

Model
NL8.4CNX.2

Sales code:
105H6090

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	150g / 5.29oz
Weight	10.50 kg / 23.15lbs
Displacement	8.35 cm3 / 0.51cu.in
Compressors on pallet	80



General – Configurations With NL8.4CNX.2

-	Conf. 1
Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz
Number of phases	1
Voltage range	95-135 V
Approvals	CCC, UL
Starting torque	HST
Refrigerant	R290
Application	LBP+MBP
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	1.300 Ohm
Oil viscosity	32cSt	Winding resistance aux	7.00 Ohm
Oil quantity	268 / 9.06fl.oz	Max. winding temp.	125 °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](#)



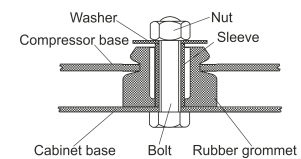
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in	-107/93.5/72 / -4.21/3.68/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

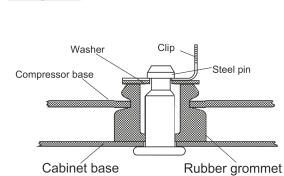


Dimensions in mm [in]

Bolt joint



Snap-on



	one comp.	multi pack
Bolt joint M6 ø16mm	118-1917	118-1918
Bolt joint ø1/4" ø16mm	118-1946	-
Bolt joint ø1/4" ø19mm	118-1949	-
Snap-on ø7,3 ø16mm	118-1947	118-1919

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Configuration 1

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Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	95-135 V
Starting torque	HST
Approvals	CCC, UL
Starting device type	relay
Run capacitor	-/-
Start capacitor	125 µF
LRA (locked rotor amps / 4s/ U(N))	26.4 A
RLA (rated load amps / 1s/ U(N))	5.3 A
Cut in current (U(N))	26.4 A

Ambient/ machine room temperatures minimum /maximum

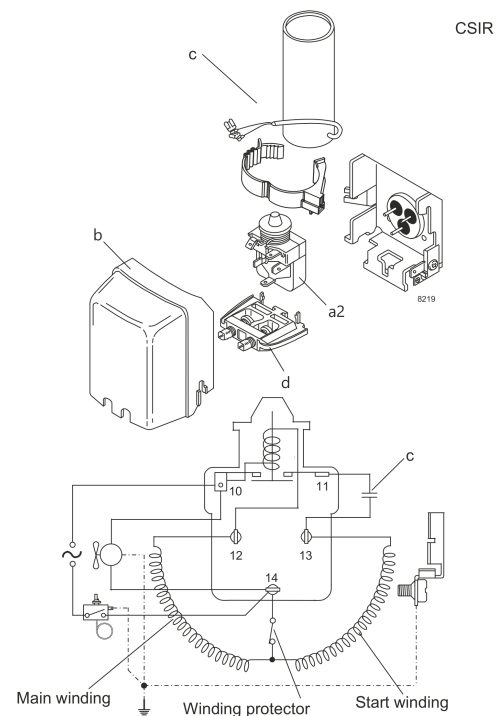
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

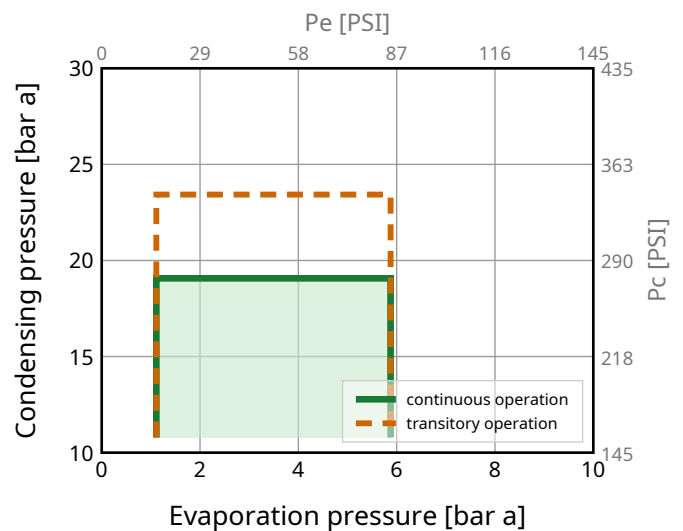
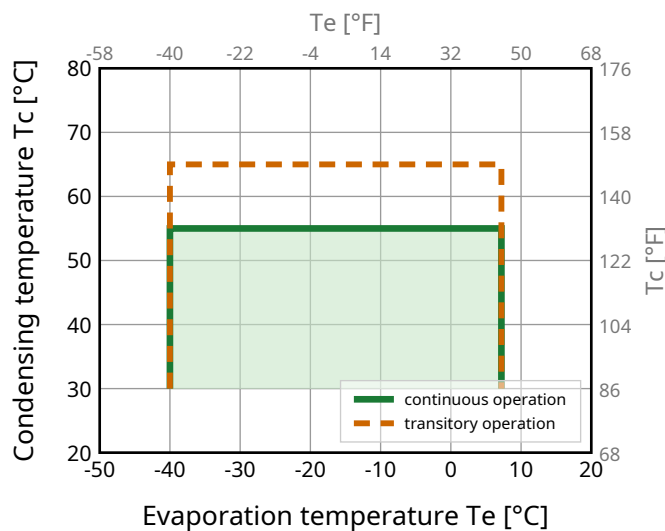
a2 relay 117U7013

c start capacitor (125µF, 6,3mm) 117U5035

b plastic cover 103N2011

d cord relief 103N1010

Operation Pressure Range



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Standard Conditions

R290, 115 V/60 Hz, CSIR, 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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	488	1665	420	1.47	5.03	331	4.06	4.96	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	363	1240	313	1.14	3.88	319	3.98	4.55	CECOMAF LBP
-35 -31	40 104	20 68	40 104	274	935	236	1.12	3.82	245	3.52	3.15	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	400	1365	344	1.24	4.22	324	4.01	5.56	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	534	1822	459	1.72	5.87	310	3.92	5.42	AHAM LBP
-25 -13	45 113	32 89.6	45 113	433	1476	372	1.41	4.80	307	3.90	4.90	opt LBP

Performance Tables

R290, 115 V/60 Hz, CSIR, 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]
-40	-40	195	666	168	0.89	3.03	220	3.40	2.19
-30	-22	341	1164	293	1.23	4.20	277	3.71	3.85
-20	-4	540	1841	464	1.59	5.44	338	4.11	6.14
-10	14	809	2760	696	2.03	6.91	399	4.55	9.29
0	32	1167	3983	1004	2.57	8.77	454	4.98	13.57
7.2	45	1491	5088	1282	3.06	10.44	487	5.26	17.54

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

-40	-40	155	529	133	0.72	2.44	217	3.38	1.93
-30	-22	284	969	244	1.00	3.42	283	3.75	3.55
-20	-4	456	1556	392	1.28	4.36	357	4.24	5.74
-10	14	690	2355	594	1.60	5.46	432	4.80	8.78
0	32	1005	3429	864	2.00	6.81	504	5.38	12.96
7.2	45	1292	4407	1111	2.35	8.01	550	5.78	16.87