

Single Pack NF6.1FX.2 115-127V 60Hz CSIR

Single pack code number: **195B4503**

Position	Title	Code	Amount
1	Compressor NF6.1FX.2	105G5631	1
2	Starting relay (overload protector MRP36AEN-6)	117U4127	1
3	Starting capacitor (280 μ F 125V, 6.3mm)	117U5025	1
4	Cord relief	117U0349	1
5	Cover	117U1021	1
6	Bolt joint for one compressor M6 \varnothing 16mm	118-1917	1

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Model

Designation	NF6.1FX.2	115-127V/60Hz 1~	Sales code:	105G5631
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a, R513A, 0
Oil viscosity	32cST	Displacement	6,13cm ³ / 0,37cu.in
Oil quantity	270cm ³ / 9,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	10kg / 22lbs		
Motor protection	external		
Winding resistance main	2Ω (at 25°C)		
Winding resistance aux	3,1Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NF6.1FX.2

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	CSIR
Power supply (nominal)	115V/60Hz	115V/60Hz
Number of phases	1	1
Voltage range	95-135V	95-135V
Approvals	EAC, UL	EAC, UL
Starting torque	HST	HST
Note	- / -	

Applications with NF6.1FX.2

	Conf. 1	Conf. 2
Refrigerant	R134a	R513A
Application	LBP+MBP	LBP+MBP
System cooling	fan 1,5m/s	fan 1,5m/s
Hot gas defrost	-/-	-/-
Long interval pull down	OK	OK

Electrical data - Configurations with NF6.1FX.2

	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	280μF	280μF
LRA (locked rotor amps / 4s/ U(N))	22,2A	22,2A
RLA (rated load amps / 1s/ U(N))	3,7A	3,7A
Cut in current (U(N))	22,2A	22,2A

Model

Designation

NF6.1FX.2

115-127V/60Hz 1~

Sales code:

105G5631

Compressor dimensions

Housing	A Height	197mm / 7,76in
	B Height	191mm / 7,52in
	C Length shell	205mm / 8,07in
	D Length w. cover	254mm / 10in
	E Width	166mm / 6,54in

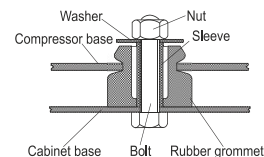
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	35°	155°
Position l/h/w	[mm]	119/76/78	127/103/54	-113/94/72
	[in]	4,7/3/3,1	5/4,1/2,1	-4,4/3,7/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



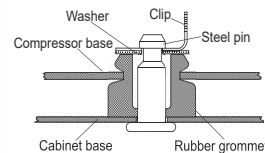
Compressor fixation



Bolt joint



Snap-on



Mounting accessories

	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

Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor

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Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	95-135V
Starting torque	HST
Approvals	EAC
	UL

Electrical accessories / wiring diagram



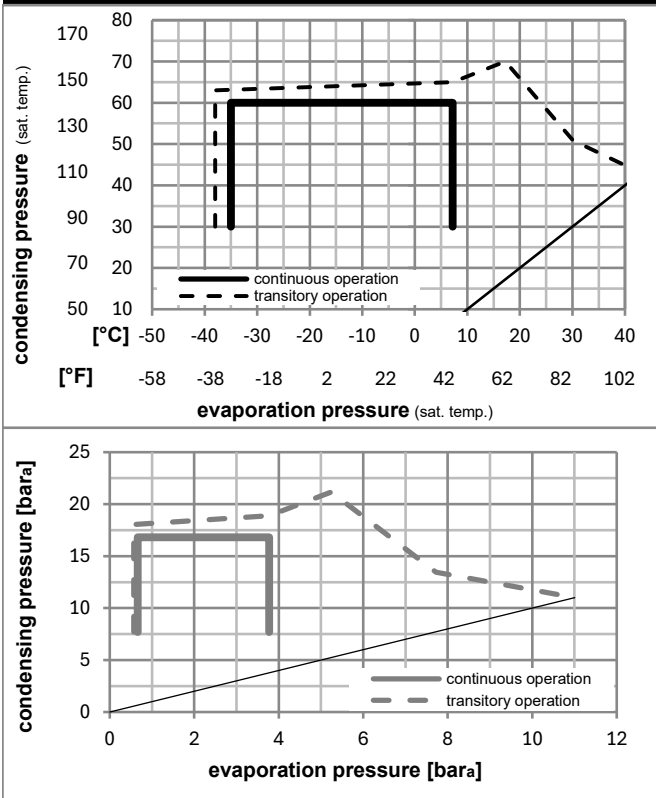
Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 1,5m/s

