Single
Packs

Single Pack NL7CN 220-240V 50Hz CSIR

Single pack code number: **195B4112**

Position	Title	Code	Amount
1	Compressor NL7CN	105H6756	1
2	Starting relay	117U7002	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5015	1
4	Cord relief	103N1010	1
5	Cover	103N2010	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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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

Model
NL7CN

Sales code:
105H6756

Compressor Design

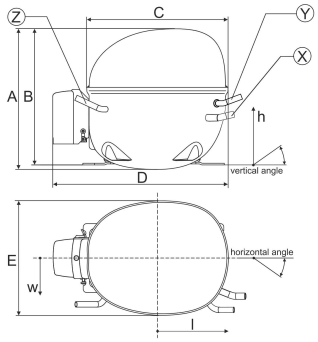
Oil type	**POE**	Winding resistance main	**8.6 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**14.7 Ohm**
Oil quantity	**268 / 9.06fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

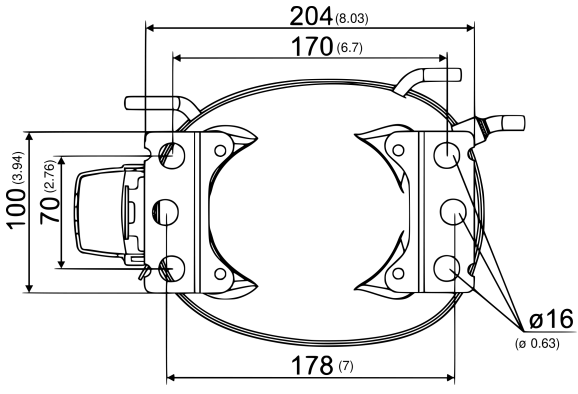
A Height	**203mm / 7.99in**
B Height	**197mm / 7.76in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



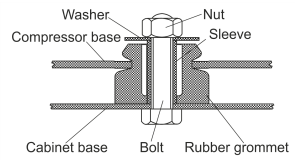
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in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

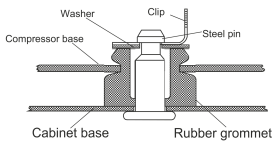


Dimensions in mm [in]

Bolt joint



Snap-on



	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

Model
NL7CN Configuration 1

Sales code:
105H6756

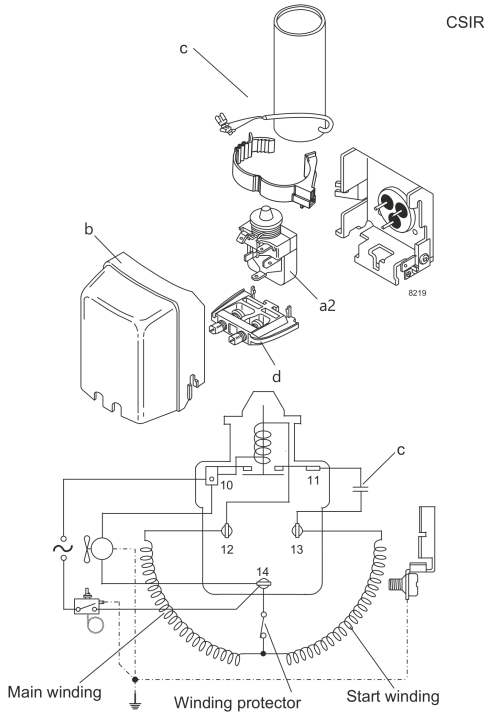
Configuration

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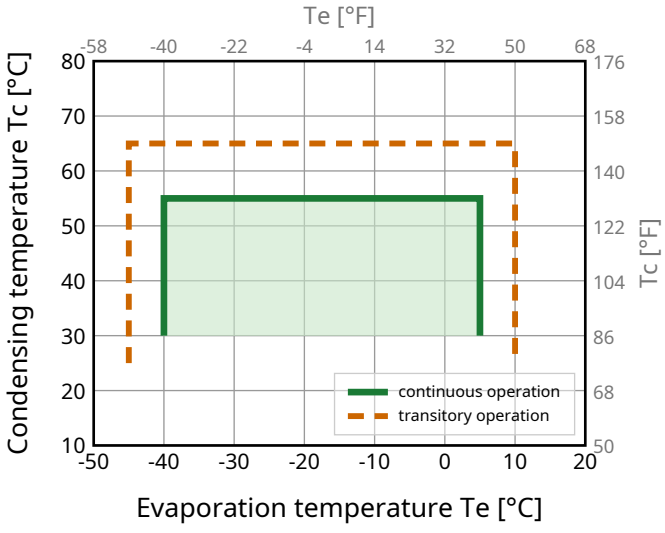
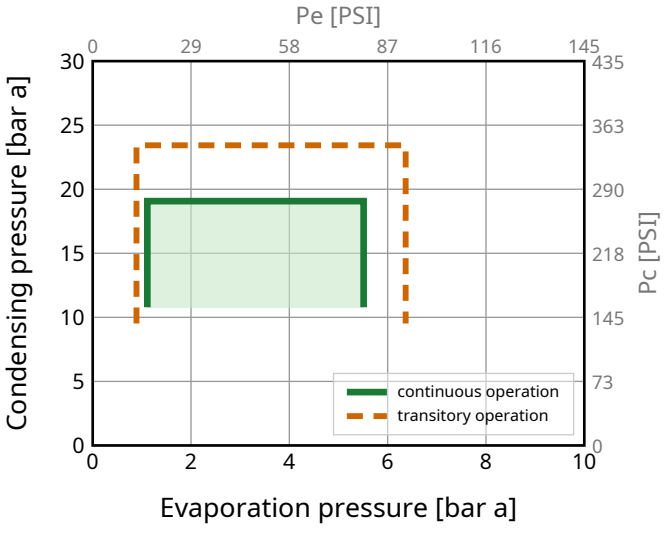
Components
a2 relay 117U7002
c start capacitor (80µF) 117U5015
b plastic cover 103N2010
d cord relief 103N1010

