Single
Packs

Single Pack SC21CNX.2 220-240V 50Hz CSIR

Single pack code number: **195B4091**

Position	Title	Code	Amount
1	Compressor SC21CNX.2	104H8166	1
2	Starting relay	117U7013	1
3	Starting capacitor (125µF 220V, 6.3mm)	117U5012	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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Technical Data Compressor

SECOP

Model

Designation	**SC21CNX.2**	**220-240V/50Hz 1~**	Sales code:	**104H8166**

Compressor design

Oil type	Polyolester	Refrigerant(s)	**R290**
Oil viscosity	32cSt	Displacement	20,95cm³ / 1,28cu.in
Oil quantity	550cm³ / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	1410cm³ / 47,7fl.oz		
Weight	14,1kg / 31,1lbs		
Motor protection	1# internal		
Winding resistance main	3,3Ω (at 25°C)		
Winding resistance aux	16Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		

General - Configurations with SC21CNX.2

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

Applications with SC21CNX.2

	Conf. 1
Refrigerant	R290
Application	LBP
System cooling	fan 3m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with SC21CNX.2

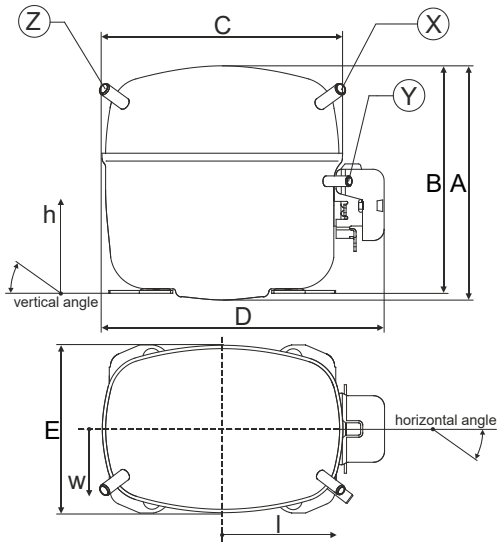
	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	125µF
LRA (locked rotor amps / 4s/ $U_{(N)}$)	25A
RLA (rated load amps / 1s/ $U_{(N)}$)	4,5A
Cut in current ($U_{(N)}$)	25A

Model

Designation **SC21CNX.2** **220-240V/50Hz 1~** Sales code: **104H8166**

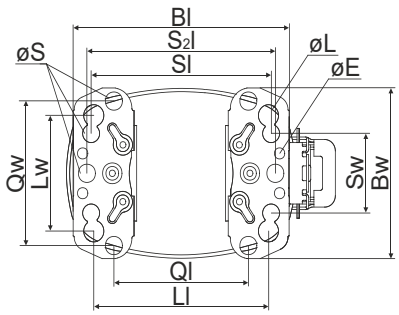
Compressor dimensions

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



Connectors		**Suction** X	**Discharge** Y	**Process** Z
Diameter	[mm]	øi 10,11-10,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,4-0,41	øi 0,24-0,25	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63	-107/193/55
	[in]	4,2/7,6/2,2	4,5/4,3/2,5	-4,2/7,6/2,2
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

Compressor fixation

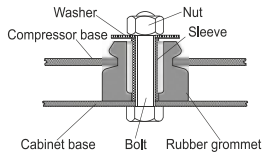


Baseplate	[mm]	[inch]
Bl	204	8.03
Bw	150	5.9
øE	ø 9.7	ø 0.38

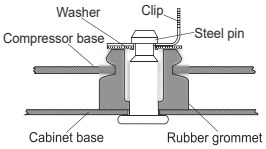
Large holes	[mm]	[inch]
Ll	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75

Small holes	[mm]	[inch]
Sl	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63
Ql	127	5
Qw	127	5

Bolt joint



Snap-on



Mounting accessories	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

Application notes

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

Model

Designation					
	SC21CNX.2	**220-240V/50Hz**	**Conf. 1**	Sales code:	**104H8166**

