

Model

Designation	NLE13LNDX	220-240V/50Hz 1~	Sales code:	105H7311
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	12,6cm ³ / 0,77cu.in
Oil quantity	298cm ³ / 10,1fl.oz	Compressors on pallet	
Refr. charge - tech. limit	300g / 10,6oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	11,8kg / 26lbs		
Motor protection	external		
Winding resistance main	8,67Ω (at 25°C)		
Winding resistance aux	15,1Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NLE13LNDX

	Conf. 1
Motor configuration	CSCR
Power supply (nominal)	220-240V/50Hz
Number of phases	1
Voltage range	198-254V
Approvals	VDE
Starting torque	HST
Note	Starter kit(relay), cover and cord relief are included and pre-assembled.

Applications with NLE13LNDX

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

Electrical data - Configurations with NLE13LNDX

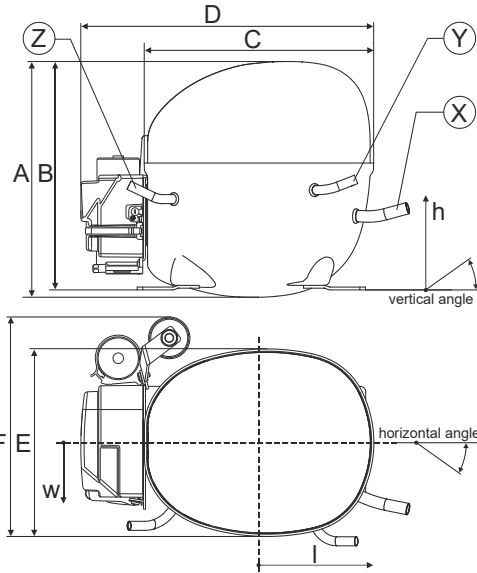
	Conf. 1
Starting device type	relay
Run capacitor	10μF
Start capacitor	80μF
LRA (locked rotor amps / 4s/ U(N))	15,1A
RLA (rated load amps / 1s/ U(N))	1,95A
Cut in current (U(N))	

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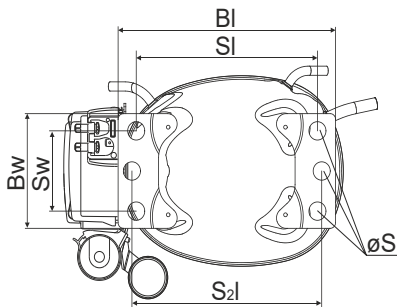
Compressor dimensions

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



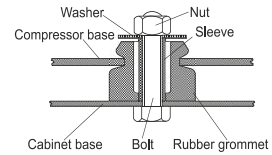
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	11°	0°	0°
Vertical angle	±2°	15°	21°	25°
Position l/h/w	[mm]	140/72/59	94/98/87	-109/93/74
	[in]	5,5/2,8/2,3	3,7/3,9/3,4	-4,3/3,7/2,9
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

Compressor fixation

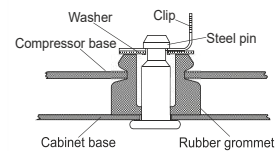


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	100	3.94
Small holes		
	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

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	
Snap-on ø7,3 ø16mm	118-1947	118-1919

Application notes

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

Model

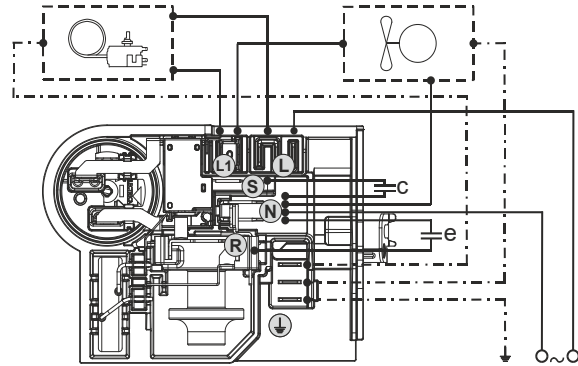
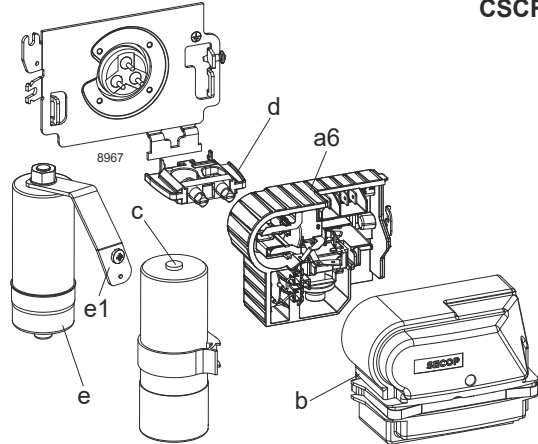
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Configuration

