Single
Packs

Single Pack SC15G 220-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4420**

Position	Title	Code	Amount
1	Compressor SC15G	104G8520	1
2	Starting relay	117U7005	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5017	1
4	Cord relief	103N1004	1
5	Cover	103N2009	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
SC15G

Sales code:
104G8520

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

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

Model
SC15G

Sales code:
104G8520

Compressor Design

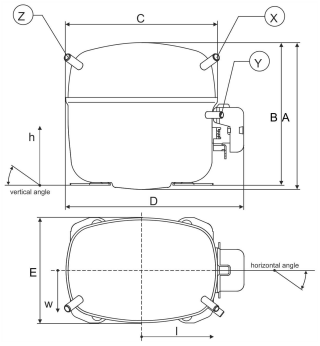
Oil type	**POE**	Winding resistance main	**5.13 Ohm**
Oil viscosity	**22cSt**	Winding resistance aux	**13.51 Ohm**
Oil quantity	**507 / 17.14fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,410 cm3 / 47.68fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

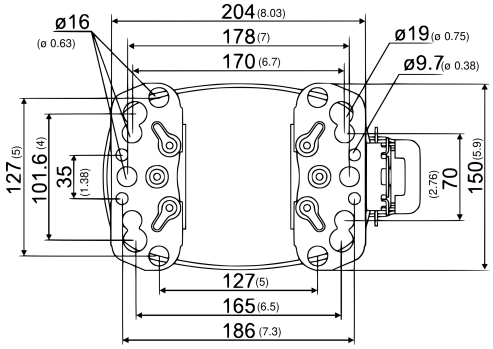
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



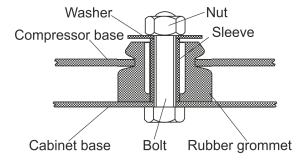
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in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

Mounting Accessories

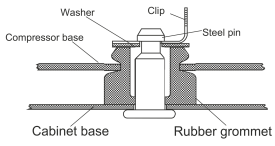


Dimensions in mm [in]

