

Model
NL7CN

Sales code:
105H6756

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	150g / 5.29oz
Weight	10.50 kg / 23.15lbs
Displacement	7.27 cm3 / 0.44cu.in
Compressors on pallet	80



General – Configurations With NL7CN

-	Conf. 1	Conf. 2
Motor configuration	CSIR	RSIR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1
Voltage range	198-254 V	198-254 V
Approvals	VDE, CCC, CB, EAC	VDE, CCC, CB, EAC
Starting torque	HST	LST
Refrigerant	R290	R290
Application	LBP+MBP	LBP+MBP
Long interval pull down	OK	OK

Application Notes

- RSCR also possible - please contact SECOP-Sales.
- Provision for PE Grounding is located at the PE Stamp on the compressor

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Compressor Design

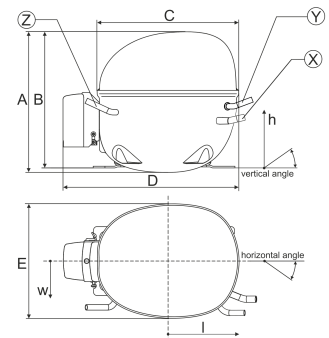
Oil type	POE	Winding resistance main	8.6 Ohm
Oil viscosity	32cSt	Winding resistance aux	14.7 Ohm
Oil quantity	268 / 9.06fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm ³ / 79.80fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

Housing

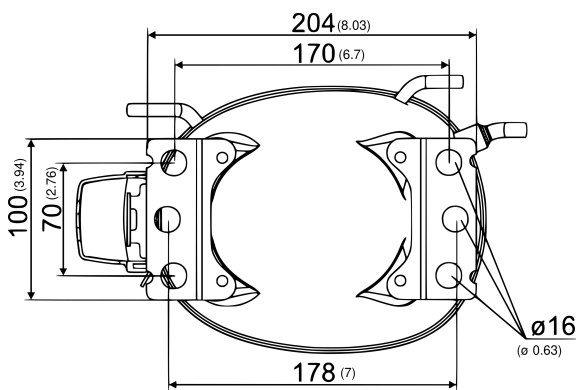
A Height	203mm / 7.99in
B Height	197mm / 7.76in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

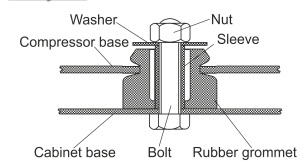


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in	-107/93.5/72 / -4.21/3.68/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

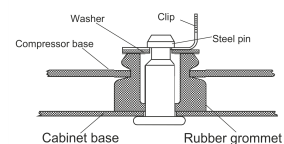
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	one comp.	multi pack
Bolt joint M6 ø16mm	118-1917	118-1918
Bolt joint ø1/4" ø16mm	118-1946	–
Snap-on ø7,3 ø16mm	118-1947	118-1919

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Configuration 1

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Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, CCC, CB, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	11 A
RLA (rated load amps / 1s/ U(N))	1.8 A
Cut in current (U(N))	14.5 A

Ambient/ machine room temperatures minimum /maximum

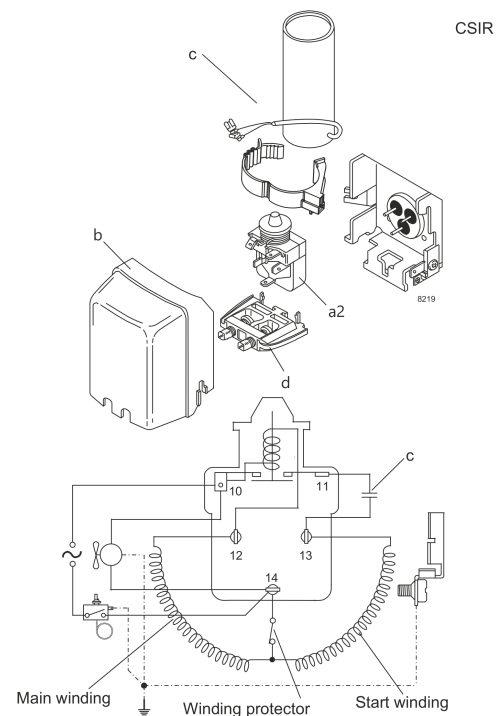
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 1,5m/s

