

Model

Designation	SC12CNX	220-240V/50Hz 1~	Sales code:	104H8265
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	12,87cm ³ / 0,79cu.in
Oil quantity	549cm ³ / 18,6fl.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	7,19Ω (at 25°C)		
Winding resistance aux	27,23Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with SC12CNX

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

Applications with SC12CNX

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

Electrical data - Configurations with SC12CNX

	Conf. 1
Starting device type	relay
Run capacitor	5μF
Start capacitor	40μF
LRA (locked rotor amps / 4s)	13,1A
RLA (rated load amps / 1s)	1,7A
Cut in current	13,1A
IP class	21

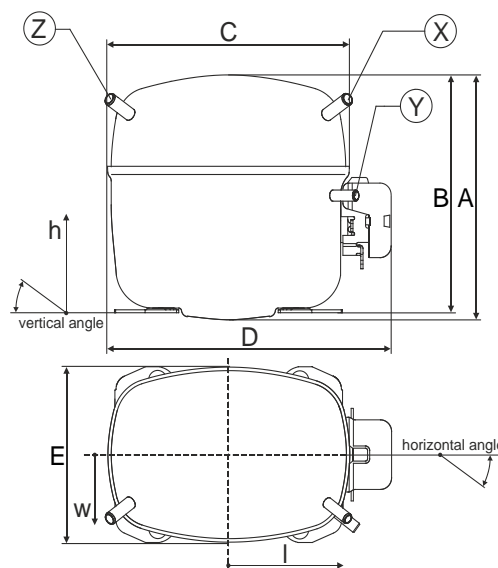
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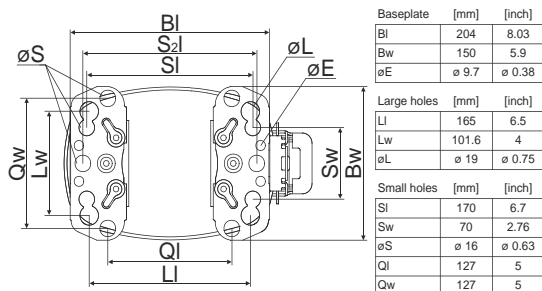
Compressor dimensions

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

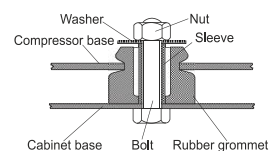
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/183/55	115/100/63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



