Single
Packs

SECOP

Single Pack SC12MNX 220-240V 50Hz CSIR

Single pack code number: **195B4440**

Position	Title	Code	Amount
1	Compressor SC12MNX	104H8275	1
2	Starting relay	117U7019	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
SC12MNX

Sales code:
104H8275

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**150g / 5.29oz**
Weight	**13.50 kg / 29.76lbs**
Displacement	**12.87 cm3 / 0.79cu.in**
Compressors on pallet	**80**

General – Configurations With SC12MNX

–	**Conf. 1**
Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz
Number of phases	1
Voltage range	198-254 V
Approvals	CCC, EAC, VDE
Starting torque	HST
Refrigerant	R290
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

Model
SC12MNX

Sales code:
104H8275

Compressor Design

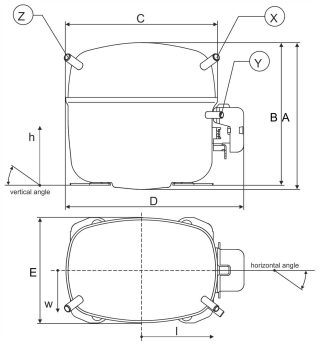
Oil type	**POE**	Winding resistance main	**3.7 Ohm**
Oil viscosity	**22cSt**	Winding resistance aux	**14 Ohm**
Oil quantity	**500 / 16.91fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,510 cm3 / 51.06fl.oz**	Max. discharge temp.	**135°C / 275°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

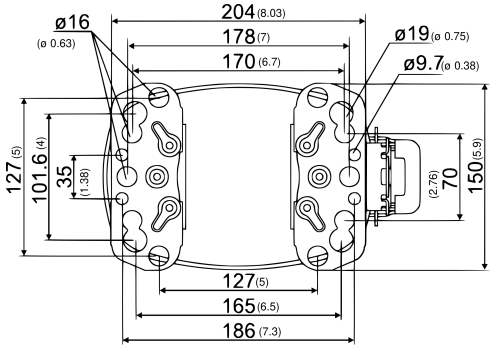
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



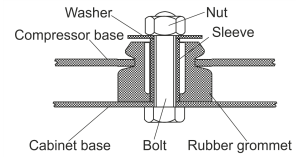
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

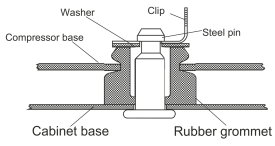


Dimensions in mm [in]

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
SC12MNX Configuration 1

Sales code:
104H8275

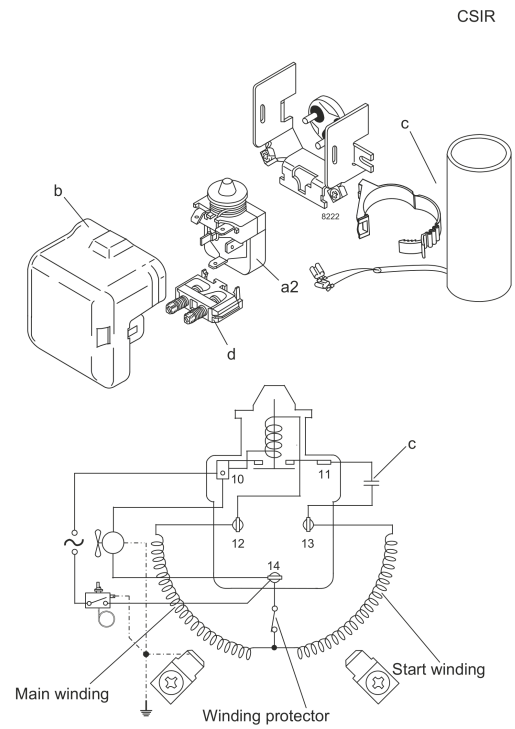
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R290**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**CCC, EAC, VDE**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
RLA (rated load amps / 1s/ U(N))	**-/-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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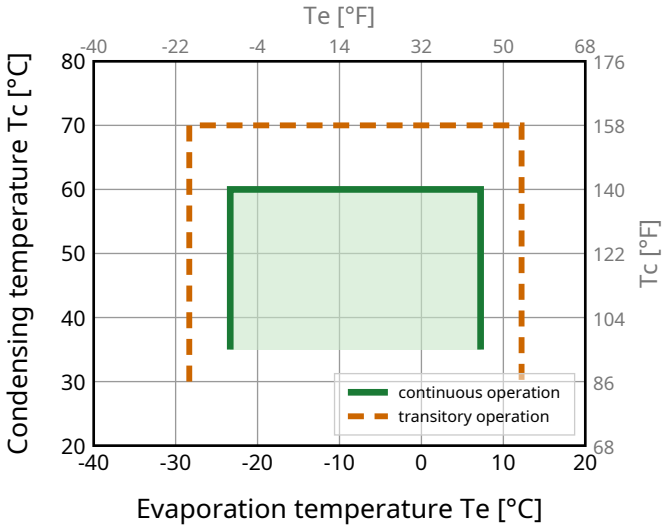
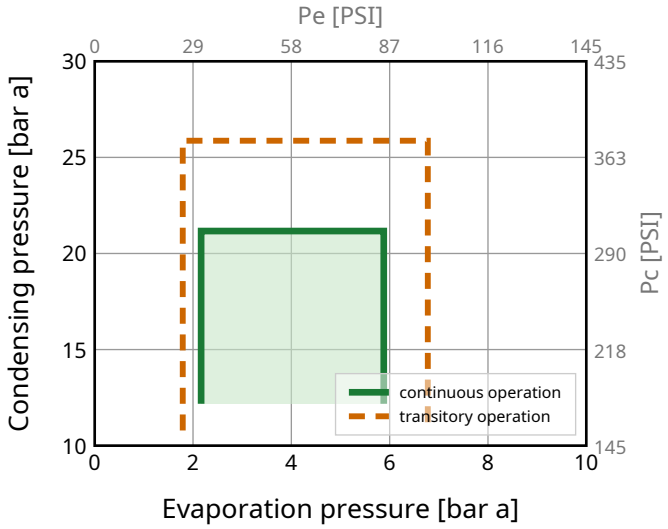
Components
a2 current relay 117U7019
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model

