Model
NLE13MNDX

Sales code:
105H7312

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	**64**

General – Configurations With NLE13MNDX

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

Application Notes

- Starter kit(relay), cover and cord relief are included and pre-assembled.
- Provision for PE Grounding is located at the PE Stamp on the compressor

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Compressor Design

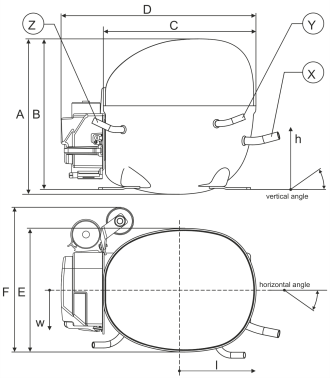
Oil type	**POE**	Winding resistance main	**7.5 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**12.9 Ohm**
Oil quantity	**300 / 10.14fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

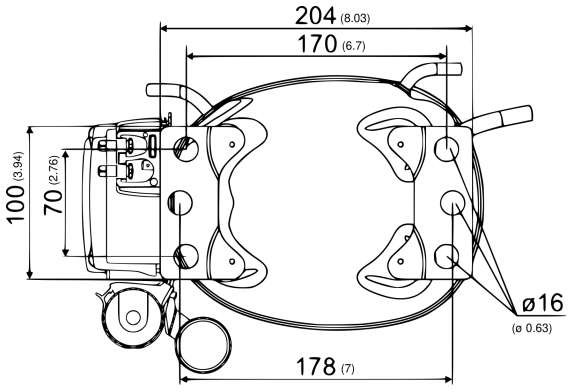
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**262mm / 10.31in**
E Width	**166mm / 6.54in**

Find 3D Model here



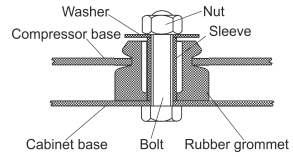
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	11°	0°	0°
Vertical angle ±2°	15°	21°	25°
Position l/h/w [mm]	140/72/59 / 5.51/2.83/2.32in	94/98.1/87 / 3.70/3.86/3.43in	-109/93/74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

Mounting Accessories

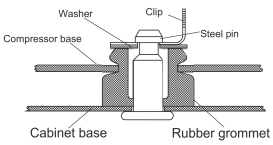


Dimensions in mm [in]

Bolt joint



Snap-on



	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

Model
NLE13MNDX Configuration 1

Sales code:
105H7312

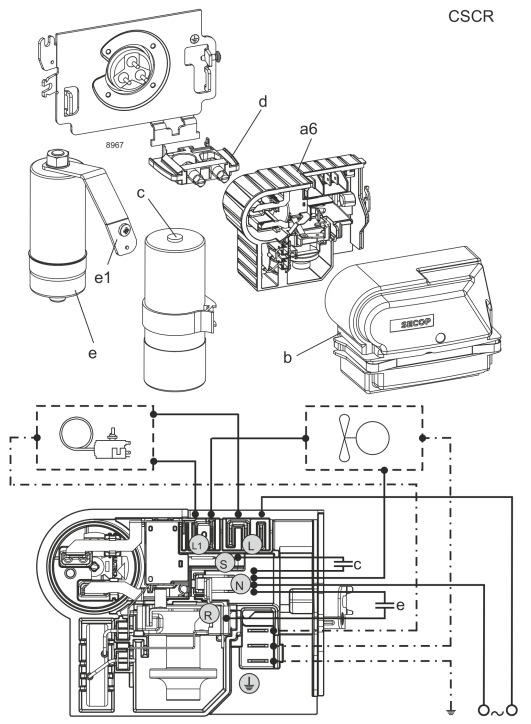
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R290**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**16.7 A**
RLA (rated load amps / 1s/ U(N))	**2.2 A**
Cut in current (U(N))	**16.7 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



