

Model
NLE13LNDX

Sales code:
105H7301

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	300g / 10.58oz
Weight	11.80 kg / 26.01lbs
Displacement	12.60 cm3 / 0.77cu.in
Compressors on pallet	80



General – Configurations With NLE13LNDX

-	Conf. 1
Motor configuration	CSCR
Power supply (nominal)	220-240 V/50 Hz
Number of phases	1
Voltage range	198-254 V
Approvals	VDE
Starting torque	HST
Refrigerant	R290
Application	LBP
Hot gas defrost	OK
Long interval pull down	OK

Application Notes

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

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Compressor Design

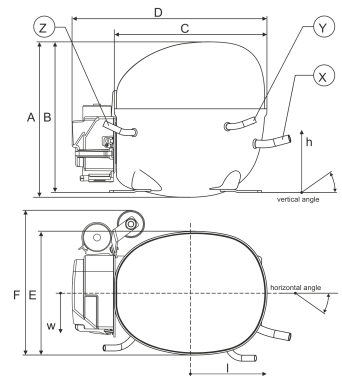
Oil type	POE	Winding resistance main	8.67 Ohm
Oil viscosity	32cSt	Winding resistance aux	15.1 Ohm
Oil quantity	298 / 10.08fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm³ / 79.80fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	external		

Compressor Dimensions

Housing

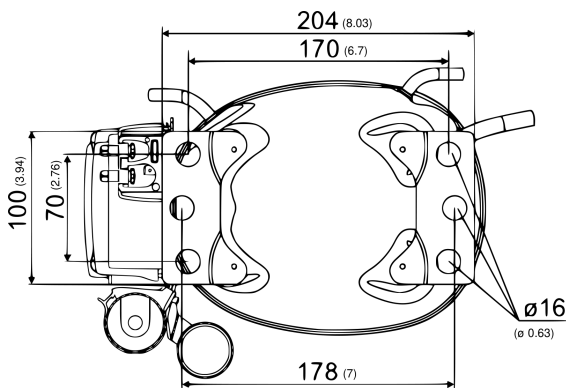
A Height	209mm / 8.23in
B Height	203mm / 7.99in
C Length shell	205mm / 8.07in
D Length w. cover	262mm / 10.31in
E Width	166mm / 6.54in

[Find 3D Model here](#)

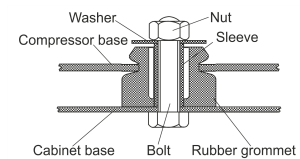


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	11°	0°	0°
Vertical angle ±2°	15°	21°	25°
Position l/h/w [mm]	140/72/59 / 5.51/2.83/2.32in	94/98.1/87 / 3.70/3.86/3.43in	-109/93/74 / -4.29/3.66/2.91in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

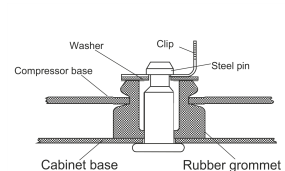
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	one comp.	multi pack
Bolt joint M6 ø16mm	118-1917	118-1918
Bolt joint ø1/4" ø16mm	118-1946	–
Snap-on ø7,3 ø16mm	118-1947	118-1919

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Configuration 1

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Configuration

Motor configuration	CSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	10 µF
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	15.1 A
RLA (rated load amps / 1s/ U(N))	1.95 A

Ambient/ machine room temperatures minimum /maximum

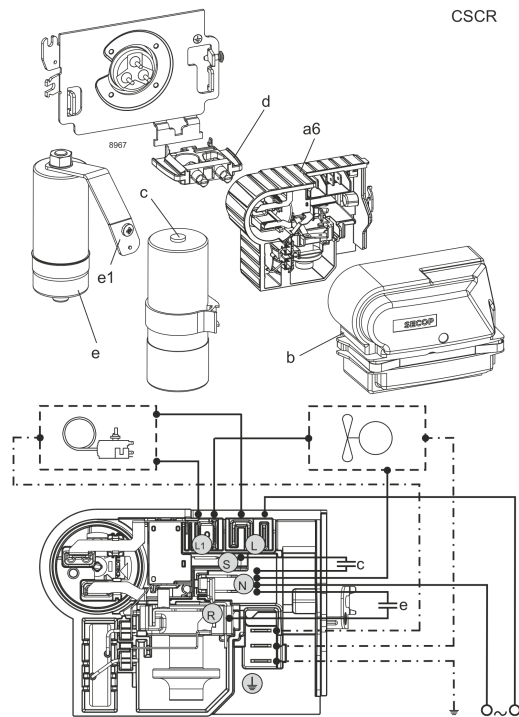
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

