

Model

Designation	NL7CN	220-240V/50Hz 1~	Sales code:	105H6756
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	7,27cm ³ / 0,44cu.in
Oil quantity	268cm ³ / 9,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	10,5kg / 23,1lbs		
Motor protection	1# internal		
Winding resistance main	8,6Ω (at 25°C)		
Winding resistance aux	14,7Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NL7CN

	Conf. 1	Conf. 2
Motor configuration	CSIR	RSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	VDE, CCC, CB, EAC	VDE, CCC, CB, EAC
Starting torque	HST	LST
Note	RSCR also possible - please contact SECOP-Sales.	

Applications with NL7CN

	Conf. 1	Conf. 2
Refrigerant	R290	R290
Application	LBP+MBP	LBP+MBP
System cooling	fan 1,5m/s	fan 1,5m/s
Hot gas defrost	-/-	-/-
Long interval pull down	OK	OK

Electrical data - Configurations with NL7CN

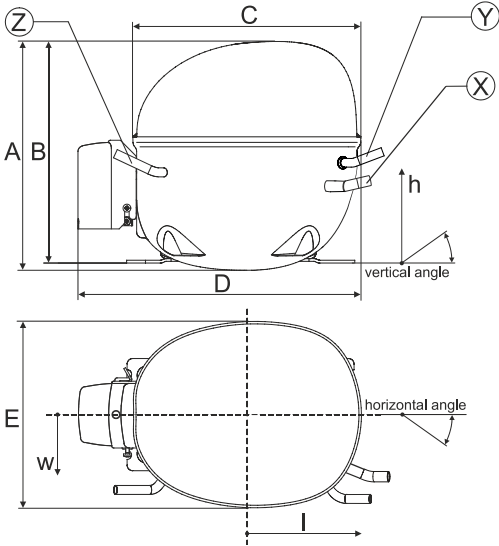
	Conf. 1	Conf. 2
Starting device type	relay	PTC
Run capacitor	-/-	-/-
Start capacitor	80μF	-/-
LRA (locked rotor amps / 4s/ U(N))	11A	
RLA (rated load amps / 1s/ U(N))	1,8A	-/-A
Cut in current (U(N))	14,5A	

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Compressor dimensions

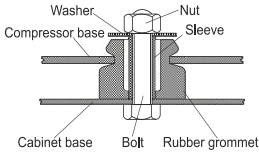
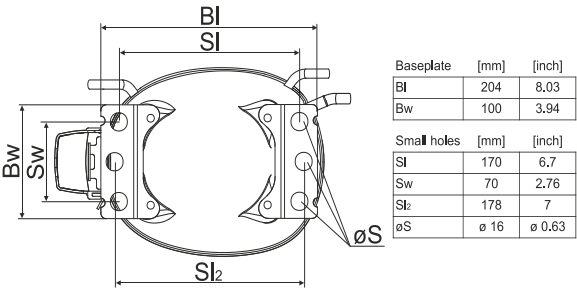
Housing	A Height	203mm / 7,99in
	B Height	197mm / 7,76in
	C Length shell	205mm / 8,07in
	D Length w. cover	254mm / 10in
	E Width	166mm / 6,54in

Connectors		Suction X	Discharge Y	Process Z
Diameter	[mm]	øi 8,11-8,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
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

