Model
NL10MF

Sales code:
105G7095

Compressor Data

Refrigerant(s)	**R1234yf**
Refr. charge - tech. limit	**600g / 21.16oz**
Weight	**10.50 kg / 23.15lbs**
Displacement	**10.09 cm3 / 0.62cu.in**
Compressors on pallet	**80**

General – Configurations With NL10MF

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	CSIR
Power supply (nominal)	220-240 V/50 Hz	208-230 V/60 Hz
Number of phases	1	1
Voltage range	187-254 V	187-254 V
Approvals	VDE, UL	VDE, UL
Starting torque	HST	HST
Refrigerant	R1234yf	R1234yf
Application	MBP	MBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

- Electrical equipment is included and pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor

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NL10MF

Sales code:
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Compressor Design

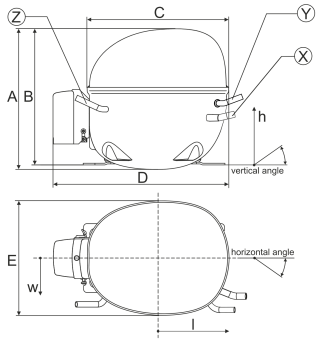
Oil type	**POE**	Winding resistance main	**6.1 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**18.35 Ohm**
Oil quantity	**298 cm3 / 10.08fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

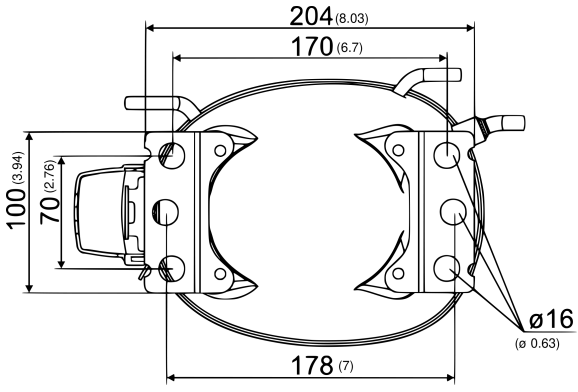
A Height	**203mm / 7.99in**
B Height	**197mm / 7.76in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



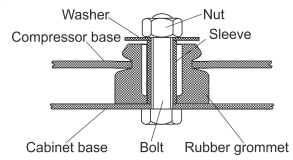
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in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

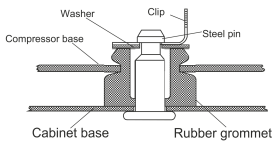


Dimensions in mm [in]

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
NL10MF Configuration 1

Sales code:
105G7095

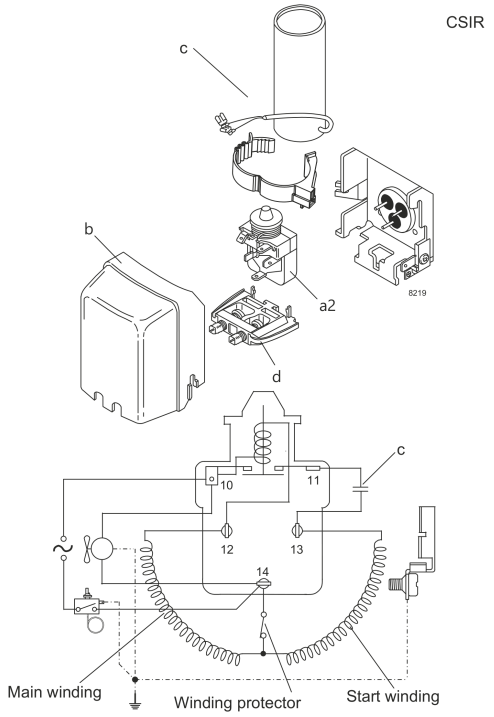
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R1234yf**
Application	**MBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**VDE, UL**
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 1,5m/s

