Model
NF6.1FX.2

Sales code:
105G5631

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**400g / 14.11oz**
Weight	**10.00 kg / 22.05lbs**
Displacement	**6.13 cm3 / 0.37cu.in**
Compressors on pallet	**80**

General – Configurations With NF6.1FX.2

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	CSIR
Power supply (nominal)	115 V/60 Hz	115 V/60 Hz
Number of phases	1	1
Voltage range	95-135 V	95-135 V
Approvals	EAC, UL	EAC, UL
Starting torque	HST	HST
Refrigerant	R134a	R513A
Application	LBP+MBP	LBP+MBP
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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NF6.1FX.2

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Compressor Design

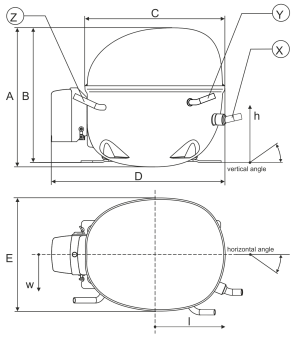
Oil type	**POE**	Winding resistance main	**2.000 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**3.10 Ohm**
Oil quantity	**270 / 9.13fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

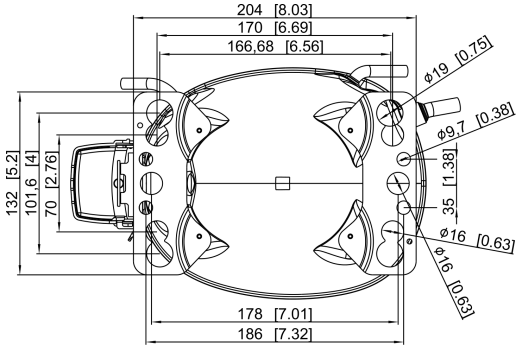
A Height	**197mm / 7.76in**
B Height	**191mm / 7.52in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



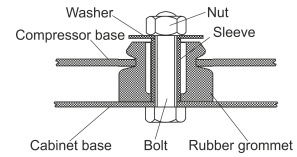
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	119/76/78 / 4.69/2.99/3.07in	127/103/54 / 5.00/4.06/2.13in	-113/94/72 / -4.45/3.70/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

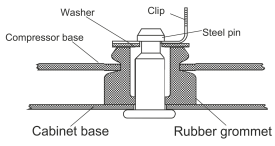


Dimensions in mm [in]

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

NF6.1FX.2 Configuration 1

Sales code:

105G5631

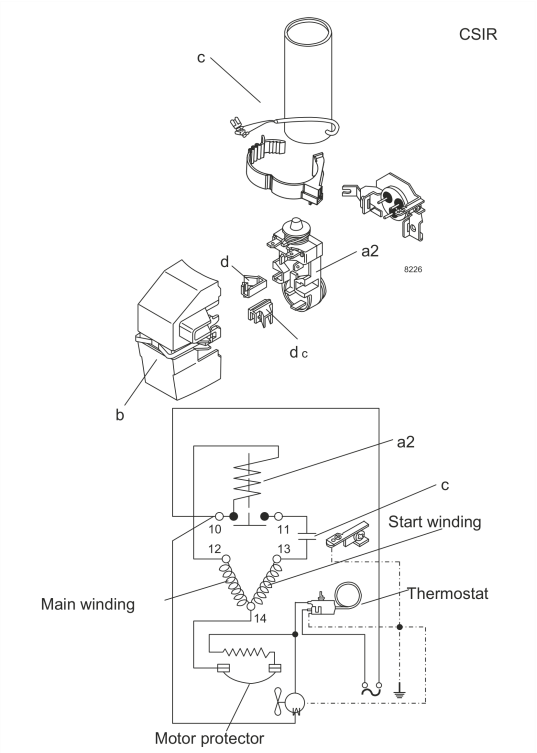
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R134a**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**EAC, UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**280 µF**
LRA (locked rotor amps / 4s/ U(N))	**22.2 A**
RLA (rated load amps / 1s/ U(N))	**3.7 A**
Cut in current (U(N))	**22.2 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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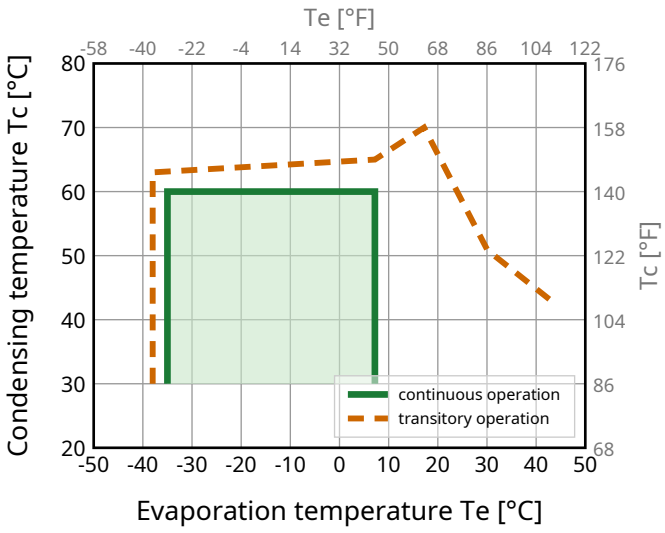
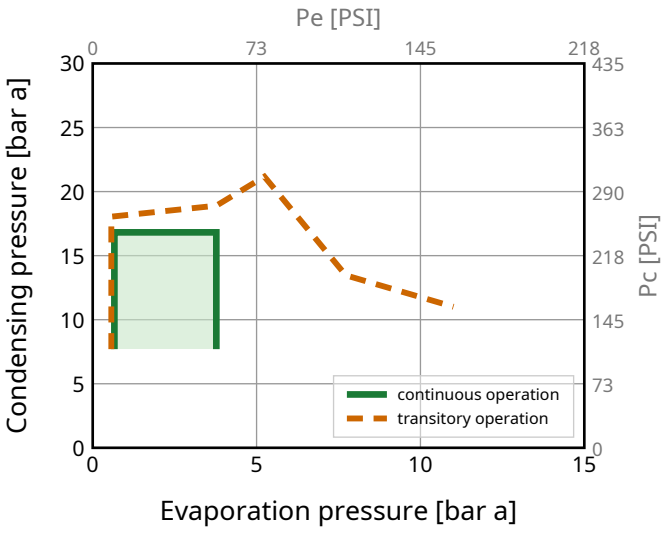
Components
a2 current relay (MRP36AEN-6) 117U4127
c start capacitor (280µF) 117U5025
b plastic cover + clamp 117U1021
d/dc cord relief 117U0349

