

Single Pack NLE10CN 115-127V 60Hz CSIR

Single pack code number: **195B4546**

Position	Title	Code	Amount
1	Compressor NLE10CN	105H6194	1
2	Starting relay	117U7018	1
3	Starting capacitor (280 μ F 125V, 6.3mm)	117U5025	1
4	Cord relief	103N1010	1
5	Cover	103N2011	1
6	Bolt joint for one compressor M6 \varnothing 16mm	118-1917	1

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Model

Designation	NLE10CN	115-127V/60Hz 1~	Sales code:	105H6194
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	10,09cm ³ / 0,62cu.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	10,9kg / 24lbs		
Motor protection	1# internal		
Winding resistance main	1,56Ω (at 25°C)		
Winding resistance aux	4,4Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	120°C / 248°F		



General - Configurations with NLE10CN

	Conf. 1	Conf. 2	Conf. 3
Motorconfiguration	CSIR	RSIR	RSCR
Power supply (nominal)	115V/60Hz	115V/60Hz	115V/60Hz
Number of phases	1	1	1
Voltage range	103-127V	103-127V	103-127V
Approvals	UL, CCC	UL, CCC	UL, CCC
Starting torque	HST	LST	LST
Note	- / -		

Applications with NLE10CN

	Conf. 1	Conf. 2	Conf. 3
Refrigerant	R290	R290	R290
Application	LBP+MBP	LBP+MBP	LBP+MBP
System cooling	fan 3m/s	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK	OK
Long interval pull down	OK	OK	OK

Electrical data - Configurations with NLE10CN

	Conf. 1	Conf. 2	Conf. 3
Starting device type	relay	PTC	PTC
Run capacitor	- / -	- / -	15μF
Start capacitor	280μF	- / -	- / -
LRA (locked rotor amps / 4s/ U(N))	34,53A	29,18A	29,18A
RLA (rated load amps / 1s/ U(N))	5,6A	5,6A	5,6A
Cut in current (U(N))	34,53A	38,64A	38,64A

Model

Designation

NLE10CN

115-127V/60Hz 1~

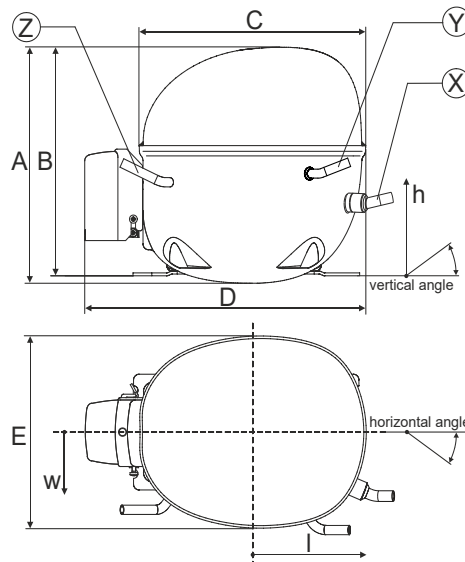
Sales code:

