

## Model

Designation	<b>NLE10DNDX</b>	220-240V/50Hz 1~	105H7010
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	32cSt	Displacement	10,1cm <sup>3</sup> / 0,62cu.in
Oil quantity	300cm <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	11,3kg / 24,9lbs		
Motor protection	1# internal		
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 NLE10DNDX

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 NLE10DNDX

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

## Electrical data - Configurations with NLE10DNDX

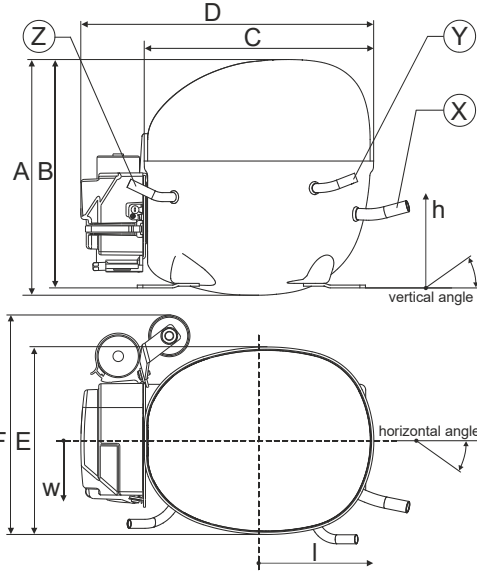
Conf. 1	
Starting device type	relay
Run capacitor	10μF
Start capacitor	80μF
LRA (locked rotor amps / 4s/ U(N))	16,8A
RLA (rated load amps / 1s/ U(N))	2,3A
Cut in current (U(N))	16,8A

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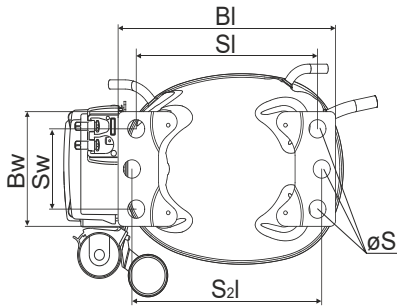
## Compressor dimensions

<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



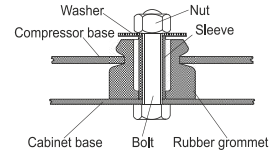
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	11°	0°	0°
Vertical angle	±2°	15°	21°	25°
Position l/h/w	[mm]	140/72/59	94/98/87	-109/93/74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

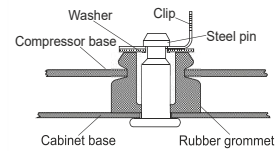


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	100	3.94
Small holes		
	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

### 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

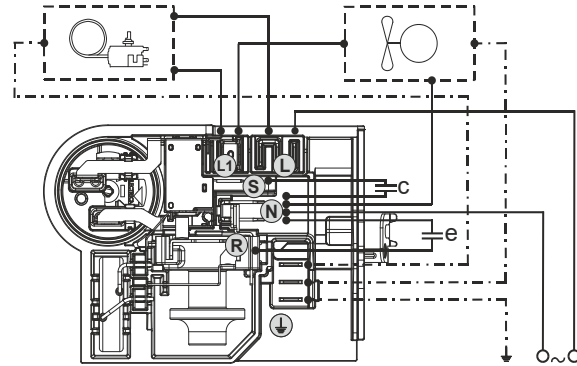
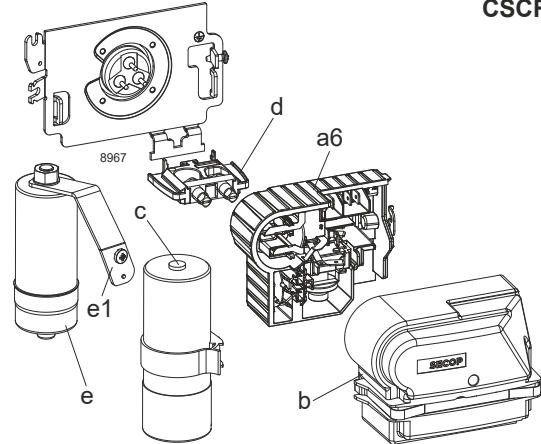
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## Configuration

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Refrigerant	R290
Application	MBP+HBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE

## Electrical accessories / wiring diagram

CSCR

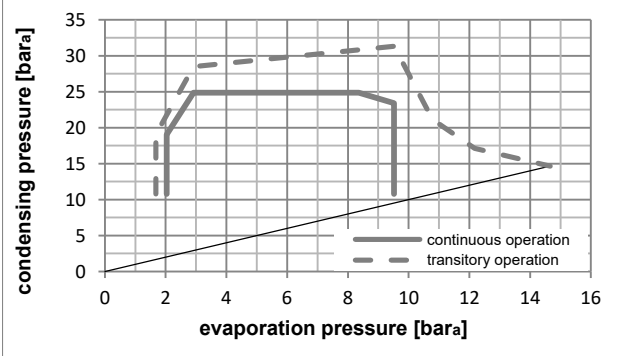
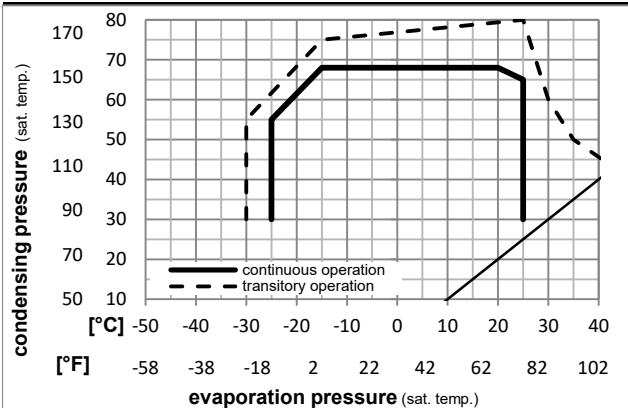


## Ambient/ machine room temperatures minimum /maximum

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	117U8202
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

### Alternative components

e	run cap (10µF, 6.3mm,c.length 350mm)	117-7170
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## Model

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## Optimization + standard conditions

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

		Evaporating pressure (saturation temperature)				Cooling capacity						Power consumption			
		Condensing pressure (saturation temperature)				COP						Current consumption			
		Return gas temp.				EER						Ref. mass flow			
		Liquid temp.				P1						I			
		Cooling capacity				m									
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	[°F]	7	54	35	46	1466,9	5010	1262,4	3,08	10,50	2,65	477,0	2,34	17,10	ASHRAE HBP
		45	130	95	115										
[°C]	[°F]	5	55	32	55	1226,3	4188	1055,4	2,62	8,93	2,25	468,9	2,31	15,90	cecomaf HBP
		41	131	90	131										
[°C]	[°F]	5	50	20	50	1250,9	4272	1076,6	2,82	9,63	2,43	443,5	2,21	16,66	EN12900 HBP
		41	122	68	122										
[°C]	[°F]	-7	54	35	46	901,6	3079	775,9	2,28	7,78	1,96	396,0	2,01	10,29	ASHRAE MBP
		20	130	95	115										
[°C]	[°F]	-10	55	32	55	716,1	2446	616,3	1,90	6,50	1,64	376,0	1,93	9,06	cecomaf MBP
		14	131	90	131										
[°C]	[°F]	-10	45	20	45	788,7	2694	678,8	2,26	7,71	1,94	349,4	1,83	9,68	EN12900 MBP
		14	113	68	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]	-25	-13	428,3	1463	368,6	1,58	5,38	1,36	271,7	1,48	4,83			
cond. pressure	-10	14	821,1	2804	706,6	2,35	8,03	2,02	349,4	1,83	9,39			
pc= 45/113	0	32	1181,6	4035	1016,9	2,96	10,12	2,55	398,7	2,03	13,71			
return gas temp.	7,2	45	1508,2	5151	1297,9	3,59	12,26	3,09	420,2	2,12	17,72			
RGT= 32/90	15	59	1938,6	6621	1668,4	4,61	15,73	3,96	420,8	2,12	23,18			
liquid temp	20	68	2262,3	7726	1947,0	5,59	19,09	4,81	404,8	2,04	27,42			
Tliq= 45/113	25	77	2627,4	8973	2261,2	7,04	24,06	6,06	373,0	1,91	32,35			
[°C / °F]	-25	-13	352,1	1203	303,1	1,18	4,03	1,02	298,5	1,60	4,38			
cond. pressure	-10	14	716,1	2446	616,3	1,90	6,50	1,64	376,0	1,93	9,06			
pc= 55/131	0	32	1034,3	3532	890,1	2,35	8,02	2,02	440,2	2,19	13,28			
return gas temp	7,2	45	1319,0	4505	1135,1	2,75	9,39	2,37	480,0	2,35	17,18			
RGT= 32/90	15	59	1693,3	5783	1457,2	3,34	11,40	2,87	507,4	2,46	22,49			
liquid temp	20	68	1975,0	6745	1699,7	3,85	13,16	3,32	512,4	2,48	26,63			
Tliq= 55/131	25	77	2293,6	7833	1973,9	4,55	15,52	3,91	504,6	2,45	31,48			