

Model

NL6.1FT

Sales code:

105G6621

Compressor Data

Refrigerant(s)

R134a

Refr. charge - tech. limit

400g / 14.11oz

Weight

9.30 kg / 20.50lbs

Displacement

6.13 cm3 / 0.37cu.in

Compressors on pallet

80



General – Configurations With NL6.1FT

-	Conf. 1	Conf. 2
Motor configuration	RSIR	CSIR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1
Voltage range	187-254 V	187-254 V
Approvals	VDE, CCC, EAC	VDE, CCC, EAC
Starting torque	LST	HST
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

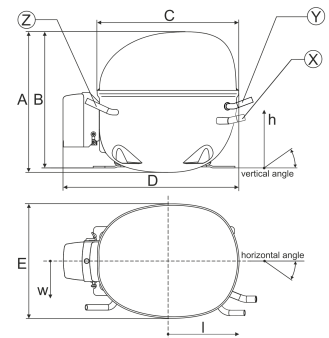
Oil type	POE	Winding resistance main	15.2 Ohm
Oil viscosity	22cSt	Winding resistance aux	12.7 Ohm
Oil quantity	276 / 9.33fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,270 cm ³ / 76.76fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

Housing

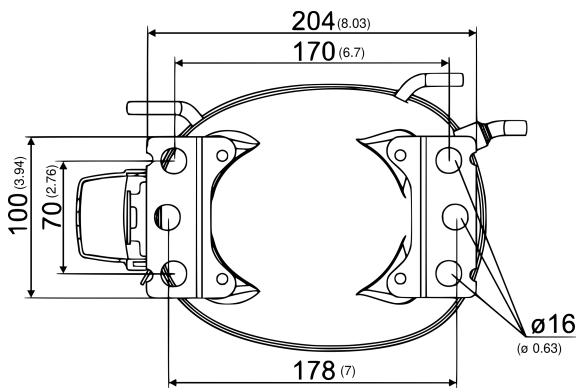
A Height	187.5mm / 7.38in
B Height	181.5mm / 7.15in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

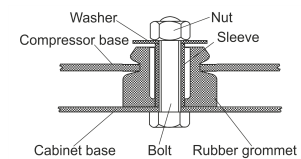


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 6.11–6.29 / 0.24–0.25in	øi 5.12–5.22 / 0.20–0.21in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in	-107/93.5/72 / -4.21/3.68/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

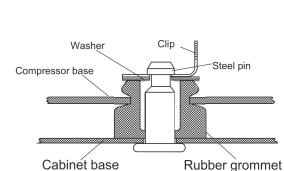
Mounting Accessories



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	RSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-254 V
Starting torque	LST
Approvals	VDE, CCC, EAC
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	7.7 A
RLA (rated load amps / 1s/ U(N))	1.1 A
Cut in current (U(N))	10.1 A

Ambient/ machine room temperatures minimum /maximum

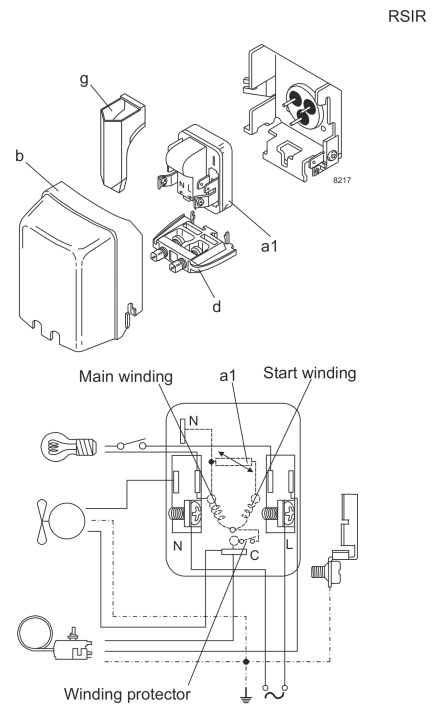
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