105H6194

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

#NV

#NV

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

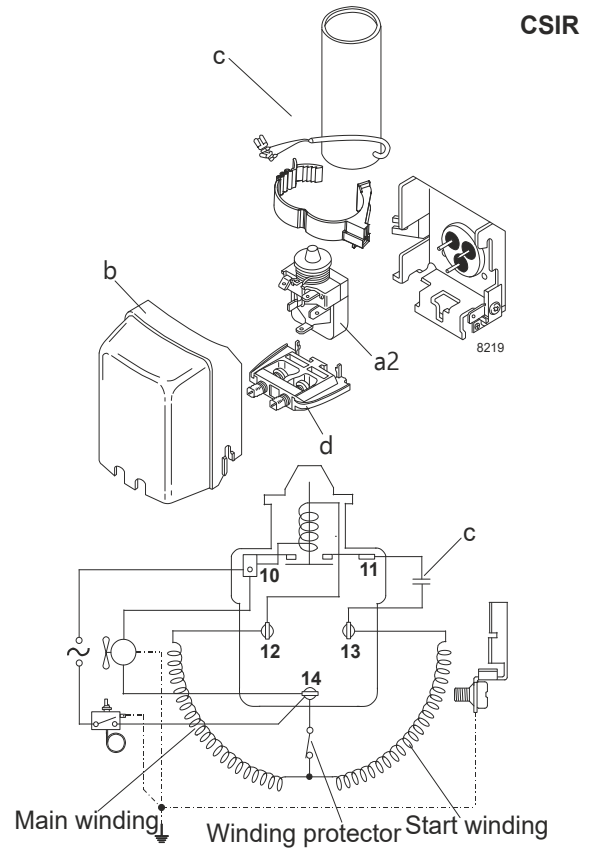
Model

Designation	NLE10CN	115V/60Hz	Conf. 1	Sales code:	105H6194
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Configuration

Motorconfiguration	CSIR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R290	
Application	LBP+MBP	
Voltage range	103-127V	
Starting torque	HST	
Approvals	UL	SA3693
	CCC	

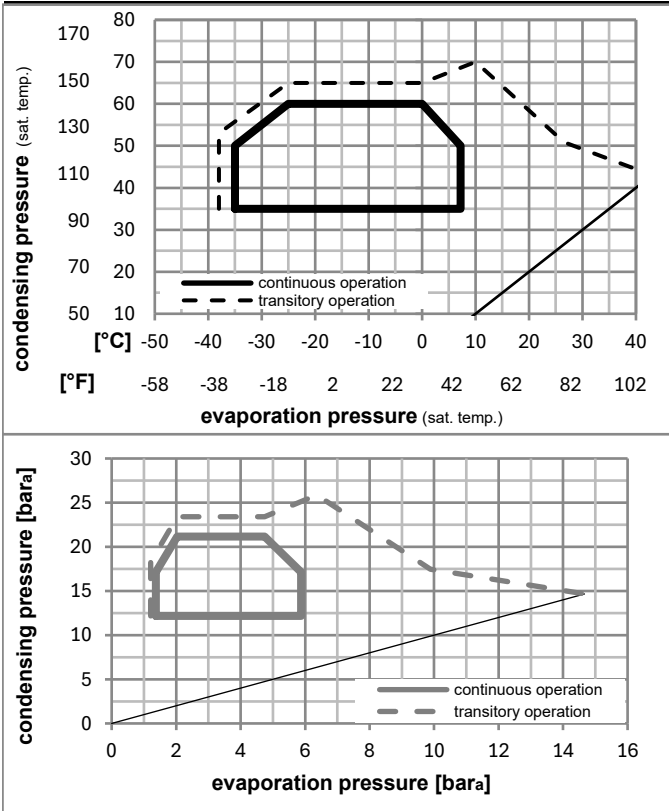
Electrical accessories / wiring diagram



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	current relay	117U7018
c	start capacitor (280µF)	117U5025
b	plastic cover	103N2011
d	cord relief	103N1010

Model

Designation **NLE10CN** **115V/60Hz** Conf. 1 Sales code: **105H6194**

Optimization + standard conditions

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

Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)				Power consumption				ASHRAE LBP		
Return gas temp.				Current consumption				P1	I	m				
Liquid temp.				Cooling capacity							COP		EER	
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]		[A]		[kg/h]
[°C]	-23	54	32	32	607,0	2073	522,4	1,52	5,20	1,31	399,0	5,18	6,15	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	456,4	1559	392,8	1,17	4,00	1,01	389,8	5,13	5,68	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	361,5	1235	311,1	1,26	4,31	1,09	286,2	4,52	4,13	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-7	54	35	46	1069,4	3652	920,3	2,05	6,99	1,76	522,8	5,95	12,20	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	854,1	2917	735,1	1,70	5,80	1,46	502,8	5,84	10,80	cecomaf MBP
[°F]	14	131	90	131										
[°C]	-10	45	20	45	934,1	3190	803,9	2,04	6,95	1,75	458,8	5,48	11,47	EN12900 MBP
[°F]	14	113	68	113										