Electrical Accessories / Wiring Diagram



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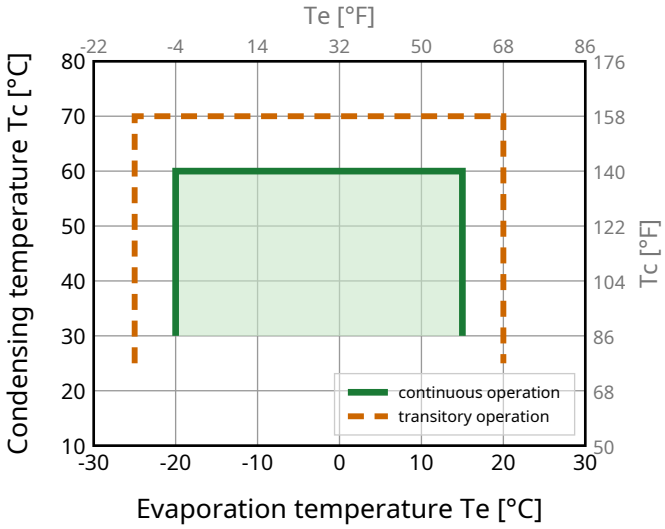
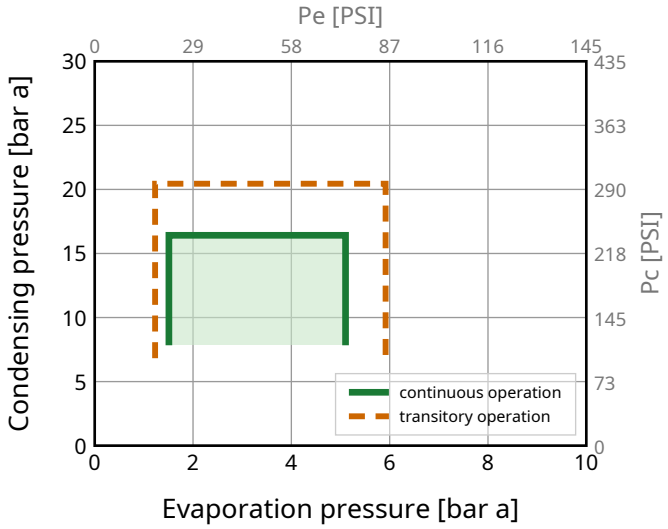
Components (already pre-assembled)
a2 relay 117U7022
c start capacitor 117U5018
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model
NL10MF Configuration 1

Sales code:
105G7095

Standard Conditions

R1234yf, 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	**300**	1022	258	**1.22**	4.18	245	1.72	7.05	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**211**	720	181	**0.90**	3.07	235	1.69	6.39	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**155**	530	134	**0.87**	2.98	178	1.54	4.26	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**574**	1958	494	**1.64**	5.59	350	2.08	15.50	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**439**	1497	377	**1.33**	4.54	330	2.01	13.46	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**493**	1681	424	**1.56**	5.34	315	1.95	14.61	**EN12900 MBP**

Performance Tables

R1234yf, 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]
-20	-4	**332**	1133	286	**1.29**	4.39	258	1.76	8.94
-15	5	**419**	1430	360	**1.46**	5.00	286	1.85	11.33
-10	14	**522**	1780	449	**1.66**	5.66	315	1.95	14.17
-5	23	**642**	2191	552	**1.87**	6.38	343	2.06	17.53
0	32	**782**	2668	672	**2.11**	7.19	371	2.16	21.49
5	41	**943**	3218	811	**2.37**	8.08	398	2.27	26.12
10	50	**1128**	3848	970	**2.66**	9.07	424	2.38	31.52
15	59	**1338**	4566	1151	**2.98**	10.17	449	2.48	37.80

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

-20	-4	**275**	938	236	**1.04**	3.53	266	1.78	8.36
-15	5	**350**	1195	301	**1.18**	4.02	297	1.89	10.69
-10	14	**439**	1497	377	**1.33**	4.54	330	2.01	13.46
-5	23	**542**	1850	466	**1.50**	5.10	362	2.13	16.75
0	32	**663**	2261	570	**1.68**	5.72	395	2.26	20.62
5	41	**803**	2738	690	**1.88**	6.40	428	2.39	25.19
10	50	**963**	3287	829	**2.10**	7.16	459	2.52	30.55
15	59	**1147**	3914	987	**2.34**	7.99	490	2.65	36.83

Model
NL10MF Configuration 2

Sales code:
105G7095

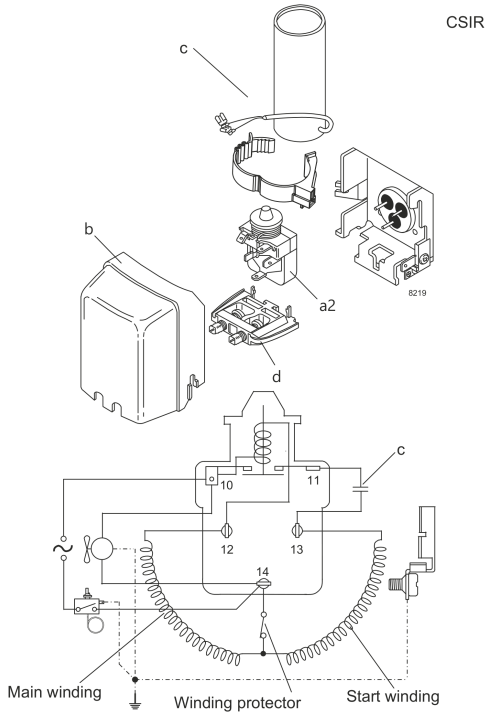
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R1234yf**
Application	**MBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**VDE, UL**
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 1,5m/s

