

Model

Designation	SC12CNX.2	220-240V/50Hz 1~	Sales code:	104H8266
-------------	------------------	------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	22cST	Displacement	12,87cm ³ / 0,79cu.in
Oil quantity	500cm ³ / 16,9fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	1410cm ³ / 47,7fl.oz		
Weight	13,1kg / 28,9lbs		
Motor protection	1# internal		
Winding resistance main	6,9Ω (at 25°C)		
Winding resistance aux	11Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SC12CNX.2

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

Applications with SC12CNX.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 SC12CNX.2

	Conf. 1
Starting device type	relay
Run capacitor	- / -
Start capacitor	80μF
LRA (locked rotor amps / 4s)	23,4A
RLA (rated load amps / 1s)	4,3A
Cut in current	23,4A

Model

Designation

SC12CNX.2

220-240V/50Hz 1~

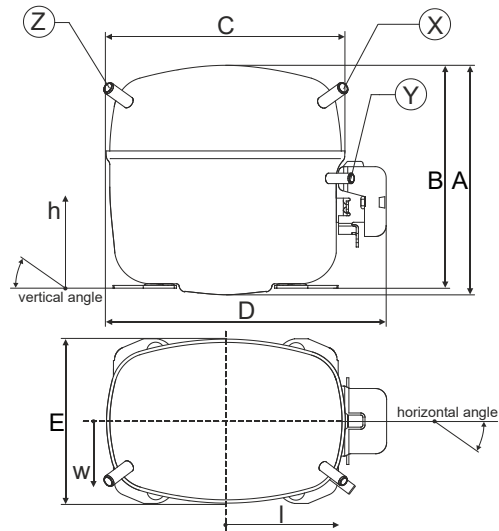
Sales code:

104H8266

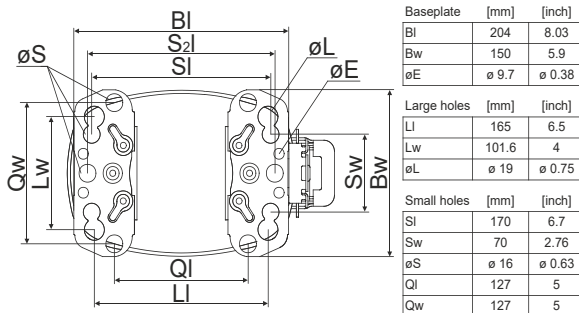
Compressor dimensions

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

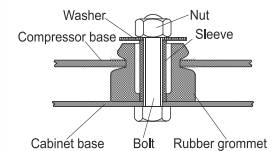
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	ø 8,11-8,29	ø 6,11-6,29	ø 6,11-6,29
	(i:inside, o:outside) [in]	ø 0,32-0,33	ø 0,24-0,25	ø 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/183/55	115/100/63	-107/183/55
	[in]	4,2/7,2/2,2	4,5/3,9/2,5	-4,2/7,2/2,2
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



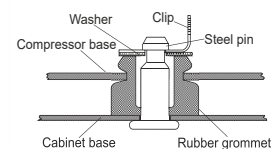
Compressor fixation



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

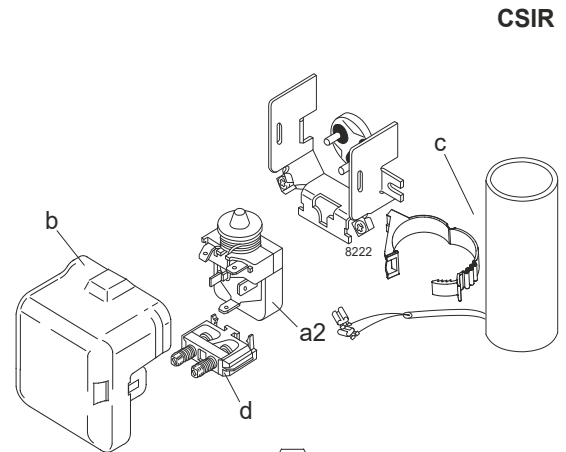
Model

Designation	SC12CNX.2	220-240V/50Hz	Conf. 1	Sales code:	104H8266
-------------	------------------	----------------------	----------------	-------------	-----------------

Configuration

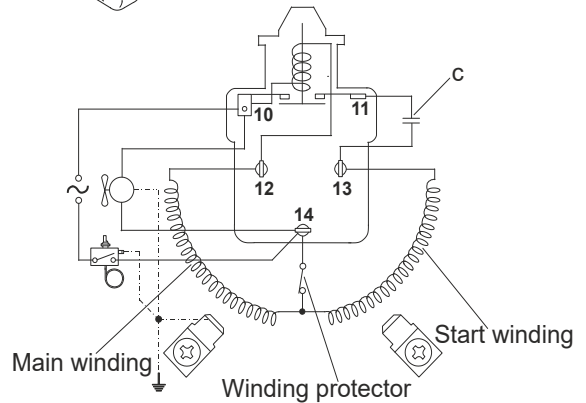
Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP
Voltage range	198-254V
Starting torque	HST
Approvals	CCC VDE

