Single
Packs

Single Pack NL11MF 220-240V 50Hz CSIR

Single pack code number: **195B4518**

Position	Title	Code	Amount
1	Compressor NL11MF	105G6154	1
2	Starting relay	117U6022	1
3	Starting capacitor (125µF 220V, 6.3mm)	117U5018	1
4	Cord relief	103N1010	1
5	Cover	103N2011	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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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

Model
NL11MF

Sales code:
105G6154

Compressor Design

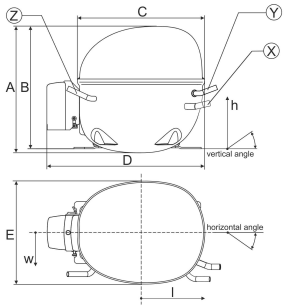
Oil type	**POE**	Winding resistance main	**6.1 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**18.35 Ohm**
Oil quantity	**298 / 10.08fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

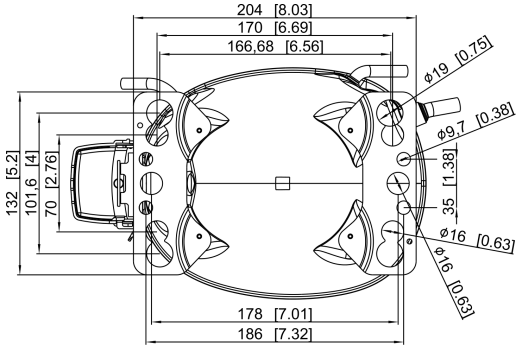
A Height	**203mm / 7.99in**
B Height	**197mm / 7.76in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



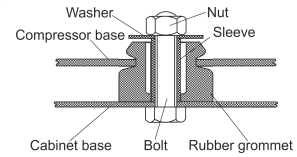
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in	-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

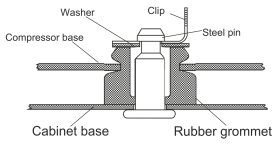


Dimensions in mm [in]

Bolt joint



Snap-on



	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

Model
NL11MF Configuration 1

Sales code:
105G6154

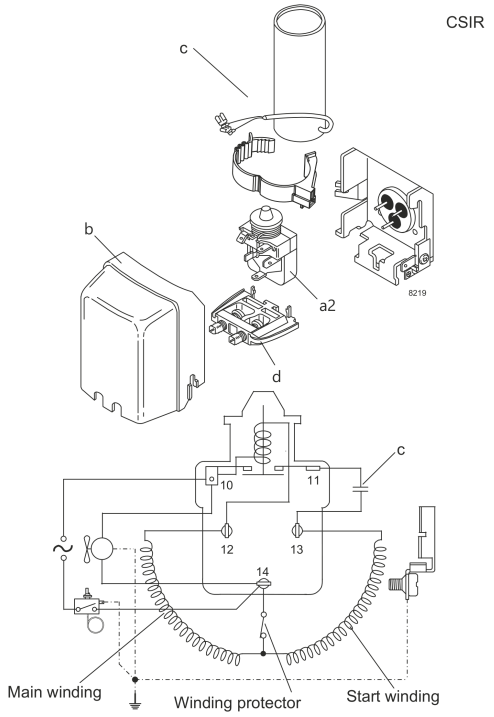
Configuration

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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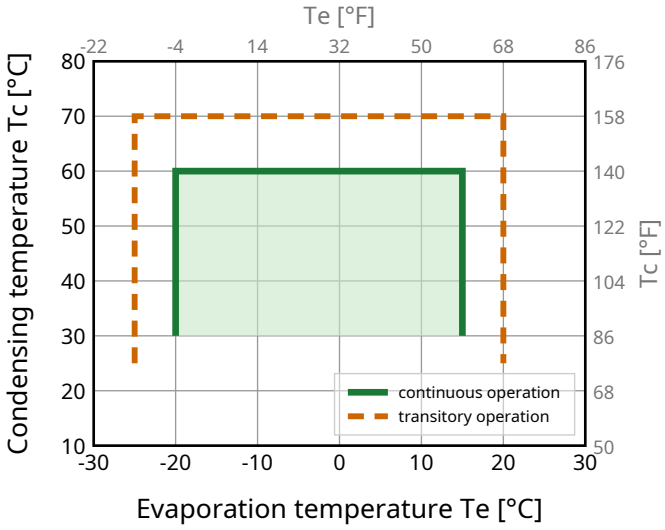
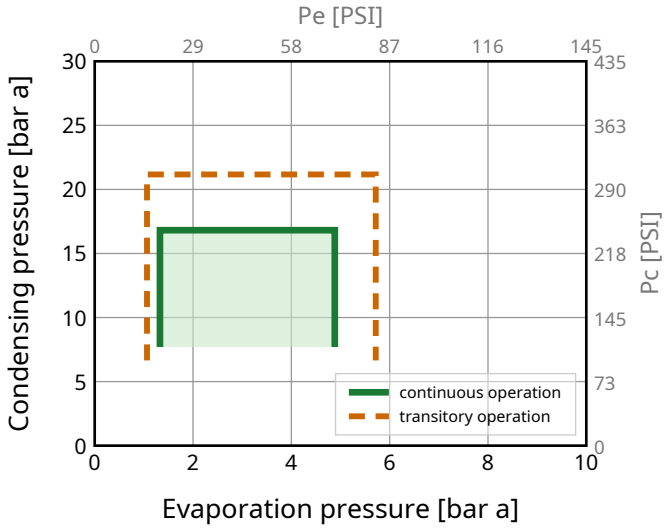
Components
a2 relay 117U6022
c start capacitor 117U5018
b plastic cover 103N2011
d cord relief 103N1010

