

## Single Pack NLU8.8DN 220-240V 50Hz CSCR

Single pack code number: **195B4622**

Position	Title	Code	Amount
1	Compressor NLU8.8DN	105H6085	1
2	SC starting device (550mm)	117-7812	1
3	Bolt joint for one compressor   M6   ø16mm	118-1917	1

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## Model

Designation	<b>NLU8.8DN</b>	220-240V/50Hz 1~	Sales code:	<b>105H6085</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	32cST	Displacement	8,76cm <sup>3</sup> / 0,53cu.in
Oil quantity	298cm <sup>3</sup> / 10,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	300g / 10,6oz		
Free gas volume comp.	2360cm <sup>3</sup> / 79,8fl.oz		
Weight	11,8kg / 26lbs		
Motor protection	1# internal		
Winding resistance main	5,68Ω (at 25°C)		
Winding resistance aux	21,15Ω (at 25°C)		
Max. winding temp.	135°C / 275°F		
Max. discharge temp.	130°C / 266°F		



## General - Configurations with NLU8.8DN

	<b>Conf. 1</b>
Motorconfiguration	CSCR
Power supply (nominal)	220-240V/50Hz
Number of phases	1
Voltage range	187-254V
Approvals	VDE
Starting torque	HST
Note	- / -

## Applications with NLU8.8DN

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

## Electrical data - Configurations with NLU8.8DN

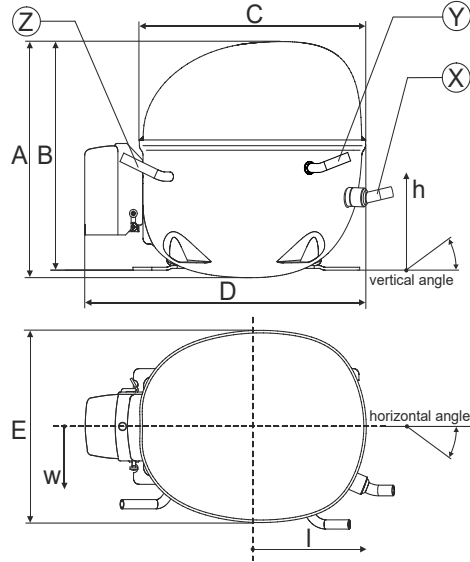
	<b>Conf. 1</b>
Starting device type	relay
Run capacitor	5μF
Start capacitor	60μF
LRA (locked rotor amps / 4s)	13A
RLA (rated load amps / 1s)	2,4A
Cut in current	

## Model

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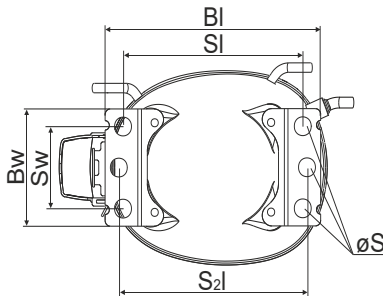
## Compressor dimensions

<b>Housing</b>	A Height	203mm / 7,99in
	B Height	197mm / 7,76in
	C Length shell	205mm / 8,07in
	D Length w. cover	254mm / 10in
	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°	0°	0°	0°
Vertical angle	±2°	15°	21°	155°
Position l/h/w	[mm]	132/69/57	94/102/81	-109/94/72
	[in]	5,2/2,7/2,2	3,7/4/3,2	-4,3/3,7/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

## Compressor fixation

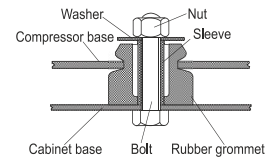


Baseplate	[mm]	[inch]
BI	204	8.03
BW	100	3.94

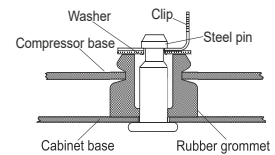
  

Small holes	[mm]	[inch]
SI	170	6.7
SW	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

