

Model

Designation	NLE8.0CN	115-127V/60Hz 1~	Sales code:	105H6098
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cST	Displacement	7,96cm ³ / 0,49cu.in
Oil quantity	268cm ³ / 9,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	10,95kg / 24,1lbs		
Motor protection	1# internal		
Winding resistance main	1,99Ω (at 25°C)		
Winding resistance aux	6,22Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	120°C / 248°F		



General - Configurations with NLE8.0CN

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

Applications with NLE8.0CN

	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 NLE8.0CN

	Conf. 1
Starting device type	PTC
Run capacitor	20μF
Start capacitor	-/-
LRA (locked rotor amps / 4s)	22,7A
RLA (rated load amps / 1s)	3,88A
Cut in current	23,2A

Model

Designation

NLE8.0CN

115-127V/60Hz 1~

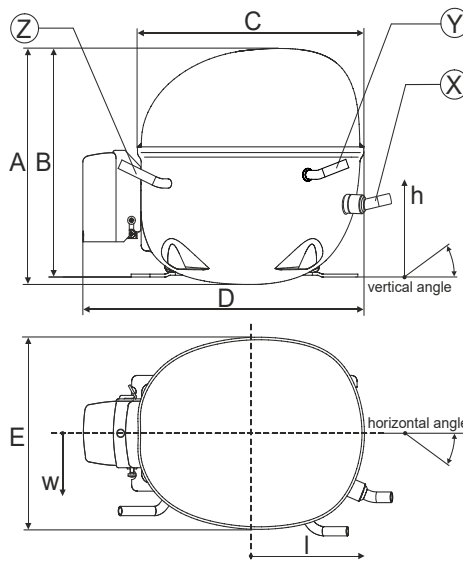
Sales code:

105H6098

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

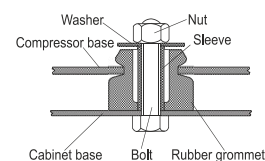
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	21°	155°
Position l/h/w	[mm]	132/69/57	94/102/81	-109/94/72
	[in]	5,2/2,7/2,2	3,7/4/3,2	-4,3/3,7/2,8
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

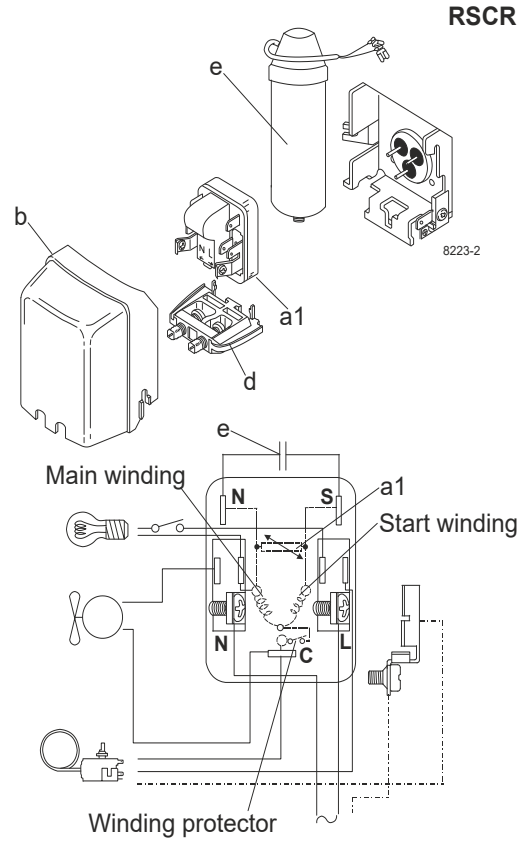
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Configuration