Operation pressure range



Components

a2	current relay (MRP36AEN-6)	117U4127
c	start capacitor (280µF)	117U5025
b	plastic cover	117U1021
d/dc	cord relief	117U0349
d/dc	cord relief	117U0349

Alternative components

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

Model

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Optimization + standard conditions

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

	pe	pc	RGT	Tliq	Cooling capacity [W]	[Btu/h]	[kcal/h]	COP [W/W]	EER [Btu/Wh]	[kcal/Wh]	P1 [W]	I [A]	Ref. mass flow ṁ [kg/h]		
Evaporating pressure (saturation temperature) Condensing pressure (saturation temperature) Return gas temp. Liquid temp.															
[°C]	-23	54	32	32	211,3	721	181,8	1,19	4,06	1,02	177,6	2,66	4,10	ASHRAE LBP	
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	152,8	522	131,5	0,90	3,08	0,78	169,4	2,62	3,65	cecomaf LBP	
[°F]	-13	131	90	131											
[°C]	-35	40	20	40	99,9	341	86,0	0,76	2,59	0,65	131,6	2,48	2,19	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-23	49	4,4	49	177,9	608	153,1	1,00	3,42	0,86	177,9	2,64	4,70	ARI540 LBP	
[°F]	-10	120	40	120											
[°C]	-23	41	32	32	242,6	828	208,8	1,38	4,70	1,19	176,1	2,62	4,71	AHAM LBP	
[°F]	-10	105	90	90											
[°C]	-35	45	32	45	90,9	310	78,2	0,71	2,42	0,61	128,1	2,47	1,96	opt	
[°F]	-31	113	90	113											

Performance tables

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

	pe	Cooling capacity			COP	EER		P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	90,9	310	78,2	0,71	2,42	0,61	128,1	2,47	1,96
cond. pressure	-23	-10	209,5	716	180,3	1,18	4,03	1,02	177,4	2,64	4,54
pc= 45/113	-15	5	326,8	1116	281,2	1,56	5,34	1,34	209,2	2,80	7,12
return gas temp.	-9	15	422,9	1444	363,9	1,83	6,27	1,58	230,5	2,93	9,26
RGT= 32/90	-4	25	535,2	1828	460,6	2,12	7,23	1,82	252,9	3,08	11,78
liquid temp	0	32	624,2	2132	537,2	2,31	7,90	1,99	269,7	3,20	13,80
Tliq= 45/113	7,2	45	814,4	2781	700,9	2,67	9,13	2,30	304,6	3,43	18,19
[°C / °F]	-35	-31	69,1	236	59,4	0,59	2,02	0,51	116,9	2,44	1,64
cond. pressure	-23	-10	170,2	581	146,5	0,96	3,28	0,83	177,5	2,66	4,07
pc= 55/131	-15	5	274,3	937	236,1	1,27	4,32	1,09	216,7	2,86	6,60
return gas temp	-9	15	361,3	1234	311,0	1,49	5,09	1,28	242,6	3,01	8,74
RGT= 32/90	-4	25	464,3	1586	399,6	1,72	5,89	1,48	269,3	3,19	11,30
liquid temp	0	32	546,6	1867	470,4	1,89	6,46	1,63	289,0	3,32	13,37
Tliq= 55/131	7,2	45	724,0	2473	623,1	2,20	7,52	1,89	328,9	3,58	17,91

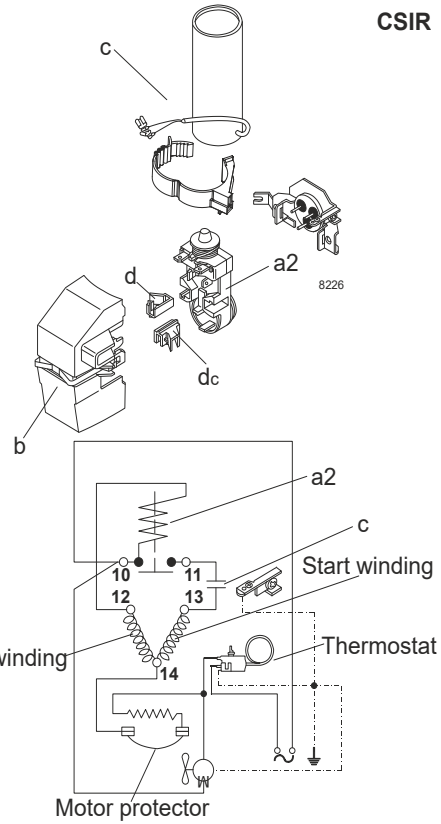
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Power supply (nominal)	115V/60Hz 1~
Refrigerant	R513A
Application	LBP+MBP
Voltage range	95-135V
Starting torque	HST
Approvals	EAC
	UL