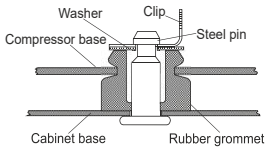


Compressor fixation

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

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

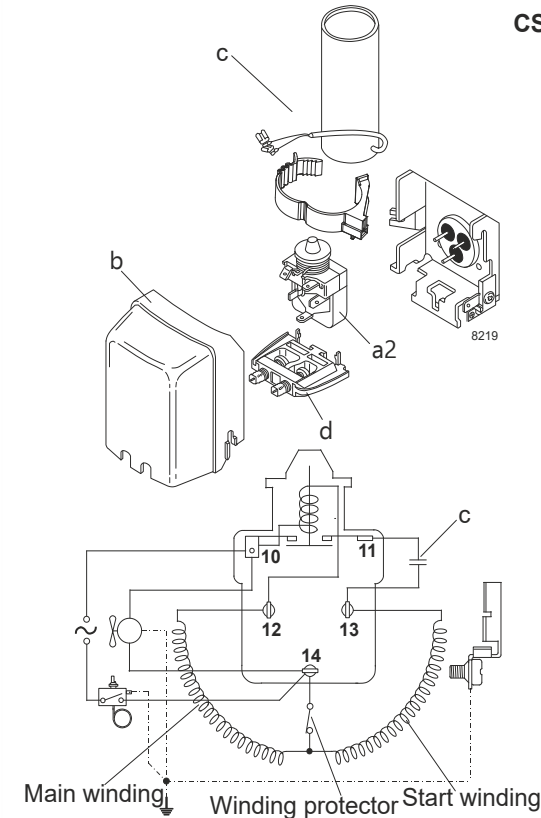
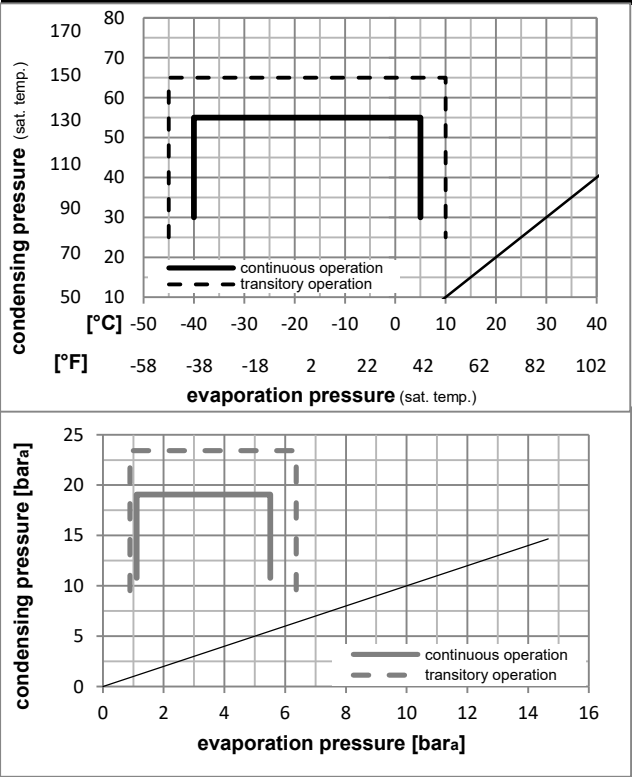
Model				
Designation	NL7CN	220-240V/50Hz	Conf. 1	Sales code: 105H6756

Configuration		Electrical accessories / wiring diagram		
Motor configuration	CSIR	CSIR		
Power supply (nominal)	220-240V/50Hz 1~			
Refrigerant	R290			
Application	LBP+MBP			
Voltage range	198-254V			
Starting torque	HST			
Approvals	VDE			
	CCC			
	CB			
	EAC			

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 1,5m/s

Operation pressure range



Components		
a2	relay	117U7002
c	start capacitor (80µF)	117U5015
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

b	plastic cover	103N2011
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Model

Designation **NL7CN** **220-240V/50Hz** Conf. 1 Sales code: **105H6756**

Optimization + standard conditions

R290, 220V/50Hz, CSIR, fan 1,5m/s, VDE, CCC, CB, EAC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			
Return gas temp.					Liquid temp.						Current consumption			
Cooling capacity					COP		EER		P1		I		Ref. mass flow	
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C]	-23	54	32	32	324,6	1108	279,3	1,35	4,61	1,16	240,4	1,59	3,29	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	242,3	828	208,5	1,04	3,56	0,90	232,5	1,57	3,02	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	178,5	610	153,6	1,03	3,51	0,88	173,6	1,45	2,04	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-7	54	35	46	597,7	2041	514,4	1,81	6,18	1,56	330,5	1,93	6,82	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	471,4	1610	405,7	1,51	5,14	1,30	313,1	1,86	5,96	cecomaf MBP
[°F]	14	131	90	131										
[°C]	-10	45	20	45	538,9	1840	463,8	1,85	6,33	1,59	290,9	1,78	6,62	EN12900 MBP
[°F]	14	113	68	113										

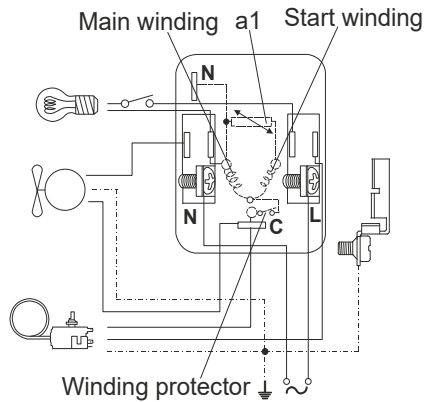
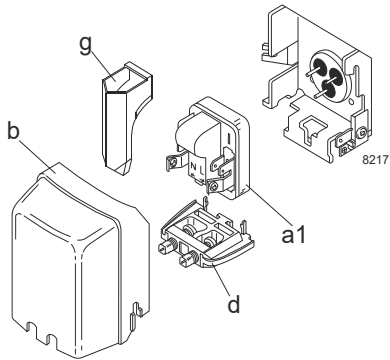
Performance tables

