

## Model

Designation	<b>NLE15LNDX</b>	220-240V/50Hz 1~	Sales code:	<b>105H7500</b>
-------------	------------------	------------------	-------------	-----------------

## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	32cSt	Displacement	14,65cm <sup>3</sup> / 0,89cu.in
Oil quantity	298cm <sup>3</sup> / 10,1fl.oz	Compressors on pallet	
Refr. charge - tech. limit	300g / 10,6oz		
Free gas volume comp.	2360cm <sup>3</sup> / 79,8fl.oz		
Weight	11,8kg / 26lbs		
Motor protection	external		
Winding resistance main	7,1Ω (at 25°C)		
Winding resistance aux	12,4Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



## General - Configurations with NLE15LNDX

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	- / -

## Applications with NLE15LNDX

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

## Electrical data - Configurations with NLE15LNDX

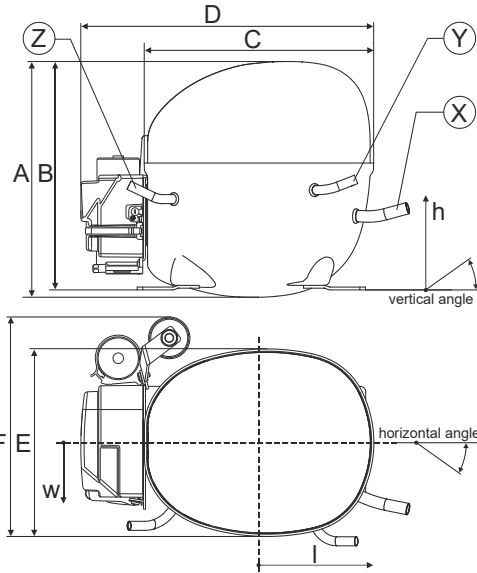
Conf. 1	
Starting device type	relay
Run capacitor	10μF
Start capacitor	80μF
LRA (locked rotor amps / 4s/ U(N))	16,8A
RLA (rated load amps / 1s/ U(N))	2,3A
Cut in current (U(N))	16,8A

## Model

Designation **NLE15LNDX** 220-240V/50Hz 1~ Sales code: **105H7500**

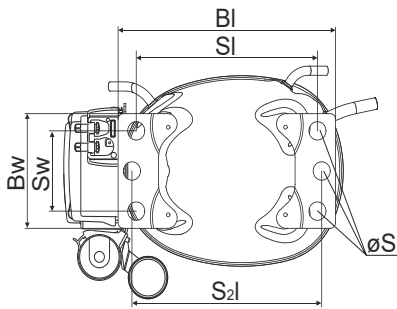
## Compressor dimensions

<b>Housing</b>	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



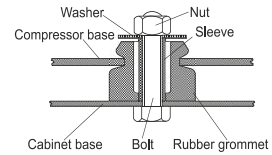
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	11°	0°	0°
Vertical angle	±2°	15°	21°	25°
Position l/h/w	[mm]	140/72/59	94/98/87	-109/93/74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

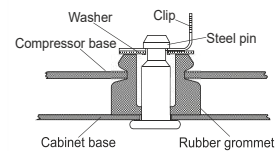


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	100	3.94
Small holes		
	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

### 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

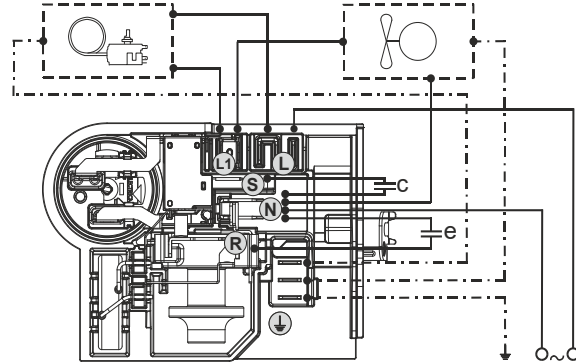
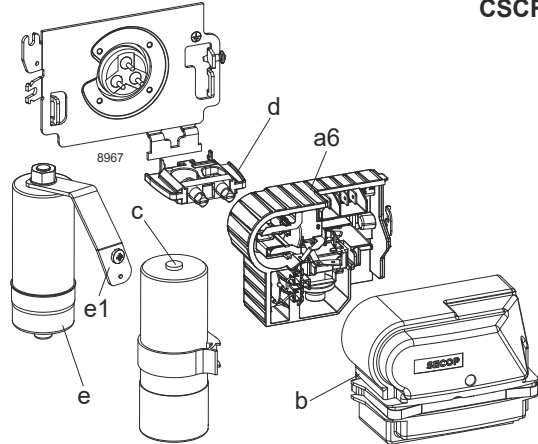
Designation **NLE15LNDX** **220-240V/50Hz** Conf. 1 Sales code: **105H7500**

