

Model
NF6.1FX.2

Sales code:
105G5638

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	UL	UL
Starting torque	HST	HST
Refrigerant	R134a	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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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 cm ³ / 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

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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 V/60 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	95-135 V
Starting torque	HST
Approvals	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

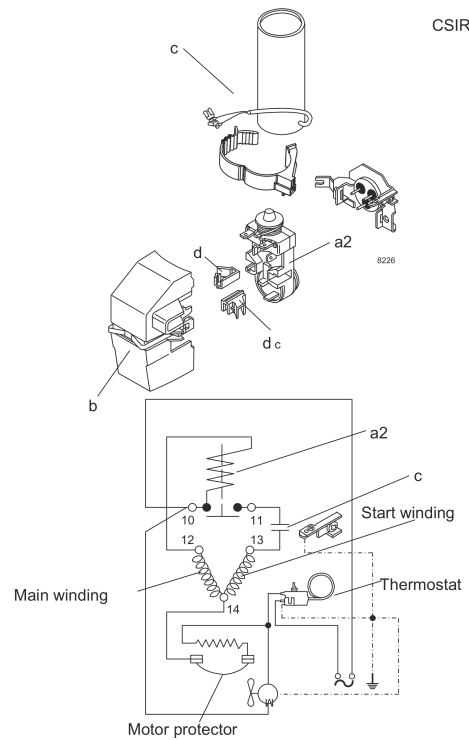
Ambient temperature range: 10 - 43°C / 50 - 109°F

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 (already pre-assembled)

a2 current relay (MRP36AEN-6) 117U4127

c start capacitor (280µF) 117U5025

b plastic cover + clamp 117U1021

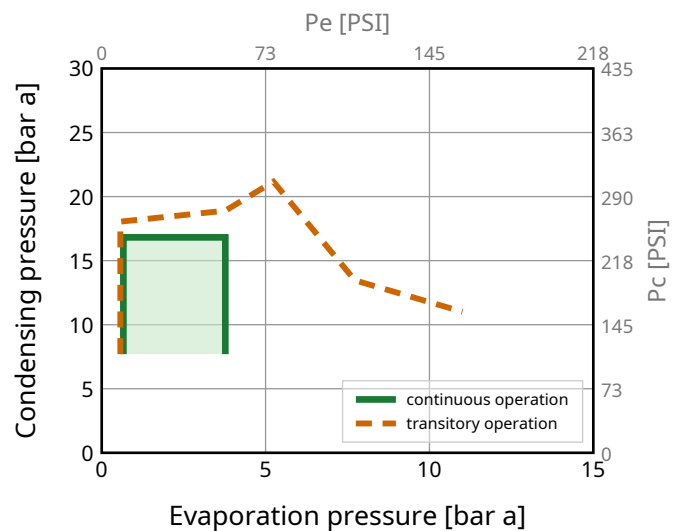
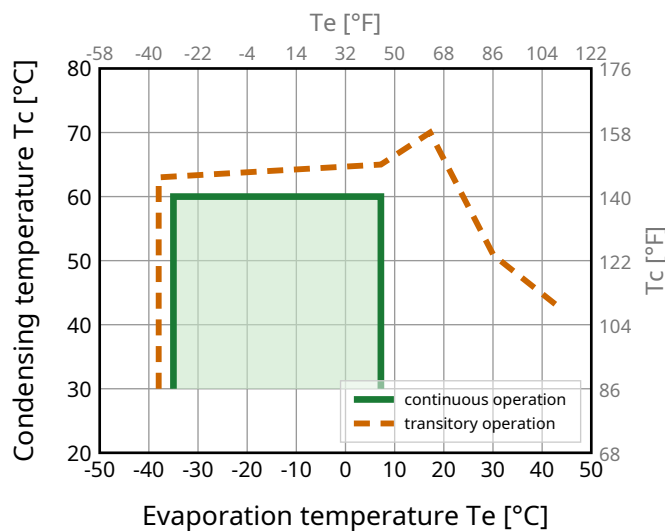
d/dc cord relief 117U0349

