

Model

NL11MF

Sales code:

105G6154

Compressor Data

Refrigerant(s)

R134a

Refr. charge - tech. limit

600g / 21.16oz

Weight

10.50 kg / 23.15lbs

Displacement

11.15 cm3 / 0.68cu.in

Compressors on pallet

80



General - Configurations With NL11MF

-	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	187-254 V	187-254 V
Approvals	VDE, CCC, EAC	VDE, CCC, EAC
Starting torque	HST	LST
Refrigerant	R134a	R134a
Application	MBP+HBP	MBP+HBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

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	6.100 Ohm
Oil viscosity	32cSt	Winding resistance aux	17.50 Ohm
Oil quantity	298 / 10.08fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm ³ / 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

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Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
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

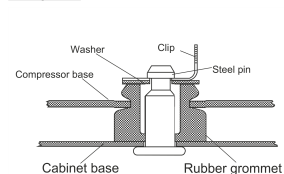
Mounting Accessories



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	-
Bolt joint ø1/4" ø19mm	118-1949	-
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	MBP+HBP
Voltage range	187-254 V
Starting torque	HST
Approvals	VDE, CCC, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	125 µF
LRA (locked rotor amps / 4s/ U(N))	16.6 A
RLA (rated load amps / 1s/ U(N))	2.8 A
Cut in current (U(N))	17 A

Ambient/ machine room temperatures minimum /maximum

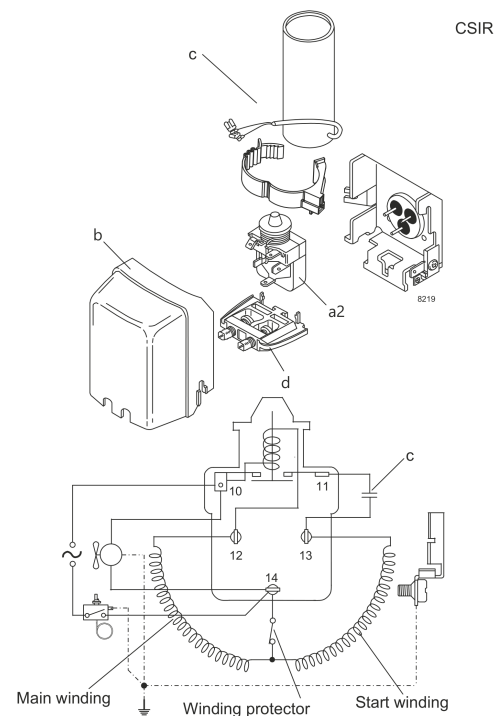
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

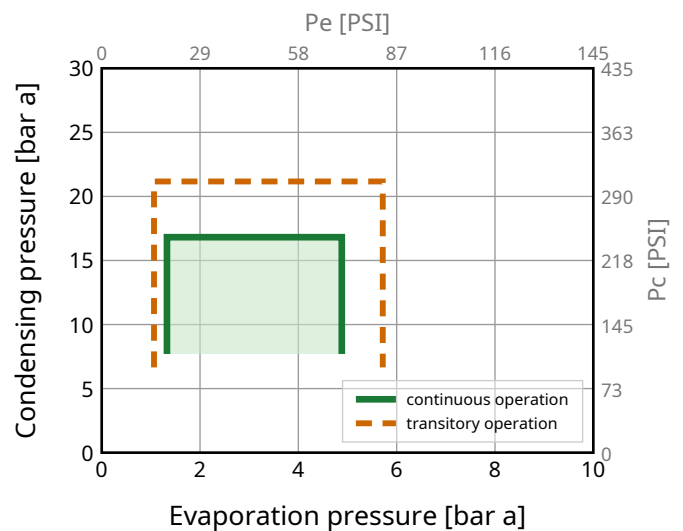
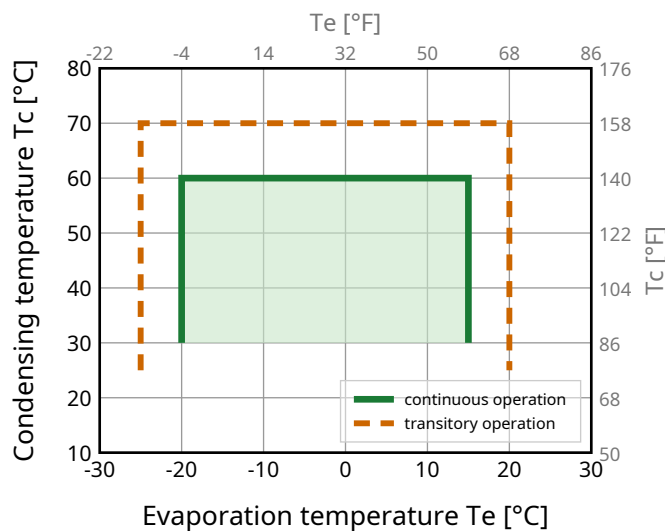
a2 relay 117U6022

c start capacitor 117U5018

b plastic cover 103N2011

d cord relief 103N1010

Operation Pressure Range



Model

NL11MF

Configuration 1

Sales code:

105G6154

Standard Conditions

R134a, 220 V/50 Hz, CSIR, fan 3m/s

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]	
-6.7 20	54.4 129.9	35 95	46.1 115	625	2132	537	1.61	5.50	388	2.46	13.61	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	485	1655	417	1.35	4.60	360	2.37	11.69	CECOMAF MBP
-10 14	45 113	20 68	45 113	547	1866	470	1.60	5.45	343	2.31	12.76	EN12900 MBP
7.2 45	54.4 129.9	35 95	46.1 115	1120	3821	963	2.19	7.47	512	2.91	24.79	ASHRAE HBP
5 41	55 131	32 89.6	55 131	927	3162	797	1.87	6.39	495	2.84	22.77	CECOMAF HBP
5 41	50 122	20 68	50 122	956	3260	822	2.01	6.86	476	2.77	23.97	EN12900 HBP

