Single
Packs

SECOP

Single Pack SC12CL 115V 60Hz CSIR

Single pack code number: **195B4078**

Position	Title	Code	Amount
1	Compressor SC12CL	104L1603	1
2	Starting relay	117U6020	1
3	Starting capacitor (240µF 125V, 6.3mm)	117U5023	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
SC12CL

Sales code:
104L1603

Compressor Data

Refrigerant(s)	**R404A / R507**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**13.10 kg / 28.88lbs**
Displacement	**12.87 cm3 / 0.79cu.in**
Compressors on pallet	**80**

General – Configurations With SC12CL

–	**Conf. 1**
Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz
Number of phases	1
Voltage range	103-127 V
Approvals	UL
Starting torque	HST
Refrigerant	R404A
Application	LBP
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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SC12CL

Sales code:
104L1603

Compressor Design

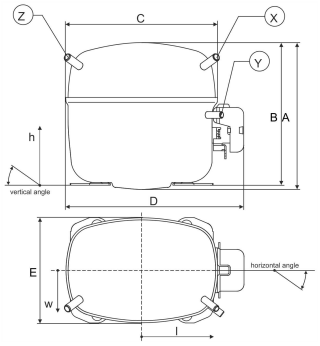
Oil type	**POE**	Winding resistance main	**1 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**4.2 Ohm**
Oil quantity	**499 / 16.87fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,510 cm3 / 51.06fl.oz**	Max. discharge temp.	**135°C / 275°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

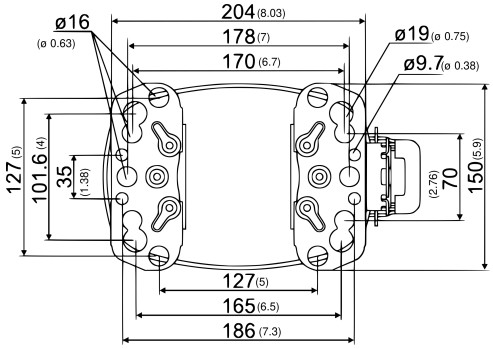
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



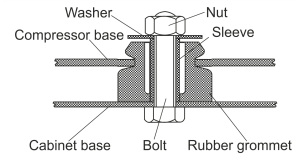
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

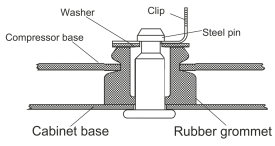


Dimensions in mm [in]

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
SC12CL Configuration 1

Sales code:
104L1603

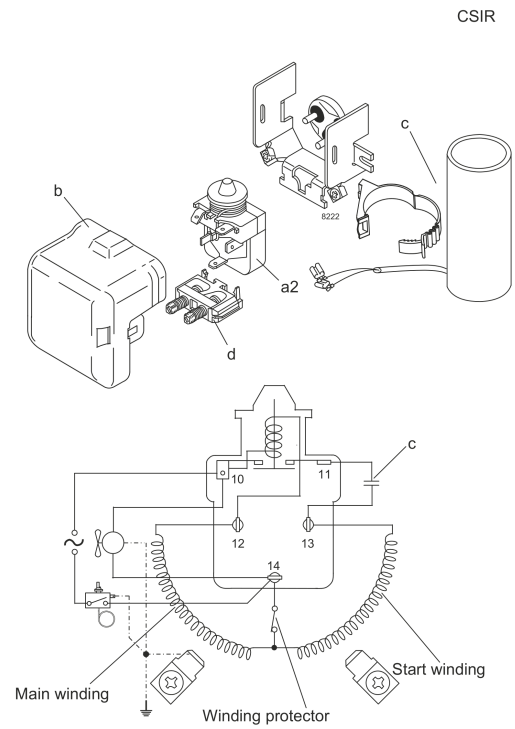
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R404A**
Application	**LBP**
Voltage range	**103-127 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**240 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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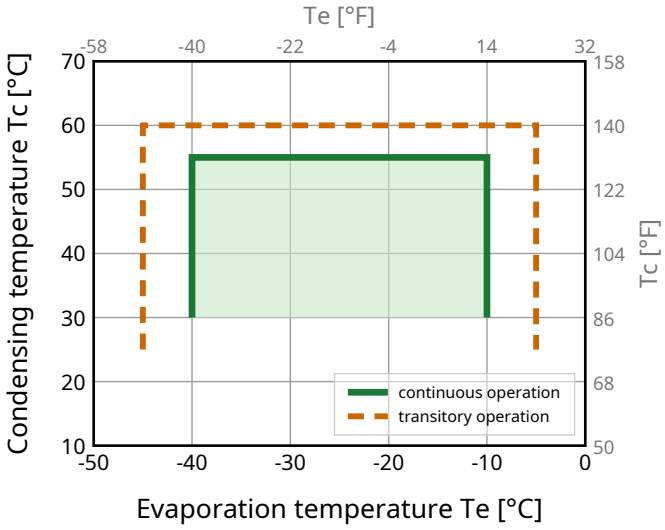
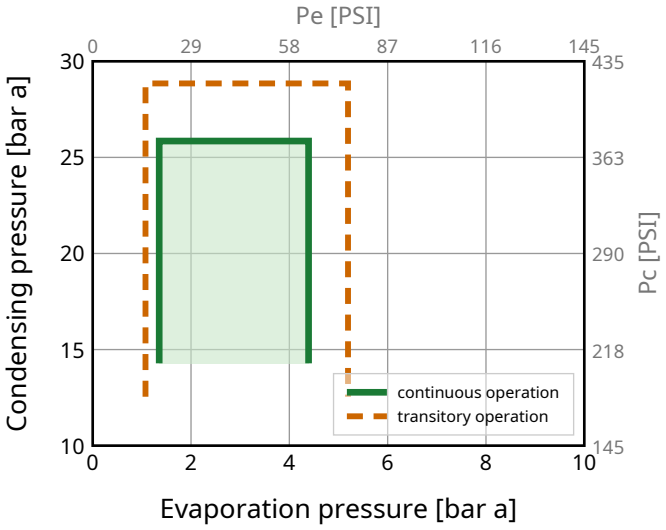
Components
a2 relay 117U6020
c start capacitor (240µF) 117U5023
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC12CL Configuration 1

