

Model
NL7F

Sales code:
105G6706

Compressor Data

Refrigerant(s)	R134a
Refr. charge - tech. limit	400g / 14.11oz
Weight	9.60 kg / 21.16lbs
Displacement	7.27 cm3 / 0.44cu.in
Compressors on pallet	80



General – Configurations With NL7F

-	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, EAC	VDE, EAC
Starting torque	HST	LST
Refrigerant	R134a	R134a
Application	LBP	LBP

Application Notes

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

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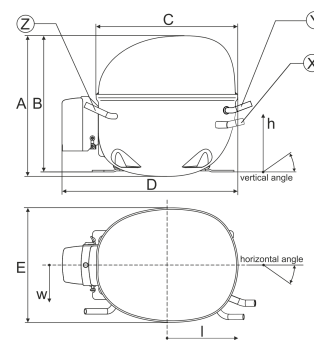
Compressor Design

Oil type	POE	Winding resistance main	13.300 Ohm
Oil viscosity	19,2cSt	Winding resistance aux	14.10 Ohm
Oil quantity	265 / 8.96fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,180 cm3 / 73.71fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

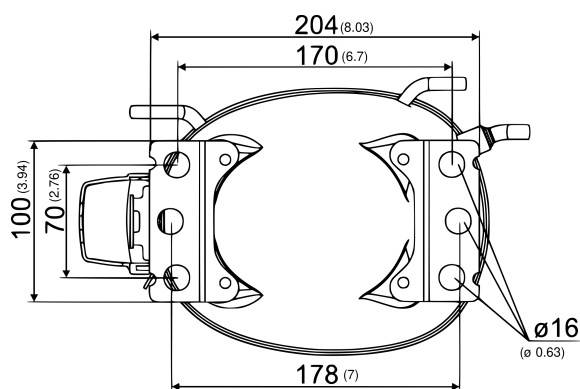
Housing

A Height	189.5mm / 7.46in
B Height	183.5mm / 7.22in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

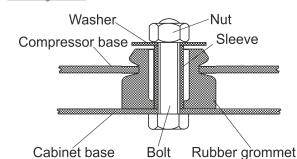
[Find 3D Model here](#)


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 6.11–6.29 / 0.24–0.25in	øi 5.12–5.22 / 0.20–0.21in	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

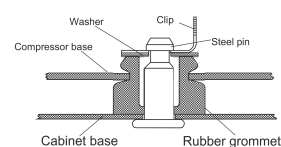
Mounting Accessories



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	R134a
Application	LBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	5.9 A
RLA (rated load amps / 1s/ U(N))	1.2 A
Cut in current (U(N))	10.4 A

Ambient/ machine room temperatures minimum /maximum

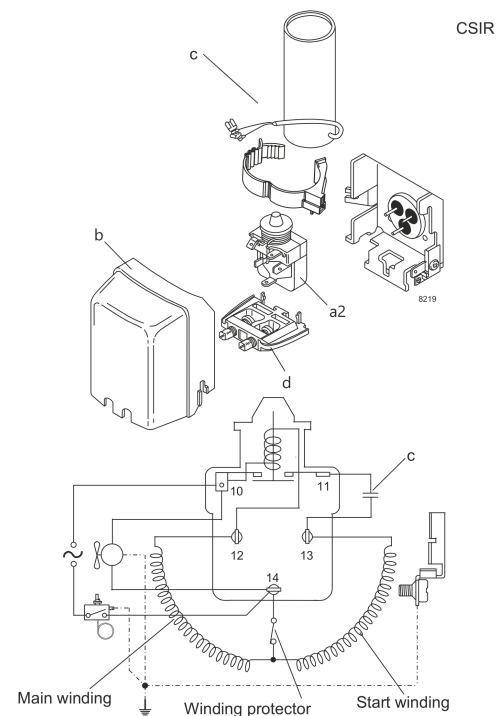
Ambient temperature range: 10 - 38°C / 50 - 100°F

Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling

static

Electrical Accessories / Wiring Diagram



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Components

a2 relay 117U6000

c start capacitor (80µF) 117U5015

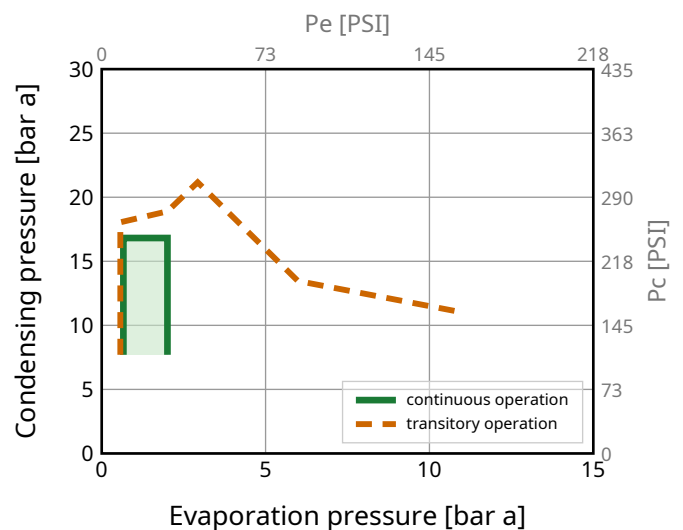
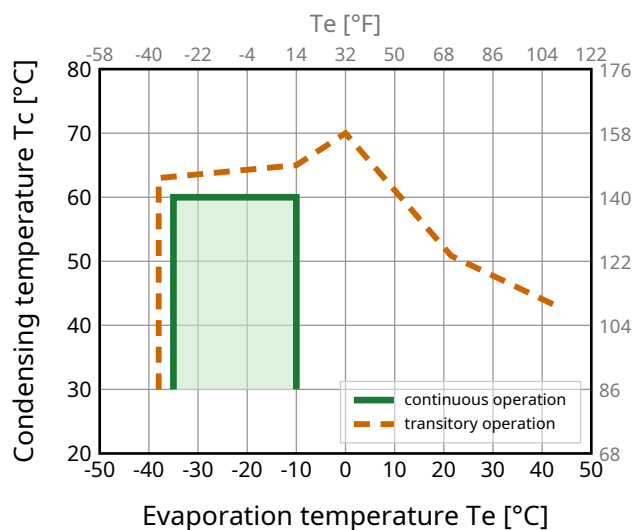
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



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NL7F

Configuration 1

Sales code:
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Standard Conditions

R134a, 220 V/50 Hz, CSIR, static

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	186	635	160	1.21	4.11	154	1.04	3.61	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	136	464	117	0.93	3.18	146	1.02	3.25	CECOMAF LBP
-35 -31	40 104	20 68	40 104	90	306	77	0.86	2.94	104	0.97	1.96	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	155	529	133	1.03	3.52	150	1.02	4.06	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	210	716	180	1.45	4.94	145	1.01	4.07	AHAM LBP
-25 -13	45 113	32 89.6	45 113	164	559	141	1.17	3.99	140	1.00	3.54	opt LBP

Performance Tables

R134a, 220 V/50 Hz, CSIR, static

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]
-35	-31	84	287	72	0.83	2.84	101	0.95	1.81
-30	-22	120	408	103	1.00	3.40	120	0.96	2.58
-25	-13	164	559	141	1.17	3.99	140	1.00	3.54
-20	-4	217	741	187	1.34	4.58	162	1.05	4.71
-15	5	280	955	241	1.51	5.14	186	1.13	6.09
-10	14	352	1201	303	1.66	5.67	212	1.24	7.69

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

-35	-31	71	242	61	0.73	2.49	97	0.92	1.68
-30	-22	99	338	85	0.82	2.80	121	0.96	2.35
-25	-13	136	464	117	0.93	3.18	146	1.02	3.25
-20	-4	182	622	157	1.06	3.61	173	1.10	4.36
-15	5	238	812	205	1.18	4.04	201	1.20	5.71
-10	14	303	1034	261	1.31	4.46	232	1.33	7.30