Performance tables

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

	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	339,2	1159	292,0	1,18	4,02	1,01	288,4	4,52	3,80
cond. pressure	-23	-10	575,9	1967	495,6	1,55	5,29	1,33	371,9	5,00	6,50
pc= 45/113	-15	5	807,4	2757	694,8	1,89	6,47	1,63	426,2	5,30	9,19
return gas temp.	-9	15	992,1	3388	853,8	2,15	7,33	1,85	462,5	5,50	11,36
RGT= 32/90	-4	25	1202,1	4105	1034,5	2,40	8,20	2,07	500,4	5,71	13,86
liquid temp	0	32	1364,5	4660	1174,3	2,58	8,82	2,22	528,6	5,87	15,83
Tliq= 45/113	7,2	45	1701,0	5809	1463,9	2,90	9,91	2,50	586,3	6,20	19,99
[°C / °F]	-35	-31	281,6	962	242,4	0,93	3,16	0,80	304,4	4,62	3,48
cond. pressure	-23	-10	492,3	1681	423,7	1,22	4,17	1,05	402,9	5,21	6,14
pc= 55/131	-15	5	702,7	2400	604,7	1,51	5,15	1,30	465,9	5,60	8,83
return gas temp	-9	15	872,1	2978	750,6	1,72	5,88	1,48	507,0	5,86	11,04
RGT= 32/90	-4	25	1065,9	3640	917,3	1,94	6,63	1,67	548,9	6,15	13,60
liquid temp	0	32	1216,5	4155	1046,9	2,10	7,17	1,81	579,5	6,36	15,62
Tliq= 55/131	7,2	45	1529,7	5224	1316,5	2,39	8,15	2,05	640,6	6,80	19,93

Model

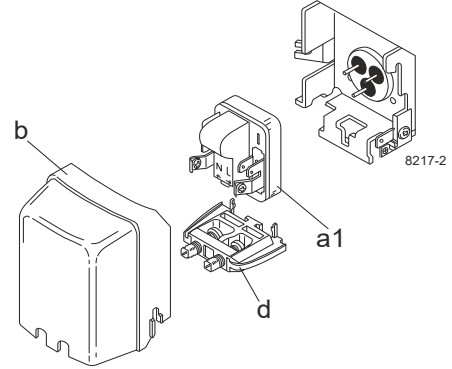
Designation	NLE10CN	115V/60Hz	Conf. 2	Sales code:	105H6194
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Configuration

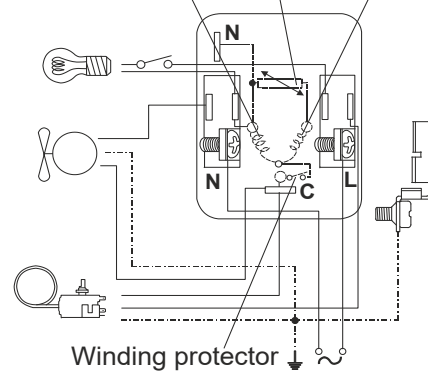
Motorconfiguration	RSIR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R290	
Application	LBP+MBP	
Voltage range	103-127V	
Starting torque	LST	
Approvals	UL	SA3693
	CCC	