## 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**



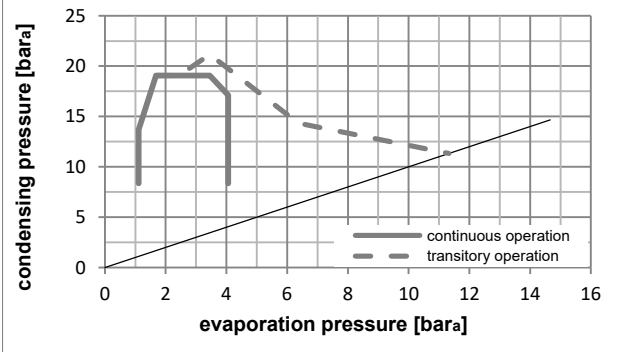
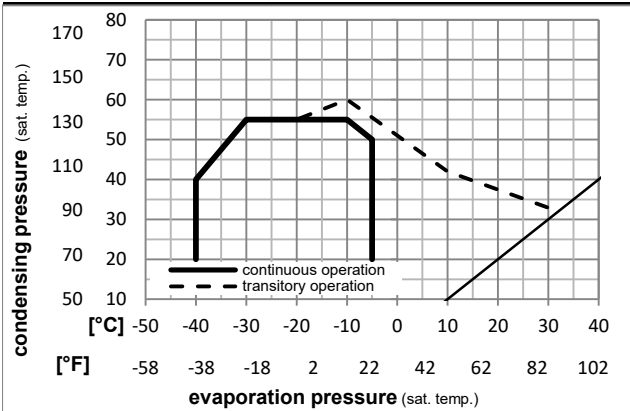
## Ambient/ machine room temperatures minimum /maximum

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

- |    |                                      |          |
|----|--------------------------------------|----------|
| 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 |

## Model

Designation **NLE15LNDX 220-240V/50Hz** Conf. 1 Sales code: **105H7500**

## 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			
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	I	m	[A]	[kg/h]							
[°C]	-23	54	32	32	775,2	2647	667,1	1,71	5,86	1,48	452,1	2,16	7,85		ASHRAE LBP							
[°F]	-10	130	90	90																		
[°C]	-25	55	32	55	585,3	1999	503,7	1,34	4,59	1,16	435,6	2,09	7,29		cecomaf LBP							
[°F]	-13	131	90	131																		
[°C]	-35	40	20	40	437,7	1495	376,7	1,38	4,70	1,18	318,2	1,61	5,00		EN12900 LBP							
[°F]	-31	104	68	104																		
[°C]	-23	49	4,4	49	620,6	2119	534,1	1,41	4,82	1,22	439,3	2,10	8,59		ARI540 LBP							
[°F]	-10	120	40	120																		
[°C]	-23	41	32	32	809,3	2764	696,5	1,94	6,63	1,67	416,7	2,00	8,20		AHAM LBP							
[°F]	-10	105	90	90																		
[°C]	-35	45	32	45	422,4	1442	363,5	1,30	4,44	1,12	324,9	1,64	4,73		opt							
[°F]	-31	113	90	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	323,1	1103	278,0	1,14	3,91	0,98	282,5	1,50	3,61
cond. pressure	-35	-31	422,4	1442	363,5	1,30	4,44	1,12	324,9	1,64	4,73
pc= 45/113	-30	-22	537,0	1834	462,1	1,46	4,97	1,25	368,9	1,80	6,04
return gas temp.	-25	-13	668,9	2284	575,7	1,62	5,52	1,39	414,1	1,99	7,54
RGT= 32/90	-20	-4	820,2	2801	705,8	1,78	6,09	1,53	460,1	2,20	9,29
liquid temp	-15	5	992,7	3390	854,3	1,96	6,69	1,69	506,5	2,41	11,29
Tliq= 45/113	-5	23	1409,6	4814	1213,2	2,35	8,03	2,02	599,4	2,84	16,23
[°C / °F]	-40	-40	266,4	910	229,2	0,92	3,15	0,79	288,9	1,52	3,28
cond. pressure	-35	-31	360,1	1230	309,9	1,07	3,67	0,92	335,1	1,68	4,45
pc= 55/131	-30	-22	465,7	1591	400,8	1,21	4,14	1,04	384,1	1,87	5,78
return gas temp	-25	-13	585,3	1999	503,7	1,34	4,59	1,16	435,6	2,09	7,29
RGT= 32/90	-20	-4	720,9	2462	620,4	1,47	5,03	1,27	489,3	2,33	9,02
liquid temp	-15	5	874,3	2986	752,5	1,60	5,48	1,38	544,8	2,58	10,99
Tliq= 55/131	-5	23	1243,1	4245	1069,8	1,88	6,44	1,62	659,5	3,11	15,84