Electrical accessories / wiring diagram



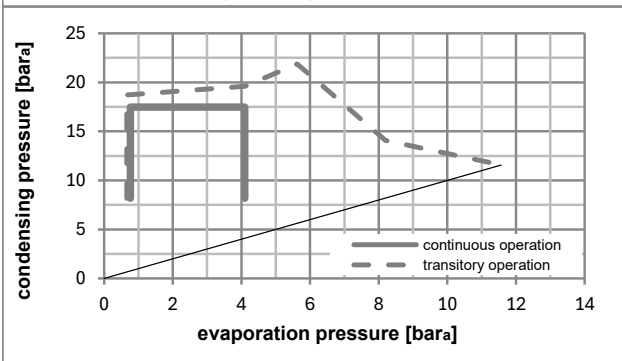
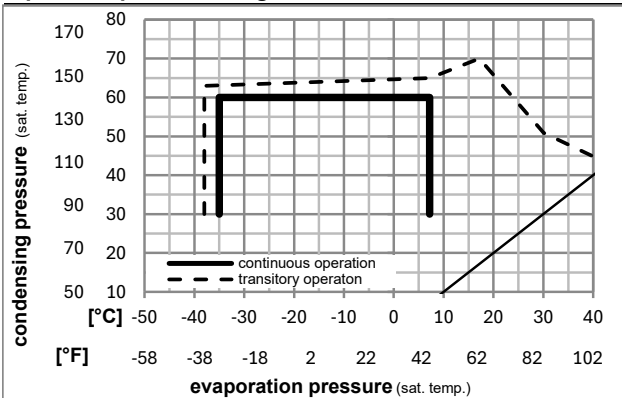
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Alternative components

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c	start capacitor (280µF)	117U5074

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Optimization + standard conditions

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

	pe	pc	RGT	Tliq	Cooling capacity	COP	EER	P1	I	Ref. mass flow	
	[°C]	[°C]	[°C]	[°C]	[W]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
ASHRAE LBP	-23	54	32	32	233,5	1,21	4,13	192,9	2,80	5,02	
	[-10]	[130]	[90]	[90]							
cecomaf LBP	-25	55	32	55	164,4	0,89	3,04	184,5	2,76	4,50	
	[-13]	[131]	[90]	[131]							
EN12900 LBP	-35	40	20	40	111,6	0,78	2,66	143,3	2,54	2,76	
	[-31]	[104]	[68]	[104]							
ARI540 LBP	-23	49	4,4	49	187,5	0,97	3,33	192,4	2,80	5,74	
	[-10]	[120]	[40]	[120]							
AHAM LBP	-23	41	32	32	266,0	1,40	4,79	189,8	2,79	5,72	
	[-10]	[105]	[90]	[90]							
opt	-35	45	32	45	102,1	0,73	2,50	139,5	2,52	2,48	
	[-31]	[113]	[90]	[113]							

Performance tables

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

	pe	Cooling capacity			COP	EER	P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	102,1	349	0,73	2,50	139,5	2,52	2,48
cond. pressure	-23	-10	226,8	775	1,19	4,05	191,4	2,79	5,53
pc= 45/113	-15	5	347,3	1186	1,55	5,31	223,5	2,96	8,51
return gas temp.	-9	15	445,0	1520	1,82	6,21	244,7	3,08	10,94
RGT= 32/90	-4	25	558,1	1906	2,09	7,14	266,9	3,19	13,79
liquid temp	0	32	647,3	2211	2,28	7,80	283,6	3,28	16,06
Tliq= 45/113	7,2	45	836,6	2857	2,63	8,97	318,5	3,47	20,93
[°C / °F]	-35	-31	77,5	265	0,60	2,05	128,9	2,46	2,11
cond. pressure	-23	-10	182,2	622	0,94	3,23	192,9	2,80	4,99
pc= 55/131	-15	5	287,3	981	1,24	4,22	232,6	3,01	7,91
return gas temp	-9	15	374,2	1278	1,45	4,95	258,4	3,15	10,35
RGT= 32/90	-4	25	476,2	1626	1,67	5,71	284,9	3,29	13,24
liquid temp	0	32	557,4	1904	1,83	6,25	304,4	3,39	15,57
Tliq= 55/131	7,2	45	731,3	2498	2,13	7,26	344,0	3,60	20,62



NF Compressors





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