### 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

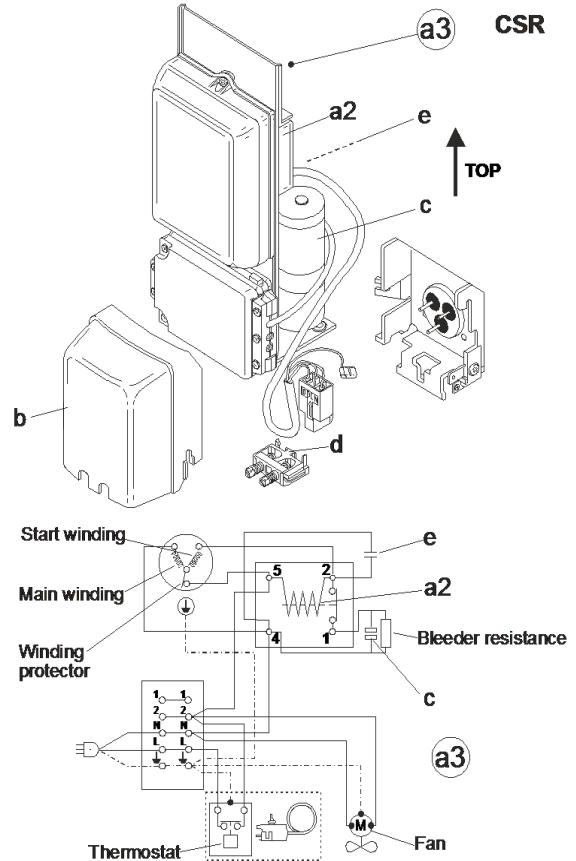
## Model

Designation	<b>NLU8.8DN</b>	<b>220-240V/50Hz</b>	Conf. 1	Sales code:	<b>105H6085</b>
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## Configuration

Motorconfiguration	CSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	MBP+HBP
Voltage range	187-254V
Starting torque	HST
Approvals	VDE

## Electrical accessories / wiring diagram



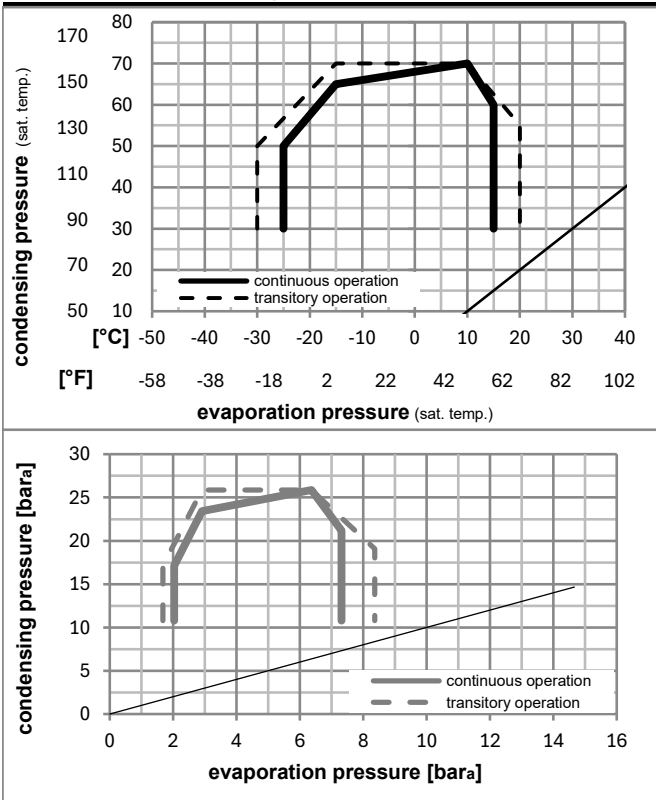
## Ambient/ machine room temperatures minimum /maximum

