

Model

Designation	SCE21CNLX	115V/60Hz 1~	Sales code:	104H7178
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	20,95cm ³ / 1,28cu.in
Oil quantity	550cm ³ / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	500g / 17,6oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	14,2kg / 31,3lbs		
Motor protection	external		
Winding resistance main	0,71Ω (at 25°C)		
Winding resistance aux	2,95Ω (at 25°C)		
Max. winding temp.	135°C / 275°F		
Max. discharge temp.	140°C / 284°F		



General - Configurations with SCE21CNLX

	Conf. 1
Motorconfiguration	CSCR
Power supply (nominal)	115V/60Hz
Number of phases	1
Voltage range	103-127V
Approvals	UL
Starting torque	HST
Note	Protector and cover are included and pre-assembled to compressor.

Applications with SCE21CNLX

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

Electrical data - Configurations with SCE21CNLX

	Conf. 1
Starting device type	relay
Run capacitor	23,5μF
Start capacitor	410μF
LRA (locked rotor amps / 4s/ U(N))	55,2A
RLA (rated load amps / 1s/ U(N))	8,67A
Cut in current (U(N))	55,2A

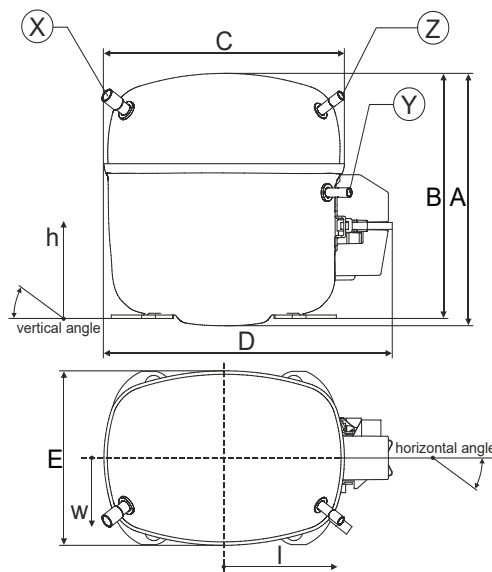
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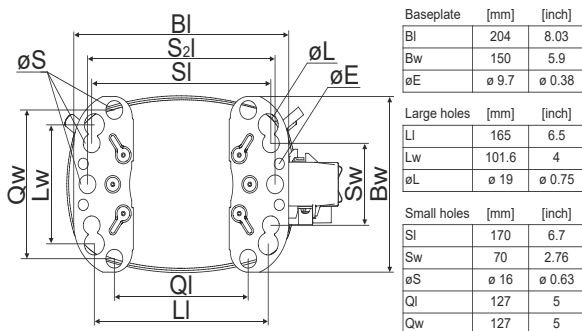
Compressor dimensions

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	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
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



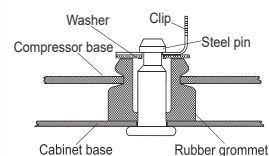
Compressor fixation



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

#NV

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

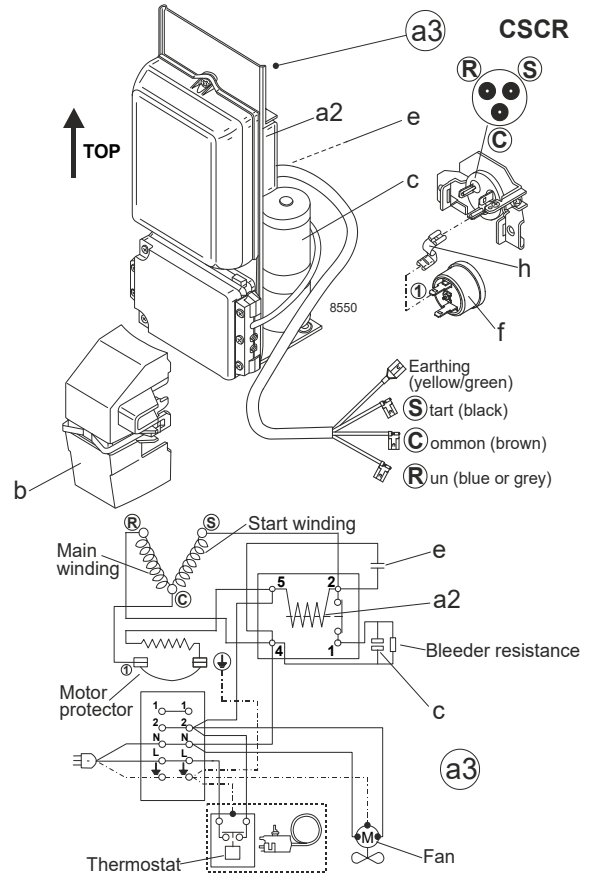
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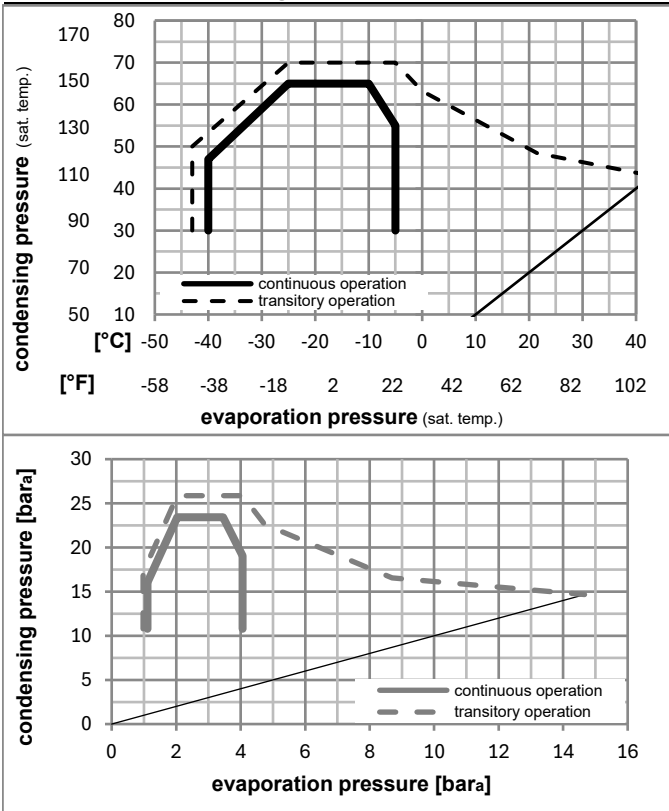
Electrical accessories / wiring diagram