R290, 220V/50Hz, CSIR, fan 1,5m/s, VDE, CCC, CB, EAC

	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	117,9	403	101,5	0,79	2,71	0,68	148,5	1,40	1,32
cond. pressure	-35	-31	166,4	568	143,2	0,96	3,27	0,82	173,9	1,43	1,86
pc= 45/113	-30	-22	223,3	763	192,2	1,13	3,85	0,97	197,8	1,48	2,51
return gas temp.	-25	-13	290,0	990	249,6	1,31	4,48	1,13	221,0	1,54	3,27
RGT= 32/90	-15	5	457,6	1563	393,8	1,71	5,85	1,47	267,0	1,69	5,21
liquid temp	-5	23	679,3	2320	584,6	2,15	7,34	1,85	316,0	1,89	7,82
Tliq= 45/113	5	41	965,3	3297	830,7	2,59	8,85	2,23	372,4	2,13	11,29
[°C / °F]	-40	-40	103,5	354	89,1	0,69	2,37	0,60	149,0	1,38	1,28
cond. pressure	-35	-31	141,9	484	122,1	0,80	2,72	0,69	178,0	1,43	1,75
pc= 55/131	-30	-22	187,7	641	161,5	0,91	3,12	0,79	205,7	1,49	2,33
return gas temp	-25	-13	242,3	828	208,5	1,04	3,56	0,90	232,5	1,57	3,02
RGT= 32/90	-15	5	382,9	1308	329,5	1,34	4,58	1,15	285,6	1,75	4,81
liquid temp	-5	23	573,8	1960	493,8	1,68	5,73	1,44	341,8	1,98	7,31
Tliq= 55/131	5	41	825,0	2818	710,0	2,04	6,96	1,75	405,1	2,25	10,70

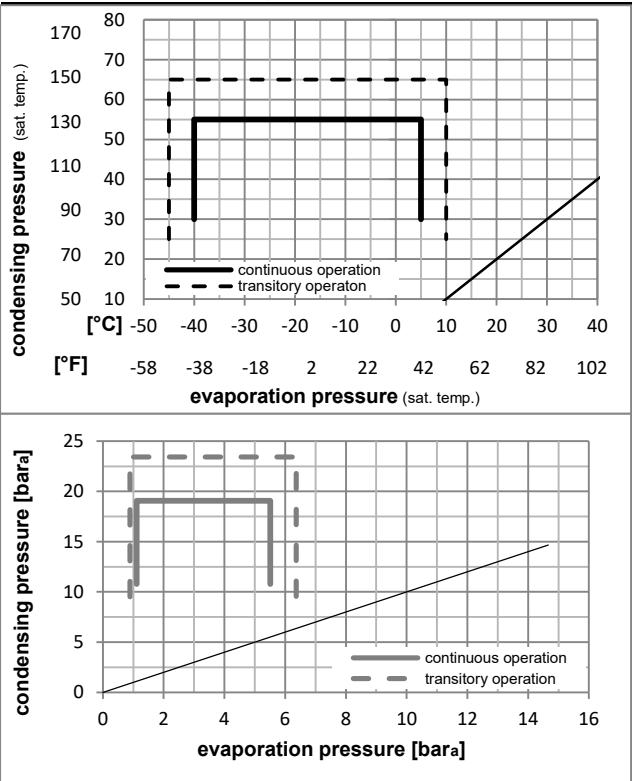
Model					
Designation	NL7CN	220-240V/50Hz	Conf. 2	Sales code:	105H6756

Configuration		Electrical accessories / wiring diagram	
Motor configuration	RSIR	RSIR	
Power supply (nominal)	220-240V/50Hz 1~		
Refrigerant	R290		
Application	LBP+MBP		
Voltage range	198-254V		
Starting torque	LST		
Approvals	VDE		
	CCC		
	CB		
	EAC		



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 1,5m/s

Operation pressure range



Components		
a1	PTC starter (220V, 25Ohm, 4.8mm)	103N0018
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Alternative components		
a1	PTC starter (220V, 25Ohm, 6.3mm)	103N0011
b	plastic cover	103N2011
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Model

Designation **NL7CN** **220-240V/50Hz** Conf. 2 Sales code: **105H6756**

Optimization + standard conditions

R290, 220V/50Hz, RSIR, fan 1,5m/s, VDE, CCC, CB, EAC

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]	[°C]									[W]	[A]	[kg/h]					
[°C]	-23	54	32	32	324,6	1108	279,3	1,35	4,61	1,16	240,4	1,59	3,29	ASHRAE LBP			
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[°F]	14	113	68	113													

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	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	117,9	403	101,5	0,79	2,71	0,68	148,5	1,40	1,32		
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RGT= 32/90	-15	5	457,6	1563	393,8	1,71	5,85	1,47	267,0	1,69	5,21		
liquid temp	-5	23	679,3	2320	584,6	2,15	7,34	1,85	316,0	1,89	7,82		
Tliq= 45/113	5	41	965,3	3297	830,7	2,59	8,85	2,23	372,4	2,13	11,29		
[°C / °F]	-40	-40	103,5	354	89,1	0,69	2,37	0,60	149,0	1,38	1,28		
cond. pressure	-35	-31	141,9	484	122,1	0,80	2,72	0,69	178,0	1,43	1,75		
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