Sales code:
104L1603

Standard Conditions

R404A, 115 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	**698**	2382	600	**1.11**	3.78	630	6.84	16.23	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**462**	1578	398	**0.78**	2.65	594	6.60	14.42	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**326**	1113	281	**0.75**	2.55	437	5.74	8.84	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**516**	1762	444	**0.82**	2.79	630	6.81	18.22	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**776**	2647	667	**1.24**	4.24	624	6.79	18.04	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**282**	962	242	**0.68**	2.30	417	5.60	7.51	**opt LBP**

Performance Tables

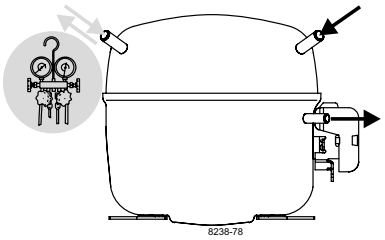
R404A, 115 V/60 Hz, CSIR, fan 3m/s

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]
-40	-40	**146**	499	126	**0.47**	1.62	308	5.26	3.89
-35	-31	**282**	962	242	**0.68**	2.30	417	5.60	7.51
-30	-22	**428**	1462	369	**0.84**	2.85	513	6.04	11.47
-25	-13	**590**	2013	507	**0.98**	3.35	600	6.58	15.88
-20	-4	**770**	2627	662	**1.12**	3.84	685	7.23	20.85
-15	5	**972**	3317	836	**1.26**	4.29	773	7.97	26.51
-10	14	**1200**	4095	1032	**1.38**	4.70	871	8.81	33.00

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

-40	-40	**25**	86	22	**0.12**	0.42	205	4.90	0.78
-35	-31	**164**	560	141	**0.46**	1.58	354	5.37	5.07
-30	-22	**309**	1053	265	**0.64**	2.18	482	5.93	9.57
-25	-13	**462**	1578	398	**0.78**	2.65	594	6.60	14.42
-20	-4	**629**	2147	541	**0.90**	3.08	696	7.37	19.76
-15	5	**812**	2772	699	**1.02**	3.49	795	8.23	25.72
-10	14	**1016**	3467	874	**1.14**	3.87	895	9.20	32.48



