

Model
NLU8.8DN

Sales code:
105H6085

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	300g / 10.58oz
Weight	11.80 kg / 26.01lbs
Displacement	8.76 cm3 / 0.53cu.in
Compressors on pallet	80



General - Configurations With NLU8.8DN

-	Conf. 1
Motor configuration	CSCR
Power supply (nominal)	220-240 V/50 Hz
Number of phases	1
Voltage range	187-254 V
Approvals	VDE
Starting torque	HST
Refrigerant	R290
Application	MBP+HBP
Hot gas defrost	OK
Long interval pull down	OK

Application Notes

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

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Compressor Design

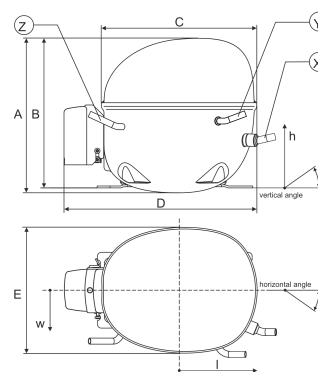
Oil type	POE	Winding resistance main	5.68 Ohm
Oil viscosity	32cSt	Winding resistance aux	21.15 Ohm
Oil quantity	298 / 10.08fl.oz	Max. winding temp.	135 °C
Free gas volume comp.	2,360 cm ³ / 79.80fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

Housing

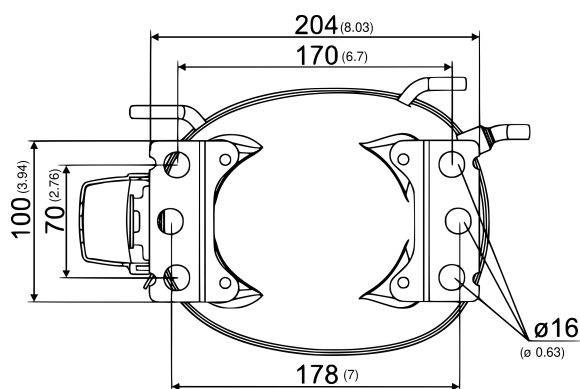
A Height	203mm / 7.99in
B Height	197mm / 7.76in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

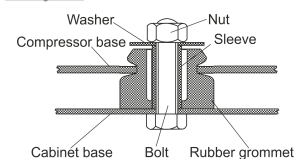


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in	-109.3/94.3/72 / -4.30/3.71/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

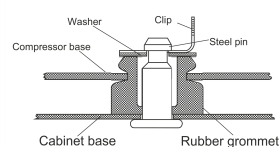
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	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

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Configuration 1

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Configuration

Motor configuration	CSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	MBP+HBP
Voltage range	187-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	5 μF
Start capacitor	60 μF
LRA (locked rotor amps / 4s/ U(N))	13 A
RLA (rated load amps / 1s/ U(N))	2.4 A

Ambient/ machine room temperatures minimum /maximum

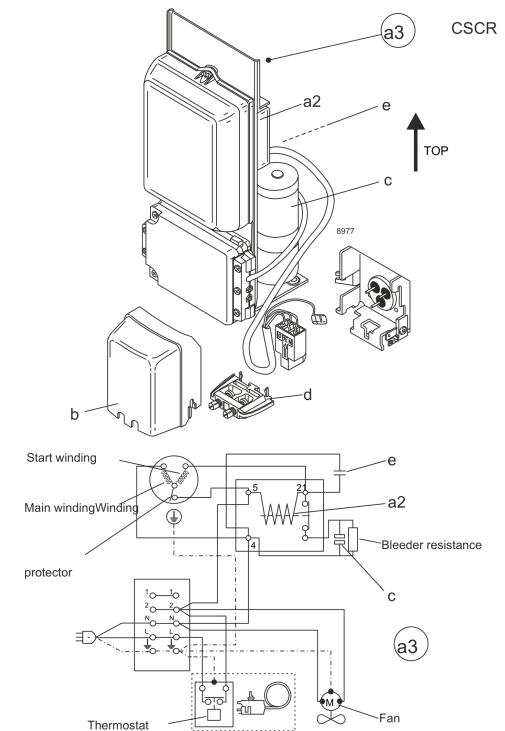
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

