range





Model
SC21G Configuration 4

Sales code:
104G8148

Standard Conditions

R513A, 230 V/60 Hz, CSCR, 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	**494**	1684	424	**1.10**	3.74	450	2.09	10.80	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1221**	4167	1050	**1.65**	5.61	742	3.17	30.44	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**2255**	7694	1939	**2.32**	7.91	972	4.02	57.30	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**262**	893	225	**0.84**	2.87	311	1.57	6.58	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**1043**	3559	897	**1.57**	5.37	663	2.88	28.25	**EN12900 MBP**
5 41	50 122	20 68	50 122	**1844**	6293	1586	**2.02**	6.88	914	3.81	54.38	**EN12900 HBP**

Performance Tables

R513A, 230 V/60 Hz, CSCR, 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	**481**	1640	413	**1.07**	3.66	449	2.08	11.89
-20	-4	**653**	2229	562	**1.25**	4.28	522	2.35	16.22
-15	5	**857**	2923	737	**1.45**	4.93	592	2.62	21.34
-10	14	**1094**	3734	941	**1.65**	5.64	663	2.88	27.40
-5	23	**1372**	4680	1180	**1.87**	6.38	734	3.14	34.52

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

-25	-13	**329**	1124	283	**0.80**	2.72	413	1.95	9.12
-20	-4	**495**	1688	425	**0.97**	3.31	510	2.31	13.74
-15	5	**688**	2348	592	**1.15**	3.91	601	2.65	19.21
-10	14	**915**	3121	787	**1.33**	4.54	688	2.97	25.67
-5	23	**1178**	4021	1013	**1.53**	5.21	772	3.28	33.27