Model
NF8.4FX.2

Sales code:
105G5998

Compressor Data

Refrigerant(s)	**R1234yf / R513A**
Refr. charge - tech. limit	**400g / 14.11oz**
Weight	**10.00 kg / 22.05lbs**
Displacement	**8.35 cm3 / 0.51cu.in**
Compressors on pallet	**80**

General – Configurations With NF8.4FX.2

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	CSIR
Power supply (nominal)	115-127 V/60 Hz	115-127 V/60 Hz
Number of phases	1	1
Voltage range	95-135 V	95-135 V
Approvals	UL	UL
Starting torque	HST	HST
Refrigerant	R1234yf	R513A
Application	LBP+MBP	LBP+MBP
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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NF8.4FX.2

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Compressor Design

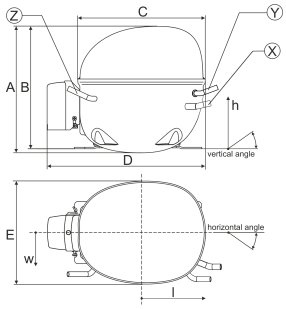
Oil type	**POE**	Winding resistance main	**1.7 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**6.2 Ohm**
Oil quantity	**268 cm3 / 9.06fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

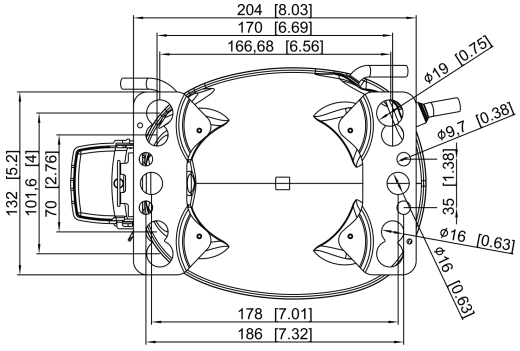
A Height	**197mm / 7.76in**
B Height	**191mm / 7.52in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



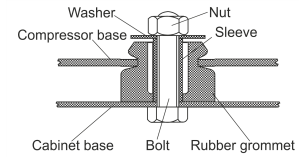
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in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

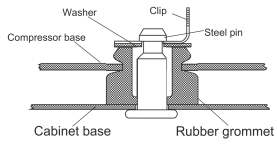


Dimensions in mm [in]

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
NF8.4FX.2 Configuration 1

Sales code:
105G5998

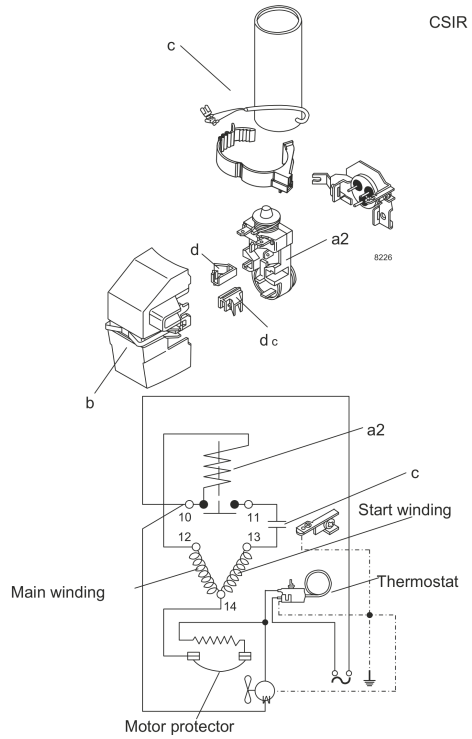
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115-127 V/60 Hz 1~**
Refrigerant	**R1234yf**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**280 µF**