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

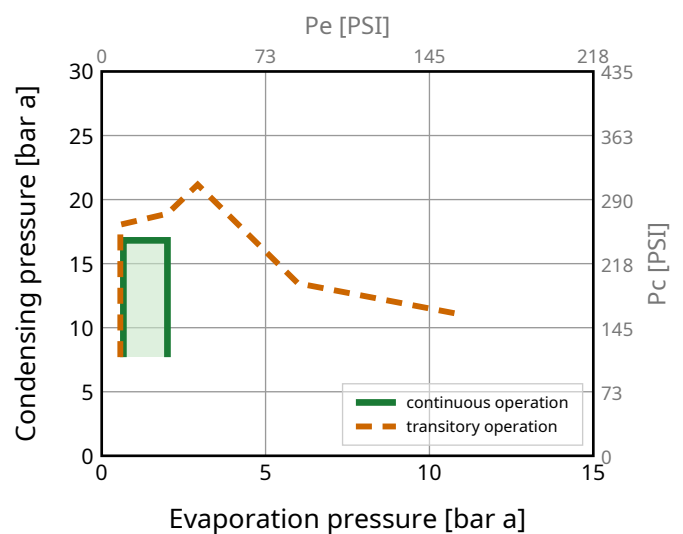
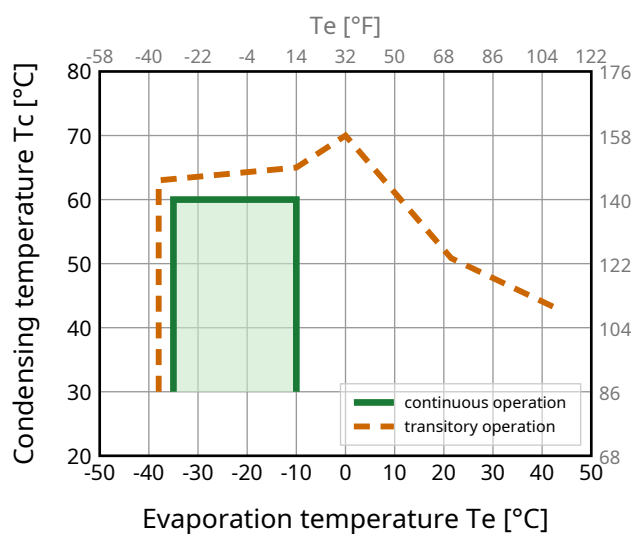
g protection screen for PTC 103N0476

Alternative components

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

b plastic cover 103N2011

Operation Pressure Range



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Configuration 1

Sales code:
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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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	156	533	134	1.21	4.11	130	0.86	3.03	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	115	392	99	0.93	3.18	123	0.84	2.74	CECOMAF LBP
-35 -31	40 104	20 68	40 104	80	273	69	0.87	2.98	92	0.77	1.75	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	130	443	112	1.01	3.44	129	0.87	3.40	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	176	601	151	1.41	4.82	125	0.86	3.42	AHAM LBP
-35 -31	45 113	32 89.6	45 113	75	255	64	0.81	2.75	93	0.78	1.61	opt LBP

Performance Tables

R134a, 220 V/50 Hz, RSIR, 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	75	255	64	0.81	2.75	93	0.78	1.61
-30	-22	103	352	89	0.97	3.32	106	0.81	2.22
-25	-13	138	472	119	1.14	3.89	121	0.85	2.99
-20	-4	182	620	156	1.31	4.47	138	0.91	3.94
-15	5	234	798	201	1.49	5.10	156	0.96	5.09
-10	14	296	1010	255	1.69	5.77	175	1.03	6.46

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

-35	-31	60	205	52	0.65	2.21	93	0.77	1.43
-30	-22	84	288	73	0.79	2.70	107	0.80	2.01
-25	-13	115	392	99	0.93	3.18	123	0.84	2.74
-20	-4	152	520	131	1.07	3.66	142	0.89	3.65
-15	5	198	676	170	1.22	4.15	163	0.96	4.75
-10	14	252	862	217	1.37	4.68	184	1.04	6.09

