

Model

NF10FX

Sales code:

105G5941

Compressor Data

Refrigerant(s)	R134a / R513A
Refr. charge - tech. limit	460g / 16.23oz
Weight	10.00 kg / 22.05lbs
Displacement	10.09 cm3 / 0.62cu.in
Compressors on pallet	80



General – Configurations With NF10FX

-	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, CCC, EAC	UL, CCC, EAC
Starting torque	HST	HST
Refrigerant	R134a	R513A
Application	LBP+MBP	LBP+MBP
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

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Compressor Design

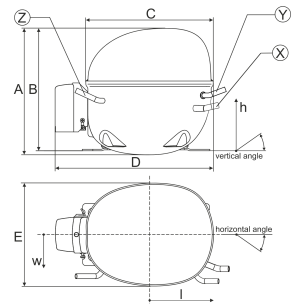
Oil type	POE	Winding resistance main	1.62 Ohm
Oil viscosity	32cSt	Winding resistance aux	4.9 Ohm
Oil quantity	298 / 10.08fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm ³ / 79.80fl.oz	Max. discharge temp.	110°C / 230°F
Motor protection	external		

Compressor Dimensions

Housing

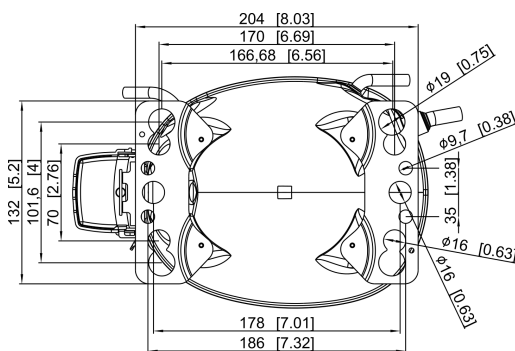
A Height	197mm / 7.76in
B Height	191mm / 7.52in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

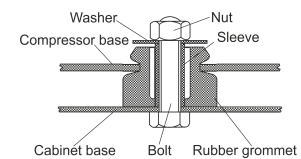


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in	-107/93.5/72 / -4.21/3.68/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

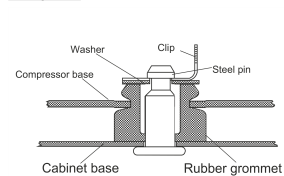
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	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

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Configuration 1

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Configuration

Motor configuration	CSIR
Power supply (nominal)	115-127 V/60 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	95-135 V
Starting torque	HST
Approvals	UL, CCC, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	320 µF
LRA (locked rotor amps / 4s/ U(N))	30.8 A
RLA (rated load amps / 1s/ U(N))	4.9 A
Cut in current (U(N))	30.8 A

Ambient/ machine room temperatures minimum /maximum

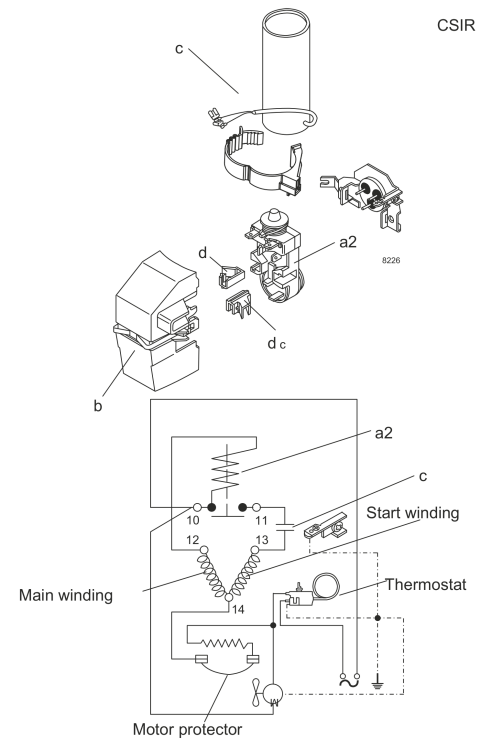
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

