Single
Packs

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
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

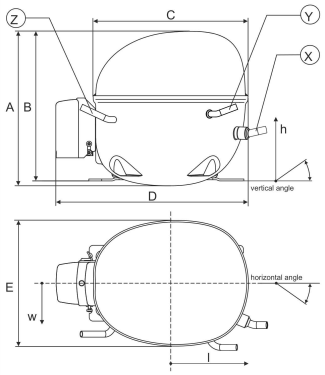
Oil type	**POE**	Winding resistance main	**5.68 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**21.15 Ohm**
Oil quantity	**298 / 10.08fl.oz**	Max. winding temp.	**135 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

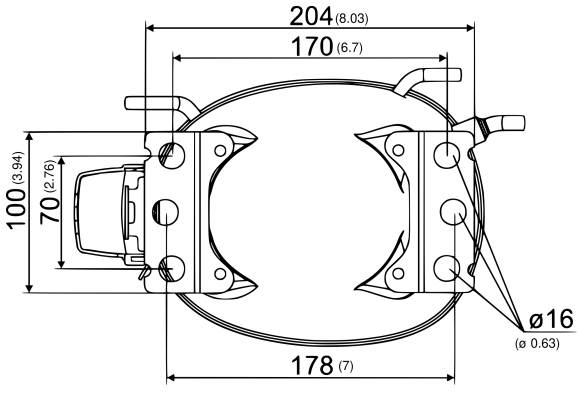
A Height	**203mm / 7.99in**
B Height	**197mm / 7.76in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



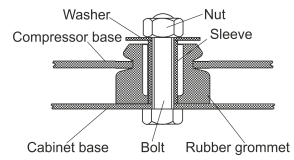
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in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

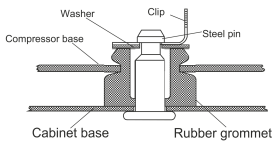


Dimensions in mm [in]

