

## Model

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

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	32cST	Displacement	12,87cm <sup>3</sup> / 0,79cu.in
Oil quantity	506cm <sup>3</sup> / 17,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	1410cm <sup>3</sup> / 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

	<b>Conf. 1</b>
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

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

## Electrical data - Configurations with SC12CNX

	<b>Conf. 1</b>
Starting device type	relay
Run capacitor	5μF
Start capacitor	40μF
LRA (locked rotor amps / 4s)	23,4A
RLA (rated load amps / 1s)	4,3A
Cut in current	23,4A

## Model

Designation

**SC12CNX**

220-240V/50Hz 1~

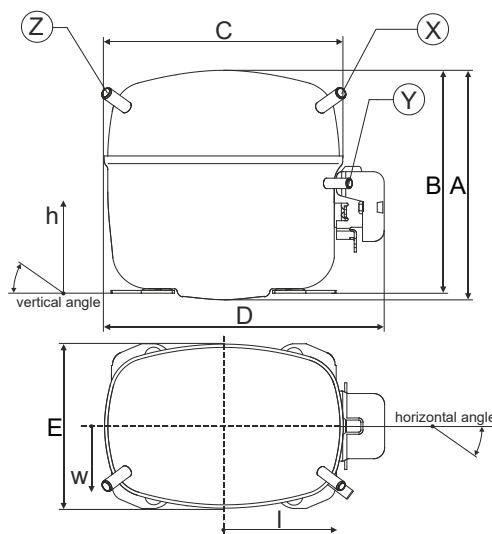
Sales code:

**104H8265**

## 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 X	Discharge Y	Process 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



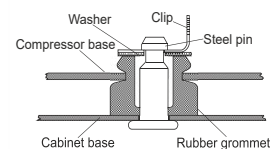
## Compressor fixation



### 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

## Application notes

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

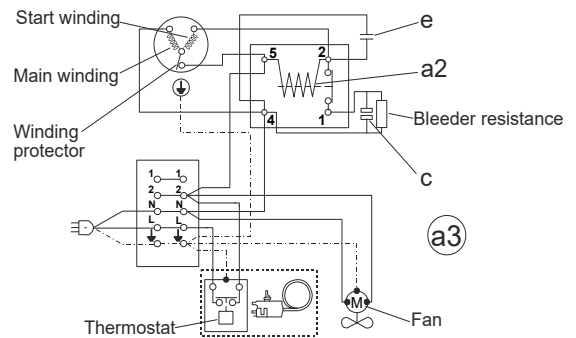
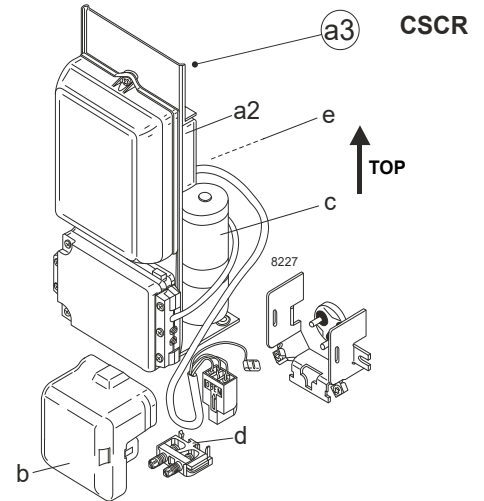
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## Configuration

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Starting torque	HST
Approvals	VDE

## Electrical accessories / wiring diagram

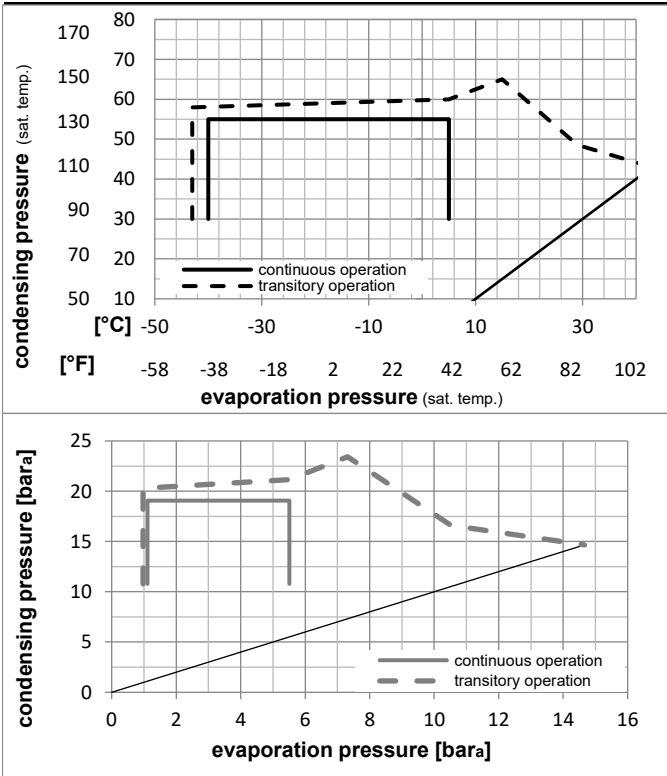


## Ambient/ machine room temperatures minimum /maximum

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

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

### Model

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### Optimization + standard conditions

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

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

### Performance tables

R290, 220V/50Hz, 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