Alternative components
a2 current relay (MRP36AEN-6) 117U4157
c start capacitor (280µF) 117U5074

Operation Pressure Range





Model

NF6.1FX.2 Configuration 1

Sales code:

105G5631

Standard Conditions

R134a, 115 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	**211**	721	182	**1.19**	4.06	178	2.66	4.10	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**153**	521	131	**0.90**	3.08	169	2.62	3.65	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**100**	342	86	**0.76**	2.59	132	2.48	2.19	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**179**	612	154	**1.01**	3.44	178	2.64	4.70	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**243**	828	209	**1.38**	4.70	176	2.62	4.71	**AHAM LBP**
-25 -13	45 113	32 89.6	45 113	**190**	647	163	**1.11**	3.79	171	2.61	4.10	**opt LBP**

Performance Tables

R134a, 115 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	**91**	310	78	**0.71**	2.42	128	2.47	1.96
-30	-22	**136**	464	117	**0.90**	3.08	150	2.53	2.93
-20	-4	**253**	863	217	**1.33**	4.53	190	2.70	5.48
-10	14	**413**	1408	355	**1.81**	6.17	228	2.92	9.01
0	32	**624**	2130	537	**2.31**	7.90	270	3.20	13.77
7.2	45	**814**	2776	700	**2.67**	9.12	304	3.43	18.13

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

-35	-31	**69**	236	59	**0.59**	2.02	117	2.44	1.64
-30	-22	**107**	364	92	**0.74**	2.53	144	2.53	2.54
-20	-4	**208**	711	179	**1.08**	3.67	193	2.73	4.98
-10	14	**352**	1201	303	**1.47**	5.01	240	3.00	8.48
0	32	**547**	1865	470	**1.89**	6.45	289	3.32	13.33
7.2	45	**723**	2468	622	**2.20**	7.51	329	3.58	17.83

