

Model

Designation	NLE8.8CN	115-127V/60Hz 1~	Sales code:	105H6096
-------------	-----------------	------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	19,2cST	Displacement	8,76cm ³ / 0,53cu.in
Oil quantity	265cm ³ / 9fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	10,9kg / 24lbs		
Motor protection	1# internal		
Winding resistance main	1,6Ω (at 25°C)		
Winding resistance aux	5,1Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	120°C / 248°F		



General - Configurations with NLE8.8CN

	Conf. 1
Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz
Number of phases	1
Voltage range	95-135V
Approvals	UL
Starting torque	HST
Note	Electrical equipment is included and pre-assembled to compressor.

Applications with NLE8.8CN

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

Electrical data - Configurations with NLE8.8CN

	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	280μF
LRA (locked rotor amps / 4s)	32,01A
RLA (rated load amps / 1s)	5,33A
Cut in current	32,01A

Model

Designation

NLE8.8CN

115-127V/60Hz 1~

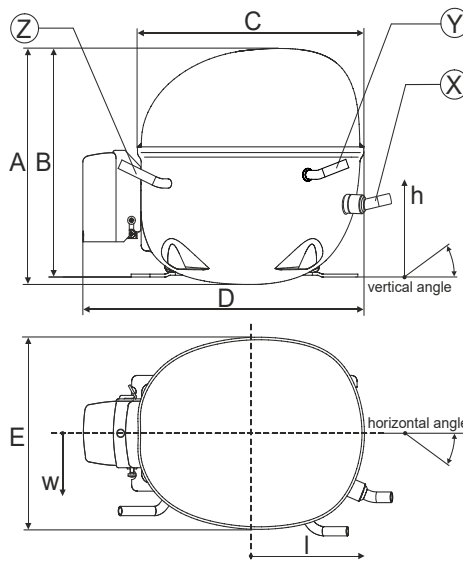
Sales code:

105H6096

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

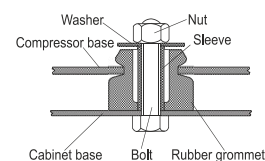
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	21°	155°
Position l/h/w	[mm]	132/69/56	94/99/86	-111/92/72
	[in]	5,2/2,7/2,2	3,7/3,9/3,4	-4,4/3,6/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



Compressor fixation



Bolt joint



Snap-on



Mounting accessories

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

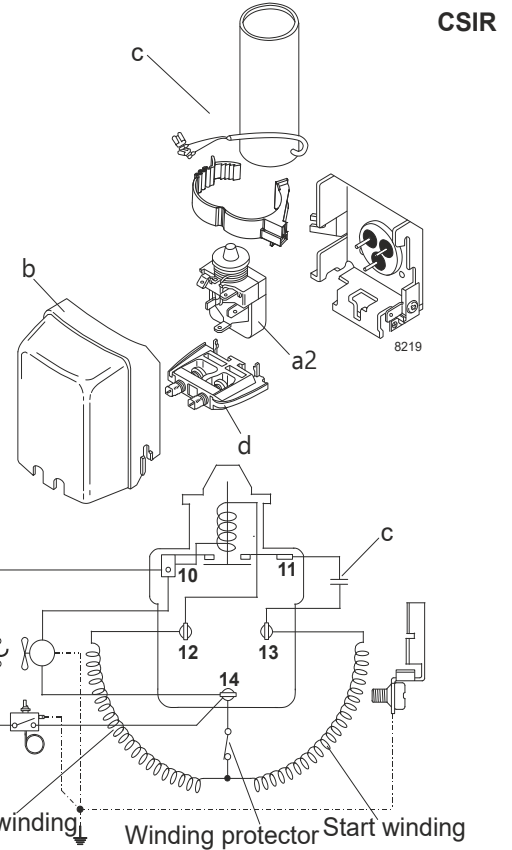
Model

Designation	NLE8.8CN	115V/60Hz	Conf. 1	Sales code:	105H6096
-------------	-----------------	------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSIR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R290	
Application	LBP+MBP	
Voltage range	95-135V	
Starting torque	HST	
Approvals	UL	SA3693