Electrical accessories / wiring diagram

RSIR



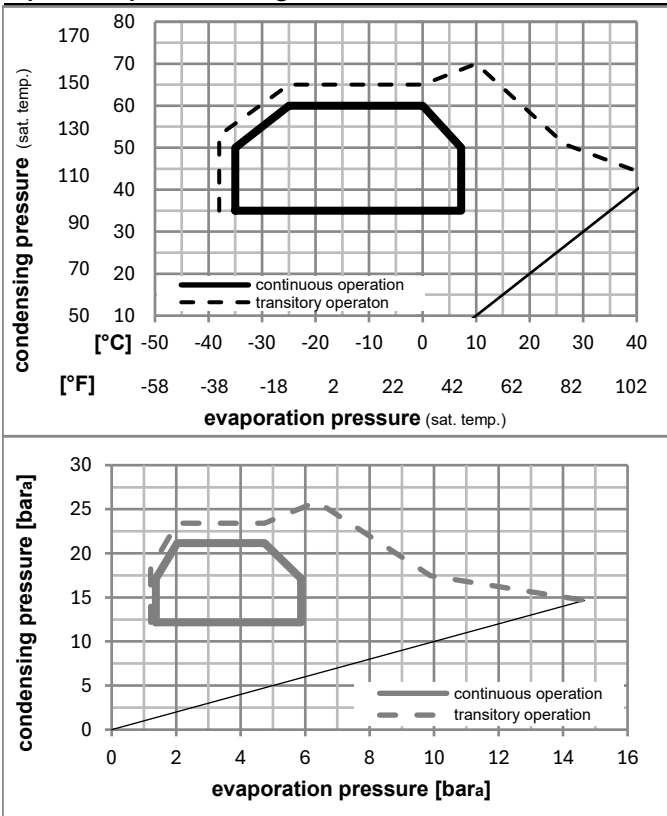
Main winding a1 Start winding



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

a1	e-PTC starter (115V, 50hm, 6.3mm, 4.8-c)	103N0057
b	plastic cover	103N2011
d	cord relief	103N1010

Alternative components

a1	e-PTC starter	103N0058
b	plastic cover	103N2011
d	cord relief	103N1010

Model

Designation **NLE10CN** **115V/60Hz** Conf. 2 Sales code: **105H6194**

Optimization + standard conditions

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

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER			Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]		[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	-23	54	32	32	607,0	2073	522,4	1,52	5,20	1,31	399,0	5,18	6,15		
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	456,4	1559	392,8	1,17	4,00	1,01	389,8	5,13	5,68	cecomaf LBP	
[°F]	-13	131	90	131											
[°C]	-35	40	20	40	361,5	1235	311,1	1,26	4,31	1,09	286,2	4,52	4,13	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-7	54	35	46	1069,4	3652	920,3	2,05	6,99	1,76	522,8	5,95	12,20	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	854,1	2917	735,1	1,70	5,80	1,46	502,8	5,84	10,80	cecomaf MBP	
[°F]	14	131	90	131											
[°C]	-10	45	20	45	934,1	3190	803,9	2,04	6,95	1,75	458,8	5,48	11,47	EN12900 MBP	
[°F]	14	113	68	113											

Performance tables

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

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]		[W/W]	[Btu/Wh]			
[°C / °F]	-35	-31	339,2	1159	292,0	1,18	4,02	1,01	288,4	4,52	3,80
cond. pressure	-23	-10	575,9	1967	495,6	1,55	5,29	1,33	371,9	5,00	6,50
pc= 45/113	-15	5	807,4	2757	694,8	1,89	6,47	1,63	426,2	5,30	9,19
return gas temp.	-9	15	992,1	3388	853,8	2,15	7,33	1,85	462,5	5,50	11,36
RGT= 32/90	-4	25	1202,1	4105	1034,5	2,40	8,20	2,07	500,4	5,71	13,86
liquid temp	0	32	1364,5	4660	1174,3	2,58	8,82	2,22	528,6	5,87	15,83
Tliq= 45/113	7,2	45	1701,0	5809	1463,9	2,90	9,91	2,50	586,3	6,20	19,99
[°C / °F]	-35	-31	281,6	962	242,4	0,93	3,16	0,80	304,4	4,62	3,48
cond. pressure	-23	-10	492,3	1681	423,7	1,22	4,17	1,05	402,9	5,21	6,14
pc= 55/131	-15	5	702,7	2400	604,7	1,51	5,15	1,30	465,9	5,60	8,83
return gas temp	-9	15	872,1	2978	750,6	1,72	5,88	1,48	507,0	5,86	11,04
RGT= 32/90	-4	25	1065,9	3640	917,3	1,94	6,63	1,67	548,9	6,15	13,60
liquid temp	0	32	1216,5	4155	1046,9	2,10	7,17	1,81	579,5	6,36	15,62
Tliq= 55/131	7,2	45	1529,7	5224	1316,5	2,39	8,15	2,05	640,6	6,80	19,93