Model
NF6.1FX.2 Configuration 2

Sales code:
105G5631

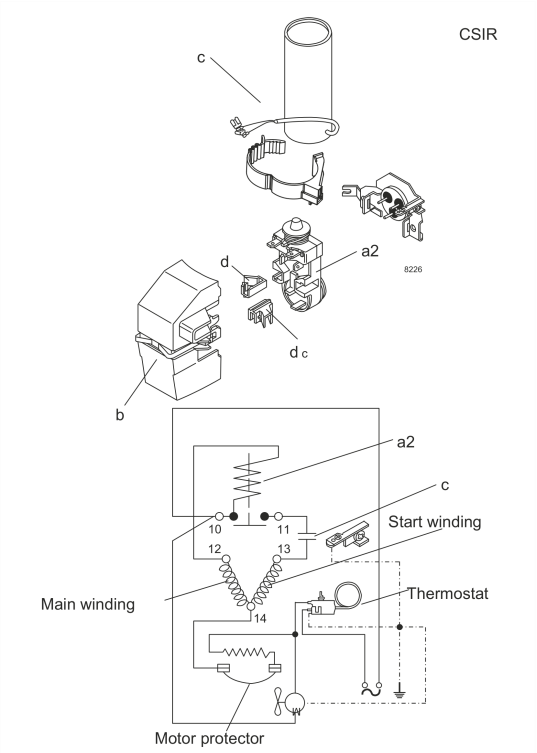
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R513A**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**EAC, UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**280 µF**
LRA (locked rotor amps / 4s/ U(N))	**22.2 A**
RLA (rated load amps / 1s/ U(N))	**3.7 A**
Cut in current (U(N))	**22.2 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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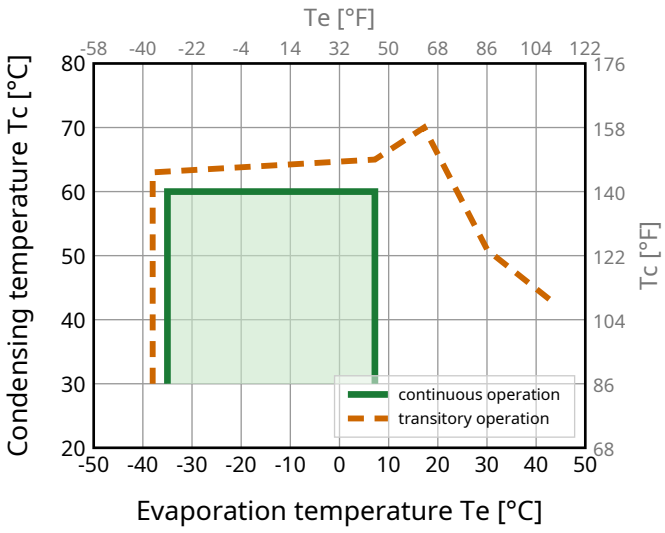
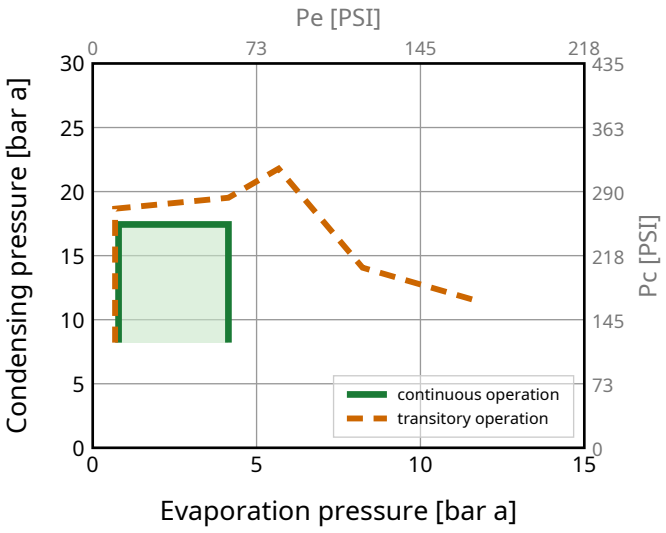
Components
a2 current relay (MRP36AEN-6) 117U4127
c start capacitor (280µF) 117U5025
b plastic cover + clamp 117U1021
d/dc cord relief 117U0349

Alternative components
a2 current relay (MRP36AEN-6) 117U4157
c start capacitor (280µF) 117U5074

Operation Pressure Range





Model
NF6.1FX.2 Configuration 2

Sales code:
105G5631

Standard Conditions

R513A, 115 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	**233**	795	200	**1.21**	4.11	193	2.80	5.10	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**164**	561	141	**0.89**	3.04	184	2.76	4.55	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**111**	380	96	**0.78**	2.65	143	2.54	2.80	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**187**	638	161	**0.97**	3.31	192	2.80	5.83	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**266**	909	229	**1.40**	4.78	190	2.79	5.83	**AHAM LBP**
-25 -13	45 113	32 89.6	45 113	**206**	703	177	**1.12**	3.81	185	2.76	5.10	**opt LBP**

Performance Tables

R513A, 115 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	**102**	348	88	**0.73**	2.50	140	2.52	2.51
-30	-22	**150**	512	129	**0.92**	3.14	163	2.65	3.70
-20	-4	**272**	927	234	**1.33**	4.53	204	2.86	6.74
-10	14	**434**	1483	374	**1.79**	6.11	242	3.06	10.88
0	32	**647**	2209	557	**2.28**	7.79	284	3.28	16.40
7.2	45	**836**	2852	719	**2.63**	8.96	318	3.47	21.42

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

-35	-31	**78**	264	67	**0.60**	2.05	129	2.46	2.13
-30	-22	**117**	399	101	**0.74**	2.52	158	2.62	3.23
-20	-4	**221**	753	190	**1.06**	3.60	209	2.89	6.14
-10	14	**365**	1245	314	**1.43**	4.87	256	3.13	10.24
0	32	**557**	1902	479	**1.83**	6.25	304	3.39	15.85
7.2	45	**731**	2493	628	**2.12**	7.25	344	3.60	21.05