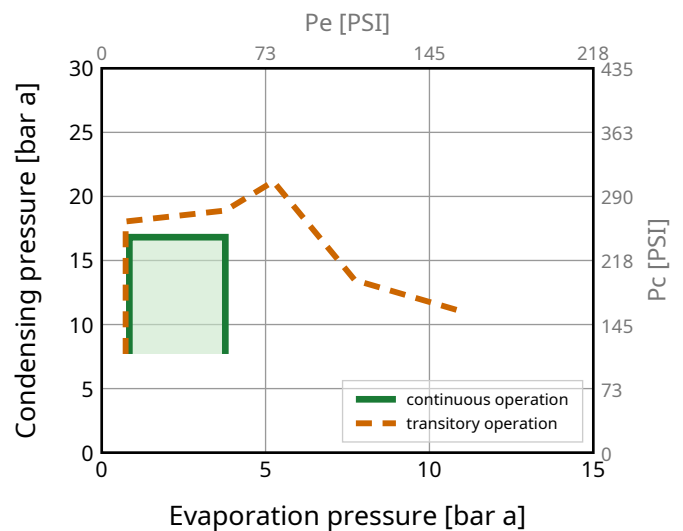
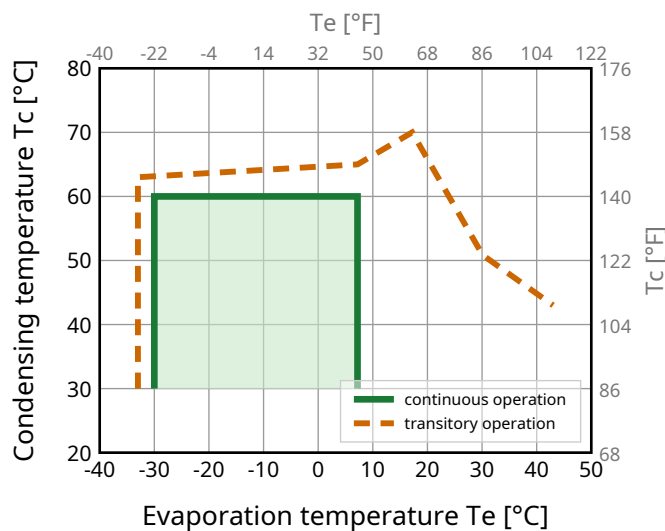
a2 current relay (MRT22AFZ-6) 117U4129

c start capacitor (320µF) 117U5022

b plastic cover + clamp 117U1021

d/dc cord relief 117U0349

Operation Pressure Range



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Configuration 1

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Standard Conditions

R134a, 115 V/60 Hz, CSIR, fan 1,5m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°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	307	1047	264	1.17	4.00	262	3.72	5.96	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	227	773	195	0.91	3.09	250	3.64	5.40	CECOMAF LBP
-35 -31	40 104	20 68	40 104	145	495	125	0.81	2.76	179	3.33	3.17	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	625	2133	538	1.60	5.47	390	4.55	13.61	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	488	1666	420	1.34	4.58	364	4.38	11.77	CECOMAF MBP
-10 14	45 113	20 68	45 113	542	1849	466	1.56	5.33	347	4.24	12.64	EN12900 MBP

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	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-30	-22	190	647	163	0.89	3.05	212	3.46	4.09
-20	-4	341	1165	294	1.23	4.20	277	3.81	7.40
-10	14	561	1915	483	1.62	5.52	347	4.24	12.26
0	32	869	2965	747	2.08	7.09	418	4.73	19.17
7.2	45	1156	3943	994	2.47	8.42	468	5.12	25.75

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

-30	-22	165	564	142	0.76	2.58	218	3.43	3.94
-20	-4	299	1021	257	1.05	3.58	286	3.87	7.16
-10	14	488	1666	420	1.34	4.58	364	4.38	11.77
0	32	752	2567	647	1.67	5.71	450	4.95	18.34
7.2	45	1000	3412	860	1.95	6.64	514	5.40	24.65

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Configuration 2

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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, CCC, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	320 μ F
LRA (locked rotor amps / 4s/ U(N))	30.8 A
RLA (rated load amps / 1s/ U(N))	4.9 A
Cut in current (U(N))	30.8 A

Ambient/ machine room temperatures minimum /maximum

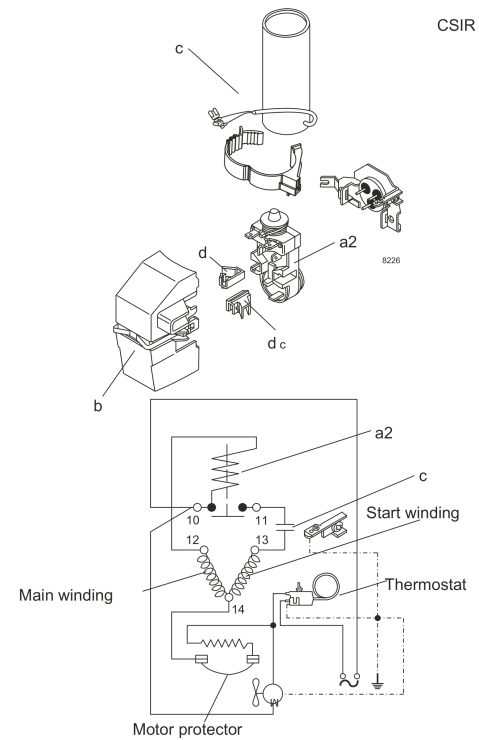
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Electrical Accessories / Wiring Diagram