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

a3 SC starter kit (550mm) 117-7812

## Alternative components

a2	potential relay (RVA 6M3R 339)	117-7425
c	start capacitor (60μF, 6.3mm)	117U5389
e	run capacitor (5μF, 6.3mm)	117-7111
b	plastic cover	103N2010
d	cord relief	103N1010
	assy. cable (1035mm)	117-7095

## Noise emission

Operation pressures:	pe: -25°C / -13°F
	pc: 45°C / 113°F
Motor speed appr.:	2900rpm
Lw(A):	49dB(A)

### Model

Designation **NLU8.8DN** **220-240V/50Hz** Conf. 1 Sales code: **105H6085**

### Optimization + standard conditions

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

		Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	Power consumption				
		Condensing pressure (saturation temperature)				Return gas temp.					Current consumption				
		Liquid temp.				Cooling capacity					Ref. mass flow				
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	[°F]											[W]	[A]	[kg/h]	
[°C]	[°F]	7	54	35	46	1210,0	4132	1041,3	3,09	10,54	2,66	392,0	1,82	14,10	ASHRAE HBP
[°C]	[°F]	45	130	95	115										
[°C]	[°F]	5	55	32	55	1007,5	3441	867,1	2,60	8,89	2,24	386,8	1,79	13,06	cecomaf HBP
[°C]	[°F]	41	131	90	131										
[°C]	[°F]	5	50	20	50	1038,1	3545	893,4	2,89	9,86	2,48	359,7	1,67	13,82	EN12900 HBP
[°C]	[°F]	41	122	68	122										
[°C]	[°F]	-7	54	35	46	722,4	2467	621,7	2,17	7,41	1,87	333,0	1,53	8,24	ASHRAE MBP
[°C]	[°F]	20	130	95	115										
[°C]	[°F]	-10	55	32	55	568,4	1941	489,2	1,79	6,11	1,54	318,0	1,46	7,19	cecomaf MBP
[°C]	[°F]	14	131	90	131										
[°C]	[°F]	-10	45	20	45	636,5	2174	547,7	2,21	7,54	1,90	288,3	1,34	7,81	EN12900 MBP
[°C]	[°F]	14	113	68	113										