Electrical Accessories / Wiring Diagram



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Components

a2 relay 117U7002

c start capacitor (80µF) 117U5015

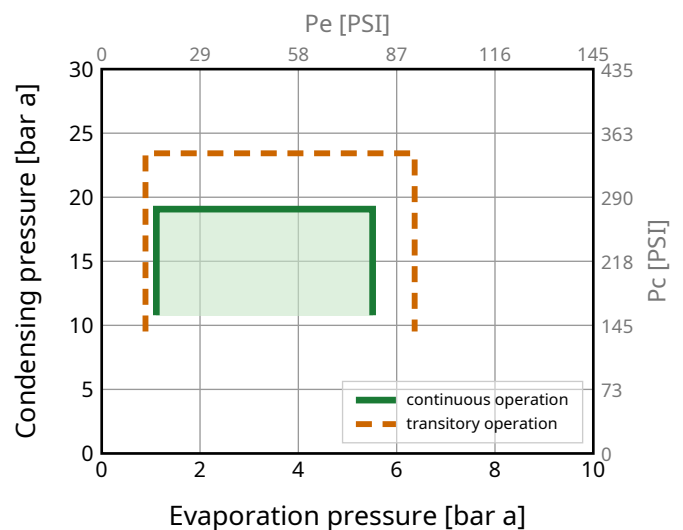
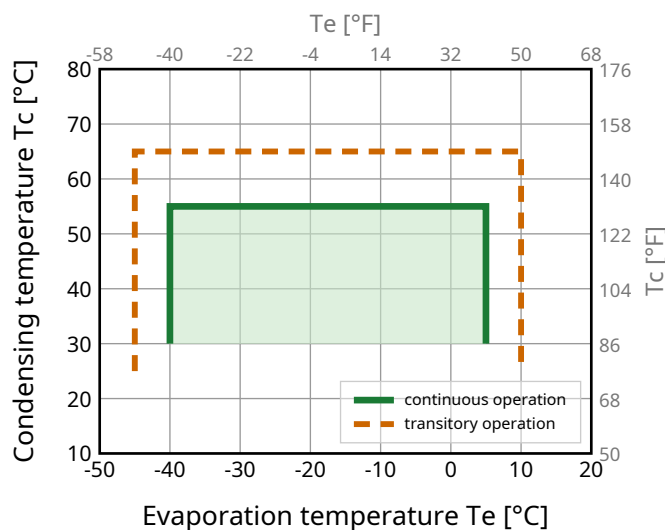
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



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Configuration 1

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Standard Conditions

R290, 220 V/50 Hz, CSIR, fan 1,5m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	326	1113	281	1.36	4.63	240	1.59	3.31	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	242	827	208	1.04	3.56	232	1.57	3.04	CECOMAF LBP
-35 -31	40 104	20 68	40 104	179	609	154	1.03	3.51	174	1.45	2.05	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	598	2039	514	1.81	6.18	330	1.93	6.84	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	471	1608	405	1.51	5.14	313	1.86	6.00	CECOMAF MBP
-10 14	45 113	20 68	45 113	540	1841	464	1.85	6.33	291	1.78	6.64	EN12900 MBP

Performance Tables

R290, 220 V/50 Hz, CSIR, fan 1,5m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	118	402	101	0.79	2.71	148	1.40	1.33
-30	-22	223	762	192	1.13	3.85	198	1.48	2.52
-20	-4	368	1254	316	1.51	5.15	244	1.61	4.18
-10	14	561	1914	482	1.93	6.58	291	1.78	6.44
0	32	814	2776	700	2.37	8.09	343	2.00	9.46
5	41	965	3294	830	2.59	8.84	372	2.12	11.31

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-40	-40	104	353	89	0.69	2.37	149	1.38	1.29
-30	-22	188	640	161	0.91	3.12	206	1.49	2.35
-20	-4	307	1047	264	1.19	4.04	259	1.66	3.86
-10	14	471	1608	405	1.51	5.14	313	1.86	6.00
0	32	691	2358	594	1.86	6.34	372	2.11	8.91
5	41	825	2815	710	2.04	6.95	405	2.25	10.73

Model
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Configuration 2

Sales code:
105H6756

Configuration

Motor configuration	RSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE, CCC, CB, EAC
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
RLA (rated load amps / 1s/ U(N))	-/-A

