

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

Single pack code number: **195B4009**

Position	Title	Code	Amount
1	Compressor NF6.1FX.2	105G5638	1
2	Bolt joint for one compressor   M6   ø16mm	118-1917	1

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## Model

Designation	<b>NF6.1FX.2</b>	115-127V/60Hz 1~	Sales code:	<b>105G5638</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R134a, R513A, 0</b>
Oil viscosity	32cST	Displacement	6,13cm <sup>3</sup> / 0,37cu.in
Oil quantity	270cm <sup>3</sup> / 9,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2360cm <sup>3</sup> / 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

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSIR	CSIR
Power supply (nominal)	115V/60Hz	115V/60Hz
Number of phases	1	1
Voltage range	95-135V	95-135V
Approvals	UL	UL
Starting torque	HST	HST
Note	Electrical equipment is included and pre-assembled to compressor.	

## Applications with NF6.1FX.2

	<b>Conf. 1</b>	<b>Conf. 2</b>
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

	<b>Conf. 1</b>	<b>Conf. 2</b>
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~

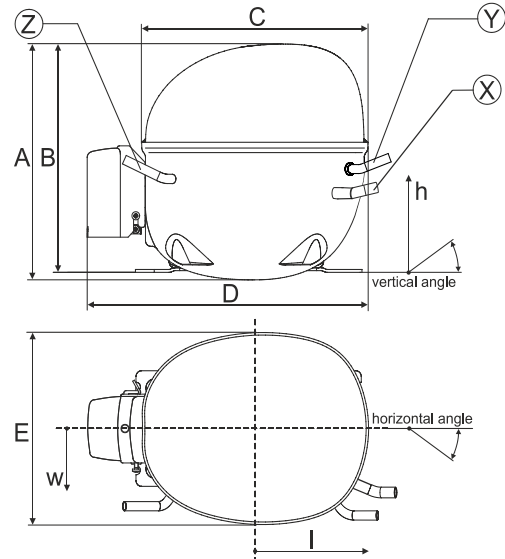
Sales code:

**105G5638**

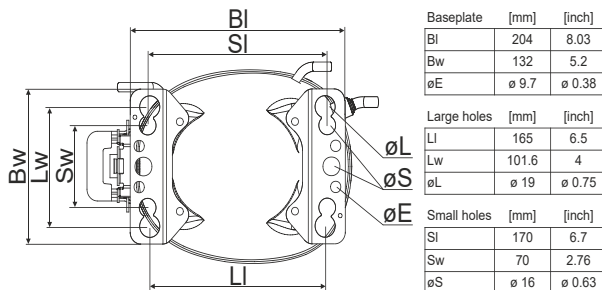
## Compressor dimensions

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

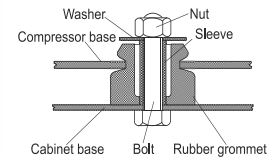
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	35°	155°
Position l/h/w	[mm]	126/76/78	133/103/54	-107/94/72
	[in]	4,9/3/3,1	5,2/4/2,1	-4,2/3,7/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



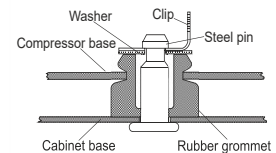
## Compressor fixation



### 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

### Model

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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	UL