Performance Tables

R134a, 220 V/50 Hz, CSIR, fan 3m/s

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]
-20	-4	348	1186	299	1.30	4.44	268	2.13	7.54
-15	5	448	1527	385	1.47	5.01	305	2.21	9.73
-10	14	567	1933	487	1.65	5.64	343	2.31	12.37
-5	23	708	2414	609	1.86	6.34	381	2.42	15.53
0	32	873	2980	751	2.08	7.10	420	2.55	19.27
5	41	1066	3638	917	2.33	7.96	457	2.70	23.68
10	50	1289	4398	1108	2.61	8.90	494	2.86	28.85
15	59	1544	5269	1328	2.92	9.95	530	3.03	34.89

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

-20	-4	292	996	251	1.06	3.63	274	2.14	6.99
-15	5	380	1297	327	1.20	4.10	316	2.25	9.12
-10	14	485	1655	417	1.35	4.60	360	2.37	11.69
-5	23	609	2079	524	1.51	5.14	404	2.51	14.77
0	32	756	2578	650	1.68	5.74	450	2.67	18.43
5	41	927	3162	797	1.87	6.39	495	2.84	22.77
10	50	1125	3840	968	2.09	7.12	540	3.03	27.88
15	59	1354	4619	1164	2.32	7.91	584	3.23	33.88

Model
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Configuration 2

Sales code:
105G6154

Configuration

Motor configuration	RSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	MBP+HBP
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))	16.6 A
RLA (rated load amps / 1s/ U(N))	2.8 A
Cut in current (U(N))	17 A

Ambient/ machine room temperatures minimum /maximum

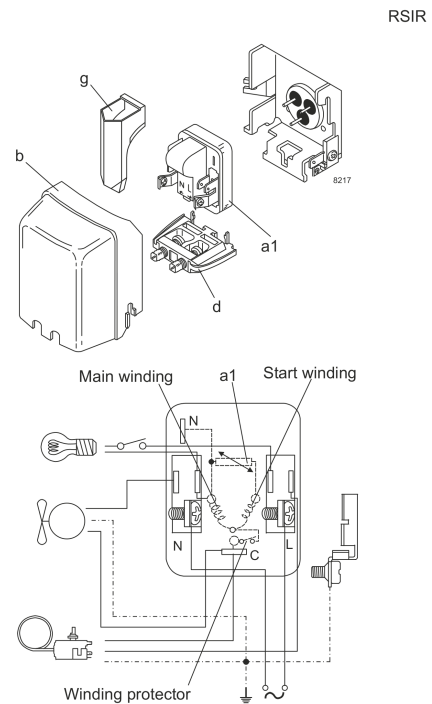
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System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

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

b plastic cover 103N2011

d cord relief 103N1010

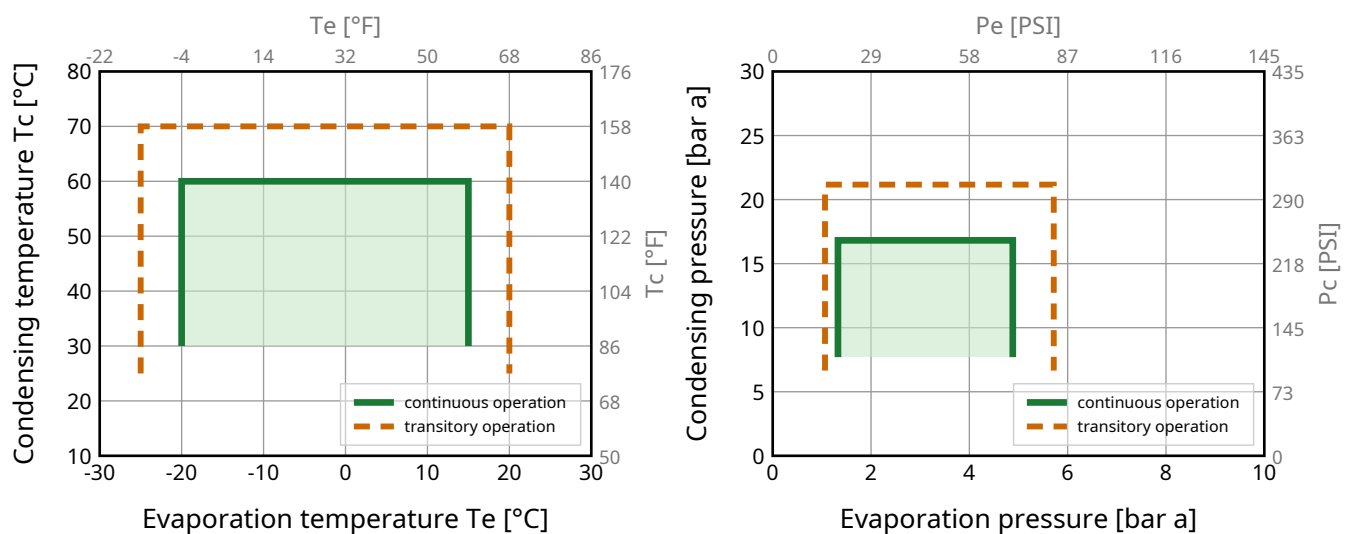
g protection screen for PTC 103N0476

Alternative components

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

b plastic cover 103N2010

Operation Pressure Range



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Configuration 2

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R134a, 220 V/50 Hz, RSIR, fan 3m/s

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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