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	ṁ	
[°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	ṁ
[°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
NL11MF Configuration 2

Sales code:
105G6154

Configuration

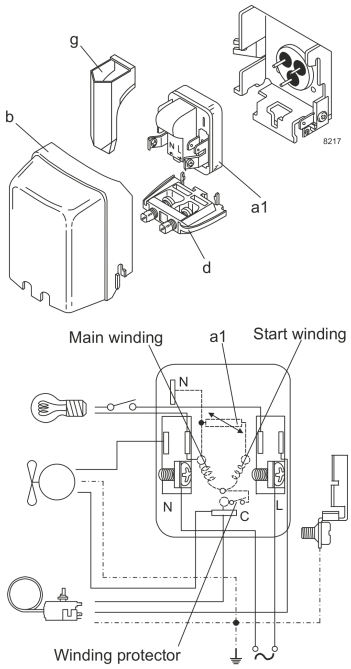
Motor configuration	**RSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**MBP+HBP**
Voltage range	**187-254 V**
Starting torque	**LST**
Approvals	**VDE, CCC, EAC**
Starting device type	**PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
LRA (locked rotor amps / 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
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

RSIR



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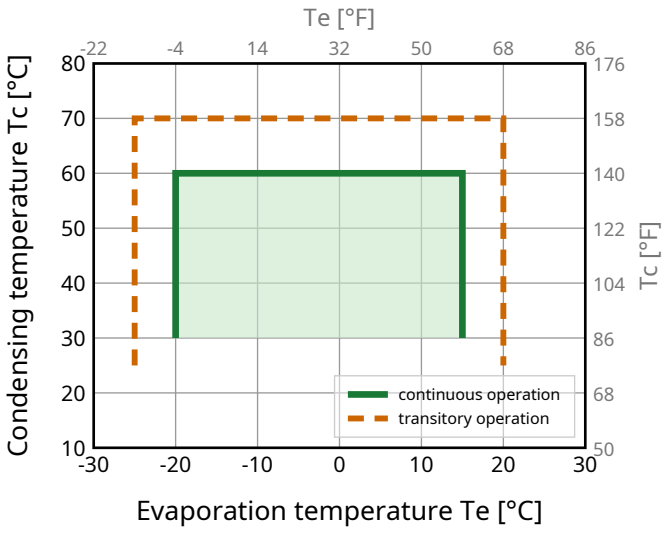
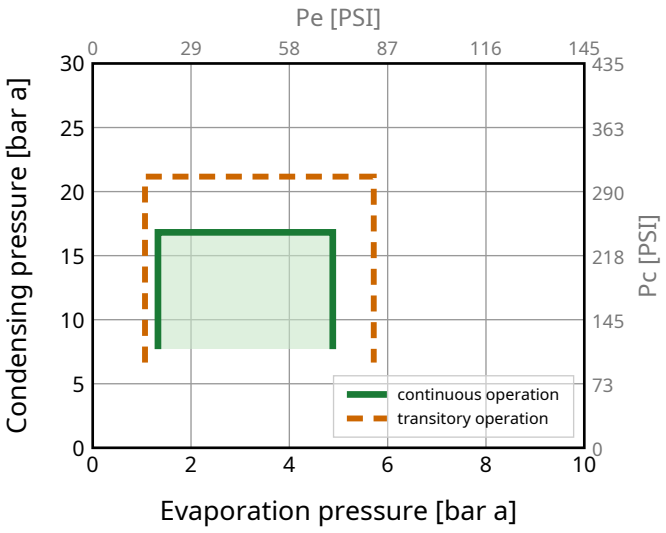
Components
a1 PTC starter (220V, 25Ohm, 4.8mm) 103N0018
b plastic cover 103N2011
d cord relief 103N1010
g protection screen for PTC 103N0476

Alternative components
a1 PTC starter (220V, 25Ohm, 6.3mm) 103N0011
b plastic cover 103N2010