### Electrical accessories / wiring diagram



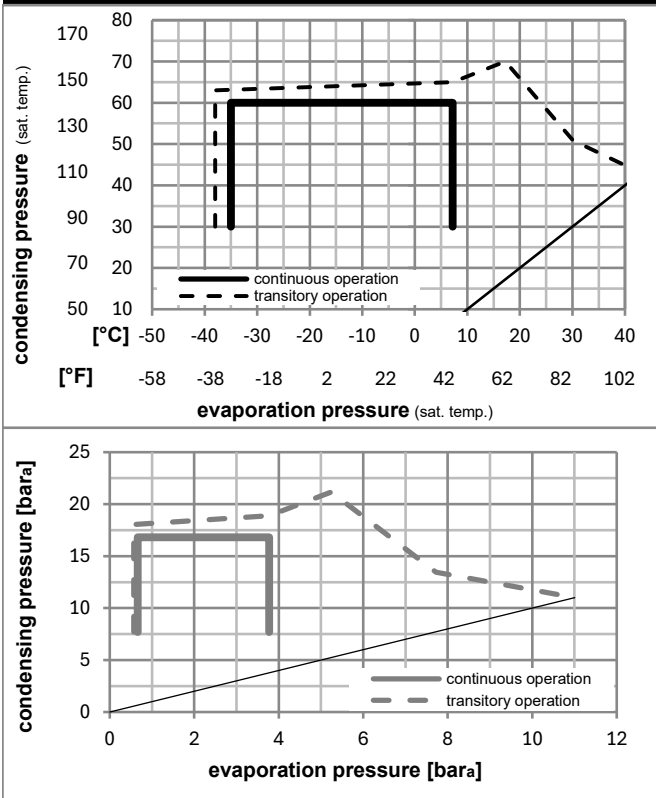
### Ambient/ machine room temperatures minimum /maximum

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 (already pre-assembled)

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 comp. (already pre-assembled)

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

## Model

Designation	<b>NF6.1FX.2</b>	<b>115V/60Hz</b>	<b>Conf. 1</b>	Sales code:	<b>105G5638</b>
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## Optimization + standard conditions

R134a, 115V/60Hz, CSIR, fan 1,5m/s, 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]	
Evaporating pressure (saturation temperature)	-23	54	32	32	211,3	1,19	4,06	177,6	2,66	4,10	ASHRAE LBP
Condensing pressure (saturation temperature)	-10	130	90	90	721	1,19	4,06	177,6	2,66	4,10	
Return gas temp.											cecomaf LBP
Liquid temp.											
	-25	55	32	55	152,8	0,90	3,08	169,4	2,62	3,65	EN12900 LBP
	-13	131	90	131	522	0,90	3,08	169,4	2,62	3,65	
	-35	40	20	40	99,9	0,76	2,59	131,6	2,48	2,19	ARI540 LBP
	-31	104	68	104	341	0,76	2,59	131,6	2,48	2,19	
	-23	49	4,4	49	177,9	1,00	3,42	177,9	2,64	4,70	AHAM LBP
	-10	120	40	120	608	1,00	3,42	177,9	2,64	4,70	
	-23	41	32	32	242,6	1,38	4,70	176,1	2,62	4,71	opt
	-10	105	90	90	828	1,38	4,70	176,1	2,62	4,71	
	-35	45	32	45	90,9	0,71	2,42	128,1	2,47	1,96	
	-31	113	90	113	310	0,71	2,42	128,1	2,47	1,96	

## Performance tables

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

	pe	Cooling capacity	COP	EER	P1	I	m
	[°C]	[W]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35 / -31	90,9	0,71	2,42	128,1	2,47	1,96
cond. pressure	-23 / -10	209,5	1,18	4,03	177,4	2,64	4,54
pc= 45/113	-15 / 5	326,8	1,56	5,34	209,2	2,80	7,12
return gas temp.	-9 / 15	422,9	1,83	6,27	230,5	2,93	9,26
RGT= 32/90	-4 / 25	535,2	2,12	7,23	252,9	3,08	11,78
liquid temp	0 / 32	624,2	2,31	7,90	269,7	3,20	13,80
Tliq= 45/113	7,2 / 45	814,4	2,67	9,13	304,6	3,43	18,19
[°C / °F]	-35 / -31	69,1	0,59	2,02	116,9	2,44	1,64
cond. pressure	-23 / -10	170,2	0,96	3,28	177,5	2,66	4,07
pc= 55/131	-15 / 5	274,3	1,27	4,32	216,7	2,86	6,60
return gas temp	-9 / 15	361,3	1,49	5,09	242,6	3,01	8,74
RGT= 32/90	-4 / 25	464,3	1,72	5,89	269,3	3,19	11,30
liquid temp	0 / 32	546,6	1,89	6,46	289,0	3,32	13,37
Tliq= 55/131	7,2 / 45	724,0	2,20	7,52	328,9	3,58	17,91

