

Model

Designation	NLY10CN	115-127V/60Hz 1~	Sales code:	105H6165
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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	150g / 5,3oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	10,9kg / 24lbs		
Motor protection	1# internal		
Winding resistance main	1Ω (at 25°C)		
Winding resistance aux	5,4Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	120°C / 248°F		



General - Configurations with NLY10CN

	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 NLY10CN

	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 NLY10CN

	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	125μF
LRA (locked rotor amps / 4s)	31,5A
RLA (rated load amps / 1s)	6,2A
Cut in current	31,5A

Model

Designation

NLY10CN

115-127V/60Hz 1~

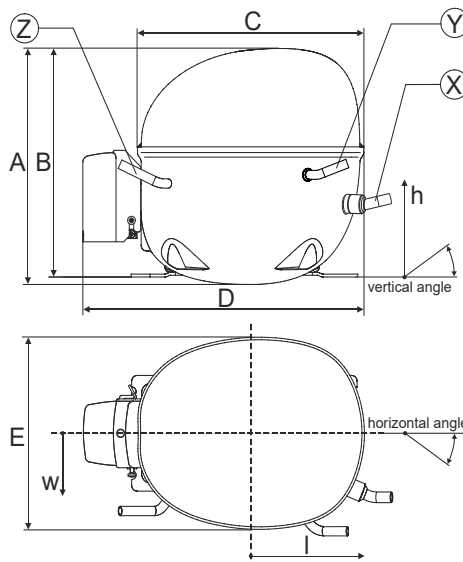
Sales code:

105H6165

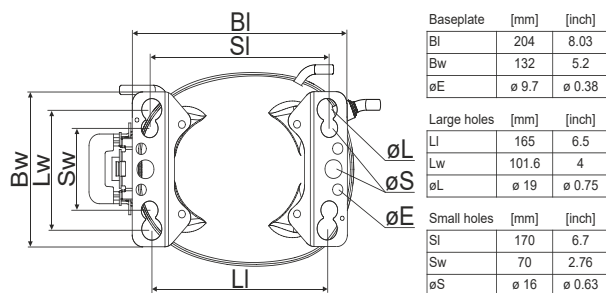
Compressor dimensions

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

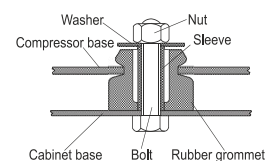
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	21°	155°
Position l/h/w	[mm]	132/69/57	94/102/81	-109/94/72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



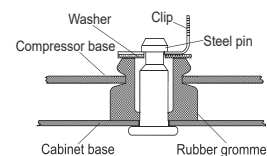
Compressor fixation



Bolt joint



Snap-on



Mounting accessories

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

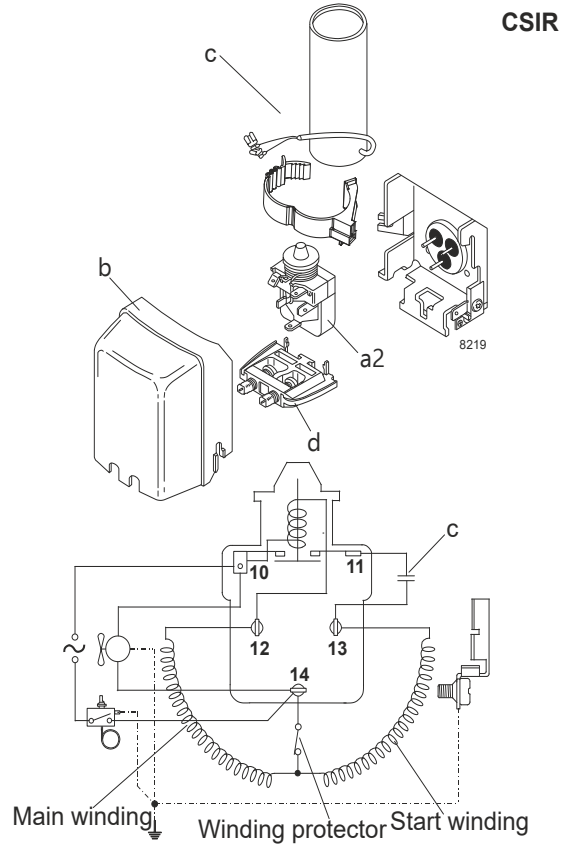
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Configuration

