

Model

Designation	NLE10CNT	220-230V/50Hz 1~	208-230V/60Hz 1~	Sales code:	105H6189
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	10,09cm³ / 0,62cu.in
Oil quantity	268cm³ / 9,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2360cm³ / 79,8fl.oz		
Weight	11,8kg / 26lbs		
Motor protection	1# internal		
Winding resistance main	4,47Ω (at 25°C)		
Winding resistance aux	18,69Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	120°C / 248°F		



General - Configurations with NLE10CNT

	Conf. 1	Conf. 2
Motor configuration	CSIR	CSIR
Power supply (nominal)	208-230V/60Hz	220-230V/50Hz
Number of phases	1	1
Voltage range	187-253V	187-242V
Approvals	UL, CB, CCC	UL, CB, CCC
Starting torque	HST	HST
Note	Electrical equipment is included and pre-assembled to compressor.	

Applications with NLE10CNT

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

Electrical data - Configurations with NLE10CNT

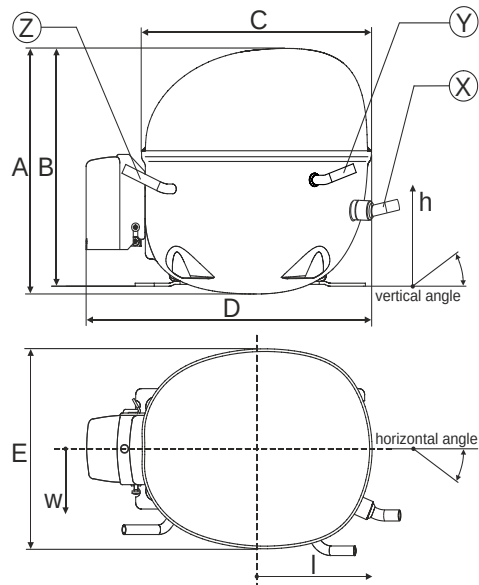
	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	60μF	60μF
LRA (locked rotor amps / 4s/ U(N))	17,1A	17,1A
RLA (rated load amps / 1s/ U(N))	2,4A	3,4A
Cut in current (U(N))	17,1A	17,1A

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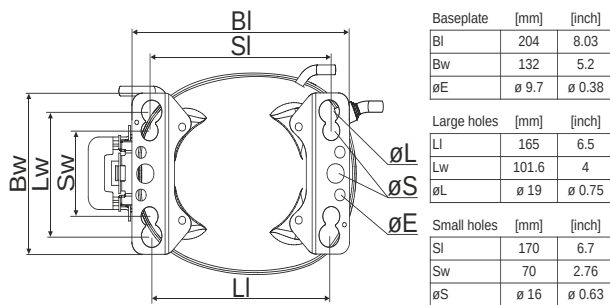
Compressor dimensions

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

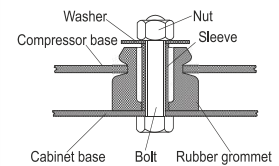


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material	copper	copper	copper
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/69/57	94/102/81	-109/94/72
	[in] 5,2/2,7/2,2	[in] 3,7/4/3,2	[in] -4,3/3,7/2,8
Straight tube l. [mm]	12	12	12
	[in] 0,5	[in] 0,5	[in] 0,5

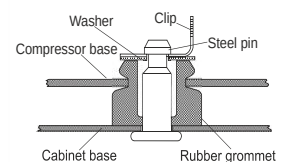
Compressor fixation



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

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

Important !! CSIR configuration uses different relays for 50Hz and 60Hz. Check accessories table.

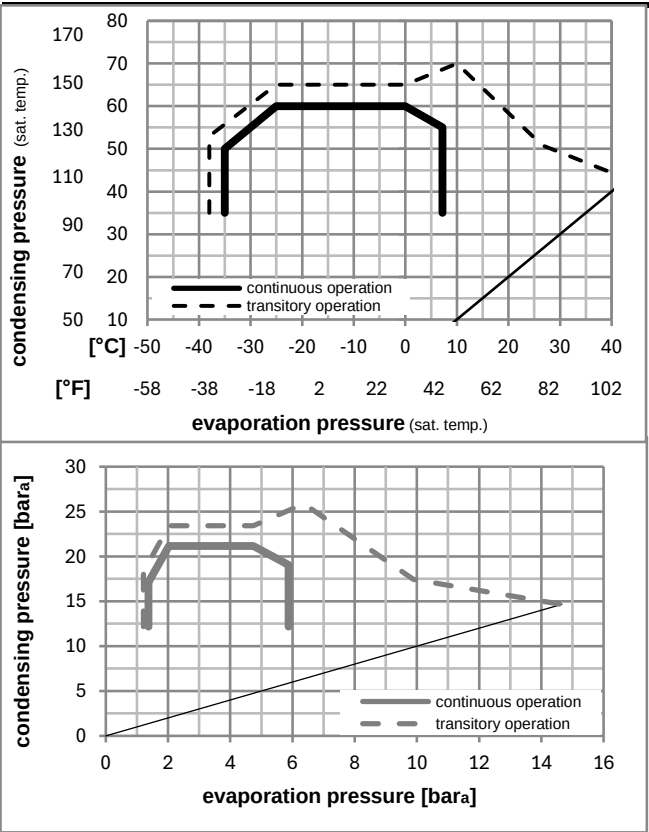
Model					
Designation	NLE10CNT	208-230V/60Hz	Conf. 1	Sales code:	105H6189