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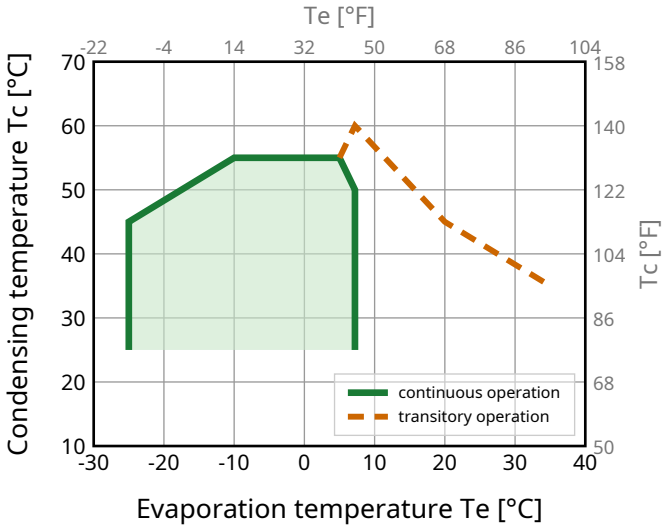
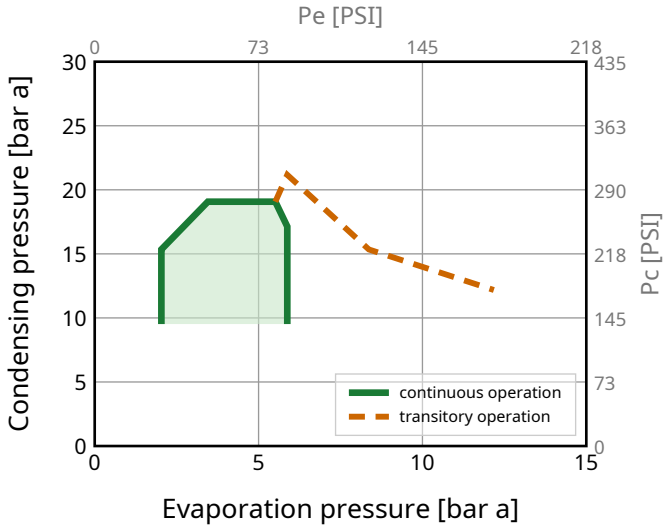
Components (Starter kit + cover + cord relief: pre-assembled)
a6 NL starter kit 117U8201
c start capacitor (80µF) 117U5353
e run cap (10µF, 6.3mm,c.length 280mm) 117-7166
b cover terminal board + clamp 117U1038
e1 retaining clamp 117-0314
screw M4x8mm 117-0301
d cord relief 103N1007

Operation Pressure Range





Model

NLE13MNDX Configuration 1

Sales code:

105H7312

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1136**	3878	977	**2.09**	7.14	543	2.55	13.01	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**906**	3092	779	**1.75**	5.99	516	2.42	11.52	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1017**	3469	874	**2.19**	7.49	463	2.19	12.51	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1074**	3663	923	**2.12**	7.23	507	2.38	13.96	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1057**	3606	909	**2.28**	7.79	463	2.19	12.14	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**570**	1944	490	**1.60**	5.47	355	1.73	6.46	**opt MBP 2**

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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	**570**	1944	490	**1.60**	5.47	355	1.73	6.46
-20	-4	**710**	2423	611	**1.82**	6.20	391	1.88	8.08
-15	5	**872**	2976	750	**2.04**	6.96	428	2.03	9.96
-10	14	**1057**	3606	909	**2.28**	7.79	463	2.19	12.14
-5	23	**1266**	4319	1089	**2.56**	8.72	495	2.33	14.62
0	32	**1500**	5118	1290	**2.87**	9.81	522	2.45	17.44
5	41	**1761**	6008	1514	**3.25**	11.10	541	2.54	20.64
7.2	45	**1884**	6429	1620	**3.45**	11.76	547	2.56	22.17

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

-25	-13	**484**	1652	416	**1.30**	4.44	372	1.80	6.07
-20	-4	**605**	2066	521	**1.45**	4.93	419	2.00	7.62
-15	5	**746**	2544	641	**1.59**	5.44	468	2.21	9.43
-10	14	**906**	3092	779	**1.75**	5.99	516	2.42	11.52
-5	23	**1088**	3713	936	**1.93**	6.60	563	2.63	13.93
0	32	**1293**	4412	1112	**2.14**	7.29	605	2.82	16.67
5	41	**1522**	5192	1309	**2.38**	8.10	641	2.99	19.80
7.2	45	**1630**	5563	1402	**2.49**	8.51	654	3.05	21.30