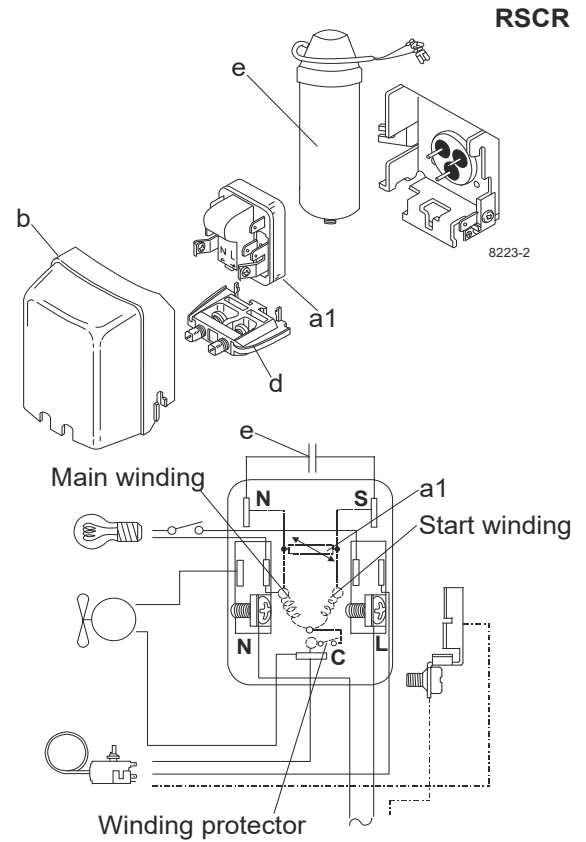
Model

Designation	NLE10CN	115V/60Hz	Conf. 3	Sales code:	105H6194
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Configuration

Motorconfiguration	RSCR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R290	
Application	LBP+MBP	
Voltage range	103-127V	
Starting torque	LST	
Approvals	UL	SA3693
	CCC	