Configuration		Electrical accessories / wiring diagram			
Motor configuration	CSIR	CSIR			
Power supply (nominal)	208-230V/60Hz 1~				
Refrigerant	R290				
Application	LBP+MBP				
Voltage range	187-253V				
Starting torque	HST				
Approvals	UL				
	CB				
	CCC				

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 (incl. and pre. assembl.)

a2	current relay	117U7050
c	start capacitor (60 μF)	117U5014
b	plastic cover	103N2011
d	cord relief	103N1010

Model					
Designation	NLE10CNT	208-230V/60Hz	Conf. 1	Sales code:	105H6189
Optimization + standard conditions			R290, 230V/60Hz, CSIR, fan 3m/s, UL, CB, CCC		

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)														
Return gas temp.														
Liquid temp.														
Cooling capacity					COP		EER		Power consumption					
									Current consumption					
									Ref. mass flow					
pe	pc	RGT	Tliq		[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	-23	54	32	32	605,9	2069	521,4	1,63	5,57	1,40	371,6	2,36	6,14	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	451,9	1543	388,9	1,27	4,32	1,09	357,0	2,31	5,63	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	346,5	1183	298,2	1,29	4,40	1,11	268,7	2,06	3,96	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-7	54	35	46	1077,8	3681	927,6	2,10	7,17	1,81	513,4	2,86	12,29	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	859,9	2937	740,1	1,76	6,01	1,51	488,7	2,77	10,88	cecomaf MBP
[°F]	14	131	90	131										
[°C]	-10	45	20	45	947,0	3234	815,0	2,12	7,23	1,82	447,6	2,61	11,63	EN12900 MBP
[°F]	14	113	68	113										

Performance tables										R290, 230V/60Hz, CSIR, fan 3m/s, UL, CB, 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]	-23	-10	576,1	1968	495,8	1,62	5,53	1,39	356,0	2,31	6,51		
cond. pressure	-23	-10	576,1	1968	495,8	1,62	5,53	1,39	356,0	2,31	6,51		
pc= 45/113	-15	5	814,7	2782	701,1	1,96	6,71	1,69	414,7	2,50	9,27		
return gas temp.	-9	15	1006,2	3437	866,0	2,23	7,62	1,92	451,1	2,63	11,52		
RGT= 32/90	-4	25	1225,8	4186	1055,0	2,53	8,65	2,18	484,0	2,75	14,14		
liquid temp	0	32	1397,1	4771	1202,4	2,77	9,46	2,38	504,5	2,82	16,21		
Tliq= 45/113	7,2	45	1756,1	5997	1511,3	3,28	11,20	2,82	535,3	2,95	20,63		
[°C / °F]	-23	-10	489,9	1673	421,6	1,32	4,50	1,13	372,1	2,36	6,11		
cond. pressure	-23	-10	489,9	1673	421,6	1,32	4,50	1,13	372,1	2,36	6,11		
pc= 55/131	-15	5	706,6	2413	608,1	1,58	5,41	1,36	446,2	2,61	8,88		
return gas temp	-9	15	878,1	2999	755,7	1,78	6,08	1,53	493,3	2,78	11,12		
RGT= 32/90	-4	25	1073,2	3665	923,6	2,00	6,82	1,72	537,3	2,95	13,70		
liquid temp	0	32	1224,8	4183	1054,0	2,17	7,39	1,86	565,7	3,06	15,73		
Tliq= 55/131	7,2	45	1541,3	5264	1326,5	2,52	8,61	2,17	611,7	3,25	20,08		