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

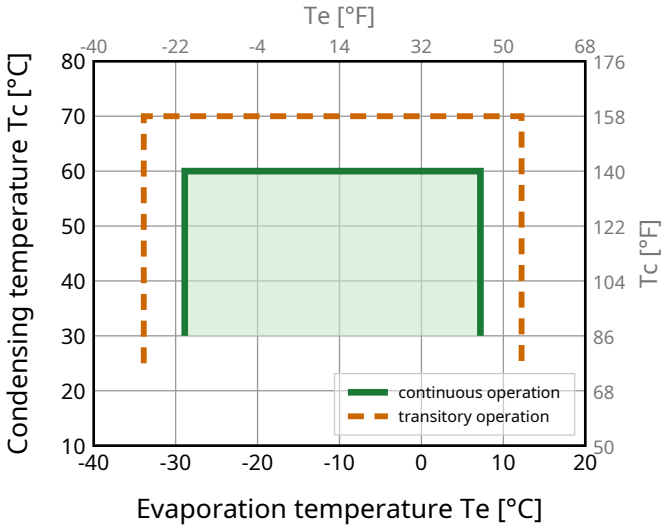
Electrical Accessories / Wiring Diagram

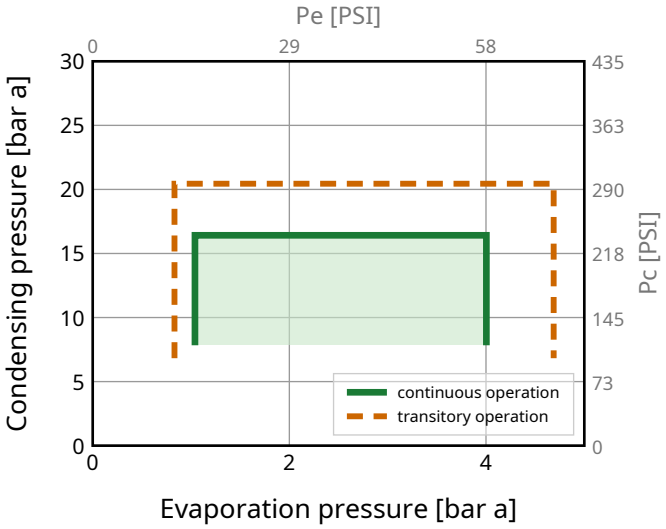


View full size

Components (already pre-assembled)
a2 current relay 117U4156
c start capacitor (280µF) 117U5025
b plastic cover + clamp 117U1021
d/dc cord relief 117U0349

Operation Pressure Range





Model

NF8.4FX.2 Configuration 1

Sales code:

105G5998

Standard Conditions

R1234yf, 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	**333**	1137	286	**1.25**	4.28	266	3.44	7.84	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**235**	802	202	**0.92**	3.15	254	3.37	7.11	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**169**	575	145	**0.84**	2.87	200	3.08	4.62	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**626**	2138	539	**1.71**	5.84	366	4.10	16.92	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**481**	1641	414	**1.39**	4.73	347	3.96	14.76	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**539**	1840	464	**1.64**	5.59	329	3.84	15.99	**EN12900 MBP**

Performance Tables

R1234yf, 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]
-30	-22	**219**	747	188	**0.96**	3.29	227	3.22	5.86
-20	-4	**370**	1264	319	**1.32**	4.50	281	3.52	9.97
-10	14	**571**	1949	491	**1.74**	5.92	329	3.84	15.51
0	32	**831**	2834	714	**2.18**	7.44	381	4.23	22.83
7.2	45	**1059**	3613	911	**2.49**	8.50	425	4.56	29.44

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

-30	-22	**176**	601	151	**0.80**	2.74	219	3.19	5.31
-20	-4	**305**	1039	262	**1.06**	3.63	287	3.56	9.26
-10	14	**481**	1641	414	**1.39**	4.73	347	3.96	14.76
0	32	**715**	2438	615	**1.75**	5.97	408	4.43	22.23
7.2	45	**924**	3151	794	**2.02**	6.88	458	4.82	29.11

Model
NF8.4FX.2 Configuration 2

Sales code:
105G5998

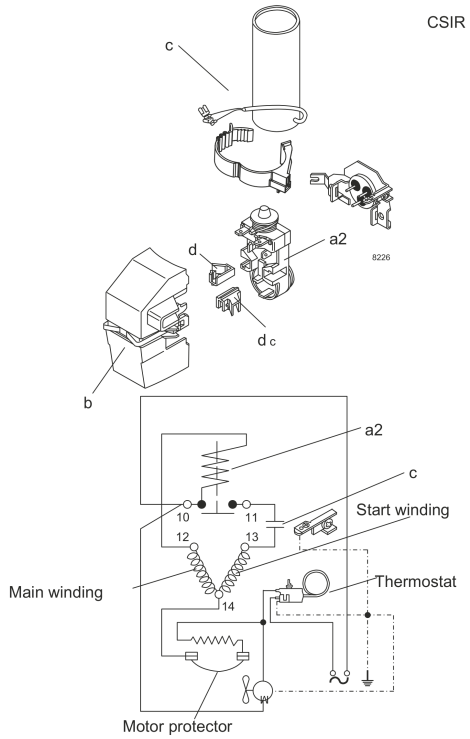
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115-127 V/60 Hz 1~**
Refrigerant	**R513A**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**280 µF**

