

Model
NL8F

Sales code:
105G6822

Compressor Data

Refrigerant(s)	R134a
Refr. charge - tech. limit	400g / 14.11oz
Weight	9.80 kg / 21.61lbs
Displacement	7.95 cm3 / 0.49cu.in
Compressors on pallet	80



General – Configurations With NL8F

-	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

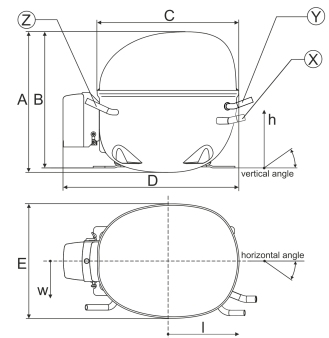
Oil type	POE	Winding resistance main	10.700 Ohm
Oil viscosity	19,2cSt	Winding resistance aux	13.00 Ohm
Oil quantity	265 / 8.96fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,230 cm3 / 75.41fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

Housing

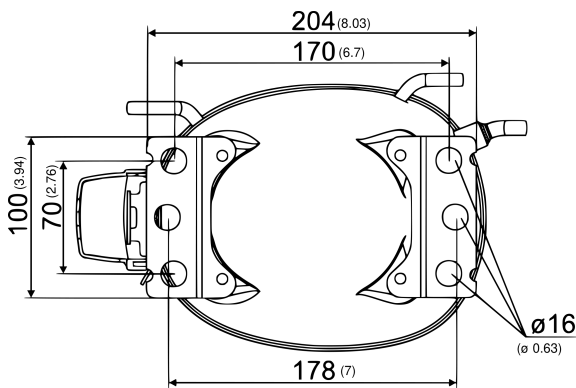
A Height	197mm / 7.76in
B Height	191mm / 7.52in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[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

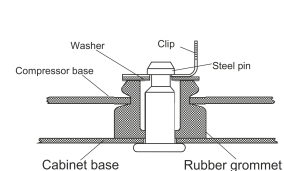
Mounting Accessories



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))	8.7 A
Cut in current (U(N))	10.9 A

Ambient/ machine room temperatures minimum /maximum

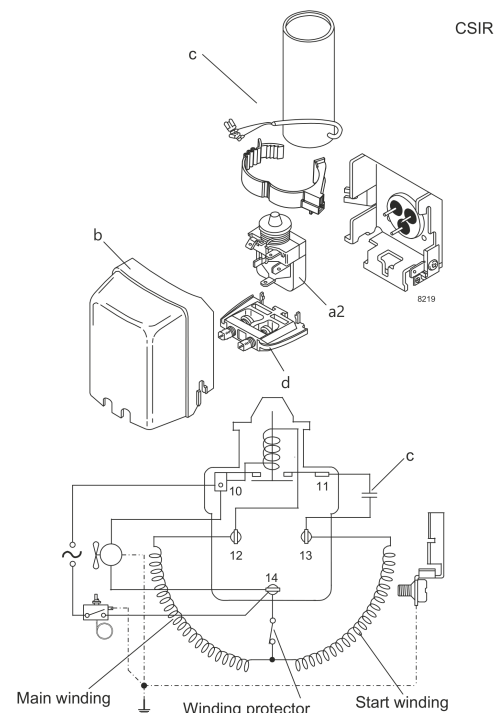
Ambient temperature range: 10 - 38°C / 50 - 100°F

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

System Cooling

static

Electrical Accessories / Wiring Diagram



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Components

a2 current relay 117U6001

c start capacitor (80µF) 117U5015

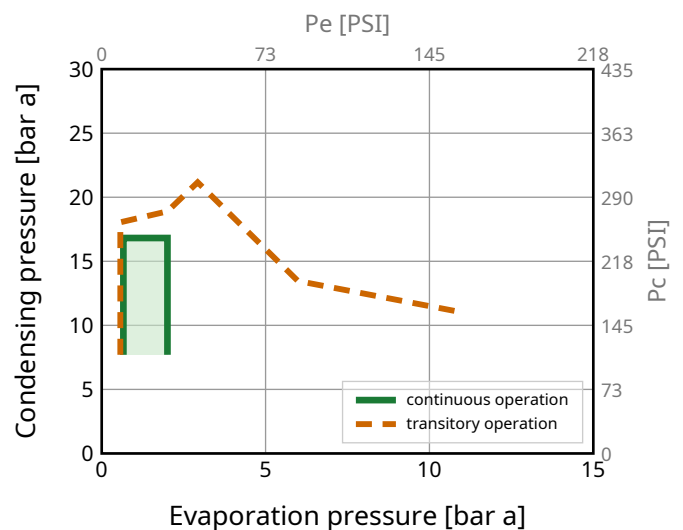
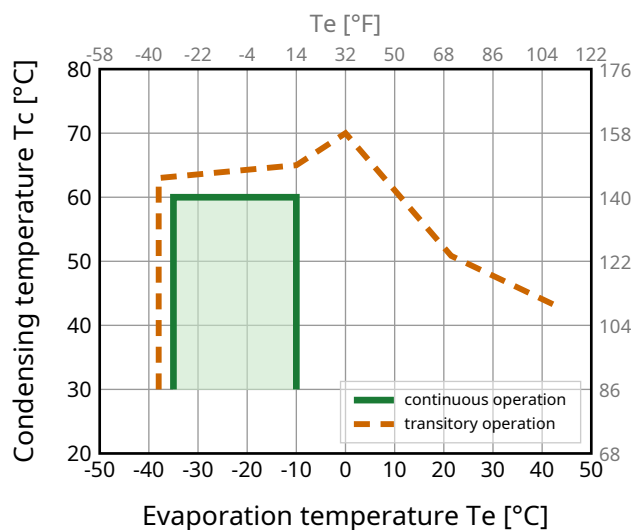
b plastic cover 103N2010

