Single
Packs

Single Pack NL11F 220-240V 50Hz CSIR

Single pack code number: **195B4113**

Position	Title	Code	Amount
1	Compressor NL11F	105G6900	1
2	Starting relay	117U6002	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5015	1
4	Cord relief	103N1010	1
5	Cover	103N2010	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
NL11F

Sales code:
105G6900

Compressor Data

Refrigerant(s)	**R134a**
Refr. charge - tech. limit	**400g / 14.11oz**
Weight	**10.70 kg / 23.59lbs**
Displacement	**11.15 cm3 / 0.68cu.in**
Compressors on pallet	**80**

General – Configurations With NL11F

–	**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

Model
NL11F

Sales code:
105G6900

Compressor Design

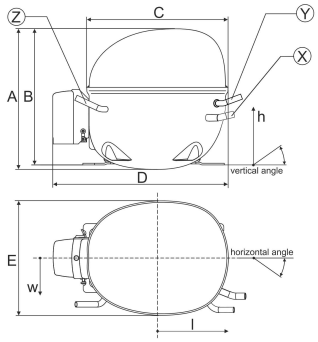
Oil type	**POE**	Winding resistance main	**8.6 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**14.7 Ohm**
Oil quantity	**298 / 10.08fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

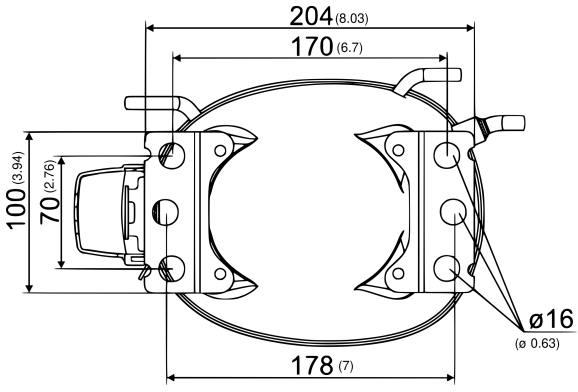
A Height	**203mm / 7.99in**
B Height	**197mm / 7.76in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



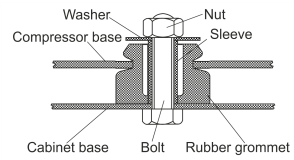
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in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

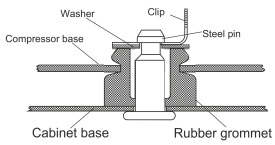


Dimensions in mm [in]

Bolt joint



Snap-on



	one comp.	multi pack
Bolt joint | M6 | ø16mm	118-1917	118-1918
Bolt joint | ø1/4" | ø16mm	118-1946	–
Snap-on | ø7,3 | ø16mm	118-1947	118-1919