SC12MNX Configuration 1

Sales code:

104H8275

Standard Conditions

R290, 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]	
-6.7 20	54.4 129.9	35 95	46.1 115	**996**	3399	857	**1.77**	6.06	561	3.55	11.41	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**775**	2644	666	**1.44**	4.91	539	3.47	9.85	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**886**	3022	762	**1.78**	6.09	496	3.34	10.90	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**948**	3235	815	**1.78**	6.06	534	3.46	12.33	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**921**	3142	792	**1.86**	6.33	496	3.34	10.57	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**447**	1526	385	**1.16**	3.95	387	3.01	5.07	**opt MBP 2**

Performance Tables

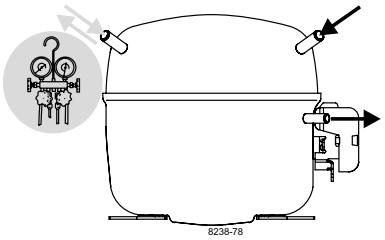
R290, 220 V/50 Hz, CSIR, fan 3m/s

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]
-23.3	-10	**492**	1677	423	**1.23**	4.19	400	3.05	5.58
-20	-4	**584**	1992	502	**1.37**	4.67	426	3.13	6.64
-15	5	**741**	2528	637	**1.60**	5.46	463	3.24	8.46
-10	14	**921**	3142	792	**1.86**	6.33	496	3.34	10.57
-5	23	**1126**	3844	969	**2.14**	7.29	527	3.44	13.01
0	32	**1361**	4642	1170	**2.45**	8.35	556	3.52	15.82
5	41	**1626**	5547	1398	**2.79**	9.53	582	3.60	19.05
7.2	45	**1753**	5981	1508	**2.95**	10.08	593	3.64	20.62

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

-23.3	-10	**381**	1299	327	**0.91**	3.09	420	3.08	4.78
-20	-4	**466**	1590	401	**1.03**	3.52	452	3.18	5.87
-15	5	**610**	2082	525	**1.23**	4.19	497	3.33	7.72
-10	14	**775**	2644	666	**1.44**	4.91	539	3.47	9.85
-5	23	**963**	3285	828	**1.67**	5.69	577	3.61	12.32
0	32	**1177**	4015	1012	**1.92**	6.56	612	3.73	15.18
5	41	**1419**	4842	1221	**2.20**	7.52	644	3.85	18.46
7.2	45	**1536**	5239	1321	**2.34**	7.97	657	3.90	20.06