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

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	200	683	172	1.24	4.24	161	1.06	3.88	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	149	508	128	0.97	3.30	154	1.04	3.55	CECOMAF LBP
-35 -31	40 104	20 68	40 104	109	373	94	0.95	3.23	115	0.93	2.39	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	163	556	140	1.04	3.54	157	1.04	4.28	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	224	764	193	1.45	4.95	154	1.06	4.35	AHAM LBP
-25 -13	45 113	32 89.6	45 113	176	599	151	1.18	4.02	149	1.03	3.80	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	100	341	86	0.87	2.96	115	0.92	2.15
-30	-22	134	456	115	1.02	3.48	131	0.97	2.88
-25	-13	176	599	151	1.18	4.02	149	1.03	3.80
-20	-4	228	777	196	1.34	4.59	169	1.10	4.94
-15	5	292	996	251	1.52	5.20	192	1.18	6.35
-10	14	371	1264	319	1.72	5.85	216	1.27	8.09

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

-35	-31	82	279	70	0.70	2.41	116	0.92	1.94
-30	-22	112	383	97	0.84	2.87	134	0.98	2.67
-25	-13	149	508	128	0.97	3.30	154	1.04	3.55
-20	-4	194	662	167	1.09	3.73	177	1.13	4.64
-15	5	250	851	215	1.23	4.19	203	1.22	5.99
-10	14	317	1083	273	1.37	4.67	232	1.34	7.65

Model

NL8F

Configuration 2

Sales code:

105G6822

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))	8.7 A
Cut in current (U(N))	10.9 A

Ambient/ machine room temperatures minimum /maximum

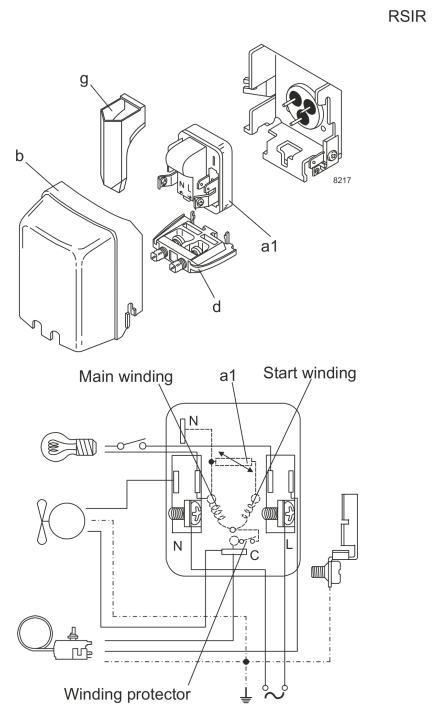
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System Cooling

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

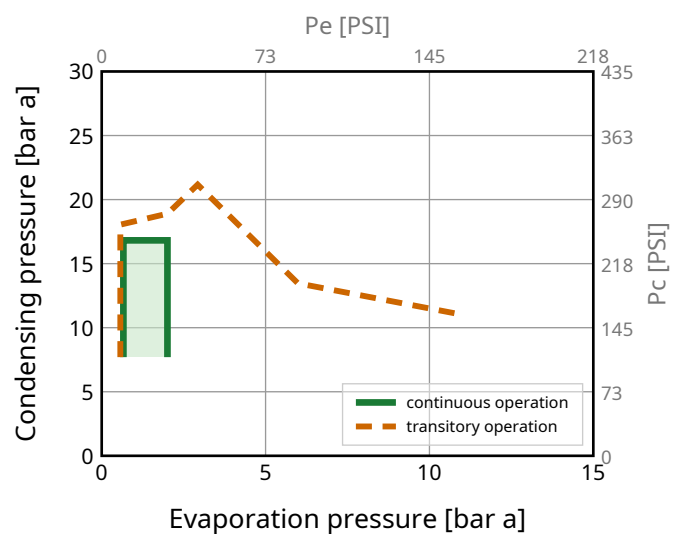
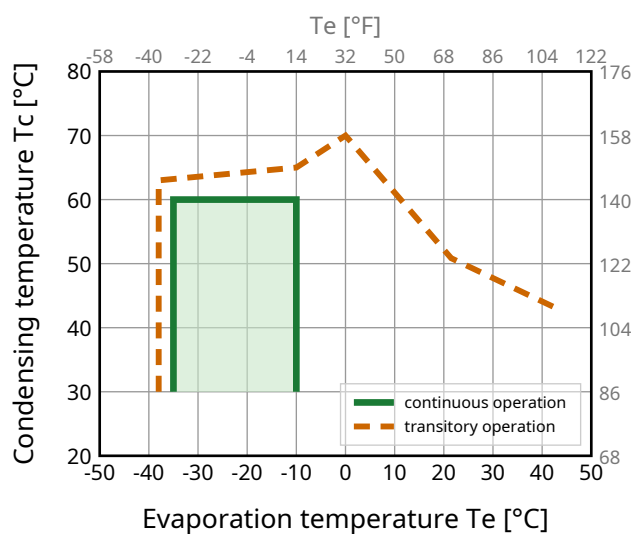
g protection screen for PTC 103N0476

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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R134a, 220 V/50 Hz, RSIR, 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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