Model
NL11F Configuration 1

Sales code:
105G6900

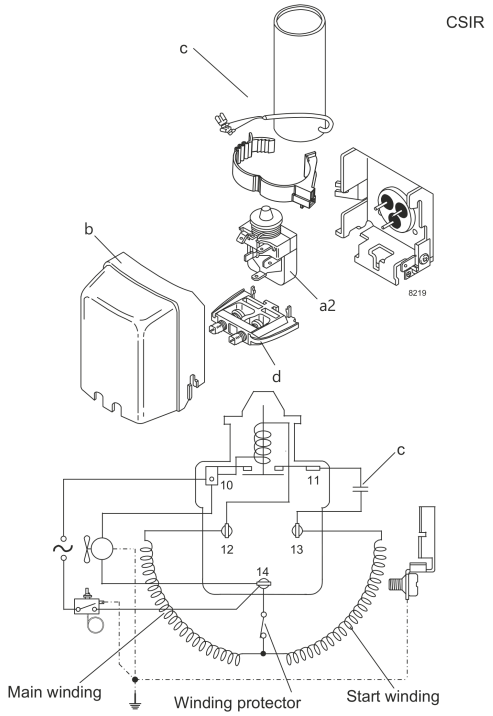
Configuration

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
fan 1,5m/s

Electrical Accessories / Wiring Diagram



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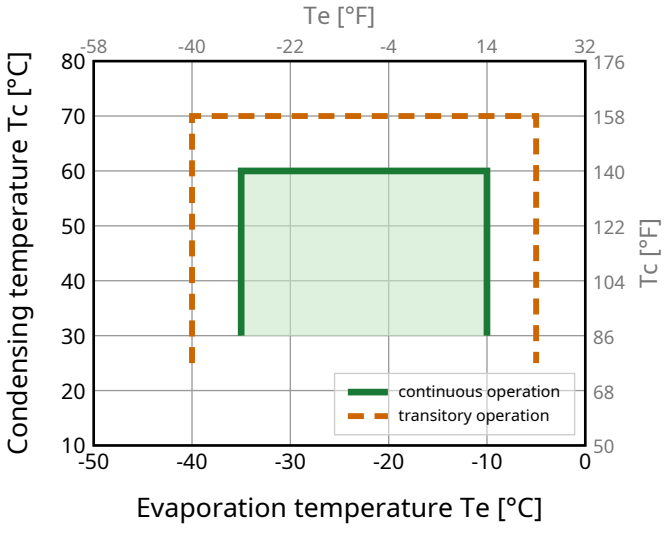
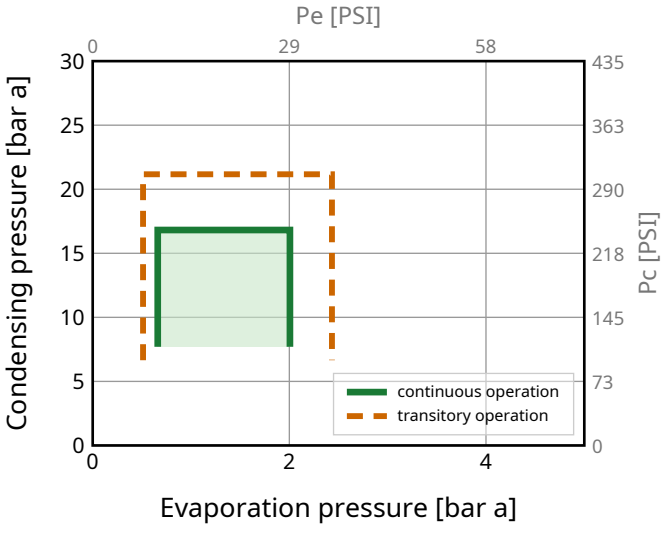
Components
a2 assy. relay 117U6002
c start capacitor (80µF) 117U5015
b plastic cover 103N2010
d cord relief 103N1010

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model Sales code:

NL11F Configuration 1 **105G6900**

Standard Conditions

R134a, 220 V/50 Hz, CSIR, fan 1,5m/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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**274**	934	235	**1.22**	4.17	224	1.57	5.31	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**200**	683	172	**0.94**	3.22	212	1.54	4.77	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**135**	460	116	**0.86**	2.94	156	1.51	2.95	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**227**	774	195	**1.03**	3.52	220	1.56	5.95	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**306**	1044	263	**1.42**	4.85	216	1.55	5.94	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**124**	424	107	**0.83**	2.83	150	1.47	2.67	**opt LBP**

Performance Tables

R134a, 220 V/50 Hz, CSIR, fan 1,5m/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]
-35	-31	**124**	424	107	**0.83**	2.83	150	1.47	2.67
-30	-22	**176**	599	151	**0.98**	3.35	179	1.48	3.79
-25	-13	**239**	816	206	**1.15**	3.93	208	1.53	5.17
-20	-4	**318**	1084	273	**1.34**	4.57	237	1.61	6.89
-15	5	**413**	1409	355	**1.53**	5.24	269	1.74	8.98
-10	14	**527**	1798	453	**1.73**	5.91	304	1.90	11.51

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

-35	-31	**102**	350	88	**0.75**	2.55	137	1.41	2.43
-30	-22	**146**	497	125	**0.83**	2.84	175	1.46	3.46
-25	-13	**200**	683	172	**0.94**	3.22	212	1.54	4.77
-20	-4	**268**	914	230	**1.07**	3.66	250	1.66	6.41
-15	5	**352**	1199	302	**1.22**	4.16	289	1.82	8.44
-10	14	**453**	1544	389	**1.37**	4.67	330	2.01	10.91

Model

NL11F Configuration 2

Sales code:

105G6900

Configuration

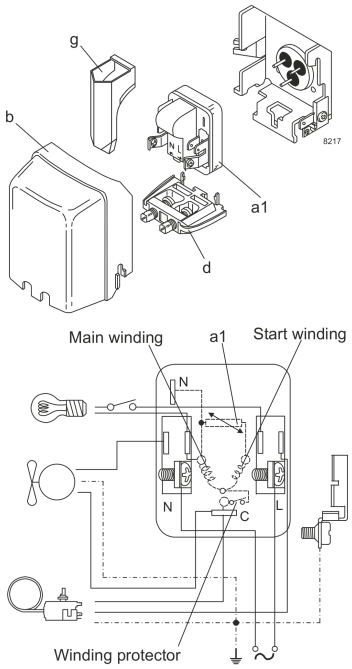
Motor configuration	**RSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**LBP**
Voltage range	**198-254 V**
Starting torque	**LST**
Approvals	**VDE, EAC**
Starting device type	**PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
RLA (rated load amps / 1s/ U(N))	**-/-A**

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
fan 1,5m/s

Electrical Accessories / Wiring Diagram

RSIR



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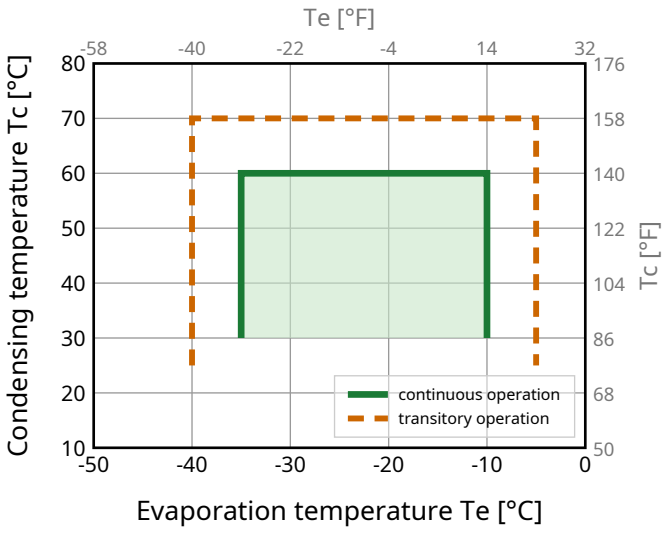
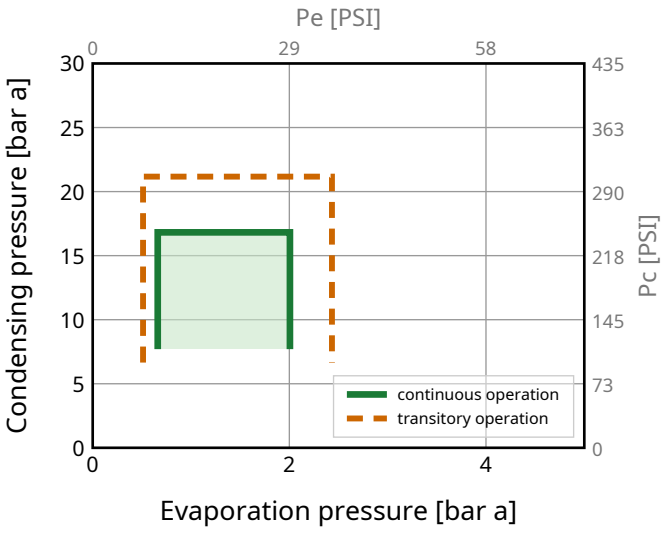
Components
a1 PTC starter (220V, 25Ohm, 6.3mm) 103N0011
b plastic cover 103N2011
d cord relief 103N1010
g protection screen for PTC 103N0476

Alternative components
a1 PTC starter (220V, 25Ohm, 4.8mm) 103N0018
a1 PTC starter (220V, 25Ohm, 6.3mm) 103N0016

Operation Pressure Range





Model
NL11F Configuration 2

Sales code:
105G6900

Standard Conditions

R134a, 220 V/50 Hz, RSIR, fan 1,5m/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]	
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-35 -31	45 113	32 89.6	45 113	**124**	424	107	**0.83**	2.83	150	1.47	2.67	**opt LBP**