Electrical Accessories / Wiring Diagram



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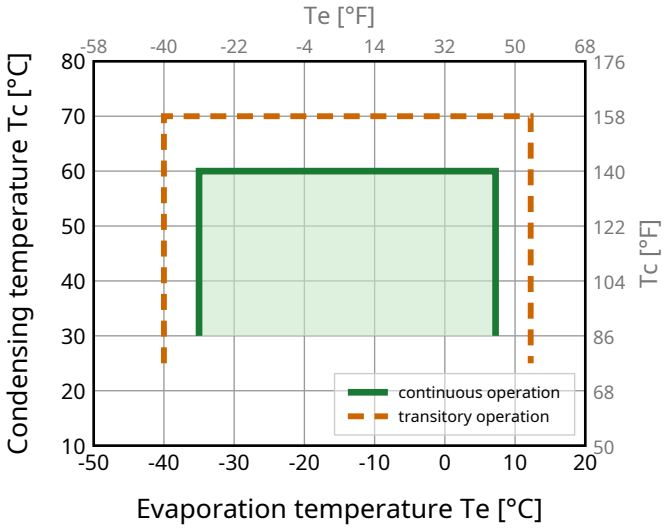
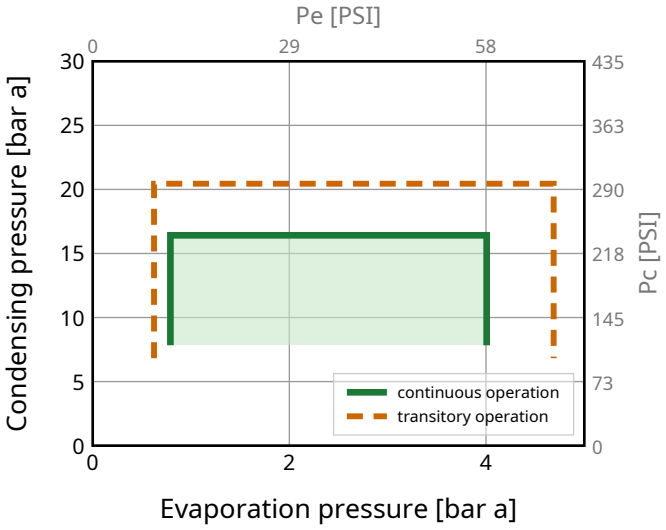
Components (already pre-assembled)
a2 relay 117U7022
c start capacitor 117U5018
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model
NL10MF Configuration 2

Sales code:
105G7095

Standard Conditions

R1234yf, 220 V/60 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	**352**	1199	302	**1.32**	4.50	267	1.56	8.28	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**248**	845	213	**0.98**	3.35	252	1.51	7.50	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**182**	622	157	**0.98**	3.34	186	1.30	4.99	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**674**	2299	579	**1.65**	5.62	409	2.11	18.19	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**515**	1756	443	**1.35**	4.59	382	2.00	15.80	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**578**	1973	497	**1.60**	5.46	362	1.92	17.14	**EN12900 MBP**

Performance Tables

R1234yf, 220 V/60 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	**169**	578	146	**0.94**	3.19	181	1.28	4.52
-30	-22	**231**	787	198	**1.06**	3.63	217	1.39	6.17
-20	-4	**390**	1329	335	**1.34**	4.59	290	1.64	10.49
-10	14	**612**	2090	527	**1.69**	5.78	362	1.92	16.63
0	32	**918**	3132	789	**2.13**	7.26	431	2.20	25.23
7.2	45	**1200**	4093	1032	**2.50**	8.54	479	2.41	33.35

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

-35	-31	**127**	434	109	**0.77**	2.64	165	1.23	3.83
-30	-22	**183**	625	158	**0.88**	3.00	208	1.36	5.53
-20	-4	**323**	1101	278	**1.09**	3.73	296	1.67	9.81
-10	14	**515**	1756	443	**1.35**	4.59	382	2.00	15.80
0	32	**778**	2656	669	**1.67**	5.69	467	2.35	24.22
7.2	45	**1023**	3490	880	**1.95**	6.64	526	2.60	32.25