Single
Packs

Single Pack SC12G 208-230V 60Hz CSIR

Single pack code number: **195B4489**

Position	Title	Code	Amount
1	Compressor SC12G	104G8245	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
SC12G

Sales code:
104G8245

Compressor Data

Refrigerant(s)	**R134a**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**13.00 kg / 28.66lbs**
Displacement	**12.87 cm3 / 0.79cu.in**
Compressors on pallet	**80**

General – Configurations With SC12G

–	**Conf. 1**
Motor configuration	CSIR
Power supply (nominal)	208-230 V/60 Hz
Number of phases	1
Voltage range	187-254 V
Approvals	VDE, UL, KC
Starting torque	HST
Refrigerant	R134a
Application	MBP
Hot gas defrost	OK
Long interval pull down	OK

Application Notes

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

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SC12G

Sales code:
104G8245

Compressor Design

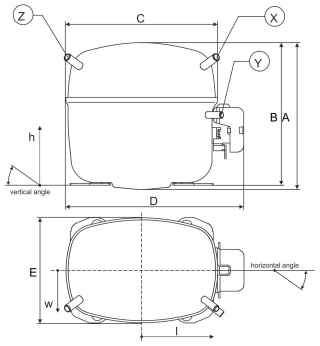
Oil type	**POE**	Winding resistance main	**4.4 Ohm**
Oil viscosity	**22cSt**	Winding resistance aux	**14 Ohm**
Oil quantity	**500 / 16.91fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,410 cm3 / 47.68fl.oz**	Max. discharge temp.	**135°C / 275°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

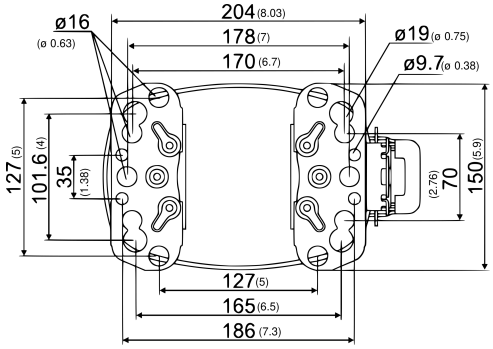
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



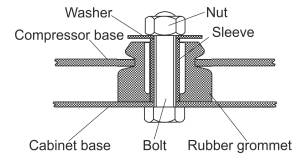
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

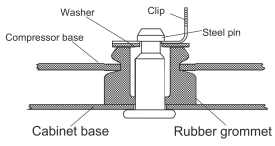


Dimensions in mm [in]