Bolt joint



Snap-on



	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

Model
NLU8.8DN Configuration 1

Sales code:
105H6085

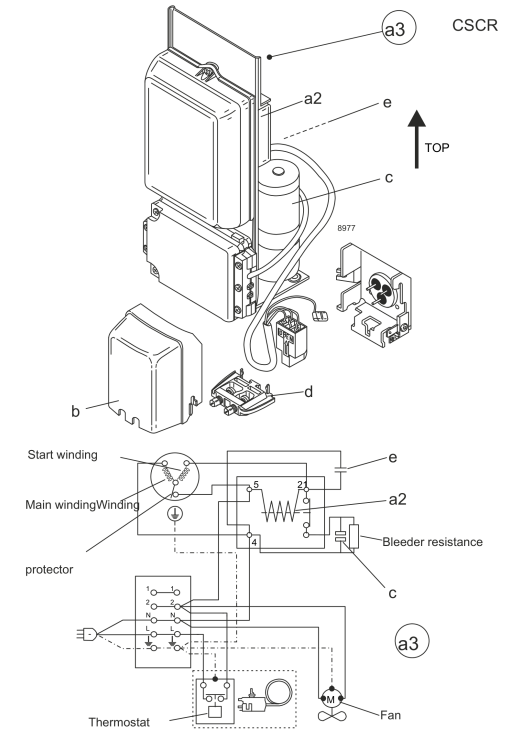
Configuration

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



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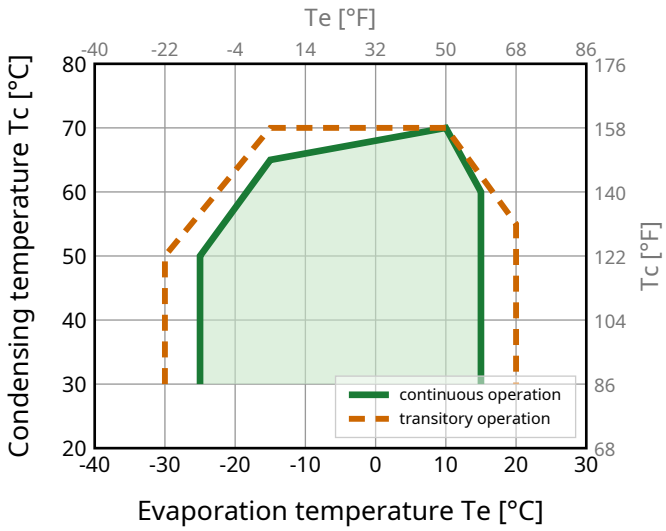
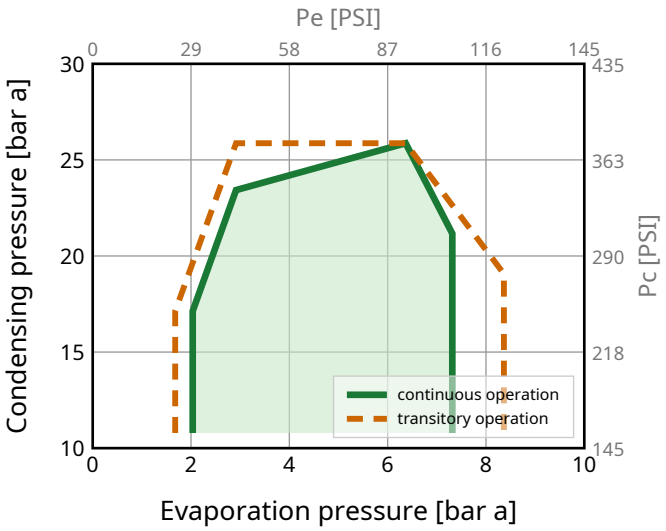
Components
a3 SC starter kit (550mm) 117-7812

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

Operation Pressure Range





Model

NLU8.8DN Configuration 1

Sales code:

105H6085

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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

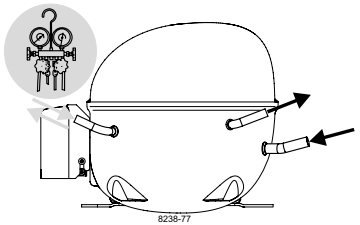
R290, 220 V/50 Hz, CSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°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



NLU-DN Compressors

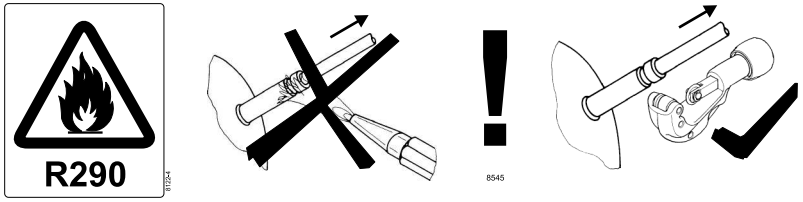
SECOP

Keep electrical equipment clear from oil, chemicals, and water

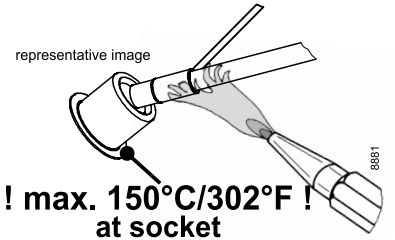
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

Service/Repair – R290

(applies to all flammable refrigerants)



Brazing on Suction Connectors (Direct Intake)

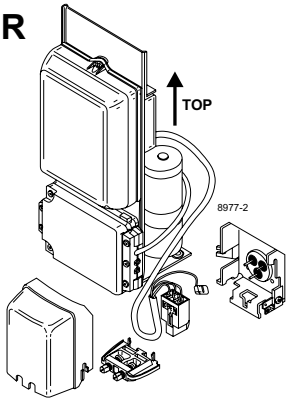


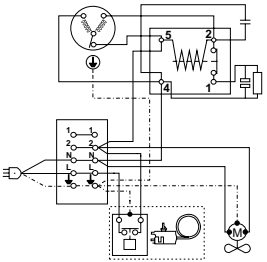
! max. 150°C/302°F !
at socket

brazing solder: phosphor (LP7) or silver

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

CSCR





Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. www.secop.com**