a3 SC starter kit (550mm) 117-7812

Alternative components

a2 potential relay (RVA 6M3R 339) 117-7425

c start capacitor (60 μ F, 6.3mm) 117U5389

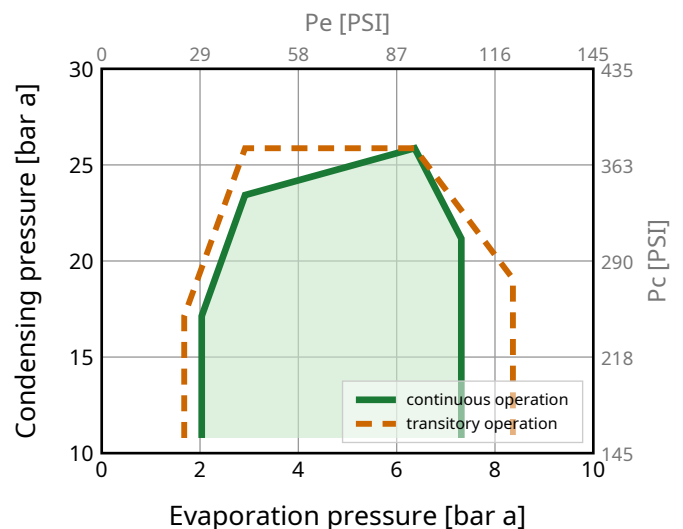
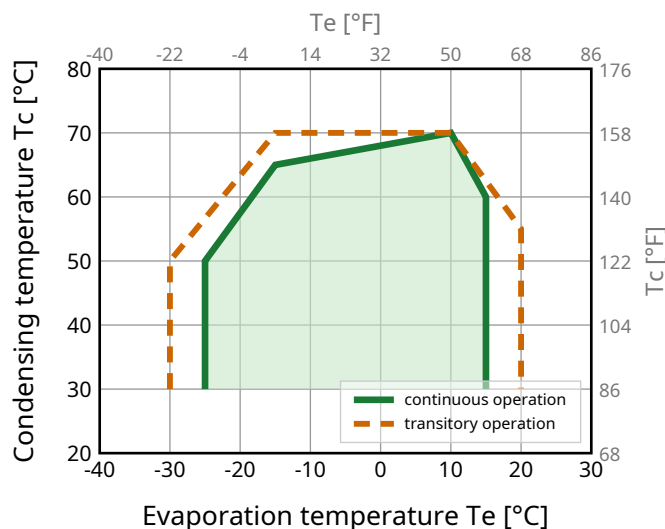
e run capacitor (5 μ F, 6.3mm) 117-7111

b plastic cover 103N2010

d cord relief 103N1010

assy. cable (1035mm) 117-7095

Operation Pressure Range



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Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°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	722	2464	621	2.17	7.41	333	1.53	8.27	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	568	1939	489	1.79	6.10	318	1.46	7.23	CECOMAF MBP
-10 14	45 113	20 68	45 113	637	2174	548	2.21	7.54	288	1.34	7.84	EN12900 MBP
7.2 45	54.4 129.9	35 95	46.1 115	1210	4130	1041	3.09	10.54	392	1.82	14.13	ASHRAE HBP
5 41	55 131	32 89.6	55 131	1008	3438	866	2.60	8.88	387	1.79	13.11	CECOMAF HBP
5 41	50 122	20 68	50 122	1041	3551	895	2.89	9.87	360	1.67	13.86	EN12900 HBP

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	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	352	1199	302	1.54	5.26	228	1.11	3.98
-20	-4	434	1482	373	1.74	5.95	249	1.18	4.94
-10	14	663	2261	570	2.30	7.84	288	1.34	7.61
0	32	980	3342	842	3.06	10.45	320	1.50	11.39
10	50	1391	4747	1197	4.08	13.92	341	1.60	16.45
15	59	1634	5577	1406	4.72	16.09	346	1.63	19.54

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

-25	-13	293	999	252	1.24	4.23	236	1.14	3.67
-20	-4	368	1255	316	1.39	4.75	264	1.24	4.63
-10	14	568	1939	489	1.79	6.10	318	1.46	7.23
0	32	842	2872	724	2.30	7.85	366	1.69	10.86
10	50	1194	4073	1027	2.95	10.06	405	1.88	15.69
15	59	1401	4780	1205	3.33	11.38	420	1.95	18.63