

## Model

Designation	<b>NL8.4CNX.2</b>	115V/60Hz 1~	Sales code:	<b>105H6090</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	32cST	Displacement	8,35cm <sup>3</sup> / 0,51cu.in
Oil quantity	268cm <sup>3</sup> / 9,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	2360cm <sup>3</sup> / 79,8fl.oz		
Weight	10,5kg / 23,1lbs		
Motor protection	1# internal		
Winding resistance main	1,3Ω (at 25°C)		
Winding resistance aux	7Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



## General - Configurations with NL8.4CNX.2

	<b>Conf. 1</b>
Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz
Number of phases	1
Voltage range	95-135V
Approvals	CCC, UL
Starting torque	HST
Note	- / -

## Applications with NL8.4CNX.2

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

## Electrical data - Configurations with NL8.4CNX.2

	<b>Conf. 1</b>
Starting device type	relay
Run capacitor	-/-
Start capacitor	125μF
LRA (locked rotor amps / 4s)	26,4A
RLA (rated load amps / 1s)	5,3A
Cut in current	26,4A

## Model

Designation

**NL8.4CNX.2**

115V/60Hz 1~

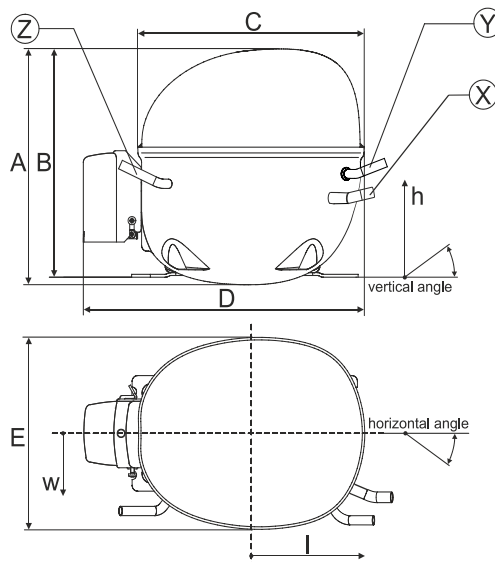
Sales code:

**105H6090**

## Compressor dimensions

Housing	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

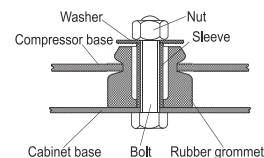
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	35°	155°
Position l/h/w	[mm]	126/76/78	133/103/54	-107/94/72
	[in]	4,9/3/3,1	5,2/4/2,1	-4,2/3,7/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



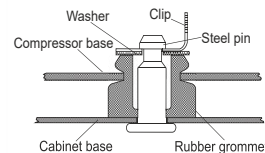
## Compressor fixation



### 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	
Bolt joint   ø1/4"   ø19mm	118-1949	
Snap-on   ø7,3   ø16mm	118-1947	118-1919

## Application notes

LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.

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

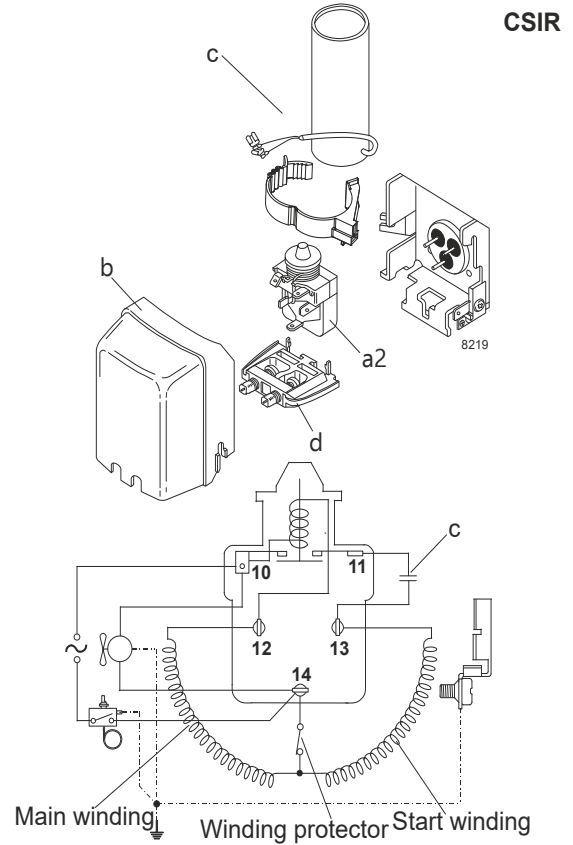
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### Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	95-135V
Starting torque	HST
Approvals	CCC
	UL