### Performance tables

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

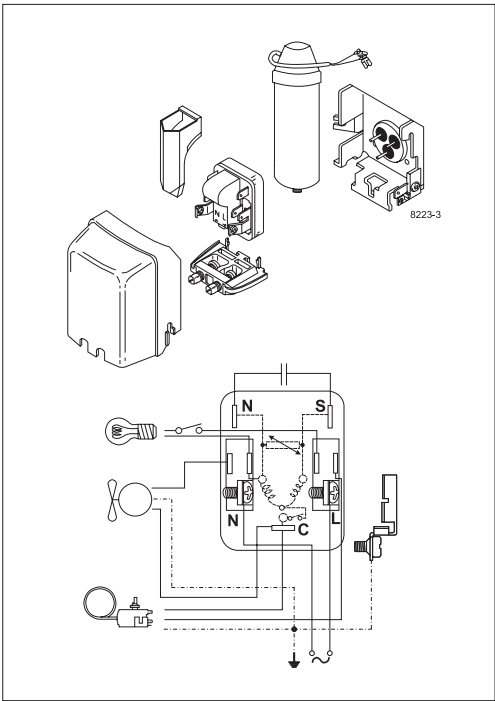
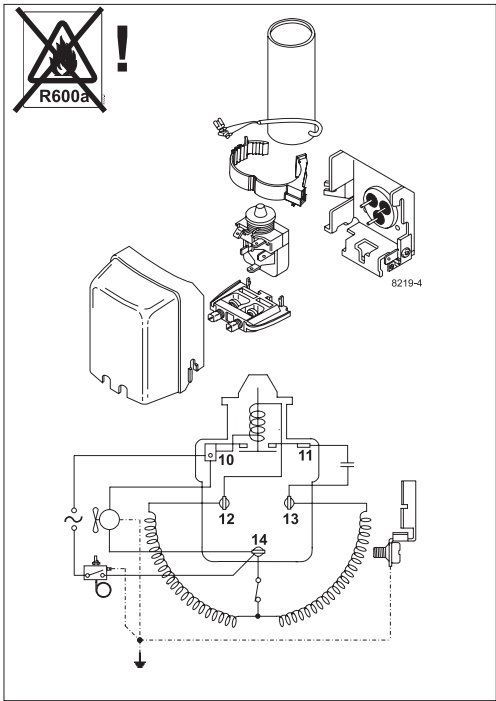
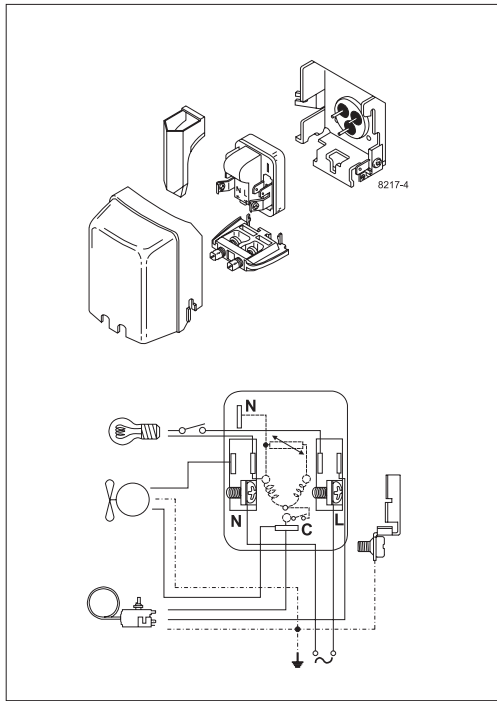
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-25	-13	351,5	1201	302,5	1,54	5,27	1,33	227,9	1,11	3,96
cond. pressure	-20	-4	434,3	1483	373,7	1,74	5,95	1,50	249,2	1,18	4,92
pc= 45/113	-10	14	662,6	2263	570,2	2,30	7,85	1,98	288,3	1,34	7,58
return gas temp.	-5	23	809,6	2765	696,8	2,65	9,06	2,28	305,2	1,42	9,32
RGT= 32/90	0	32	979,6	3346	843,1	3,06	10,46	2,64	319,9	1,50	11,36
liquid temp	5	41	1173,3	4007	1009,7	3,53	12,07	3,04	332,0	1,56	13,73
Tliq= 45/113	15	59	1634,5	5582	1406,7	4,72	16,11	4,06	346,5	1,63	19,54
[°C / °F]	-25	-13	292,9	1000	252,1	1,24	4,24	1,07	236,0	1,14	3,65
cond. pressure	-20	-4	367,8	1256	316,6	1,39	4,76	1,20	264,1	1,24	4,60
pc= 55/131	-10	14	568,4	1941	489,2	1,79	6,11	1,54	318,0	1,46	7,19
return gas temp	-5	23	695,6	2376	598,7	2,03	6,93	1,75	342,9	1,58	8,86
RGT= 32/90	0	32	841,7	2875	724,4	2,30	7,85	1,98	366,0	1,69	10,81
liquid temp	5	41	1007,5	3441	867,1	2,60	8,89	2,24	386,8	1,79	13,06
Tliq= 55/131	15	59	1401,0	4785	1205,7	3,34	11,39	2,87	420,1	1,94	18,61



8238-20

# NL Compressors

**SECOP**





## Service/Repair – R600a, R290



8545

## Brazing on Suction Connectors (Direct Intake)

representative image



**! max. 150°C/302°F !  
at socket**  
brazing solder: phosphor (LP7) or silver

Refer to Product Bulletin:  
**Brazing on Suction Connectors  
(Compressors with Direct Suction Intake)**

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