Model

NL7F

Configuration 2

Sales code:

105G6706

Configuration

Motor configuration	RSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE, EAC
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	5.9 A
RLA (rated load amps / 1s/ U(N))	1.2 A
Cut in current (U(N))	10.4 A

Ambient/ machine room temperatures minimum /maximum

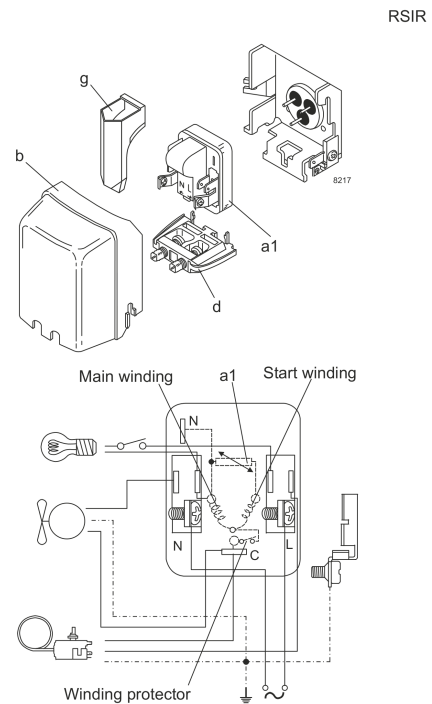
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System Cooling

static

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

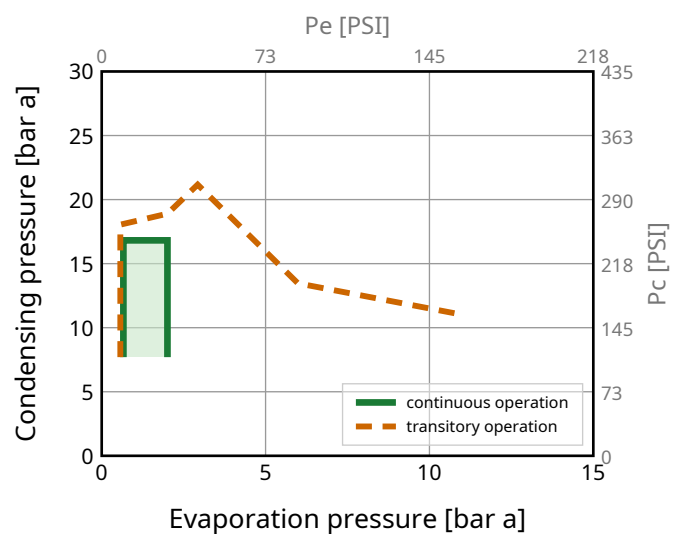
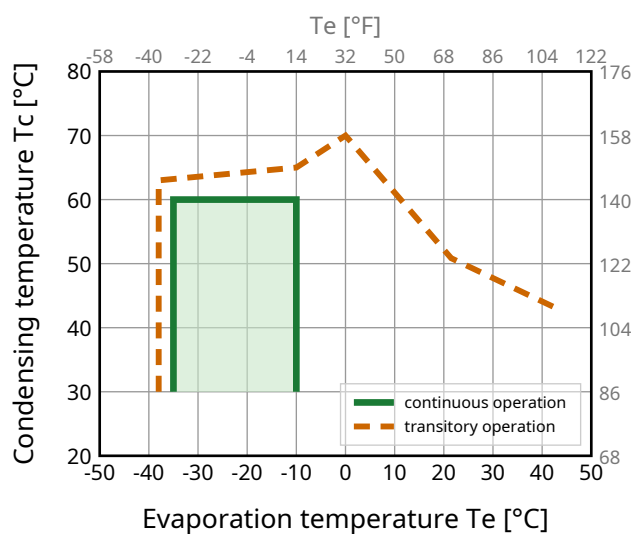
g protection screen for PTC 103N0476

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

R134a, 220 V/50 Hz, RSIR, static

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]	
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