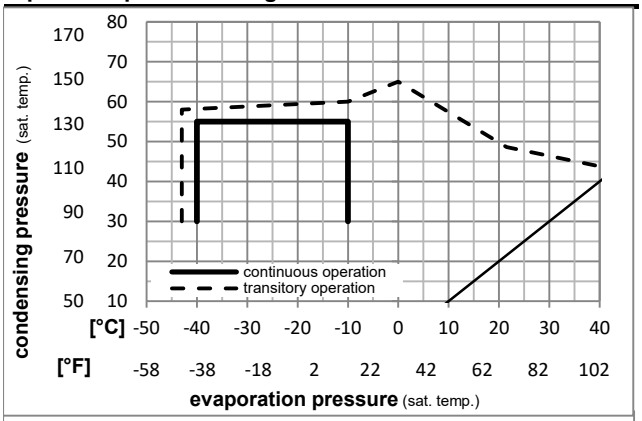
Configuration

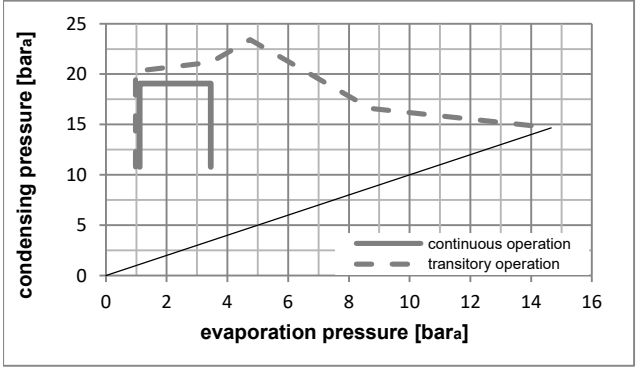
Motor configuration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	CCC

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

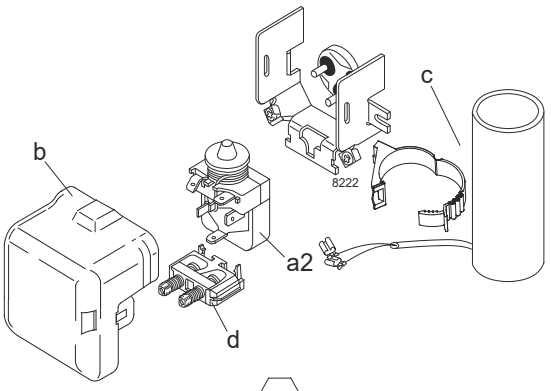
Operation pressure range

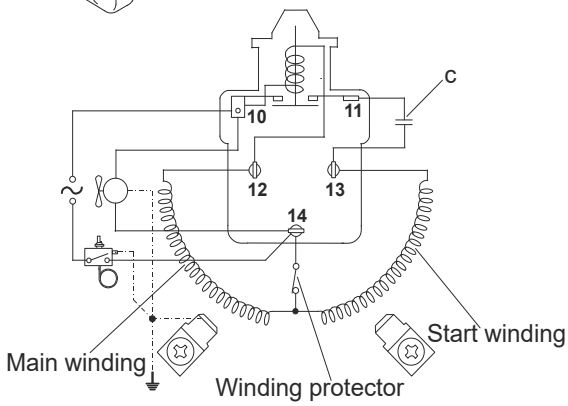




Electrical accessories / wiring diagram

CSIR





Components

a2	relay	117U7013
c	start capacitor (125µF)	117U5012
d	cord relief	103N1004
b	plastic cover	103N2009

Alternative components

c	start capacitor (125µF)	117U5069

Model

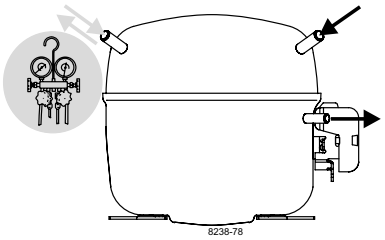
Designation **SC21CNX.2** **220-240V/50Hz** **Conf. 1** Sales code: **104H8166**