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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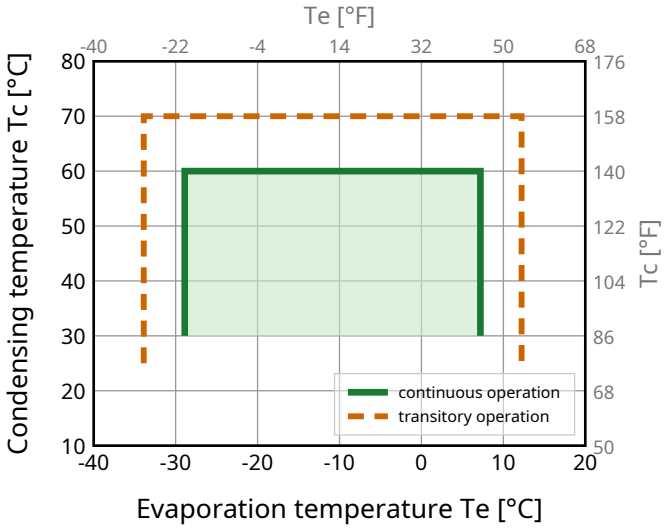
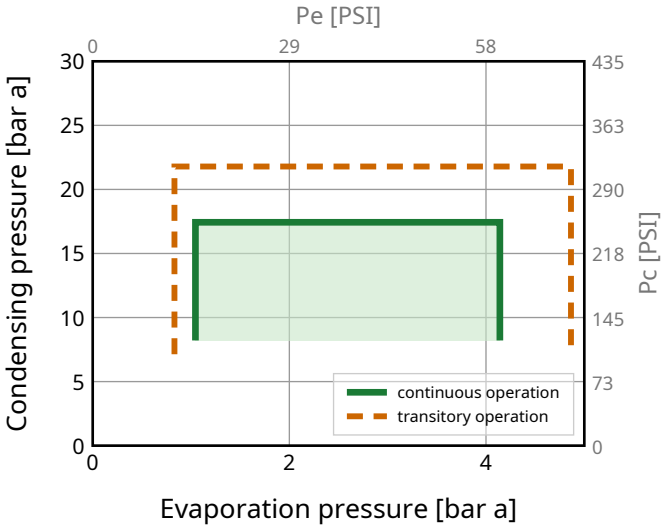
Components (already pre-assembled)
a2 current relay 117U4156
c start capacitor (280µF) 117U5025
b plastic cover + clamp 117U1021
d/dc cord relief 117U0349

Operation Pressure Range





Model

NF8.4FX.2 Configuration 2

Sales code:

105G5998

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	**333**	1135	286	**1.23**	4.19	270	3.47	7.28	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**237**	809	204	**0.92**	3.14	258	3.40	6.57	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**167**	570	144	**0.84**	2.86	200	3.08	4.20	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**650**	2217	559	**1.69**	5.77	384	4.24	16.20	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**501**	1710	431	**1.38**	4.72	363	4.07	14.06	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**566**	1930	487	**1.65**	5.62	344	3.94	15.32	**EN12900 MBP**

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]
-30	-22	**219**	746	188	**0.96**	3.27	228	3.22	5.39
-20	-4	**379**	1292	326	**1.31**	4.49	288	3.56	9.40
-10	14	**594**	2025	510	**1.73**	5.90	344	3.94	14.86
0	32	**874**	2983	752	**2.17**	7.39	404	4.40	22.15
7.2	45	**1123**	3833	966	**2.47**	8.43	454	4.79	28.78

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

-30	-22	**175**	597	150	**0.80**	2.72	220	3.19	4.83
-20	-4	**311**	1062	268	**1.06**	3.61	294	3.61	8.65
-10	14	**501**	1710	431	**1.38**	4.72	363	4.07	14.06
0	32	**755**	2576	649	**1.74**	5.94	434	4.63	21.47
7.2	45	**984**	3357	846	**2.00**	6.82	492	5.10	28.34