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

Electrical accessories / wiring diagram



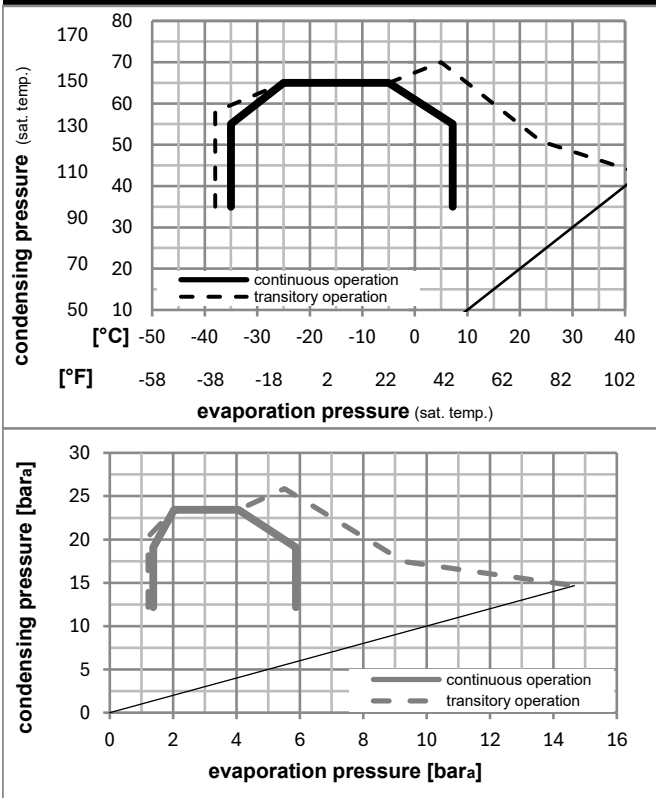
Ambient/ machine room temperatures minimum /maximum

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)

a1	e-PTC starter	103N0058
e	run capacitor (20μF, 6.3mm)	117-7147
b	plastic cover	103N2011
d	cord relief	103N1010
	bracket for run capacitor	117-0300
	screw M4x8mm	117-0301

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Optimization + standard conditions

R290, 115V/60Hz, RSCR, fan 3m/s, 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	463,5	1583	398,9	1,70	5,81	1,46	272,5	3,32	4,69	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	346,8	1184	298,5	1,32	4,50	1,13	263,2	3,26	4,32	cecomaf LBP
	-13	131	90	131										
	-35	40	20	40	272,2	929	234,2	1,32	4,52	1,14	205,5	2,97	3,11	EN12900 LBP
	-31	104	68	104										
	-7	54	35	46	823,4	2812	708,7	2,27	7,74	1,95	363,2	3,98	9,39	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	653,8	2233	562,6	1,88	6,42	1,62	347,8	3,86	8,27	cecomaf MBP
	14	131	90	131										
	-10	45	20	45	733,7	2506	631,4	2,29	7,83	1,97	320,1	3,67	9,01	EN12900 MBP
	14	113	68	113										

Performance tables

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

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]		[Btu/Wh]	[kcal/Wh]			
[°C / °F]	-35	-31	256,4	876	220,7	1,24	4,24	1,07	206,6	2,97	2,87
cond. pressure	-23	-10	447,8	1529	385,4	1,70	5,82	1,47	263,0	3,27	5,06
pc= 45/113	-15	5	630,1	2152	542,3	2,10	7,18	1,81	299,9	3,52	7,17
return gas temp.	-9	15	780,0	2664	671,2	2,42	8,27	2,08	322,2	3,68	8,93
RGT= 32/90	-4	25	956,8	3268	823,4	2,80	9,55	2,41	342,3	3,83	11,03
liquid temp	0	32	1098,7	3752	945,5	3,10	10,58	2,67	354,7	3,92	12,74
Tliq= 45/113	7,2	45	1406,5	4803	1210,4	3,76	12,85	3,24	373,9	4,04	16,52
[°C / °F]	-35	-31	199,4	681	171,6	0,98	3,35	0,85	203,1	2,93	2,47
cond. pressure	-23	-10	374,9	1280	322,6	1,37	4,69	1,18	273,0	3,33	4,67
pc= 55/131	-15	5	536,4	1832	461,6	1,67	5,71	1,44	320,7	3,66	6,74
return gas temp	-9	15	667,9	2281	574,8	1,90	6,50	1,64	350,7	3,88	8,46
RGT= 32/90	-4	25	823,0	2811	708,3	2,17	7,42	1,87	378,8	4,09	10,50
liquid temp	0	32	947,5	3236	815,5	2,39	8,15	2,05	397,1	4,23	12,17
Tliq= 55/131	7,2	45	1218,6	4162	1048,8	2,85	9,73	2,45	427,8	4,46	15,88