

Model
NL9F

Sales code:
105G6802

Compressor Data

Refrigerant(s)	R134a
Refr. charge - tech. limit	400g / 14.11oz
Weight	10.00 kg / 22.05lbs
Displacement	8.35 cm3 / 0.51cu.in
Compressors on pallet	80



General – Configurations With NL9F

-	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
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

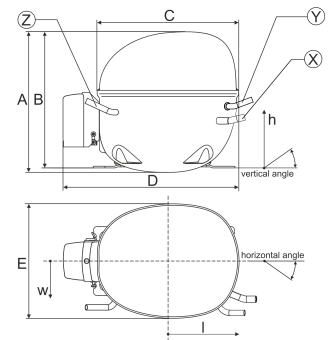
Oil type	POE	Winding resistance main	11 Ohm
Oil viscosity	19,2cSt	Winding resistance aux	13 Ohm
Oil quantity	265 / 8.96fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,280 cm ³ / 77.10fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

Housing

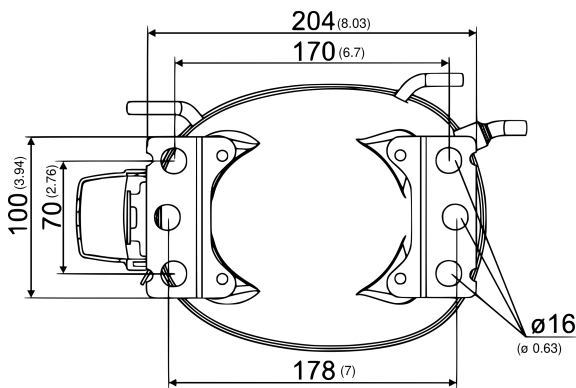
A Height	197mm / 7.76in
B Height	191mm / 7.52in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

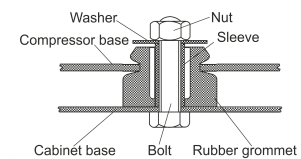


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in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

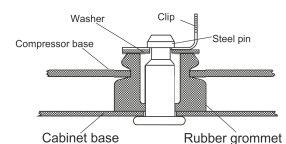
Mounting Accessories



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	R134a
Application	LBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
RLA (rated load amps / 1s/ U(N))	-/-A

Ambient/ machine room temperatures minimum /maximum

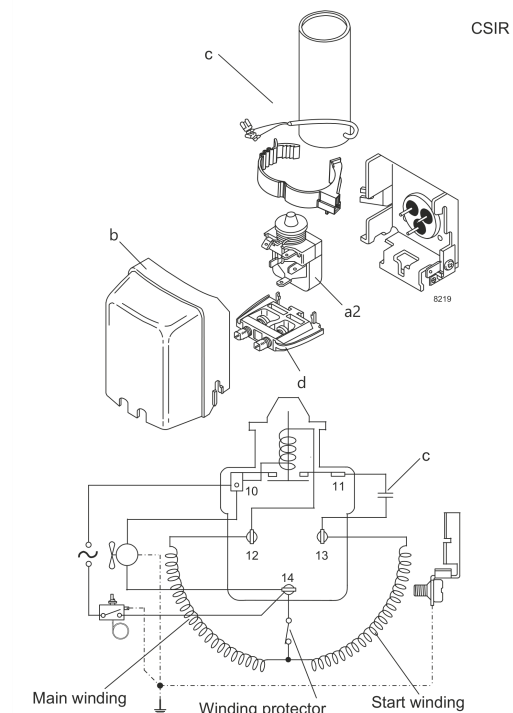
Ambient temperature range: 10 - 38°C / 50 - 100°F

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

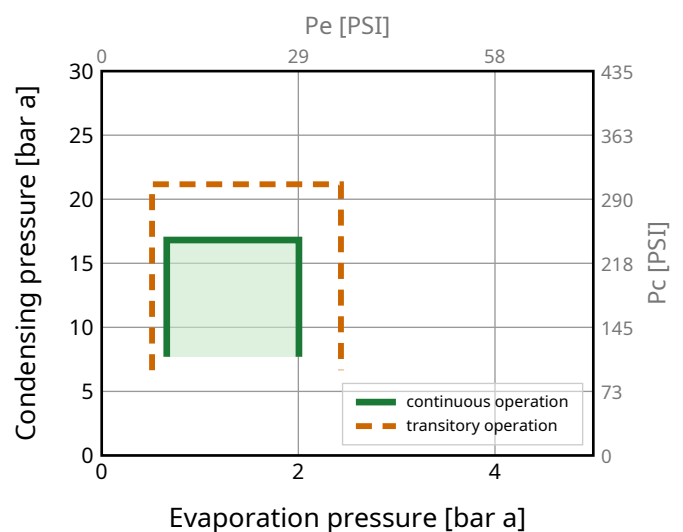
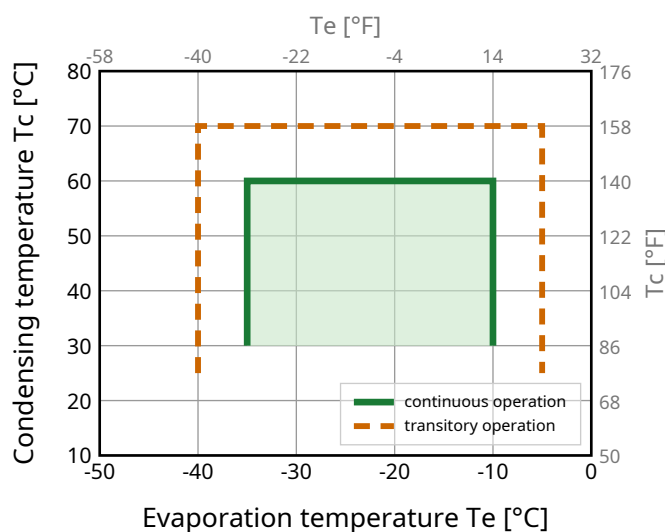
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