Motorconfiguration	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



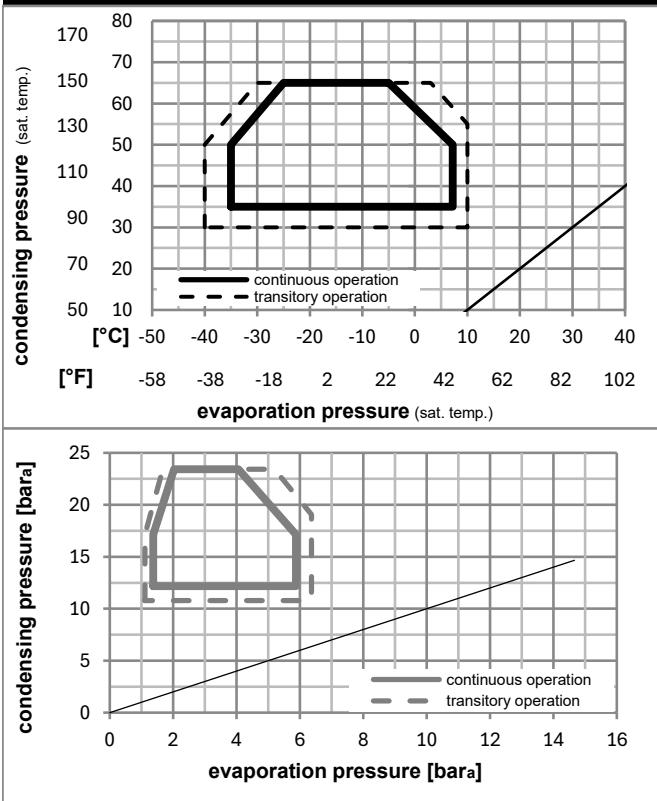
Ambient/ machine room temperatures minimum /maximum

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	relay	117U7020
c	start capacitor (125µF, 6,3mm)	117U5035
b	plastic cover	103N2011
d	cord relief	103N1010

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Optimization + standard conditions

R290, 115V/60Hz, CSIR, 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	592,4	2023	509,8	1,60	5,46	1,37	370,8	4,73	6,00	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	444,7	1519	382,7	1,24	4,25	1,07	357,5	4,64	5,54	cecomaf LBP
	-13	131	90	131										
	-35	40	20	40	339,7	1160	292,4	1,23	4,20	1,06	276,2	4,26	3,88	EN12900 LBP
	-31	104	68	104										
	-7	54	35	46	1068,8	3650	919,8	2,15	7,33	1,85	497,7	5,64	12,19	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	848,5	2898	730,2	1,78	6,10	1,54	475,4	5,48	10,73	cecomaf MBP
	14	131	90	131										
	-10	45	20	45	935,3	3194	804,9	2,14	7,31	1,84	436,7	5,24	11,48	EN12900 MBP
	14	113	68	113										

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]		[Btu/Wh]	[kcal/Wh]			
[°C / °F]	-35	-31	325,0	1110	279,7	1,17	3,99	1,01	278,0	4,23	3,64
cond. pressure	-23	-10	565,5	1931	486,7	1,58	5,39	1,36	358,6	4,69	6,39
pc= 45/113	-15	5	805,3	2750	693,1	1,97	6,73	1,70	408,7	5,03	9,16
return gas temp.	-9	15	993,5	3393	855,0	2,26	7,72	1,94	439,7	5,26	11,37
RGT= 32/90	-4	25	1202,4	4107	1034,8	2,56	8,75	2,20	469,5	5,49	13,87
liquid temp	0	32	1360,2	4645	1170,6	2,78	9,48	2,39	489,9	5,65	15,78
Tliq= 45/113	7,2	45	1676,0	5724	1442,4	3,18	10,85	2,73	527,5	5,95	19,69
[°C / °F]	-35	-31	292,9	1000	252,1	1,09	3,71	0,93	269,7	4,07	3,62
cond. pressure	-23	-10	479,5	1638	412,7	1,29	4,41	1,11	371,3	4,74	5,98
pc= 55/131	-15	5	692,0	2363	595,5	1,58	5,40	1,36	437,4	5,20	8,70
return gas temp	-9	15	867,1	2961	746,3	1,81	6,18	1,56	479,5	5,51	10,98
RGT= 32/90	-4	25	1067,3	3645	918,5	2,05	7,00	1,76	520,7	5,81	13,62
liquid temp	0	32	1221,3	4171	1051,1	2,22	7,59	1,91	549,3	6,01	15,69
Tliq= 55/131	7,2	45	1535,7	5245	1321,7	2,55	8,70	2,19	602,6	6,38	20,01