a6 NL starter kit 117U8200

c start capacitor (80µF) 117U5353

e run cap (10µF, 6.3mm,c.length 280mm) 117-7166

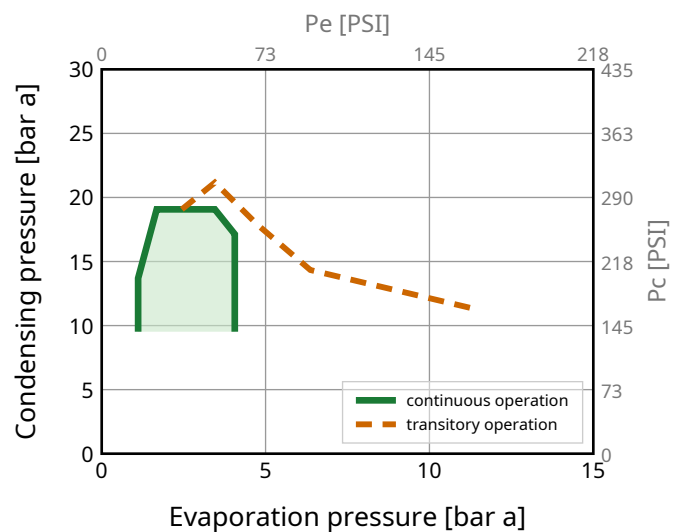
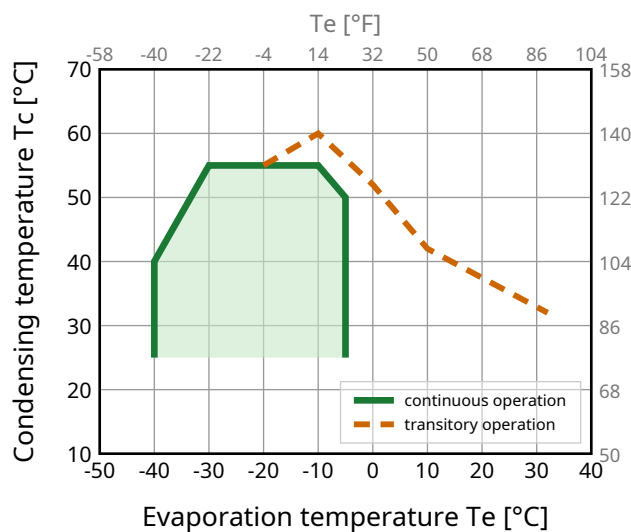
b cover terminal board + clamp 117U1038

e1 retaining clamp 117-0314

screw M4x8mm 117-0301

d cord relief 103N1007

Operation Pressure Range



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Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	$\dot{m}$	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	645	2202	555	1.69	5.77	382	2.18	6.55	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	483	1648	415	1.31	4.48	368	2.13	6.05	CECOMAF LBP
-35 -31	40 104	20 68	40 104	359	1226	309	1.36	4.64	264	1.75	4.12	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	519	1771	446	1.41	4.82	367	2.13	7.21	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	679	2318	584	1.97	6.74	344	2.04	6.90	AHAM LBP
-35 -31	45 113	32 89.6	45 113	345	1179	297	1.27	4.34	271	1.77	3.89	opt LBP

Performance Tables

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

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	$\dot{m}$
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	262	896	226	1.11	3.78	237	1.64	2.95
-35	-31	345	1179	297	1.27	4.34	271	1.77	3.89
-30	-22	443	1512	381	1.44	4.92	307	1.91	5.01
-25	-13	557	1900	479	1.62	5.52	344	2.04	6.31
-20	-4	688	2348	592	1.80	6.16	382	2.18	7.83
-15	5	839	2861	721	2.01	6.84	418	2.31	9.58
-10	14	1010	3445	868	2.23	7.60	454	2.45	11.59
-5	23	1202	4103	1034	2.47	8.42	487	2.59	13.89

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-40	-40	219	746	188	0.90	3.06	244	1.67	2.72
-35	-31	294	1001	252	1.04	3.53	283	1.82	3.65
-30	-22	381	1300	328	1.17	4.00	325	1.97	4.76
-25	-13	483	1648	415	1.31	4.48	368	2.13	6.05
-20	-4	601	2050	517	1.46	4.97	412	2.29	7.56
-15	5	736	2510	633	1.61	5.49	457	2.46	9.30
-10	14	889	3034	765	1.77	6.06	501	2.64	11.31
-5	23	1063	3627	914	1.96	6.67	544	2.82	13.61