Optimization + standard conditions R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC

	Evaporating pressure (saturation temperature) pe	Condensing pressure (saturation temperature) pc	Return gas temp. RGT	Liquid temp. Tliq	Cooling capacity [W]	[Btu/h]	[kcal/h]	COP [W/W]	EER [Btu/Wh]	[kcal/Wh]	Power consumption P1 [W]	Current consumption I [A]	Ref. mass flow ṁ [kg/h]	
[°C]	-23	54	32	32	960,5	3280	826,6	1,45	4,96	1,25	661,4	4,19	9,73	**ASHRAE LBP**
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	715,7	2444	616,0	1,12	3,82	0,96	639,2	4,10	8,91	**cecomaf LBP**
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	540,5	1846	465,2	1,09	3,72	0,94	495,6	3,59	6,18	**EN12900 LBP**
[°F]	-31	104	68	104										
[°C]	-23	49	4,4	49	767,9	2622	660,9	1,18	4,04	1,02	648,4	4,11	10,63	**ARI540 LBP**
[°F]	-10	120	40	120										
[°C]	-23	41	32	32	1008,0	3443	867,5	1,57	5,36	1,35	642,8	4,01	10,21	**AHAM LBP**
[°F]	-10	105	90	90										
[°C]	-35	45	32	45	491,9	1680	423,4	1,00	3,42	0,86	491,2	3,58	5,51	**opt**
[°F]	-31	113	90	113										

Performance tables R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-40	-40	338,6	1156	291,4	0,78	2,68	0,68	431,4	3,43	3,79
cond. pressure	-35	-31	491,9	1680	423,4	1,00	3,42	0,86	491,2	3,58	5,51
pc= 45/113	-30	-22	653,8	2233	562,6	1,18	4,02	1,01	554,9	3,76	7,35
return gas temp.	-25	-13	828,3	2829	712,9	1,33	4,54	1,14	622,9	3,98	9,34
RGT= 32/90	-20	-4	1019,8	3483	877,7	1,47	5,01	1,26	695,3	4,23	11,55
liquid temp	-15	5	1232,6	4209	1060,8	1,60	5,45	1,37	772,5	4,52	14,02
Tliq= 45/113	-10	14	1470,7	5023	1265,7	1,72	5,88	1,48	854,6	4,84	16,83
[°C / °F]	-40	-40	219,1	748	188,6	0,47	1,62	0,41	462,4	3,39	2,70
cond. pressure	-35	-31	372,3	1271	320,4	0,73	2,48	0,63	512,3	3,59	4,60
pc= 55/131	-30	-22	536,4	1832	461,7	0,94	3,21	0,81	571,2	3,83	6,65
return gas temp	-25	-13	715,7	2444	616,0	1,12	3,82	0,96	639,2	4,10	8,91
RGT= 32/90	-20	-4	914,4	3123	786,9	1,28	4,36	1,10	716,6	4,41	11,44
liquid temp	-15	5	1136,7	3882	978,2	1,41	4,83	1,22	803,7	4,75	14,29
Tliq= 55/131	-10	14	1386,8	4736	1193,5	1,54	5,26	1,33	900,6	5,13	17,54



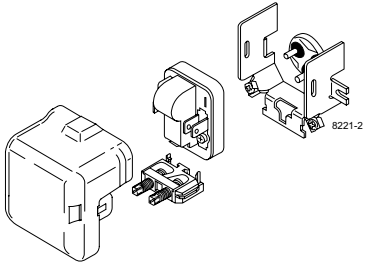
SC Compressors

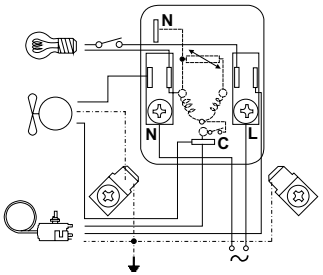
SECOP

Keep electrical equipment clear from oil, chemicals, and water

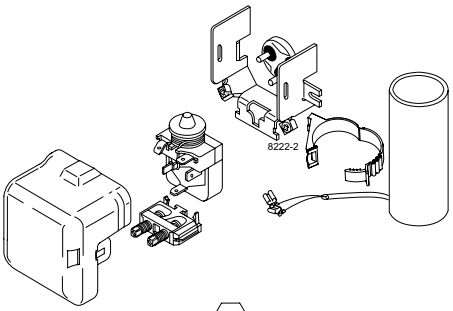
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