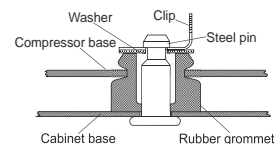
Compressor fixation



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

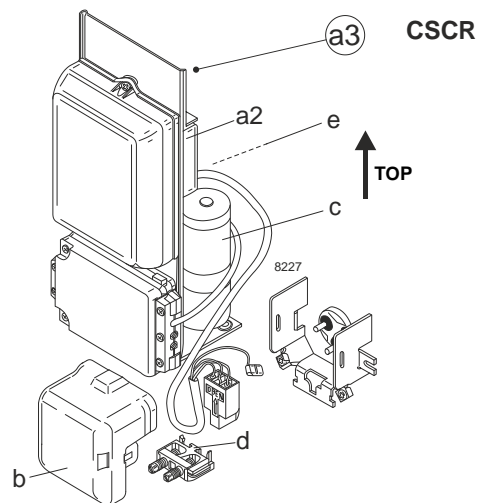
Model

Designation **SC12CNX 220-240V/50Hz** Conf. 1 Sales code: **104H8265**

Configuration

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

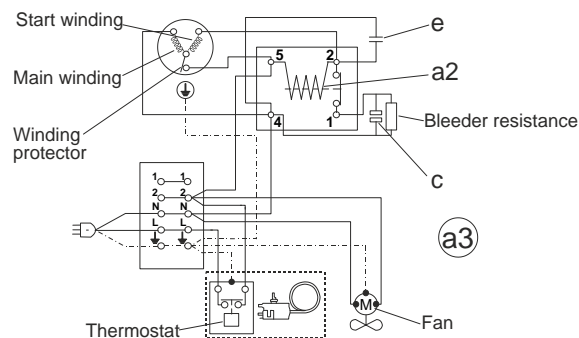
Electrical accessories / wiring diagram



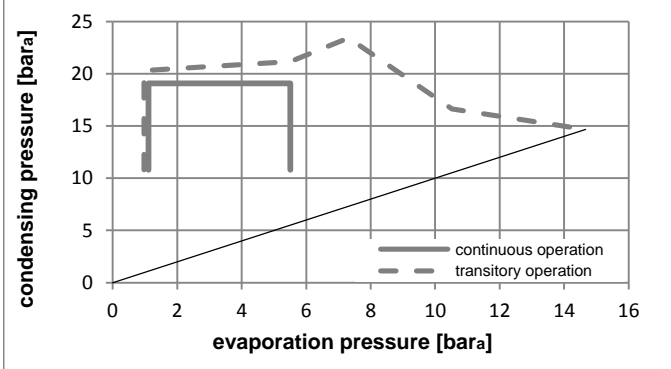
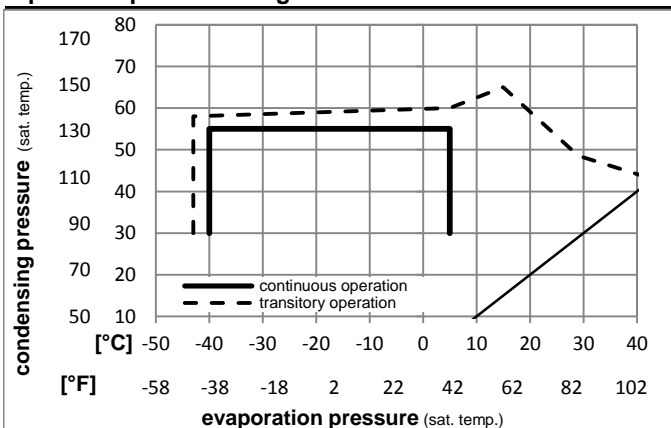
Ambient temperatures / system cooling

Ambient temperature min.: **10°C / 50°F**
 Ambient temperature max.: **43°C / 110°F**

System cooling			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a



Operation pressure range



Components:

- a3 SC starter kit 117-7025
- b plastic cover 103N2009
- d cord relief 103N1004

Alternative components:

- a2 potential relay (RVA 6M3R 339) 117-7425
- e run capacitor (5µF, 6.3mm) 117-7111
- c start capacitor (40µF, 6.3mm) 117U5372
- b plastic cover 103N2009
- d cord relief 103N1004

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Designation **SC12CNX 220-240V/50Hz** Conf. 1 Sales code: **104H8265**

Optimization + standard conditions

220-240V/50Hz 1~, CSCR, fan 3m/s, VDE

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P1	I	Ref. mass flow		
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23,3	54,4	32,2	32,2	473,8	1618	407,7	1,31	4,47	1,13	361,6	1,86	4,80	ASHRAE LBP
	[°F]	-10	130	90										
	-25	55	32	55	350,6	1197	301,7	1,01	3,46	0,87	345,9	1,79	4,37	cecomaf LBP
	[°F]	-13	131	89,6	131									
	-35	40	20	40	270,3	923	232,7	1,01	3,44	0,87	268,8	1,44	3,09	EN12900 LBP
	[°F]	-31	104	68	104									
	-6,66	54,4	35	46,1	924,6	3158	795,7	1,80	6,13	1,55	514,8	2,56	10,55	ASHRAE MBP
	[°F]	20	130	95	115									
	-10	55	32	55	720,2	2460	619,8	1,49	5,07	1,28	484,9	2,42	9,11	cecomaf MBP
	[°F]	14	131	89,6	131									
	-10	45	20	45	813,0	2777	699,7	1,78	6,09	1,54	455,7	2,27	9,98	EN12900 MBP
	[°F]	14	113	68	113									

Performance tables

220-240V/50Hz 1~, CSCR, fan 3m/s, 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	178,2	609	153,4	0,77	2,64	0,67	230,2	1,28	1,99
cond. pressure	-35	-31	250,4	855	215,5	0,93	3,18	0,80	268,9	1,44	2,81
pc= 45/113	-30	-22	331,2	1131	285,0	1,08	3,69	0,93	306,6	1,60	3,72
return gas temp.	-25	-13	425,9	1455	366,6	1,24	4,23	1,07	343,7	1,76	4,80
RGT= 32/90	-15	5	678,3	2316	583,7	1,62	5,54	1,40	417,9	2,09	7,72
liquid temp	-5	23	1049,6	3584	903,3	2,12	7,25	1,83	494,4	2,45	12,08
Tliq= 45/113	5	41	1582,2	5403	1361,6	2,74	9,37	2,36	576,5	2,81	18,51
[°C / °F]	-40	-40	104,1	356	89,6	0,51	1,75	0,44	202,6	1,19	1,28
cond. pressure	-35	-31	181,4	619	156,1	0,72	2,46	0,62	251,5	1,39	2,24
pc= 55/131	-30	-22	261,8	894	225,3	0,88	2,99	0,75	299,1	1,59	3,25
return gas temp.	-25	-13	350,6	1197	301,7	1,01	3,46	0,87	345,9	1,79	4,37
RGT= 32/90	-15	5	574,5	1962	494,4	1,31	4,48	1,13	438,4	2,21	7,22
liquid temp	-5	23	895,4	3058	770,6	1,68	5,75	1,45	532,1	2,64	11,41
Tliq= 55/131	5	41	1355,5	4629	1166,5	2,15	7,35	1,85	630,1	3,09	17,58