Ambient/ machine room temperatures minimum /maximum

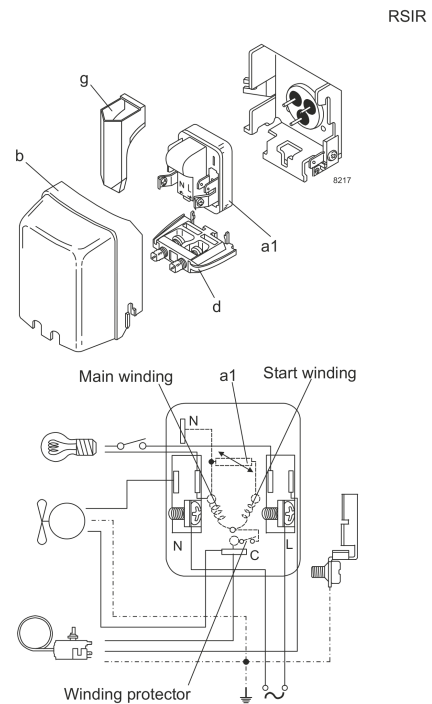
Ambient temperature range: 10 - 43°C / 50 - 109°F

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System Cooling

fan 1,5m/s

Electrical Accessories / Wiring Diagram



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Components

a1 PTC starter (220V, 250Ohm, 4.8mm) 103N0018

b plastic cover 103N2010

d cord relief 103N1010

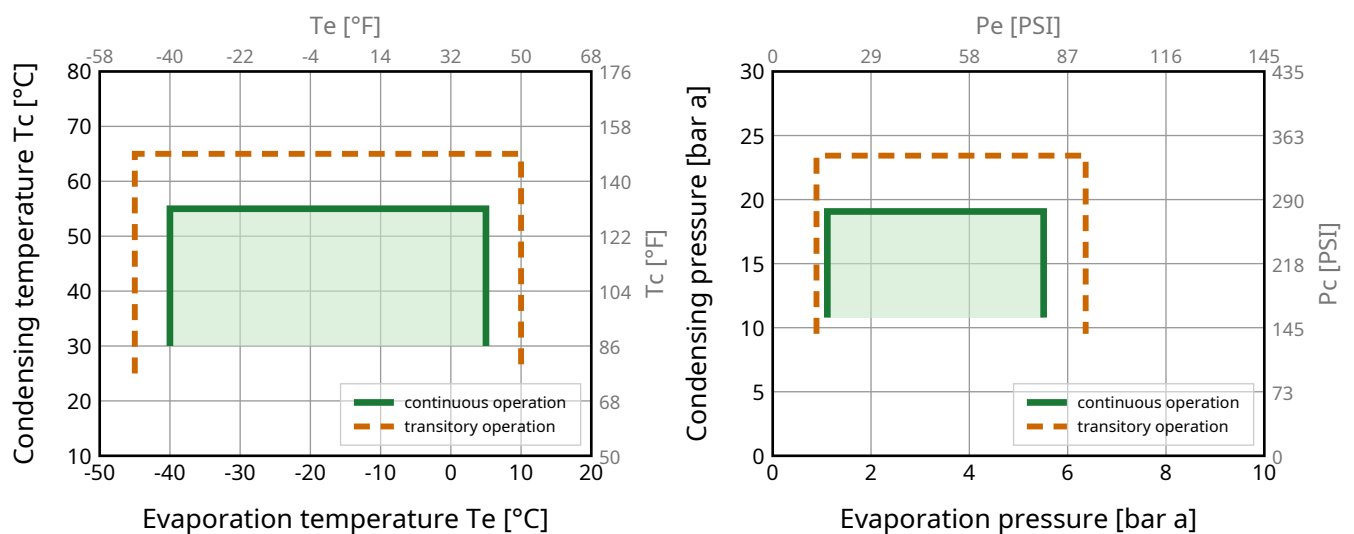
g protection screen for PTC 103N0476

Alternative components

a1 PTC starter (220V, 250Ohm, 6.3mm) 103N0011

b plastic cover 103N2011

Operation Pressure Range



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Configuration 2

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Standard Conditions

R290, 220 V/50 Hz, RSIR, fan 1,5m/s

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