Electrical accessories / wiring diagram



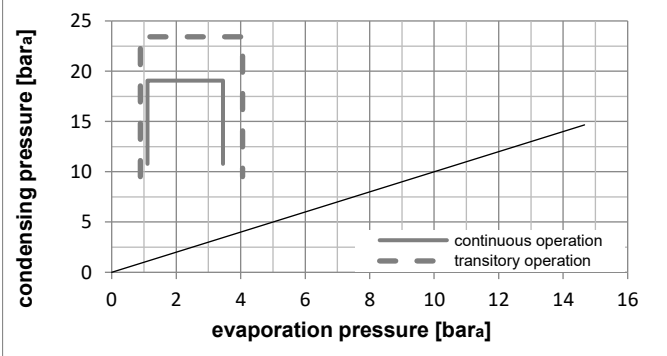
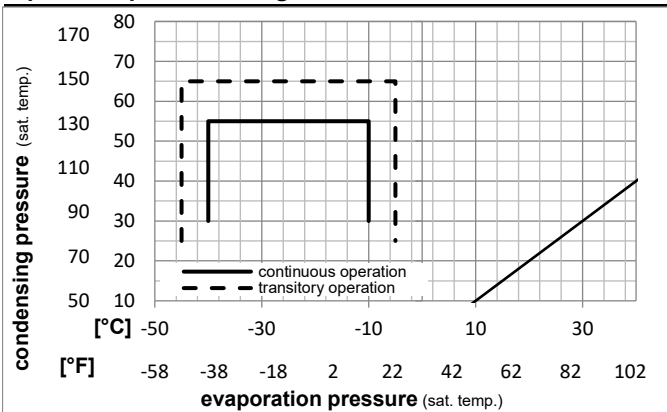
Ambient/ machine room temperatures minimum /maximum

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 Limits

Operation pressure range



Components

a2	relay	117U7003
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation **SC12CNX.2** **220-240V/50Hz** Conf. 1 Sales code: **104H8266**

Optimization + standard conditions

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

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Ref. mass flow	[W]	[A]	[kg/h]						
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]																		
-23	54	32	32	489,6	1672	421,4	1,19	4,08	1,03	409,8	2,43	4,96	ASHRAE LBP										
-10	130	90	90																				
-25	55	32	55	359,3	1227	309,2	0,91	3,12	0,79	393,7	2,37	4,47	cecomaf LBP										
-13	131	90	131																				
-35	40	20	40	279,4	954	240,4	0,96	3,26	0,82	292,5	2,06	3,19	EN12900 LBP										
-31	104	68	104																				
-23	49	4,4	49	414,2	1415	356,5	1,03	3,52	0,89	401,5	2,42	5,74	ARI540 LBP										
-10	120	40	120																				
-23	41	32	32	569,6	1945	490,2	1,50	5,13	1,29	379,2	2,35	5,77	AHAM LBP										
-10	105	90	90																				
-35	45	32	45	258,1	882	222,1	0,87	2,95	0,74	298,3	2,09	2,89	opt										
-31	113	90	113																				

Performance tables

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

	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	186,3	636	160,3	0,72	2,47	0,62	257,4	1,99	2,08
cond. pressure	-35	-31	258,1	882	222,1	0,87	2,95	0,74	298,3	2,09	2,89
pc= 45/113	-30	-22	346,3	1183	298,1	1,02	3,49	0,88	338,7	2,21	3,89
return gas temp.	-25	-13	452,5	1545	389,4	1,19	4,08	1,03	378,8	2,35	5,10
RGT= 32/90	-20	-4	578,3	1975	497,6	1,38	4,71	1,19	419,2	2,50	6,55
liquid temp	-15	5	725,1	2476	624,0	1,58	5,38	1,36	460,2	2,67	8,25
Tliq= 45/113	-10	14	894,6	3055	769,9	1,78	6,08	1,53	502,4	2,86	10,23
[°C / °F]	-40	-40	115,1	393	99,0	0,49	1,66	0,42	236,3	1,94	1,42
cond. pressure	-35	-31	183,5	627	157,9	0,63	2,15	0,54	291,0	2,07	2,27
pc= 55/131	-30	-22	264,4	903	227,5	0,77	2,63	0,66	343,3	2,21	3,28
return gas temp	-25	-13	359,3	1227	309,2	0,91	3,12	0,79	393,7	2,37	4,47
RGT= 32/90	-20	-4	469,8	1605	404,3	1,06	3,62	0,91	442,7	2,55	5,88
liquid temp	-15	5	597,5	2041	514,2	1,22	4,16	1,05	490,5	2,75	7,51
Tliq= 55/131	-10	14	743,9	2541	640,2	1,38	4,73	1,19	537,7	2,96	9,41