### Electrical accessories / wiring diagram



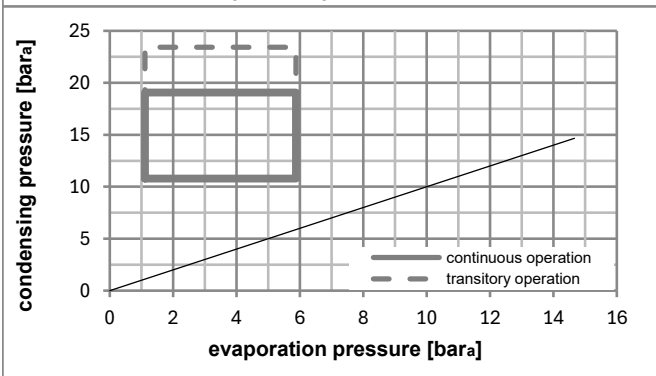
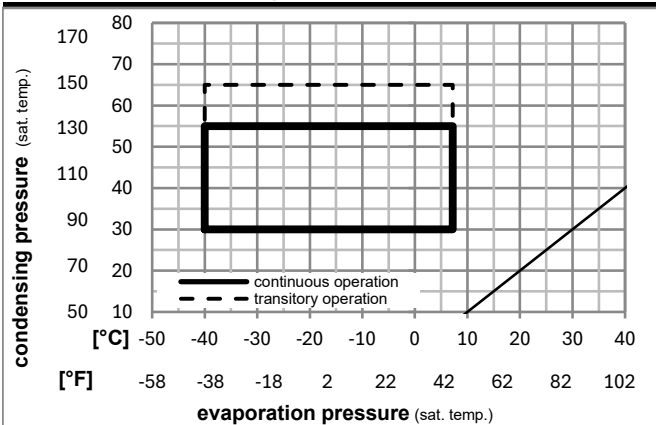
### Ambient/ machine room temperatures minimum /maximum

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

a2	relay	117U7013
c	start capacitor (125µF, 6,3mm)	117U5035
b	plastic cover	103N2011
d	cord relief	103N1010

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## Optimization + standard conditions

R290, 115V/60Hz, CSIR, fan 3m/s, CCC, UL

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	P1	Power consumption		ASHRAE LBP	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				I	m		
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23	54	32	32	485,5	1658	417,8	1,47	5,01	1,26	331,0	4,06	4,92	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	363,4	1241	312,7	1,14	3,89	0,98	319,4	3,98	4,52	cecomaf LBP
	-13	131	90	131										
	-35	40	20	40	274,0	936	235,8	1,12	3,82	0,96	244,7	3,52	3,13	EN12900 LBP
	-31	104	68	104										
	-23	49	4,4	49	398,1	1360	342,6	1,23	4,20	1,06	323,6	4,01	5,51	ARI540 LBP
	-10	120	40	120										
	-23	41	32	32	532,5	1819	458,3	1,72	5,86	1,48	310,3	3,92	5,39	AHAM LBP
	-10	105	90	90										
	-35	45	32	45	262,8	897	226,1	1,06	3,63	0,91	247,5	3,54	2,94	opt
	-31	113	90	113										

## Performance tables

R290, 115V/60Hz, CSIR, fan 3m/s, CCC, UL

	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]	-40	-40	195,1	666	167,9	0,89	3,03	0,76	219,8	3,40	2,18
cond. pressure	-34	-30	270,9	925	233,1	1,08	3,69	0,93	250,6	3,56	3,04
pc= 45/113	-23	-10	466,5	1593	401,5	1,47	5,02	1,26	317,7	3,97	5,27
return gas temp.	-15	5	664,2	2268	571,6	1,80	6,14	1,55	369,1	4,33	7,56
RGT= 32/90	-4	25	1016,1	3470	874,5	2,34	8,00	2,02	433,8	4,82	11,72
liquid temp	0	32	1167,4	3987	1004,6	2,57	8,78	2,21	454,2	4,98	13,54
Tliq= 45/113	7,2	45	1492,3	5096	1284,3	3,06	10,46	2,64	487,4	5,26	17,53
[°C / °F]	-40	-40	155,1	530	133,5	0,72	2,44	0,62	216,7	3,38	1,91
cond. pressure	-34	-30	222,4	759	191,4	0,88	3,01	0,76	252,5	3,57	2,75
pc= 55/131	-23	-10	392,7	1341	338,0	1,18	4,04	1,02	331,7	4,07	4,90
return gas temp	-15	5	564,3	1927	485,6	1,43	4,89	1,23	394,3	4,52	7,09
RGT= 32/90	-4	25	871,8	2977	750,3	1,83	6,25	1,58	476,3	5,16	11,13
liquid temp	0	32	1004,9	3432	864,8	2,00	6,82	1,72	503,5	5,38	12,91
Tliq= 55/131	7,2	45	1292,5	4414	1112,4	2,35	8,02	2,02	550,3	5,78	16,84