Alternative components

a2 current relay (MRP36AEN-6) 117U4157

c start capacitor (280µF) 117U5074

Operation Pressure Range



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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	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	m
[°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

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Configuration 2

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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	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

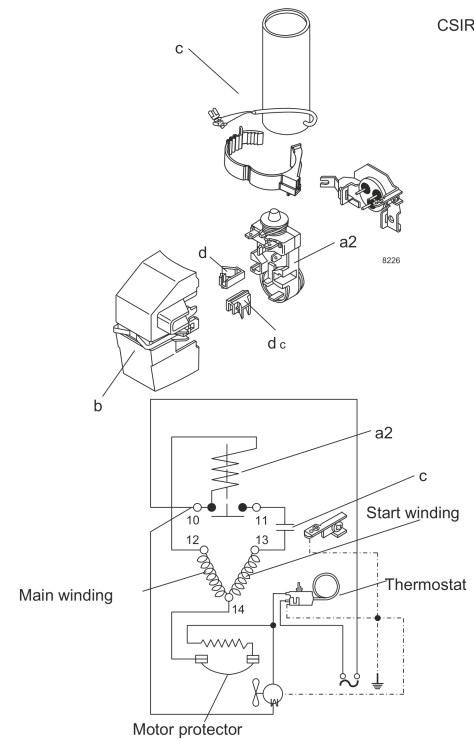
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b plastic cover + clamp 117U1021

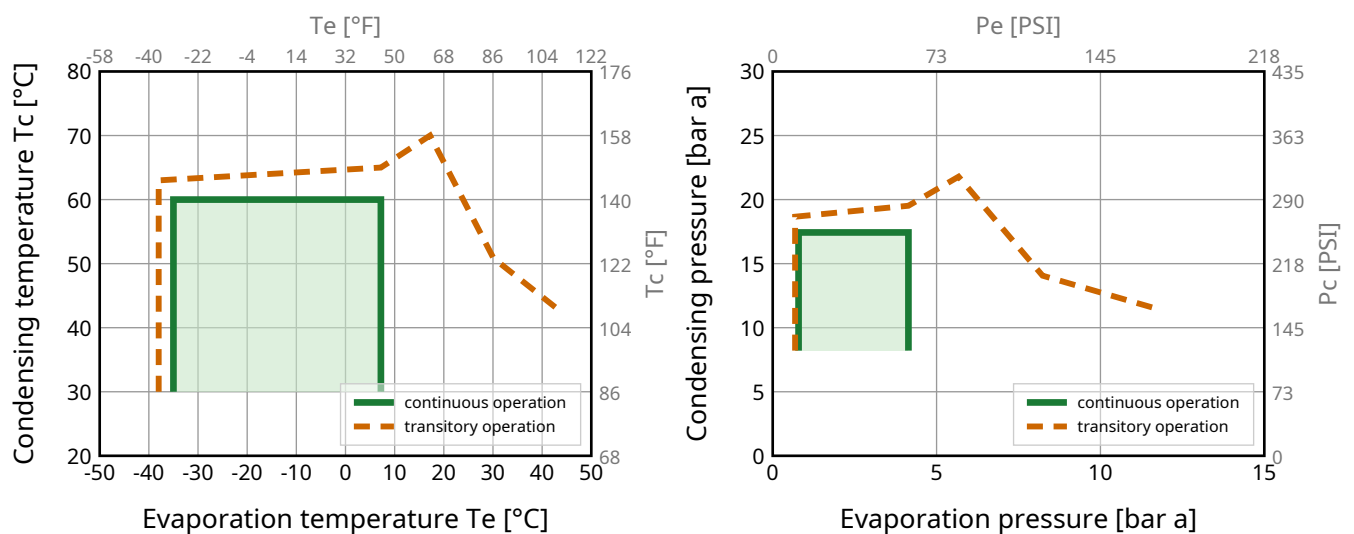
d/dc cord relief 117U0349

Alternative components

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c start capacitor (280µF) 117U5074

Operation Pressure Range



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Configuration 2

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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	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	m
[°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