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

Electrical accessories / wiring diagram

CSCR



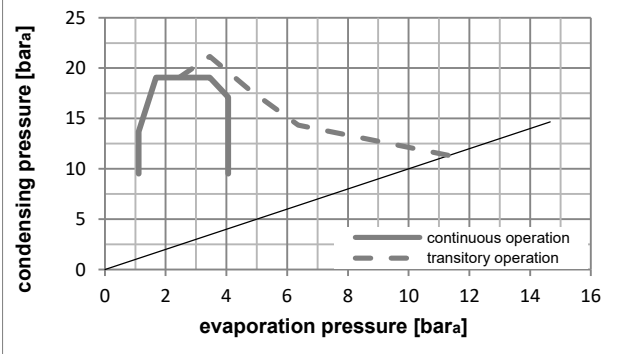
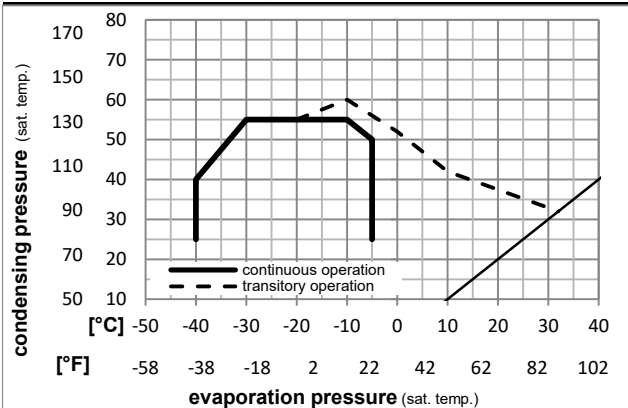
Ambient/ machine room temperatures minimum /maximum

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 (Starter kit (a6)+cover (b) +cord relief (d): pre assembled)

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

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Optimization + standard conditions

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

	pe	pc	RGT	Tliq	Cooling capacity	COP	EER	P1	I	Ref. mass flow	
	[°C]	[°C]	[°C]	[°C]	[W]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
Evaporating pressure (saturation temperature)	-23	54	32	32	610,7	1,69	5,77	361,2	1,97	6,18	ASHRAE LBP
Condensing pressure (saturation temperature)	-10	130	90	90	2086	1,69	5,77	361,2	1,97	6,18	ASHRAE LBP
Return gas temp.					525,5	1,69	5,77	361,2	1,97	6,18	ASHRAE LBP
Liquid temp.					610,7	1,69	5,77	361,2	1,97	6,18	ASHRAE LBP
Power consumption					610,7	1,69	5,77	361,2	1,97	6,18	ASHRAE LBP
Current consumption					610,7	1,69	5,77	361,2	1,97	6,18	ASHRAE LBP
Ref. mass flow					610,7	1,69	5,77	361,2	1,97	6,18	ASHRAE LBP
	[°F]	[°F]	[°F]	[°F]	[Btu/h]	[kcal/h]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-10	130	90	90	2086	1,69	5,77	361,2	1,97	6,18	ASHRAE LBP
					460,4	1,32	4,51	348,5	1,93	5,73	cecomaf LBP
					460,4	1,32	4,51	348,5	1,93	5,73	cecomaf LBP
					354,5	1,38	4,72	256,4	1,64	4,05	EN12900 LBP
					354,5	1,38	4,72	256,4	1,64	4,05	EN12900 LBP
					494,3	1,41	4,83	349,5	1,93	6,85	ARI540 LBP
					494,3	1,41	4,83	349,5	1,93	6,85	ARI540 LBP
					660,5	1,99	6,79	332,3	1,87	6,69	AHAM LBP
					660,5	1,99	6,79	332,3	1,87	6,69	AHAM LBP
					339,2	1,30	4,44	260,9	1,65	3,80	opt
					339,2	1,30	4,44	260,9	1,65	3,80	opt

Performance tables

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

	pe	pc	RGT	Tliq	Cooling capacity	COP	EER	P1	I	m
	[°C]	[°F]	[°C]	[°C]	[W]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-40	-40	-35	-31	259,0	1,15	3,91	226,0	1,55	2,90
cond. pressure	-35	-31	-30	-22	339,2	1,30	4,44	260,9	1,65	3,80
pc= 45/113	-30	-22	-25	-13	430,7	1,46	4,98	295,1	1,75	4,84
return gas temp.	-25	-13	-20	-4	537,1	1,63	5,57	329,3	1,86	6,06
RGT= 32/90	-20	-4	-15	5	662,4	1,82	6,21	364,3	1,98	7,50
liquid temp	-15	5	-5	23	810,5	2,02	6,90	400,9	2,12	9,22
Tliq= 45/113	-5	23			1190,5	2,47	8,43	482,1	2,43	13,71
[°C / °F]	-40	-40	-35	-31	216,0	0,94	3,21	229,8	1,56	2,66
cond. pressure	-35	-31	-30	-22	287,7	1,07	3,65	269,0	1,67	3,56
pc= 55/131	-30	-22	-25	-13	367,8	1,19	4,07	308,4	1,80	4,56
return gas temp	-25	-13	-20	-4	460,4	1,32	4,51	348,5	1,93	5,73
RGT= 32/90	-20	-4	-15	5	569,1	1,46	4,98	390,3	2,08	7,12
liquid temp	-15	5	-5	23	698,0	1,61	5,49	434,5	2,25	8,78
Tliq= 55/131	-5	23			1031,5	1,93	6,61	533,2	2,64	13,14