Single
Packs

Single Pack SC12CNX.2 115V 60Hz CSIR

Single pack code number: **195B4337**

Position	Title	Code	Amount
1	Compressor SC12CNX.2	104H7270	1
2	Starting relay	117U7020	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
SC12CNX.2

Sales code:
104H7270

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**150g / 5.29oz**
Weight	**13.20 kg / 29.10lbs**
Displacement	**12.87 cm3 / 0.79cu.in**
Compressors on pallet	**80**

General – Configurations With SC12CNX.2

–	**Conf. 1**
Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz
Number of phases	1
Voltage range	95-135 V
Approvals	UL, VDE, EAC
Starting torque	HST
Refrigerant	R290
Application	LBP+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

Model
SC12CNX.2

Sales code:
104H7270

Compressor Design

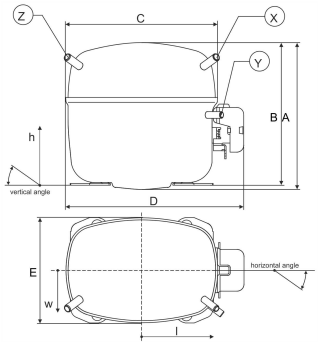
Oil type	**POE**	Winding resistance main	**1 Ohm**
Oil viscosity	**22cSt**	Winding resistance aux	**4.2 Ohm**
Oil quantity	**500 / 16.91fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,510 cm3 / 51.06fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

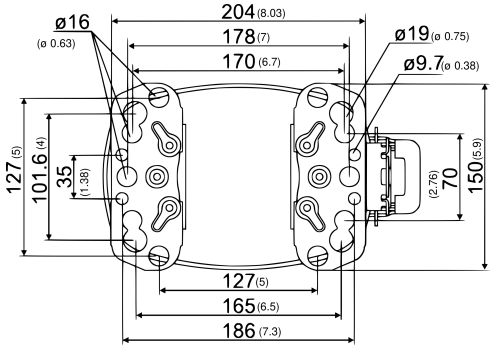
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



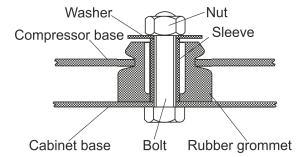
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 9.54–9.72 / 0.38–0.38in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

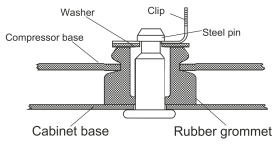


Dimensions in mm [in]

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
SC12CNX.2 Configuration 1

Sales code:
104H7270

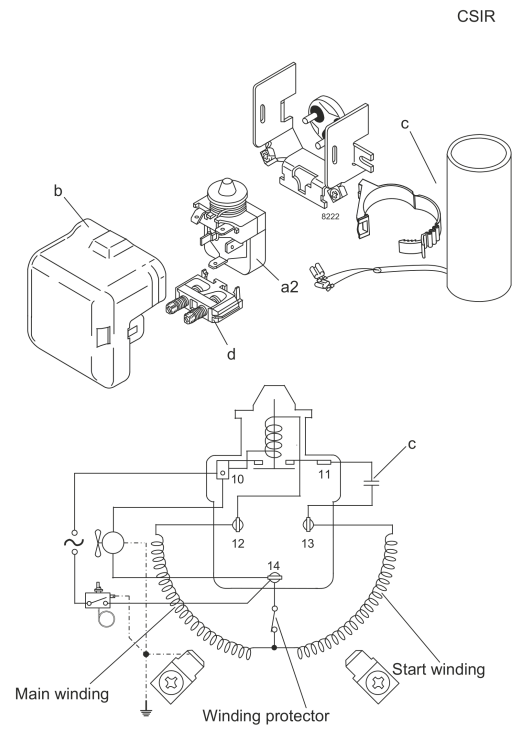
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**UL, VDE, EAC**
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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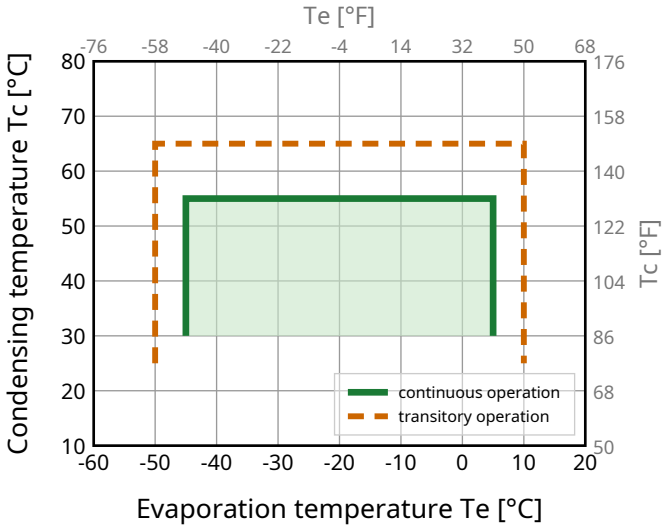
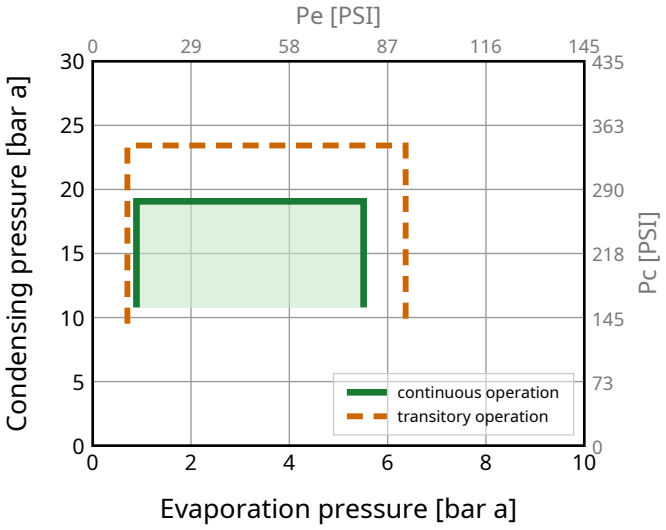
Components
a2 relay 117U7020
c start capacitor (240µF) 117U5023
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model