Operation Pressure Range





Model
NL11MF Configuration 2

Sales code:
105G6154

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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**
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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, RSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
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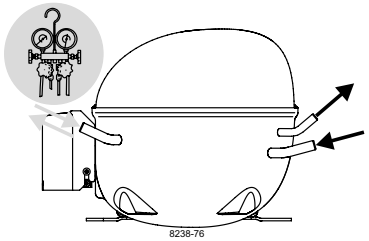


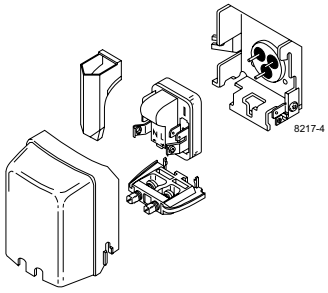
NL Compressors

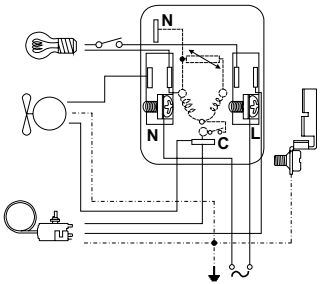
SECOP

Keep electrical equipment clear from oil, chemicals, and water

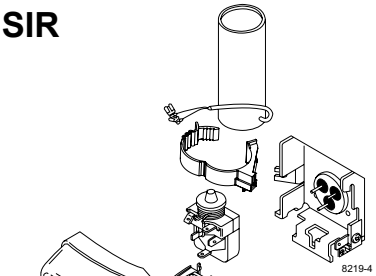
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

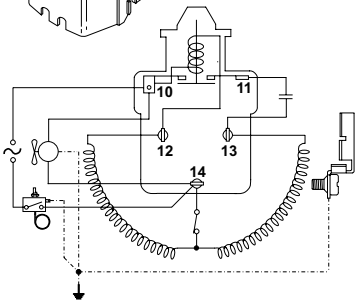
RSIR





CSIR





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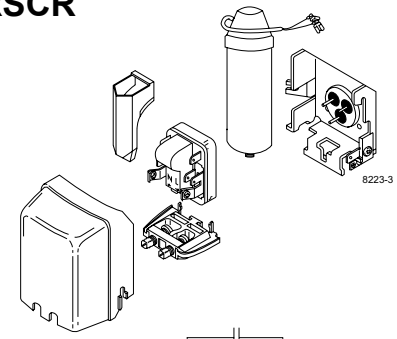

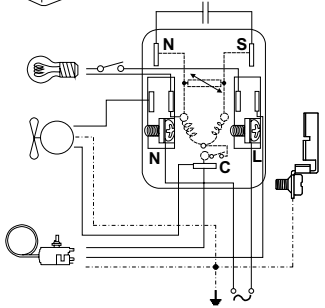

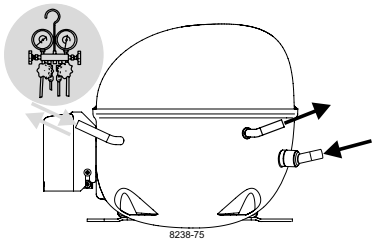

NL Compressors

SECOP

Keep electrical equipment clear from oil, chemicals, and water

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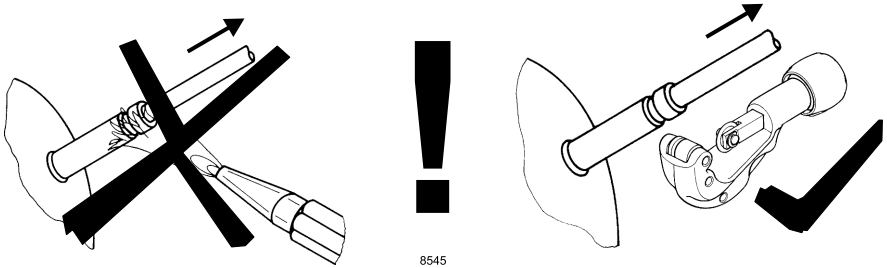
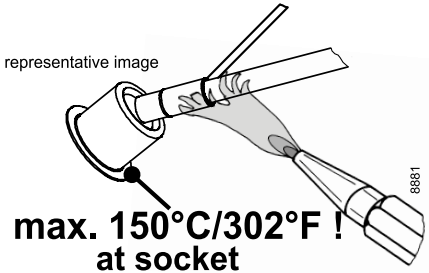
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



Brazing on Suction Connectors (Direct Intake)

representative image



! max. 150°C/302°F ! at socket

brazing solder: phosphor (LP7) or silver

Refer to Product Bulletin:
Brazing on Suction Connectors (Compressors with Direct Suction Intake)

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. www.secop.com**