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:
104G8520

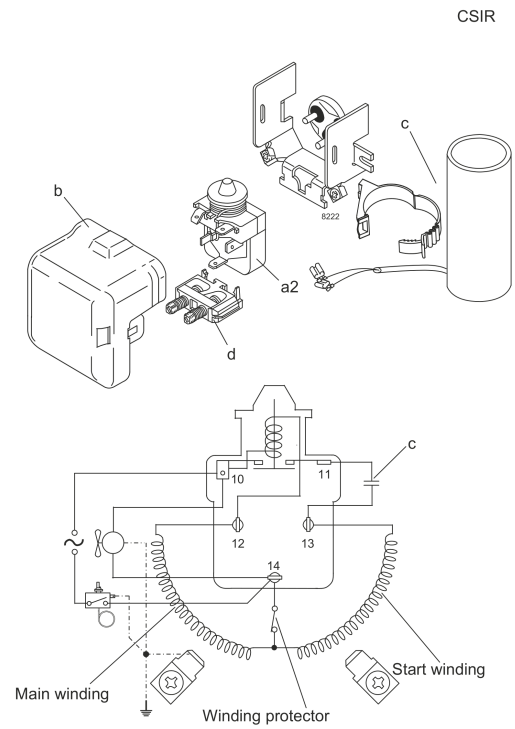
Configuration

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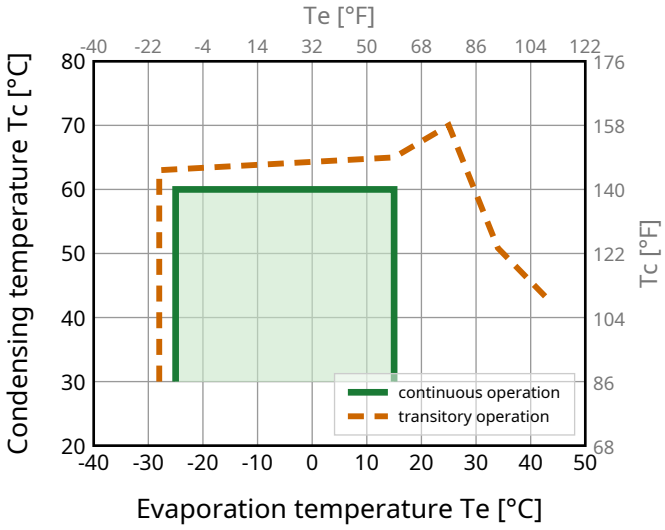
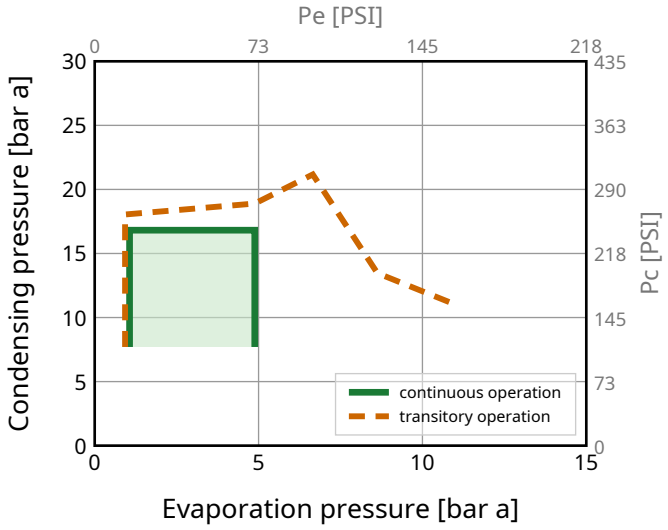
Components
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model
SC15G Configuration 1

Sales code:
104G8520

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:
104G8520

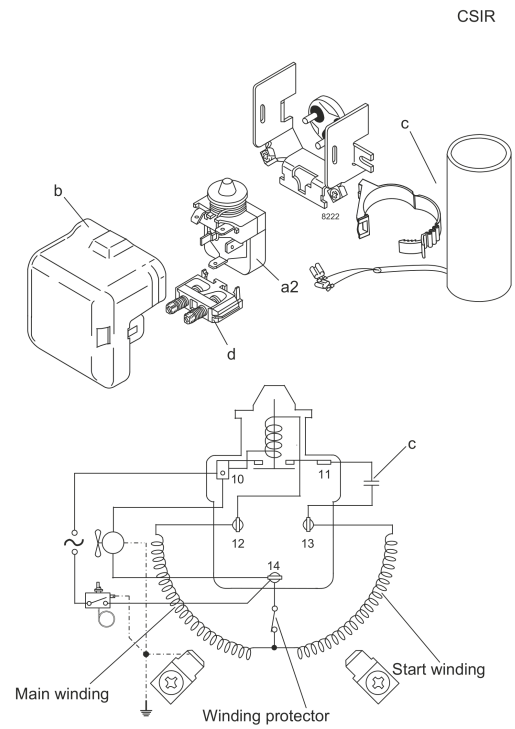
Configuration

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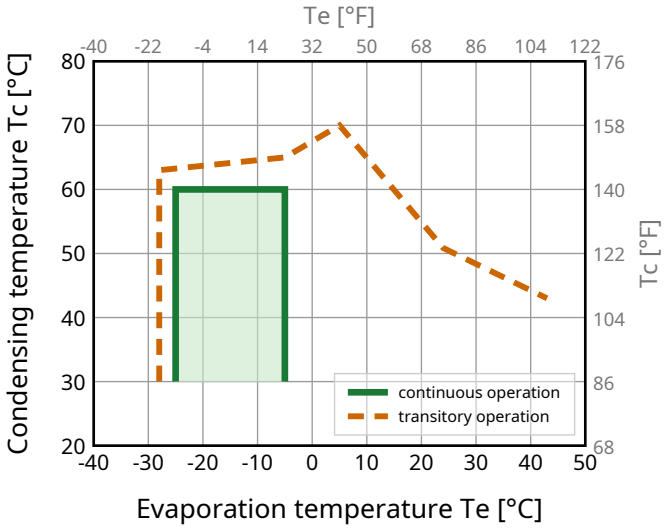
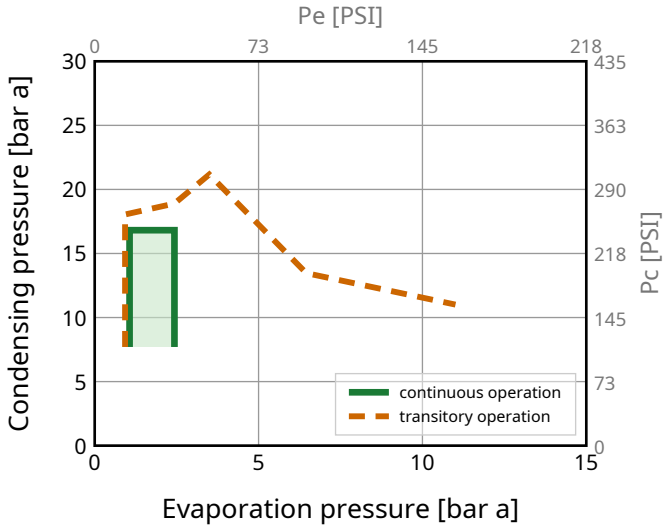
Components
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model Sales code:

SC15G Configuration 2 **104G8520**

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:
104G8520

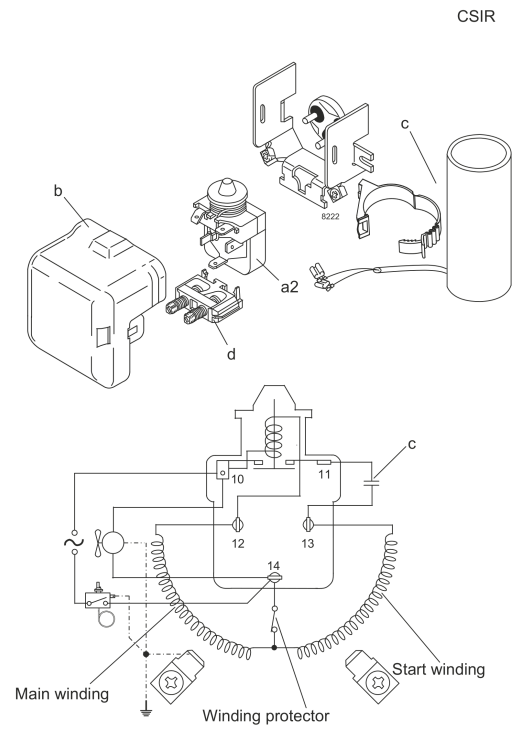
Configuration

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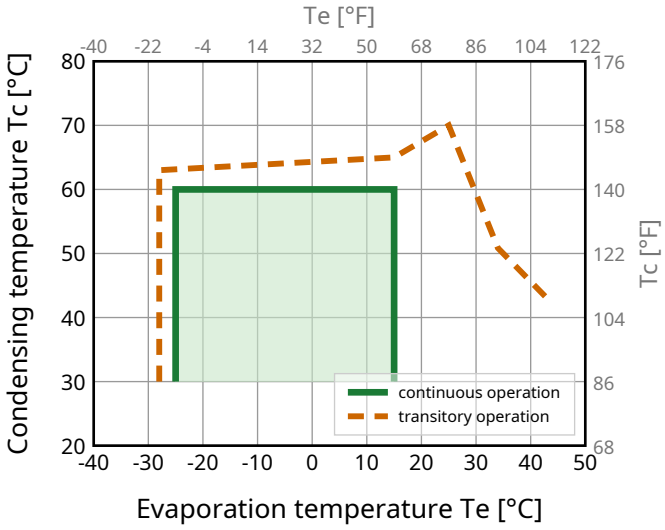
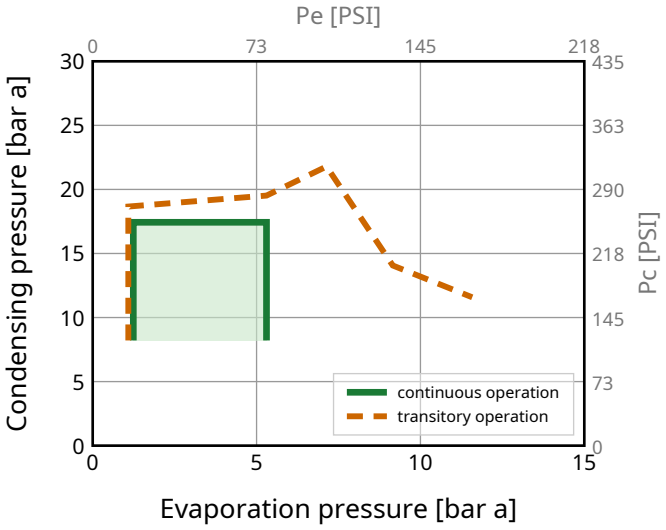
Components
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model
SC15G Configuration 3