SC12CNX.2 Configuration 1

Sales code:

104H7270

Standard Conditions

R290, 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	**615**	2099	529	**1.29**	4.42	475	6.11	6.25	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**449**	1533	386	**0.98**	3.35	458	6.00	5.63	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**335**	1143	288	**0.97**	3.30	346	5.42	3.85	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1190**	4061	1024	**1.87**	6.39	635	7.30	13.63	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**936**	3193	805	**1.53**	5.23	610	7.07	11.90	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1042**	3557	896	**1.89**	6.43	553	6.74	12.83	**EN12900 MBP**

Performance Tables

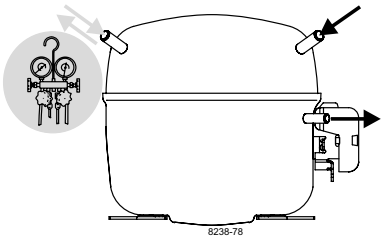
R290, 115 V/60 Hz, CSIR, fan 3m/s

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]
-45	-49	**131**	446	112	**0.58**	1.97	226	4.99	1.47
-40	-40	**212**	724	182	**0.74**	2.51	288	5.20	2.39
-30	-22	**420**	1434	361	**1.07**	3.64	393	5.66	4.75
-20	-4	**704**	2404	606	**1.47**	5.01	480	6.18	8.02
-10	14	**1084**	3698	932	**1.96**	6.69	553	6.74	12.44
0	32	**1577**	5380	1356	**2.54**	8.68	620	7.35	18.34
5	41	**1872**	6388	1610	**2.87**	9.78	653	7.68	21.94

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

-45	-49	**60**	205	52	**0.34**	1.17	175	4.75	0.75
-40	-40	**137**	467	118	**0.53**	1.82	257	5.04	1.70
-30	-22	**329**	1123	283	**0.83**	2.83	397	5.67	4.11
-20	-4	**589**	2010	507	**1.15**	3.92	513	6.34	7.42
-10	14	**936**	3193	805	**1.53**	5.23	610	7.07	11.90
0	32	**1388**	4736	1194	**2.00**	6.81	696	7.85	17.90
5	41	**1660**	5663	1427	**2.25**	7.69	736	8.26	21.59