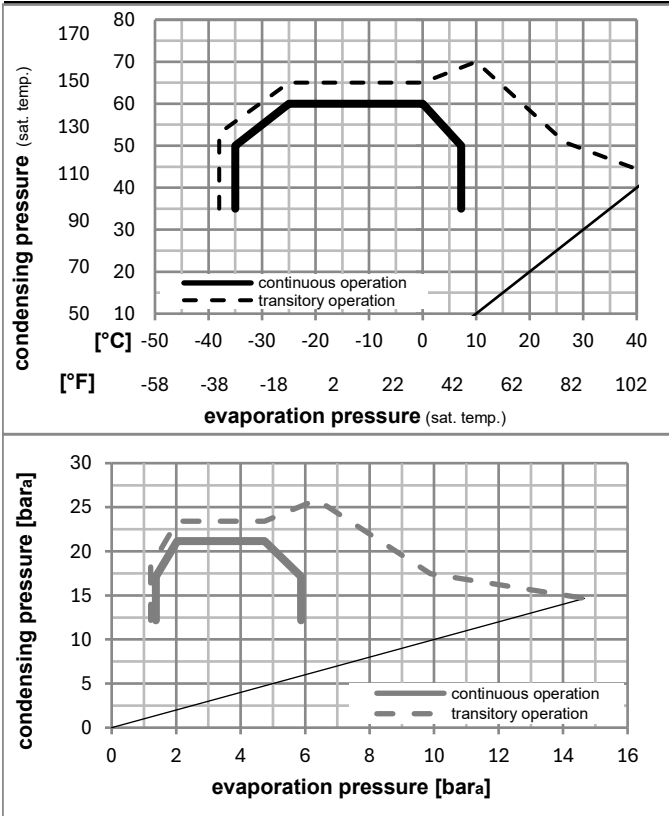
Electrical accessories / wiring diagram



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

a1	e-PTC starter	103N0058
e	run capacitor (15μF, 6.3mm)	117-7118
b	plastic cover	103N2011
d	cord relief	103N1010
	bracket for run capacitor	117-0300
	screw M4x8mm	117-0301

Alternative components

a1	e-PTC starter (115V, 50Ohm, 6.3mm, 4.8-c)	103N0057
e	run capacitor (15μF, 4.8mm)	117-7120
b	plastic cover	103N2011
d	cord relief	103N1010
	bracket for run capacitor	117-0300
	screw M4x8mm	117-0301

Model

Designation **NLE10CN** **115V/60Hz** Conf. 3 Sales code: **105H6194**

Optimization + standard conditions

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

	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	616,9	2107	530,9	1,67	5,72	1,44	368,5	4,78	6,25	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	463,8	1584	399,2	1,29	4,40	1,11	359,9	4,74	5,78	cecomaf LBP
	-13	131	90	131										
	-35	40	20	40	367,4	1255	316,2	1,39	4,75	1,20	264,3	4,18	4,20	EN12900 LBP
	-31	104	68	104										
	-7	54	35	46	1086,8	3712	935,3	2,25	7,69	1,94	482,8	5,50	12,40	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	868,0	2964	747,0	1,87	6,38	1,61	464,3	5,39	10,98	cecomaf MBP
	14	131	90	131										
	-10	45	20	45	949,4	3242	817,0	2,24	7,65	1,93	423,7	5,06	11,66	EN12900 MBP
	14	113	68	113										

Performance tables

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

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]						
[°C / °F]	-35	-31	344,8	1177	296,7	1,29	4,42	1,11	266,3	4,17	3,86
cond. pressure	-23	-10	585,3	1999	503,7	1,70	5,82	1,47	343,4	4,62	6,61
pc= 45/113	-15	5	820,5	2802	706,1	2,08	7,12	1,79	393,6	4,90	9,34
return gas temp.	-9	15	1008,2	3443	867,7	2,36	8,06	2,03	427,1	5,08	11,54
RGT= 32/90	-4	25	1221,6	4172	1051,4	2,64	9,03	2,28	462,1	5,27	14,09
liquid temp	0	32	1386,7	4736	1193,4	2,84	9,70	2,44	488,1	5,42	16,08
Tliq= 45/113	7,2	45	1728,7	5904	1487,8	3,19	10,90	2,75	541,4	5,72	20,31
[°C / °F]	-35	-31	286,2	978	246,3	1,02	3,48	0,88	281,1	4,27	3,54
cond. pressure	-23	-10	500,3	1709	430,6	1,34	4,59	1,16	372,0	4,81	6,24
pc= 55/131	-15	5	714,1	2439	614,6	1,66	5,67	1,43	430,2	5,17	8,98
return gas temp	-9	15	886,3	3027	762,8	1,89	6,47	1,63	468,1	5,42	11,22
RGT= 32/90	-4	25	1083,3	3700	932,3	2,14	7,30	1,84	506,9	5,67	13,82
liquid temp	0	32	1236,3	4222	1064,0	2,31	7,89	1,99	535,1	5,87	15,88
Tliq= 55/131	7,2	45	1554,6	5309	1337,9	2,63	8,97	2,26	591,6	6,28	20,25



NL Compressors





Service/Repair – R600a, R290



8545

Brazing on Suction Connectors (Direct Intake)

representative image



**! 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)**

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