Electrical accessories / wiring diagram

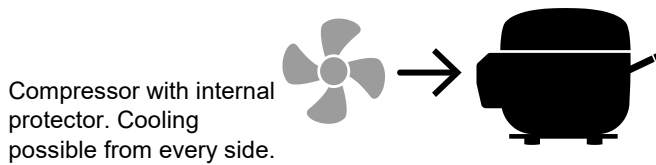


Ambient/ machine room temperatures minimum /maximum

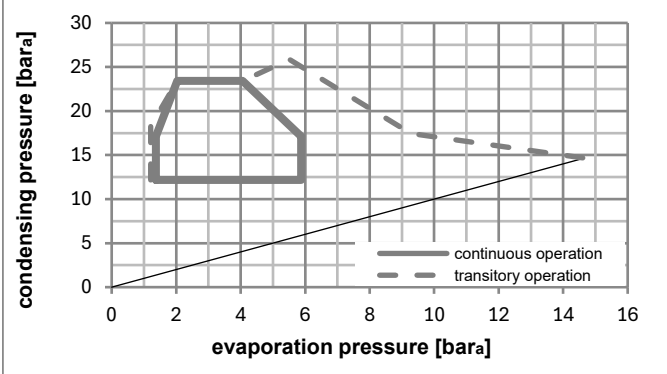
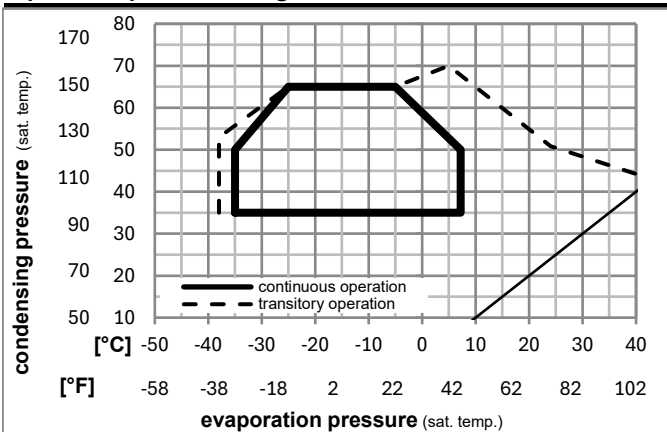
Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s



Operation pressure range



Components (already pre-assembled)

a2	current relay	117U7014
c	start capacitor (280µF)	117U5025
b	plastic cover	103N2011
d	cord relief	103N1010

Model

Designation	NLE8.8CN	115V/60Hz	Conf. 1	Sales code:	105H6096
-------------	-----------------	------------------	----------------	-------------	-----------------

Optimization + standard conditions

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

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Current consumption		Ref. mass flow							
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]							[W]	[A]	[A]	[kg/h]								
-23	-10	54	130	32	90	32	90	512,6	1751	441,2	1,57	5,37	1,35	325,8	4,24	5,19					ASHRAE LBP		
-25	-13	55	131	32	90	55	131	384,4	1313	330,8	1,22	4,16	1,05	315,7	4,18	4,79					cecomaf LBP		
-35	-31	40	104	20	68	40	104	304,3	1039	261,9	1,26	4,30	1,08	241,7	3,80	3,48					EN12900 LBP		
-7	20	54	130	35	95	46	115	915,3	3126	787,7	2,08	7,11	1,79	439,5	5,00	10,44					ASHRAE MBP		
-10	14	55	131	32	90	55	131	728,1	2486	626,6	1,75	5,98	1,51	416,1	4,83	9,21					cecomaf MBP		
-10	14	45	113	20	68	45	113	807,7	2758	695,1	2,08	7,10	1,79	388,3	4,64	9,92					EN12900 MBP		

Performance tables

R290, 115V/60Hz, CSIR, fan 3m/s, 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]	-35	-31	288,9	987	248,6	1,18	4,02	1,01	245,5	3,83	3,24
cond. pressure	-23	-10	493,0	1684	424,3	1,60	5,46	1,37	308,7	4,15	5,57
pc= 45/113	-15	5	695,8	2376	598,8	1,95	6,68	1,68	356,0	4,43	7,92
return gas temp.	-9	15	858,1	2931	738,5	2,19	7,47	1,88	392,1	4,67	9,82
RGT= 32/90	-4	25	1042,6	3561	897,3	2,40	8,20	2,07	434,1	4,96	12,02
liquid temp	0	32	1185,3	4048	1020,1	2,53	8,65	2,18	468,0	5,20	13,75
Tliq= 45/113	7,2	45	1480,2	5055	1273,8	2,72	9,31	2,34	543,2	5,74	17,39
[°C / °F]	-35	-31	239,4	818	206,0	0,97	3,32	0,84	246,6	3,83	2,96
cond. pressure	-23	-10	415,0	1417	357,2	1,27	4,34	1,09	326,6	4,24	5,17
pc= 55/131	-15	5	596,3	2036	513,2	1,56	5,34	1,35	381,3	4,59	7,50
return gas temp	-9	15	743,8	2540	640,1	1,77	6,05	1,52	420,2	4,86	9,42
RGT= 32/90	-4	25	913,1	3118	785,8	1,97	6,73	1,70	463,2	5,19	11,65
liquid temp	0	32	1044,9	3568	899,2	2,10	7,18	1,81	496,7	5,45	13,42
Tliq= 55/131	7,2	45	1319,0	4505	1135,2	2,32	7,92	2,00	569,0	6,04	17,18