Performance Tables

R134a, 220 V/50 Hz, RSIR, fan 1,5m/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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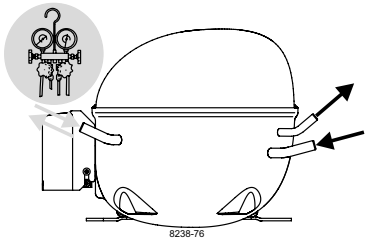


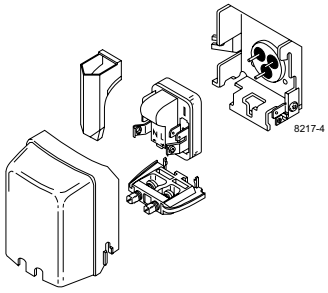
NL Compressors

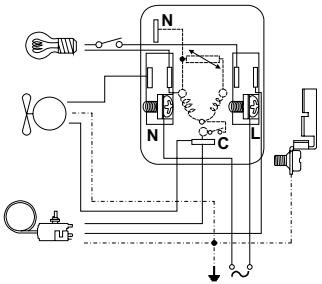
SECOP

Keep electrical equipment clear from oil, chemicals, and water

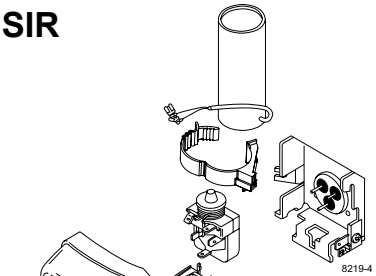
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

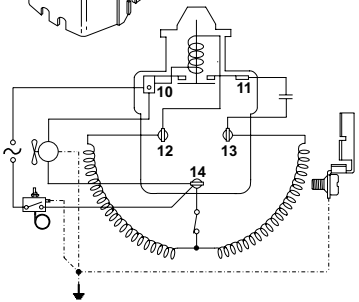
RSIR



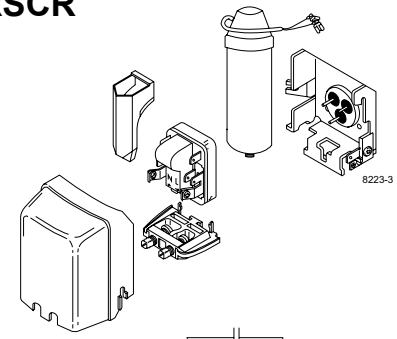


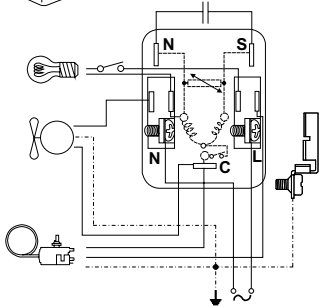
CSIR

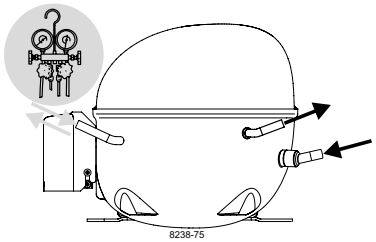




RSCR







NL Compressors

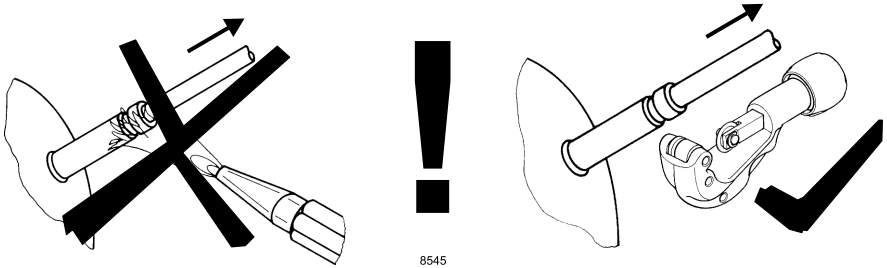
SECOP

Keep electrical equipment clear from oil, chemicals, and water

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

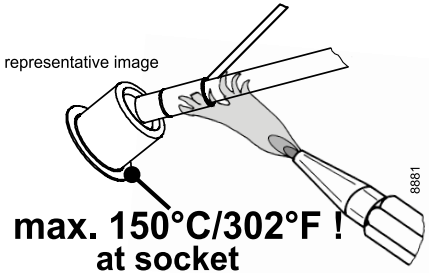
Service/Repair – R290, R600a, R170, R1270, R1234yf

(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**