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Configuration 1

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	212	725	183	1.21	4.12	176	1.10	4.12	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	155	530	133	0.93	3.17	167	1.07	3.70	CECOMAF LBP
-35 -31	40 104	20 68	40 104	107	366	92	0.86	2.94	125	0.92	2.35	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	176	601	152	1.03	3.50	172	1.09	4.62	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	234	798	201	1.41	4.81	166	1.07	4.54	AHAM LBP
-35 -31	45 113	32 89.6	45 113	98	336	85	0.81	2.77	121	0.90	2.12	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	98	336	85	0.81	2.77	121	0.90	2.12
-30	-22	138	472	119	0.98	3.33	142	0.97	2.98
-25	-13	186	634	160	1.15	3.92	162	1.05	4.02
-20	-4	242	827	209	1.32	4.51	184	1.14	5.26
-15	5	310	1056	266	1.49	5.07	208	1.23	6.74
-10	14	389	1326	334	1.63	5.57	238	1.34	8.49

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

-35	-31	74	251	63	0.68	2.31	109	0.89	1.75
-30	-22	111	379	96	0.80	2.73	139	0.97	2.64
-25	-13	155	530	133	0.93	3.17	167	1.07	3.70
-20	-4	207	707	178	1.06	3.62	195	1.18	4.95
-15	5	268	916	231	1.19	4.06	226	1.29	6.44
-10	14	340	1162	293	1.31	4.46	260	1.42	8.21

Model

NL9F

Configuration 2

Sales code:

105G6802

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
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
RLA (rated load amps / 1s/ U(N))	-/-A

Ambient/ machine room temperatures minimum /maximum

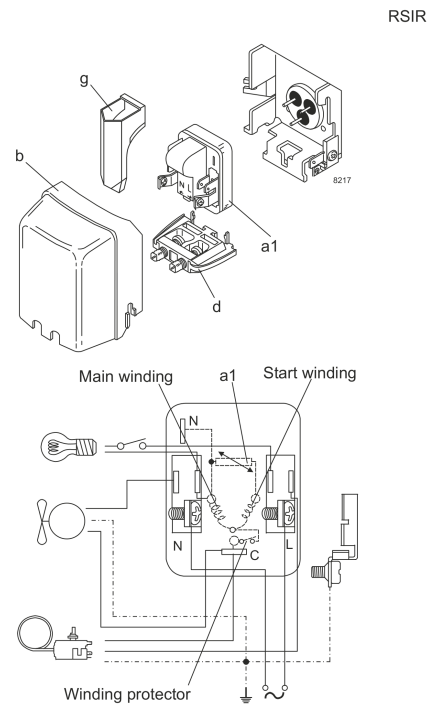
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System Cooling

static

Electrical Accessories / Wiring Diagram


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Components

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

b plastic cover 103N2011

d cord relief 103N1010

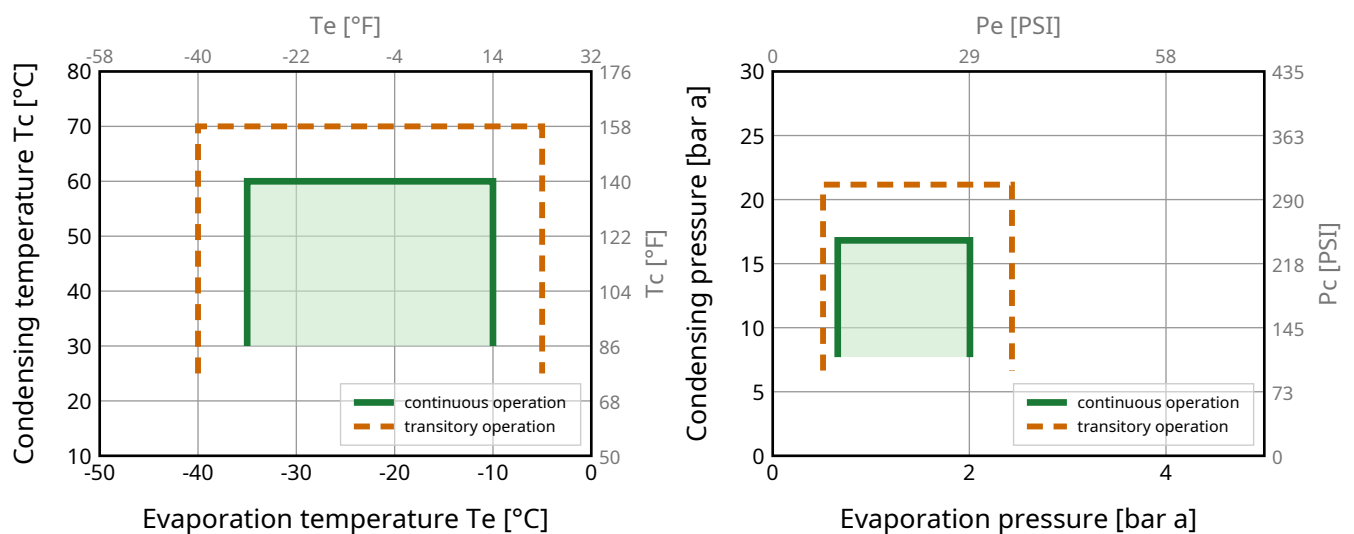
g protection screen for PTC 103N0476

Alternative components

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

a1 PTC starter (220V, 250Ohm, 6.3mm) 103N0016

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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