Sales code:
104G8520

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:
104G8520

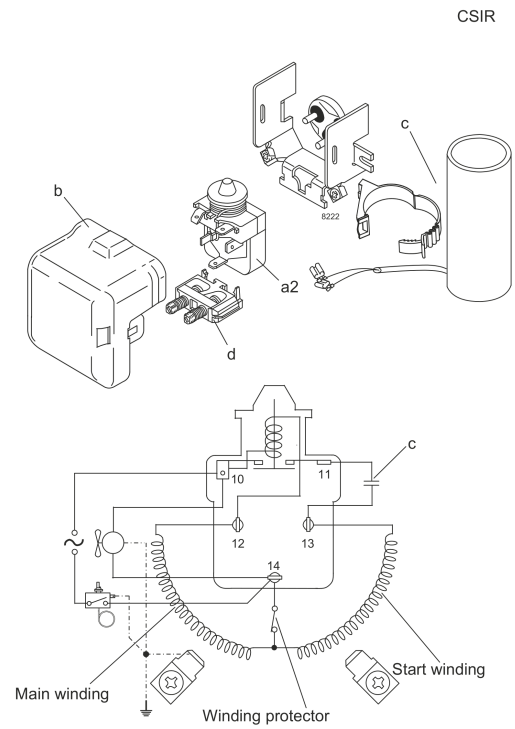
Configuration

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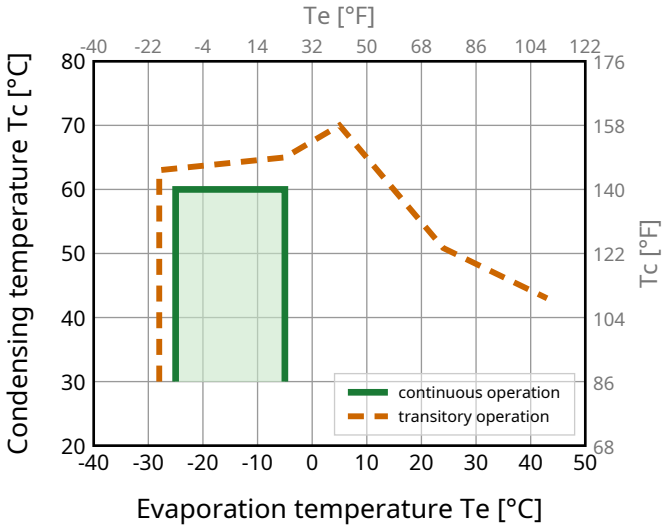
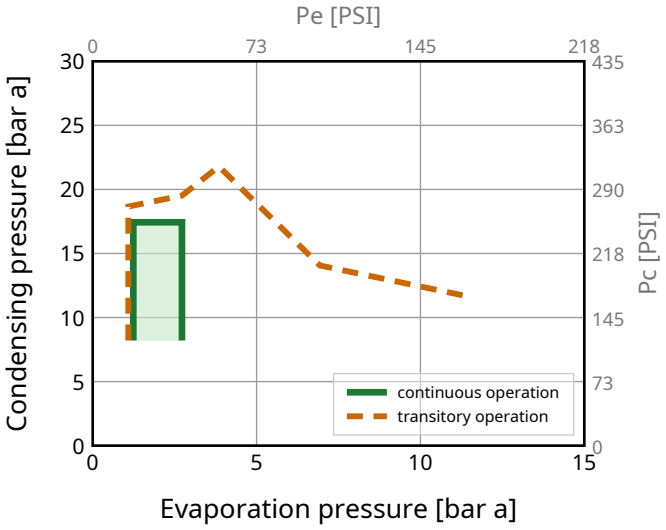
Components
a2 relay 117U6005
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model Sales code:

SC15G Configuration 4 **104G8520**

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

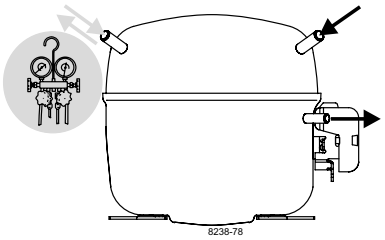
R513A, 230 V/60 Hz, CSIR, fan 3m/s

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



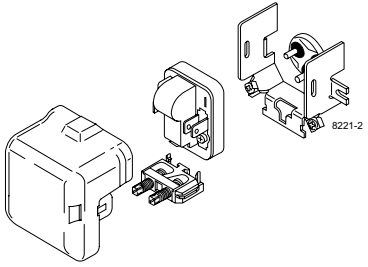
SC Compressors

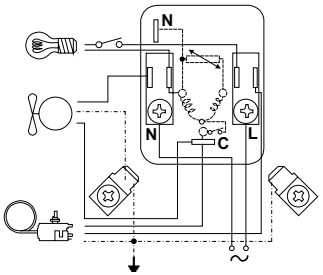
SECOP

Keep electrical equipment clear from oil, chemicals, and water

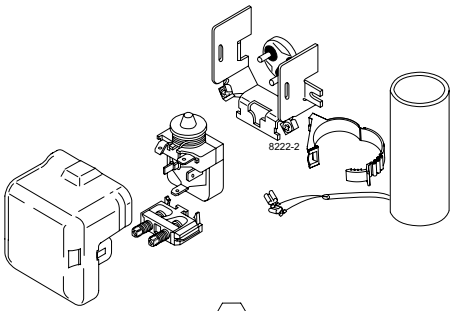
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

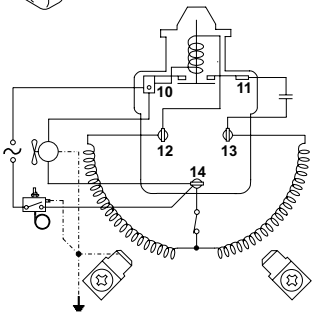
RSIR



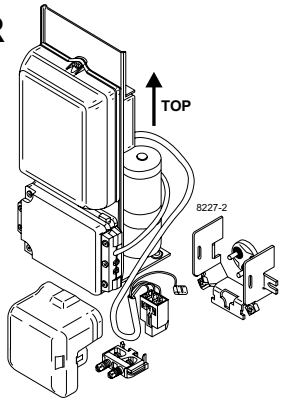


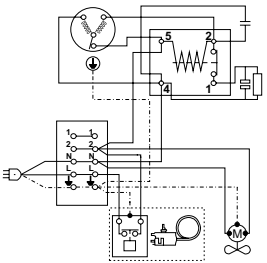
CSIR

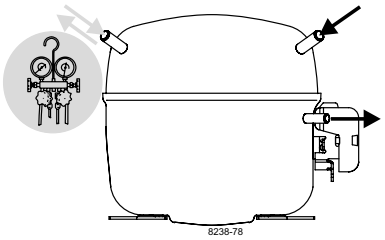




CSCR







SC Compressors

SECOP

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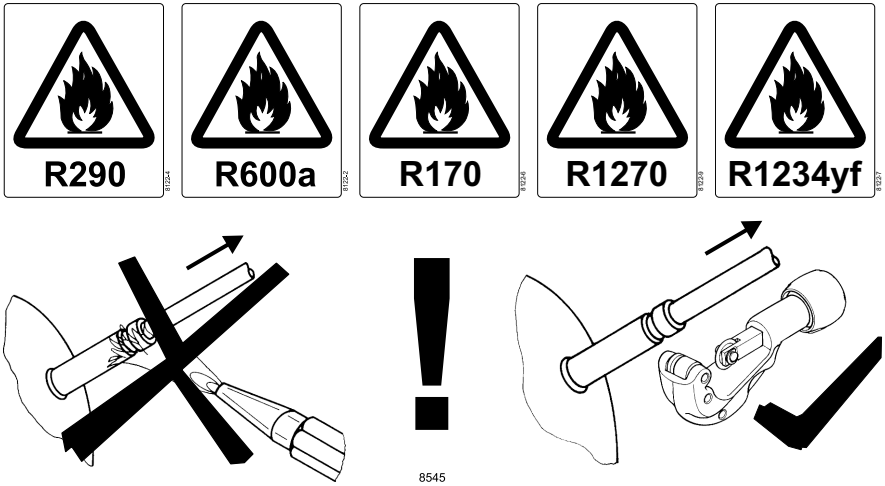
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



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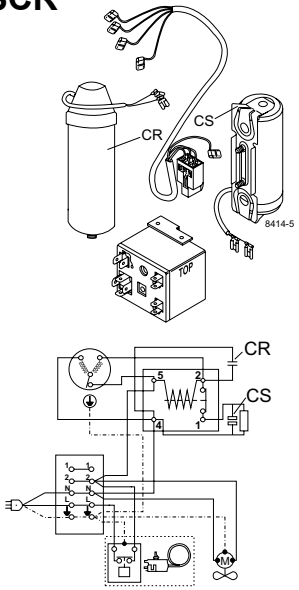

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be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