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model
NL7CN Configuration 1

Sales code:
105H6756

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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	ṁ
[°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
NL7CN Configuration 2

Sales code:
105H6756

Configuration

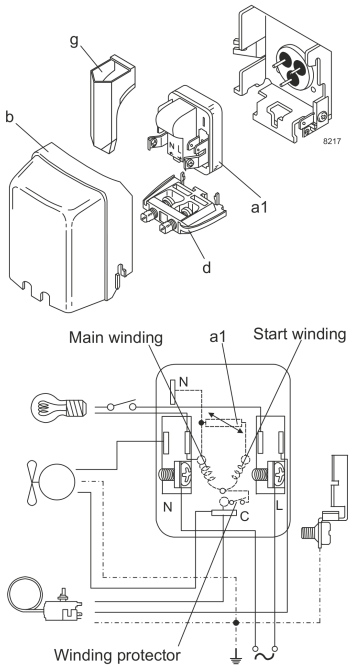
Motor configuration	**RSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**198-254 V**
Starting torque	**LST**
Approvals	**VDE, CCC, CB, EAC**
Starting device type	**PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
RLA (rated load amps /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

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 1,5m/s

Electrical Accessories / Wiring Diagram

RSIR



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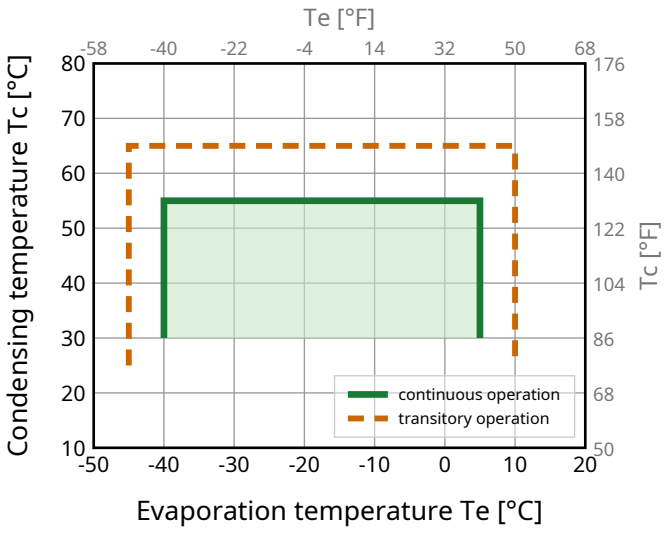
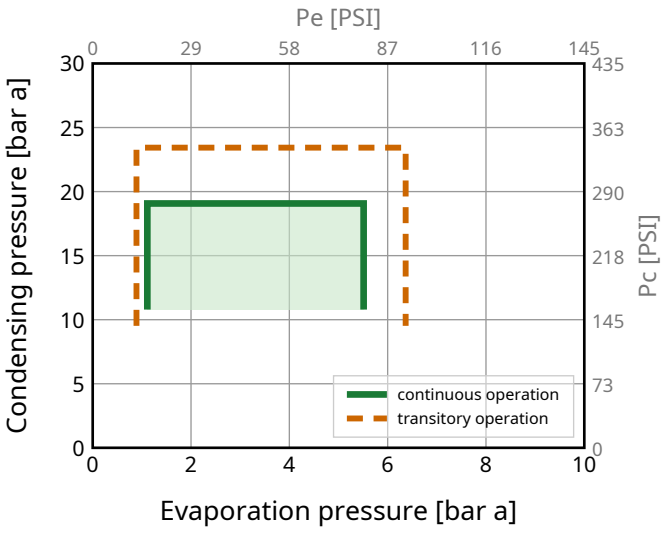
Components
a1 PTC starter (220V, 25Ohm, 4.8mm) 103N0018
b plastic cover 103N2010
d cord relief 103N1010
g protection screen for PTC 103N0476