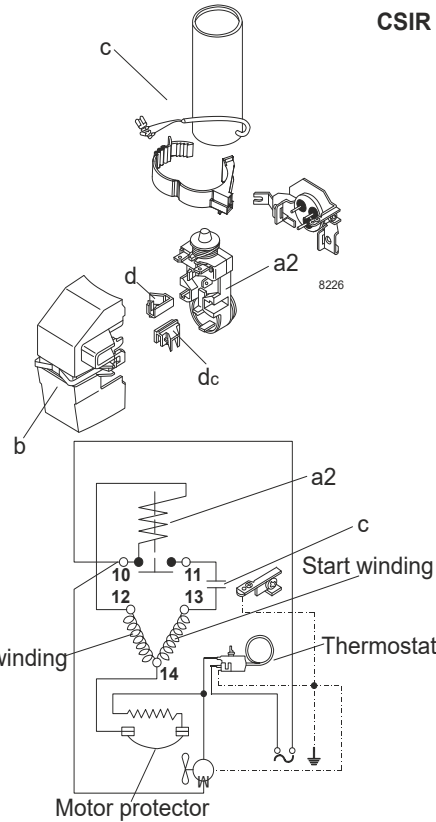
### Model

Designation	<b>NF6.1FX.2</b>	<b>115V/60Hz</b>	<b>Conf. 2</b>	Sales code:	<b>105G5638</b>
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### Configuration

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

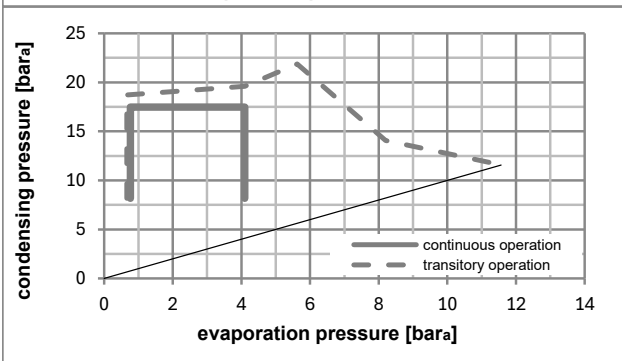
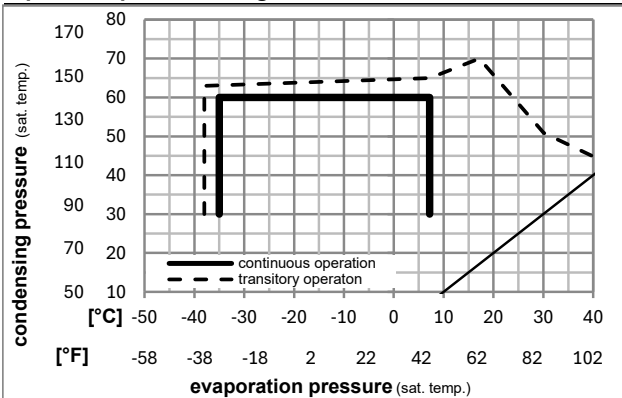
### Electrical accessories / wiring diagram



### Ambient/ machine room temperatures minimum /maximum

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b	plastic cover	117U1021
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### Alternative comp. (already pre-assembled)

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c	start capacitor (280µF)	117U5074

### Model

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### Optimization + standard conditions