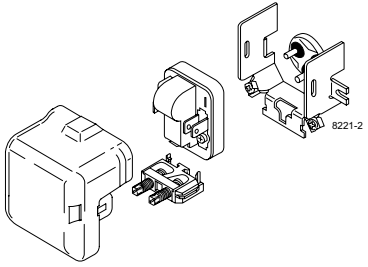
SC Compressors

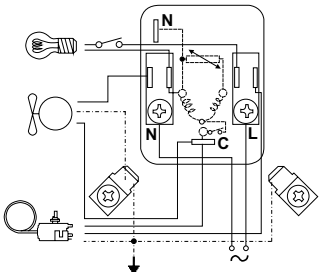
SECOP

Keep electrical equipment clear from oil, chemicals, and water

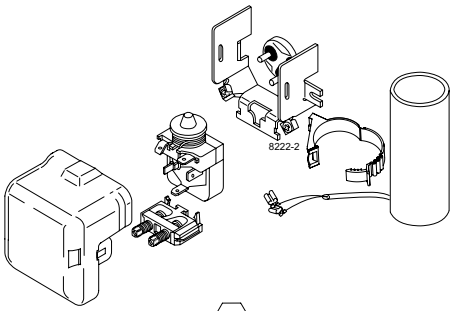
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

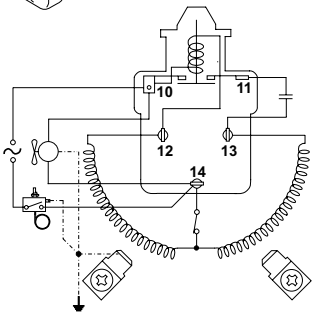
RSIR



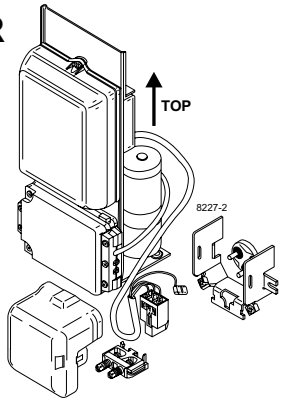


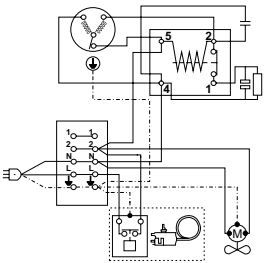
CSIR

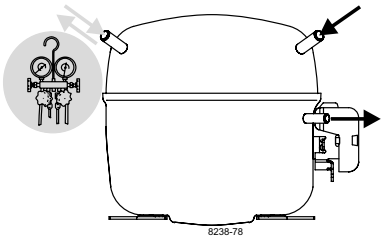




CSCR







SC Compressors

SECOP

Keep electrical equipment clear from oil, chemicals, and water

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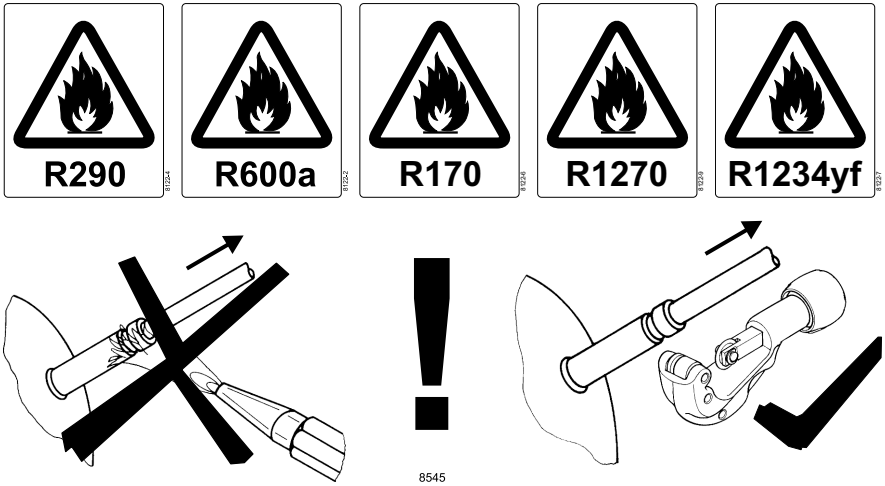
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



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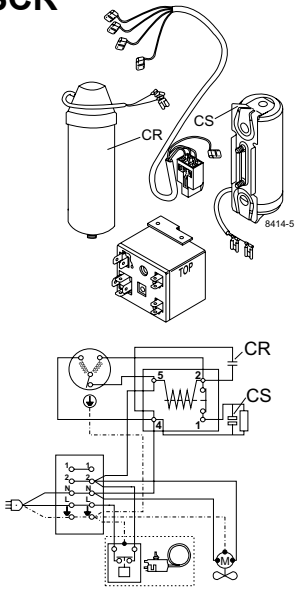

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be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