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Components

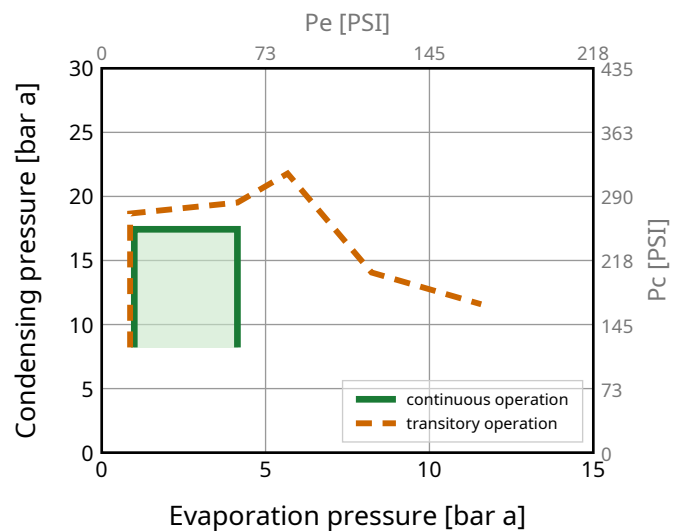
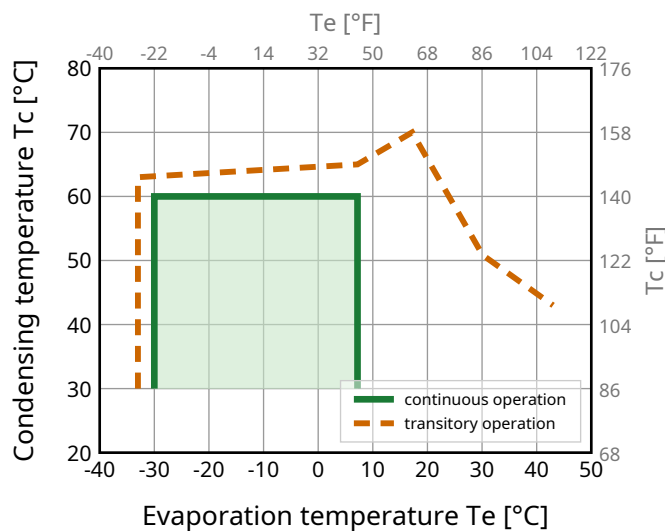
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c start capacitor (320 μ F) 117U5022

b plastic cover + clamp 117U1021

d/dc cord relief 117U0349

Operation Pressure Range



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Standard Conditions

R513A, 115 V/60 Hz, CSIR, fan 1,5m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°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	338	1152	290	1.18	4.03	286	3.92	7.39	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	243	830	209	0.89	3.02	275	3.85	6.74	CECOMAF LBP
-35 -31	40 104	20 68	40 104	161	550	139	0.81	2.77	198	3.36	4.05	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	655	2235	563	1.57	5.37	416	4.75	16.33	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	506	1726	435	1.30	4.44	389	4.58	14.20	CECOMAF MBP
-10 14	45 113	20 68	45 113	563	1921	484	1.52	5.18	371	4.47	15.24	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	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-30	-22	209	713	180	0.90	3.05	234	3.59	5.16
-20	-4	366	1250	315	1.22	4.17	300	4.01	9.10
-10	14	591	2015	508	1.59	5.44	371	4.47	14.79
0	32	900	3071	774	2.04	6.94	442	4.92	22.80
7.2	45	1186	4048	1020	2.41	8.23	492	5.24	30.40

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

-30	-22	181	617	155	0.74	2.54	243	3.65	4.99
-20	-4	317	1082	273	1.02	3.49	310	4.08	8.81
-10	14	506	1726	435	1.30	4.44	389	4.58	14.20
0	32	766	2615	659	1.61	5.50	476	5.14	21.80
7.2	45	1009	3442	868	1.87	6.37	541	5.55	29.05