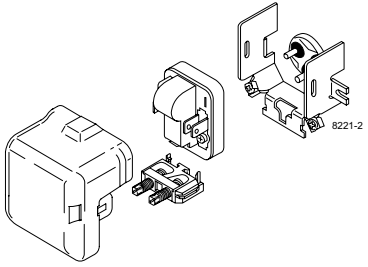
SC Compressors

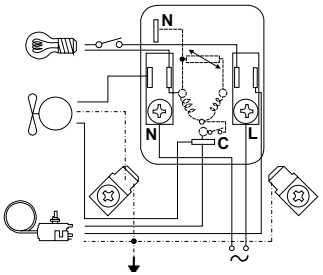
SECOP

Keep electrical equipment clear from oil, chemicals, and water

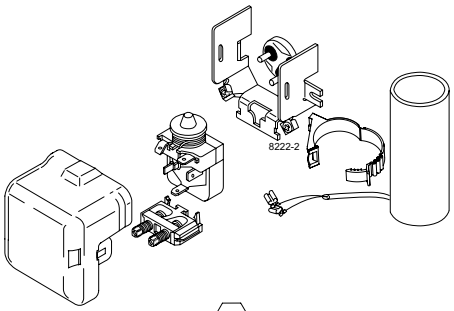
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

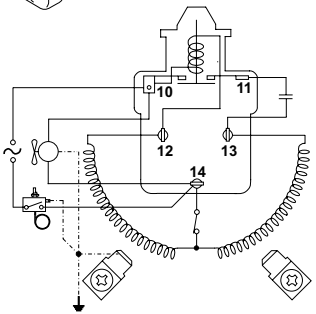
RSIR



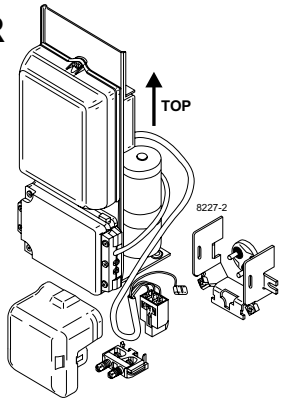


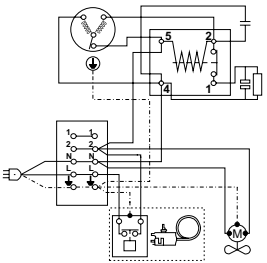
CSIR

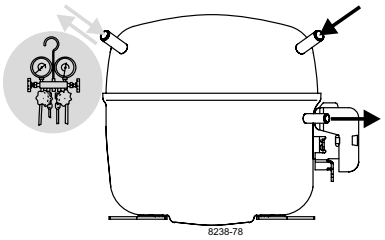




CSCR







SC Compressors

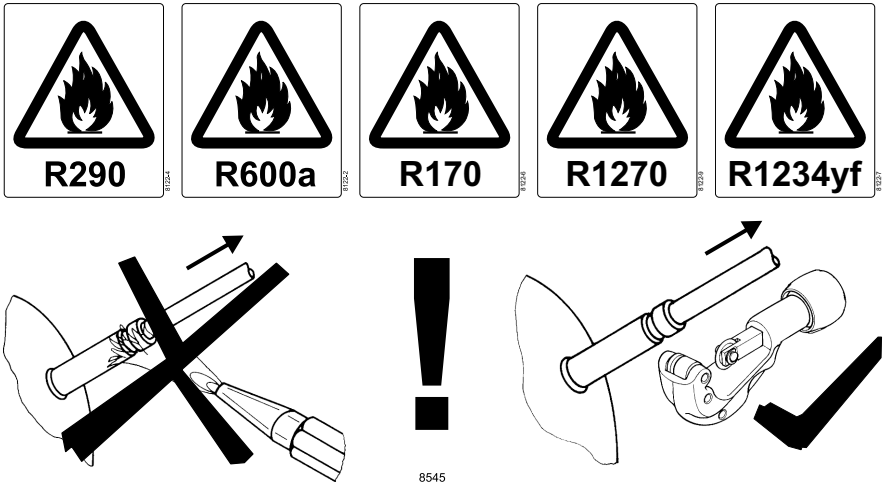
SECOP

Keep electrical equipment clear from oil, chemicals, and water

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

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

(applies to all flammable refrigerants)



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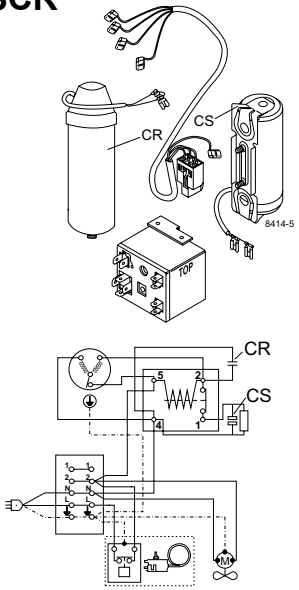

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be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