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 pressure range



Components (protector (f)+ holder (h)+ cover (b): pre assembled)

a3	SC starter kit (600mm)	117-7805
h	protector holder	117U0439
f	ext. protector (T1106)	117U3222
b	plastic cover + clamp	117U1021

Alternative comp.

a2	potential relay (RVA 7AB3R A39)	117-7443
e	run capacitor (23,5μF, 6.3mm)	117-7133
c	start capacitor (410μF, 6.3mm)	117U5379

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Optimization + standard conditions

R290, 115V/60Hz, CSCR, fan 3m/s, UL

		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						
[°C]	[°F]											[W]	[A]	[kg/h]						
-23	-10	54	130	32	90	1089,3	3720	937,4	1,60	5,47	1,38	679,5	6,97	11,03		ASHRAE LBP				
-25	-13	55	131	32	131	800,3	2733	688,8	1,24	4,24	1,07	644,8	6,71	9,97		cecomaf LBP				
-35	-31	40	104	20	104	648,1	2213	557,7	1,28	4,38	1,10	505,5	5,68	7,40		EN12900 LBP				
-23	-10	49	120	4,4	120	917,0	3132	789,2	1,35	4,60	1,16	680,6	6,96	12,70		ARI540 LBP				
-23	-10	41	105	32	90	1223,8	4179	1053,2	1,88	6,42	1,62	650,6	6,75	12,39		AHAM LBP				
-35	-31	45	113	32	113	597,2	2040	514,0	1,18	4,05	1,02	504,2	5,60	6,69		opt				

Performance tables

R290, 115V/60Hz, CSCR, fan 3m/s, UL

	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	419,3	1432	360,9	0,96	3,28	0,83	437,0	4,87	4,69
cond. pressure	-34	-30	617,6	2109	531,5	1,21	4,12	1,04	511,9	5,67	6,92
pc= 45/113	-29	-20	833,5	2847	717,3	1,41	4,81	1,21	591,3	6,32	9,37
return gas temp.	-23	-10	1079,3	3686	928,9	1,61	5,49	1,38	671,0	6,90	12,19
RGT= 32/90	-21	-5	1217,3	4157	1047,7	1,72	5,86	1,48	709,6	7,18	13,78
liquid temp	-15	5	1531,3	5230	1317,9	1,96	6,69	1,69	781,8	7,75	17,42
Tliq= 45/113	-5	23	2258,4	7713	1943,6	2,56	8,73	2,20	883,6	9,03	26,00
[°C / °F]	-40	-40	165,8	566	142,7	0,47	1,60	0,40	354,2	4,01	2,04
cond. pressure	-34	-30	395,3	1350	340,2	0,86	2,95	0,74	457,2	5,15	4,89
pc= 55/131	-29	-20	628,4	2146	540,8	1,11	3,79	0,95	566,6	6,11	7,80
return gas temp	-23	-10	877,4	2997	755,1	1,29	4,42	1,11	678,3	6,96	10,94
RGT= 32/90	-21	-5	1011,8	3455	870,7	1,38	4,71	1,19	733,7	7,36	12,65
liquid temp	-15	5	1307,9	4467	1125,6	1,55	5,31	1,34	841,1	8,16	16,44
Tliq= 55/131	-5	23	1967,3	6719	1693,1	1,95	6,64	1,67	1011,3	9,76	25,06