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
SC12G Configuration 1

Sales code:
104G8245

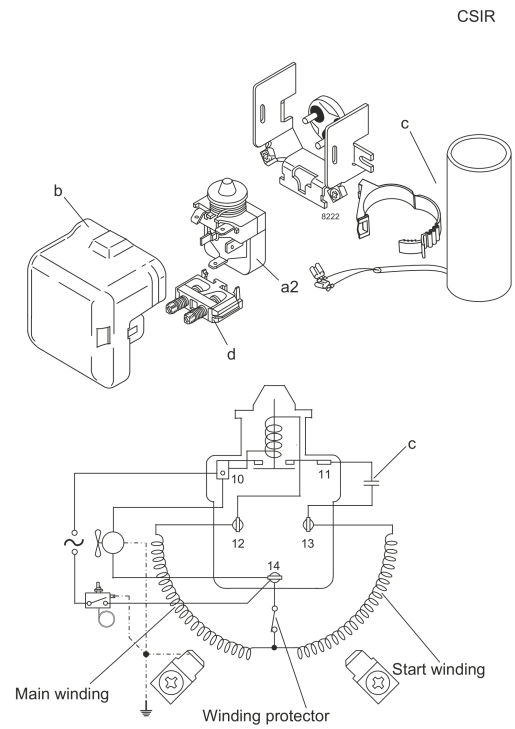
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R134a**
Application	**MBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**VDE, UL, KC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**23.4 A**
RLA (rated load amps / 1s/ U(N))	**4.3 A**
Cut in current (U(N))	**23.4 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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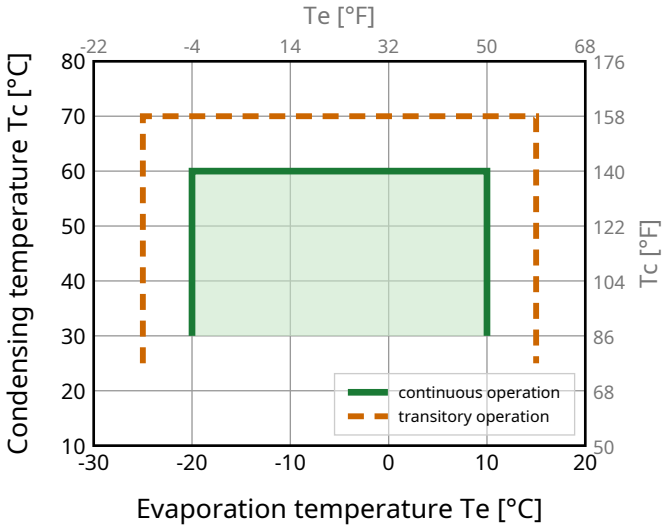
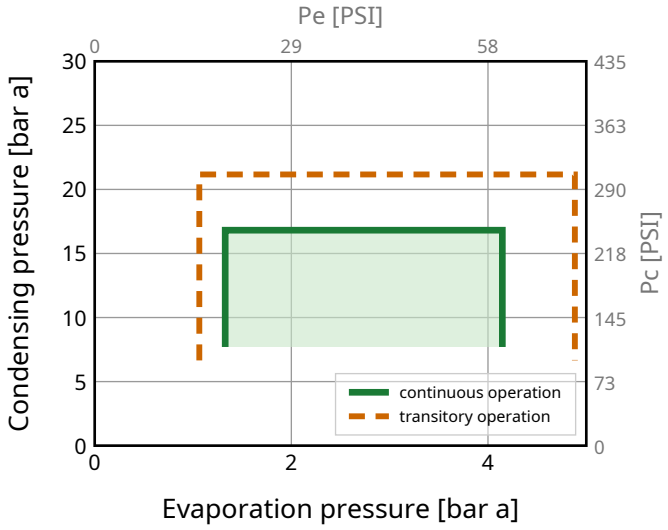
Components
a2 relay 117U6011
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC12G Configuration 1

Sales code:
104G8245

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	**701**	2393	603	**1.65**	5.63	425	2.73	15.27	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**518**	1769	446	**1.34**	4.57	388	2.62	12.50	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**623**	2126	536	**1.65**	5.64	377	2.51	14.53	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**688**	2347	592	**1.66**	5.68	413	2.66	16.90	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**646**	2202	555	**1.71**	5.84	377	2.51	14.10	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**214**	730	184	**0.90**	3.08	237	2.15	4.62	**opt MBP 2**

Performance Tables

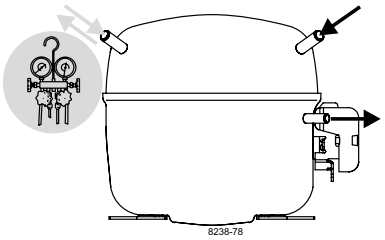
R134a, 230 V/60 Hz, CSIR, fan 3m/s

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]
-20	-4	**332**	1133	286	**1.17**	3.99	284	2.25	7.20
-15	5	**475**	1619	408	**1.43**	4.89	331	2.38	10.32
-10	14	**646**	2202	555	**1.71**	5.84	377	2.51	14.10
-5	23	**849**	2897	730	**2.01**	6.86	422	2.67	18.63
0	32	**1090**	3718	937	**2.35**	8.00	465	2.84	24.04
5	41	**1372**	4680	1180	**2.72**	9.27	505	3.02	30.46
10	50	**1699**	5798	1461	**3.14**	10.70	542	3.22	38.03

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

-20	-4	**248**	845	213	**0.91**	3.12	271	2.28	5.93
-15	5	**370**	1264	319	**1.12**	3.84	329	2.44	8.89
-10	14	**518**	1769	446	**1.34**	4.57	388	2.62	12.50
-5	23	**696**	2375	599	**1.56**	5.33	446	2.80	16.87
0	32	**908**	3096	780	**1.80**	6.15	503	3.01	22.13
5	41	**1157**	3948	995	**2.07**	7.06	559	3.23	28.42
10	50	**1449**	4945	1246	**2.36**	8.06	614	3.46	35.90