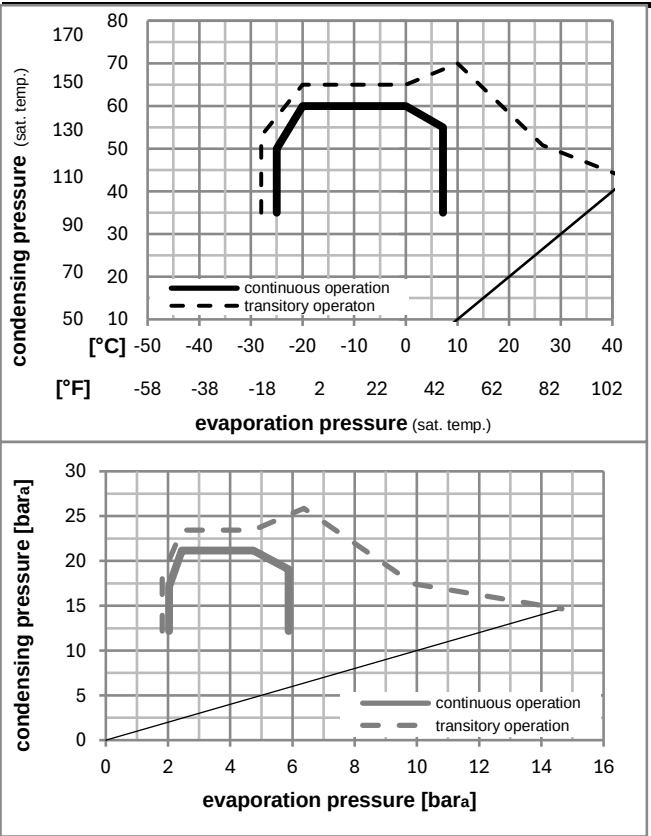
Model					
Designation	NLE10CNT	220-230V/50Hz	Conf. 2	Sales code:	105H6189

Configuration		Electrical accessories / wiring diagram			
Motor configuration	CSIR	CSIR			
Power supply (nominal)	220-230V/50Hz 1~				
Refrigerant	R290				
Application	LBP+MBP				
Voltage range	187-242V				
Starting torque	HST				
Approvals	UL				
	CB				
	CCC				

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 (incl. and pre. assembl.)		
a2	current relay	117U7019
c	start capacitor (60μF)	117U5014
b	plastic cover	103N2011
d	cord relief	103N1010

Model

Designation **NLE10CNT** **220-230V/50Hz** Conf. 2 Sales code: **105H6189**

Optimization + standard conditions

R290, 230V/50Hz, CSIR, fan 3m/s, UL, CB, CCC

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)														
Return gas temp.														
Liquid temp.														
Cooling capacity														
COP														
EER														
Power consumption														
Current consumption														
Ref. mass flow														
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m		
[°C]										[W]	[A]	[kg/h]		
[°F]	-23	54	32	32	509,6	1740	438,6	1,49	5,08	1,28	342,4	2,73	5,16	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	380,1	1298	327,1	1,16	3,95	1,00	328,7	2,68	4,73	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	291,4	995	250,7	1,19	4,05	1,02	245,6	2,40	3,33	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-7	54	35	46	907,2	3098	780,7	1,92	6,56	1,65	472,3	3,25	10,35	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	723,8	2472	622,9	1,61	5,49	1,38	450,2	3,16	9,16	cecomaf MBP
[°F]	14	131	90	131										
[°C]	-10	45	20	45	795,4	2717	684,6	1,95	6,68	1,68	406,9	2,97	9,77	EN12900 MBP
[°F]	14	113	68	113										

Performance tables

R290, 230V/50Hz, CSIR, fan 3m/s, UL, CB, 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]	[W]	[A]	[kg/h]	[W]	[A]
[°C / °F]	-25	-13	449,0	1534	386,4	1,43	4,88	1,23	314,5	2,62	5,06					
cond. pressure	-23	-10	483,6	1651	416,2	1,49	5,08	1,28	325,3	2,66	5,46					
pc= 45/113	-15	5	684,1	2336	588,7	1,81	6,18	1,56	377,7	2,85	7,78					
return gas temp.	-9	15	845,2	2887	727,4	2,06	7,04	1,77	410,0	2,98	9,68					
RGT= 32/90	-4	25	1030,0	3518	886,5	2,34	8,01	2,02	439,3	3,10	11,88					
liquid temp	0	32	1174,2	4010	1010,5	2,57	8,77	2,21	457,4	3,18	13,62					
Tliq= 45/113	7,2	45	1476,2	5041	1270,4	3,04	10,39	2,62	485,1	3,30	17,34					
[°C / °F]	-25	-13	380,1	1298	327,1	1,16	3,95	1,00	328,7	2,68	4,73					
cond. pressure	-23	-10	412,1	1407	354,6	1,20	4,11	1,03	342,8	2,73	5,14					
pc= 55/131	-15	5	594,7	2031	511,8	1,45	4,94	1,24	411,4	3,00	7,48					
return gas temp	-9	15	739,1	2524	636,1	1,63	5,56	1,40	454,3	3,18	9,36					
RGT= 32/90	-4	25	903,3	3085	777,4	1,83	6,25	1,57	494,0	3,35	11,53					
liquid temp	0	32	1030,7	3520	887,0	1,98	6,78	1,71	519,3	3,46	13,24					
Tliq= 55/131	7,2	45	1296,5	4428	1115,7	2,31	7,91	1,99	560,1	3,65	16,89					