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

		Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	Power consumption			
		Condensing pressure (saturation temperature)		Return gas temp.	Liquid temp.	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Ref. mass flow
[°C]	[°F]	pe	pc	RGT	Tliq							[W]	[A]	[kg/h]
-23	-10	54	32	32	233,5	797	200,9	1,21	4,13	1,04	192,9	2,80	5,02	ASHRAE LBP
-25	-13	55	32	55	164,4	562	141,5	0,89	3,04	0,77	184,5	2,76	4,50	cecomaf LBP
-35	-31	40	20	40	111,6	381	96,0	0,78	2,66	0,67	143,3	2,54	2,76	EN12900 LBP
-23	-10	49	4,4	49	187,5	640	161,3	0,97	3,33	0,84	192,4	2,80	5,74	ARI540 LBP
-23	-10	41	32	32	266,0	908	228,9	1,40	4,79	1,21	189,8	2,79	5,72	AHAM LBP
-35	-31	45	32	45	102,1	349	87,9	0,73	2,50	0,63	139,5	2,52	2,48	opt

### Performance tables

R513A, 115V/60Hz, CSIR, fan 1,5m/s, 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	102,1	349	87,9	0,73	2,50	0,63	139,5	2,52	2,48
cond. pressure	-23	-10	226,8	775	195,2	1,19	4,05	1,02	191,4	2,79	5,53
pc= 45/113	-15	5	347,3	1186	298,9	1,55	5,31	1,34	223,5	2,96	8,51
return gas temp.	-9	15	445,0	1520	383,0	1,82	6,21	1,57	244,7	3,08	10,94
RGT= 32/90	-4	25	558,1	1906	480,3	2,09	7,14	1,80	266,9	3,19	13,79
liquid temp	0	32	647,3	2211	557,1	2,28	7,80	1,96	283,6	3,28	16,06
Tliq= 45/113	7,2	45	836,6	2857	720,0	2,63	8,97	2,26	318,5	3,47	20,93
[°C / °F]	-35	-31	77,5	265	66,7	0,60	2,05	0,52	128,9	2,46	2,11
cond. pressure	-23	-10	182,2	622	156,8	0,94	3,23	0,81	192,9	2,80	4,99
pc= 55/131	-15	5	287,3	981	247,3	1,24	4,22	1,06	232,6	3,01	7,91
return gas temp	-9	15	374,2	1278	322,0	1,45	4,95	1,25	258,4	3,15	10,35
RGT= 32/90	-4	25	476,2	1626	409,8	1,67	5,71	1,44	284,9	3,29	13,24
liquid temp	0	32	557,4	1904	479,7	1,83	6,25	1,58	304,4	3,39	15,57
Tliq= 55/131	7,2	45	731,3	2498	629,4	2,13	7,26	1,83	344,0	3,60	20,62



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# NF Compressors

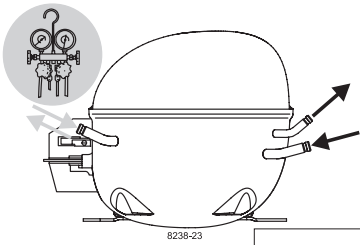


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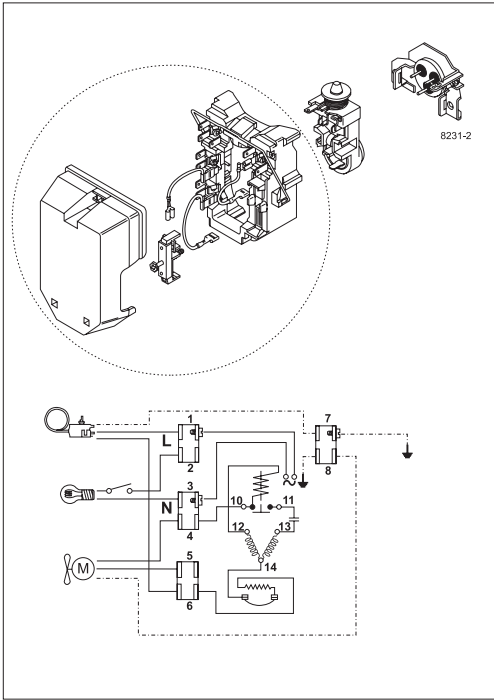


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