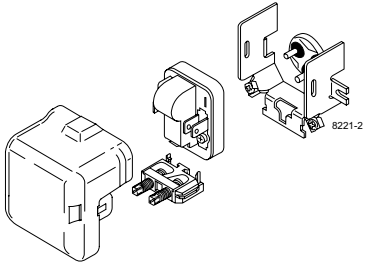
SC Compressors

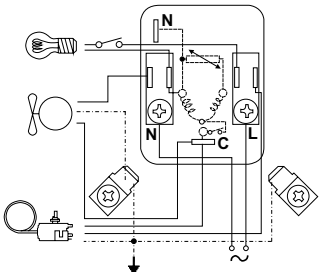
SECOP

Keep electrical equipment clear from oil, chemicals, and water

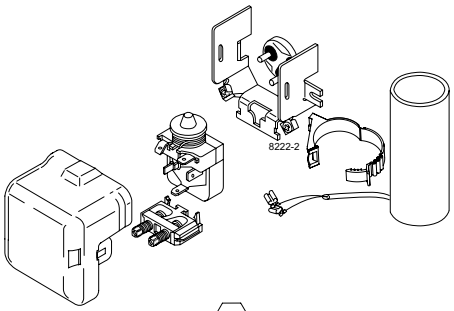
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

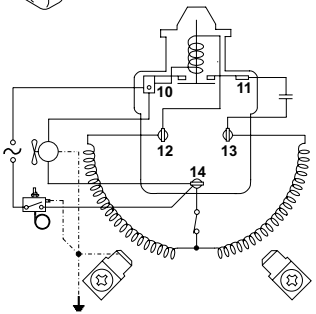
RSIR



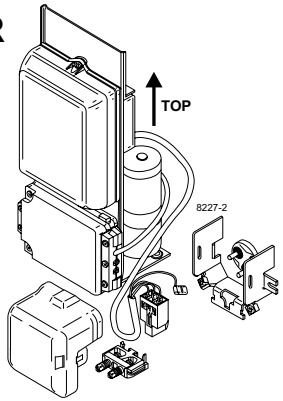


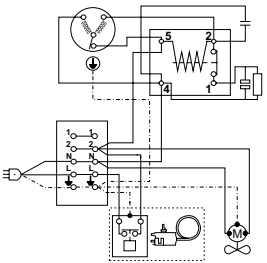
CSIR

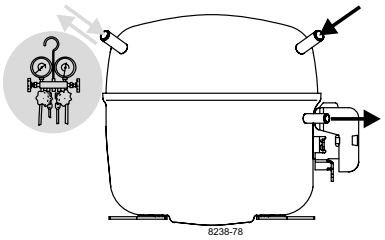




CSCR







SC Compressors

SECOP

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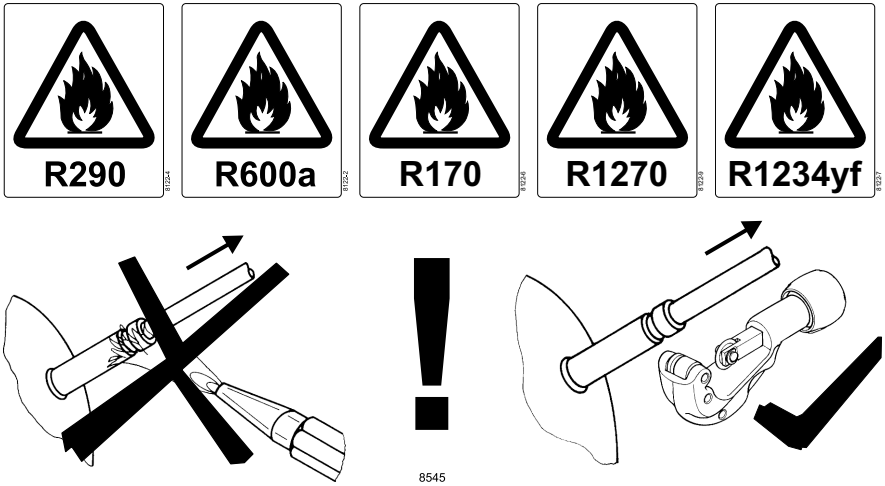
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



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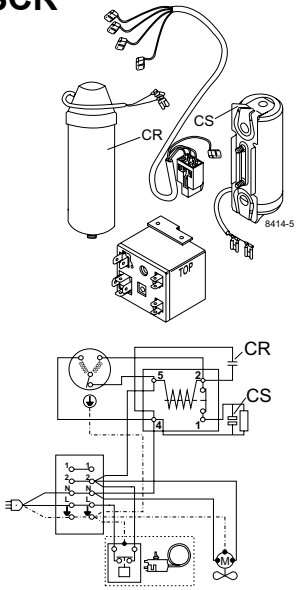

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be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