Model
NL6.1FT

Configuration 2

Sales code:
105G6621

Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-254 V
Starting torque	HST
Approvals	VDE, CCC, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	7.7 A
RLA (rated load amps / 1s/ U(N))	1.1 A
Cut in current (U(N))	10.1 A

Ambient/ machine room temperatures minimum /maximum

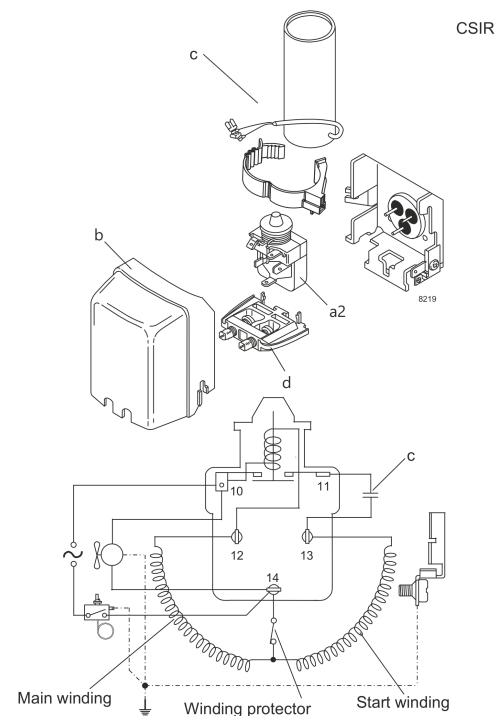
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Electrical Accessories / Wiring Diagram



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Components

a2 relay 117U6000

c start capacitor (80µF) 117U5015

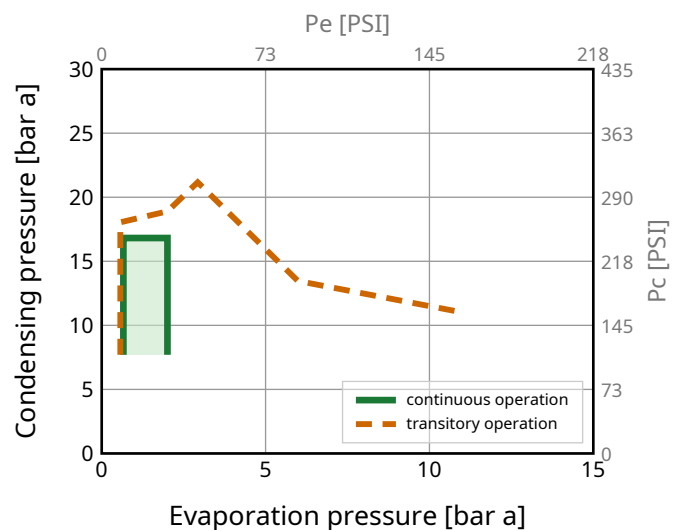
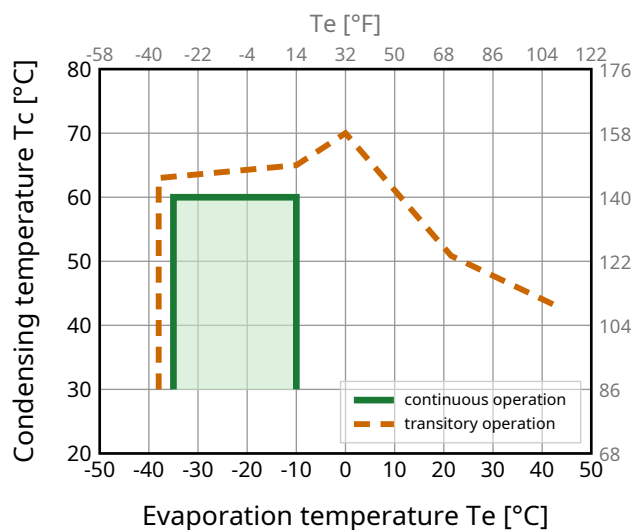
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



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Configuration 2

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R134a, 220 V/50 Hz, CSIR, static

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[°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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