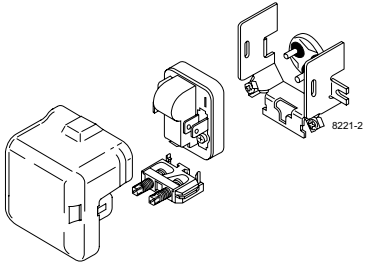
SC Compressors

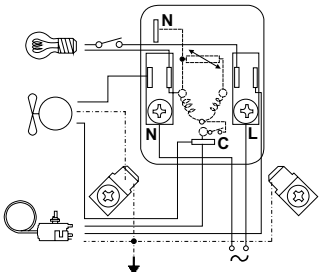
SECOP

Keep electrical equipment clear from oil, chemicals, and water

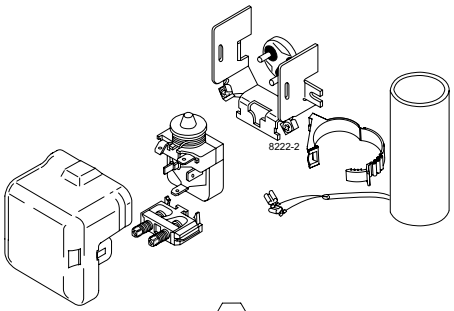
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

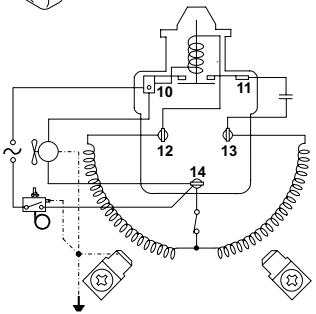
RSIR



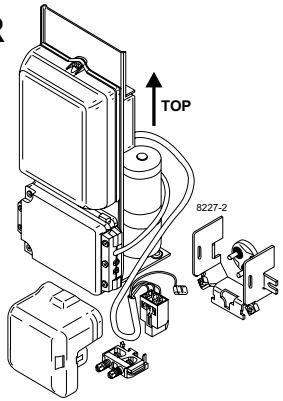


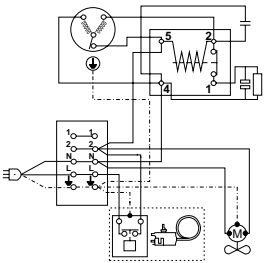
CSIR

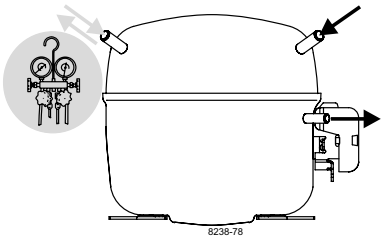




CSCR







SC Compressors

SECOP

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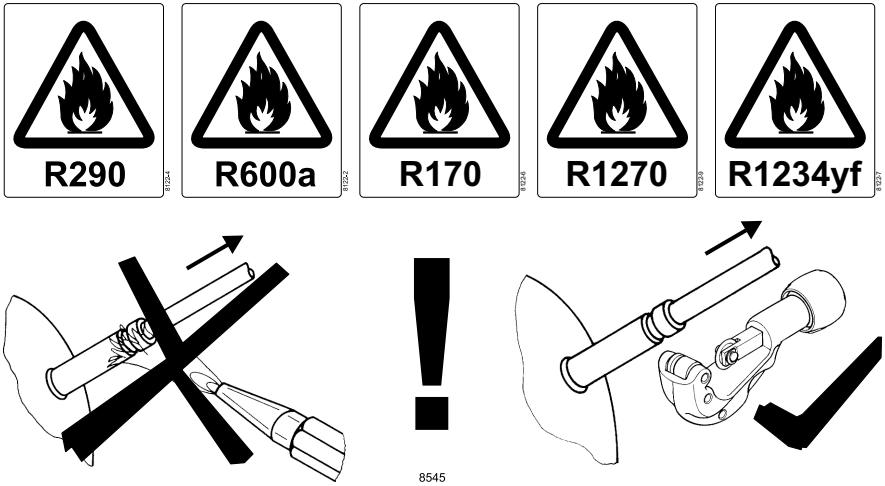
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



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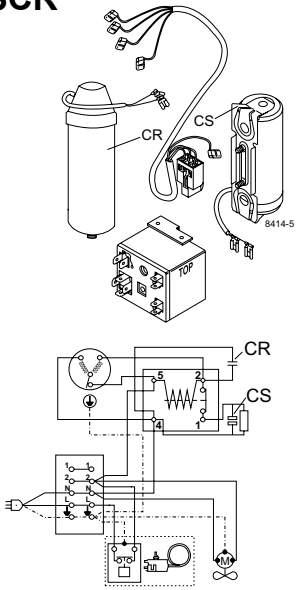

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be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