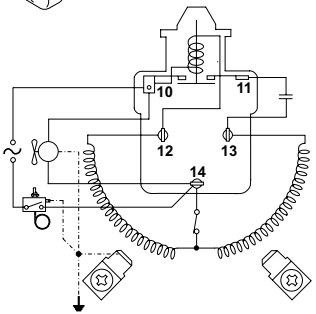
RSIR



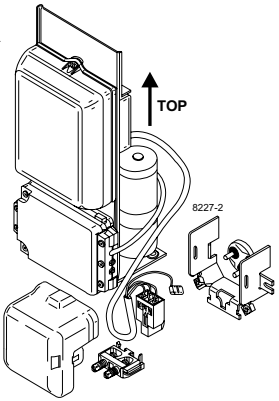


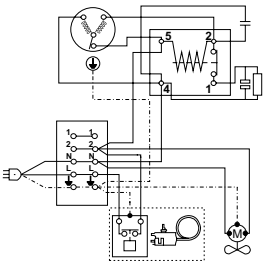
CSIR

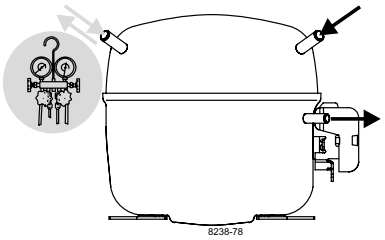




CSCR







SC Compressors

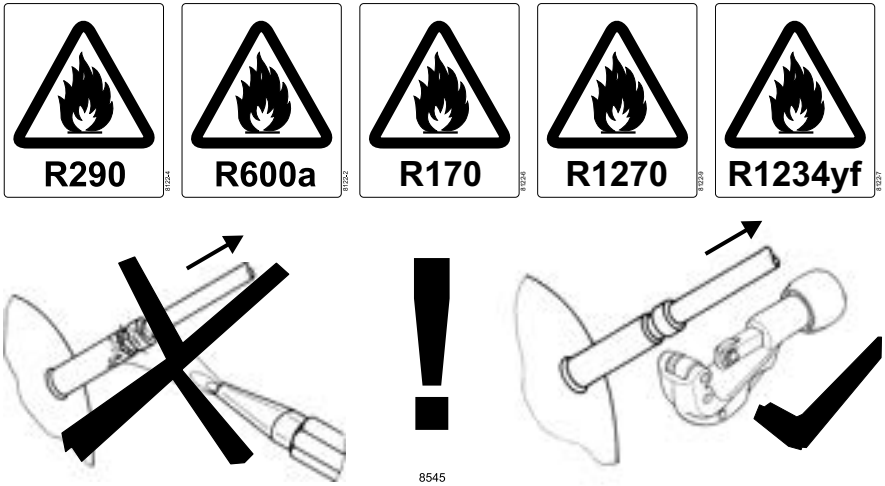
SECOP

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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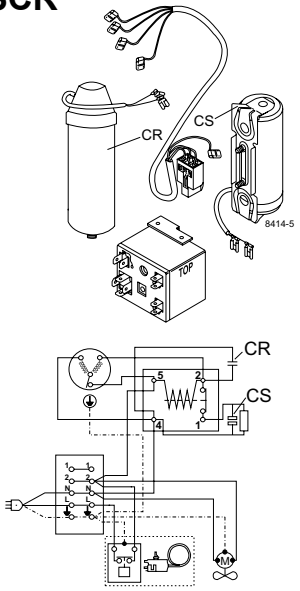

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be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