Alternative components
a1 PTC starter (220V, 25Ohm, 6.3mm) 103N0011
b plastic cover 103N2011

Operation Pressure Range





Model
NL7CN Configuration 2

Sales code:
105H6756

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
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-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, RSIR, fan 1,5m/s

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

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
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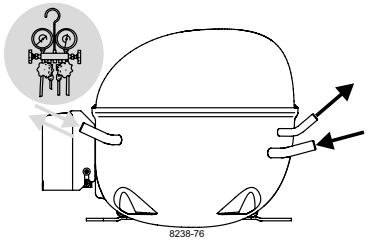


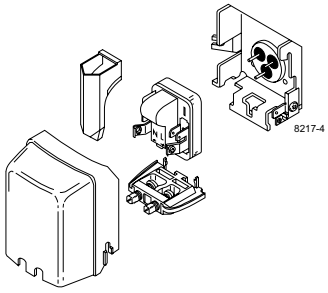
NL Compressors

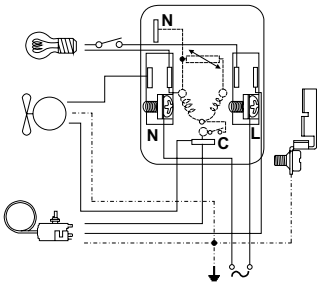
SECOP

Keep electrical equipment clear from oil, chemicals, and water

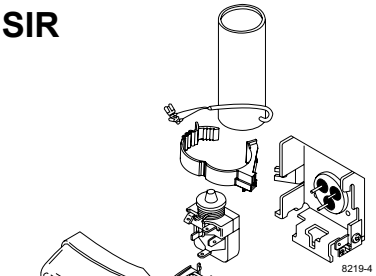
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

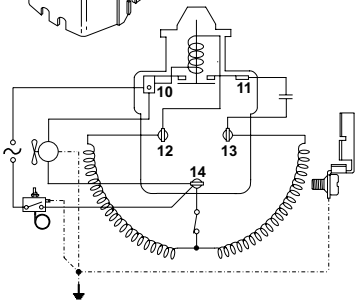
RSIR



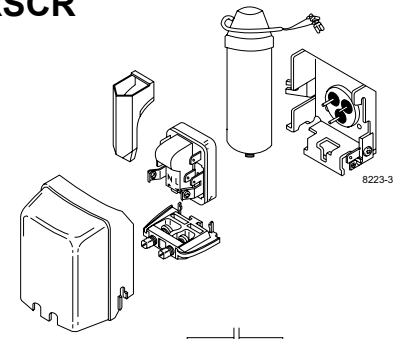


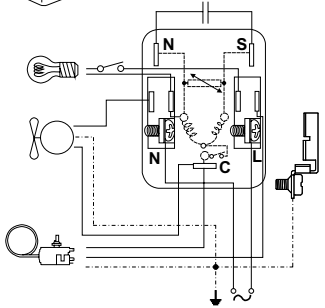
CSIR

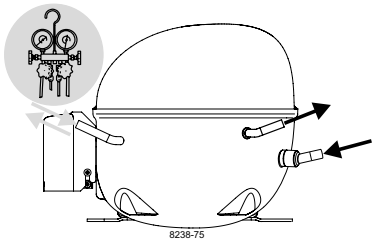




RSCR







NL Compressors

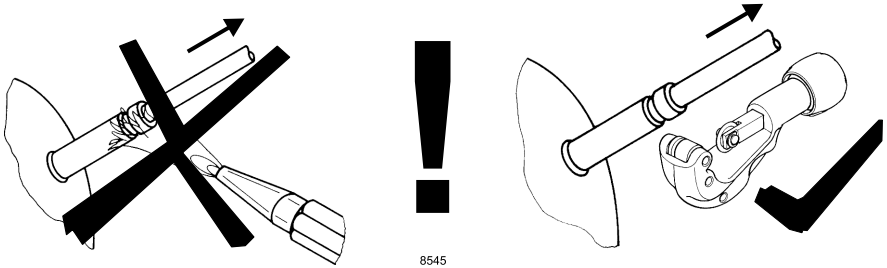
SECOP

Keep electrical equipment clear from oil, chemicals, and water

When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

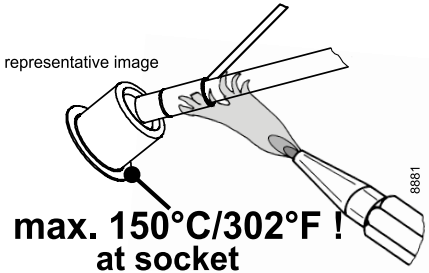
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



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)

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. www.secop.com**