

## 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

**Secop GmbH** • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • [www.secop.com](http://www.secop.com)

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved.

## Model

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

## 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~

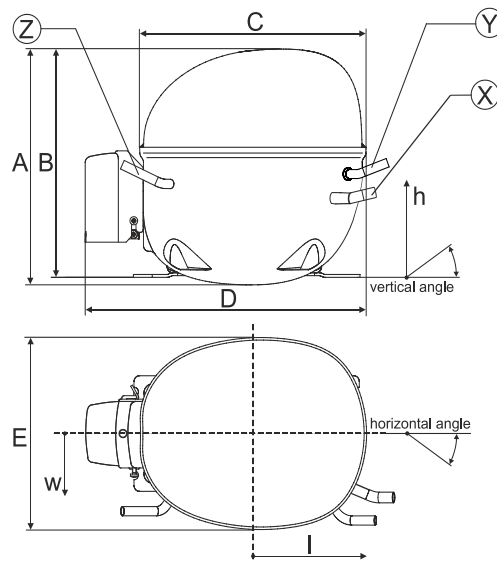
Sales code:

**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



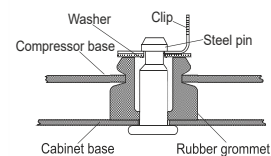
## Compressor fixation



### 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

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

### 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



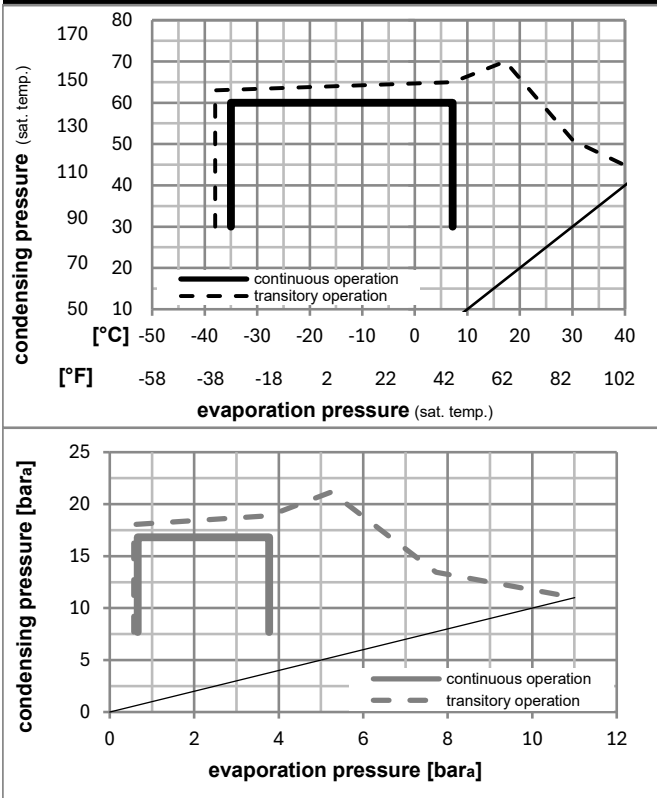
### Ambient/ machine room temperatures minimum /maximum

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>
-------------	------------------	------------------	----------------	-------------	-----------------

### Optimization + standard conditions

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

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	P1	Power consumption		Ref. mass flow	ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				[A]	[kg/h]		
[°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, UL

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]		[Btu/Wh]	[kcal/Wh]			
[°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

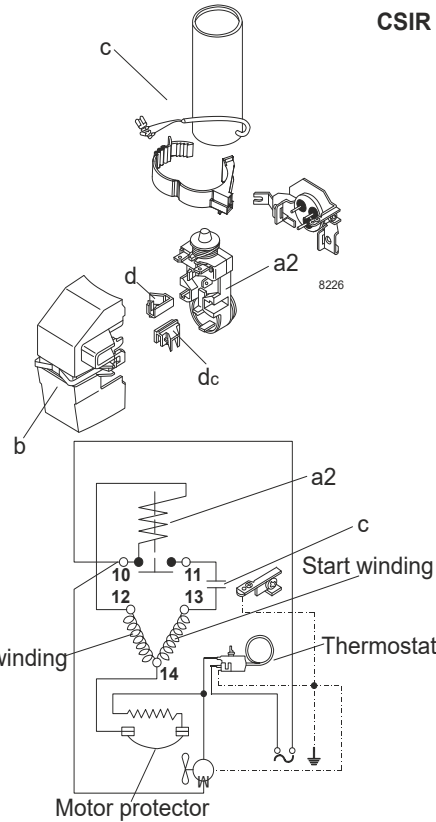
## Model

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

## Configuration

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

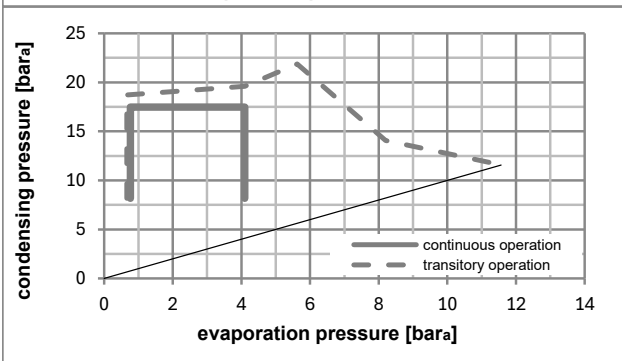
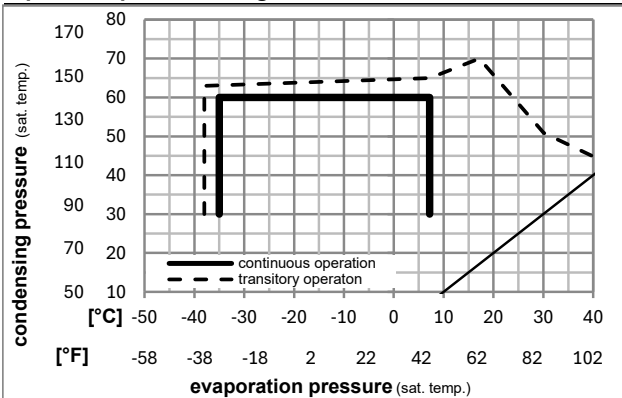
## Electrical accessories / wiring diagram



## Ambient/ machine room temperatures minimum /maximum

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. 2</b>	Sales code:	<b>105G5638</b>
-------------	------------------	------------------	----------------	-------------	-----------------

## 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	130	32	90	233,5	797	200,9	1,21	4,13	1,04	192,9	2,80	5,02	ASHRAE LBP
-25	-13	55	131	32	90	164,4	562	141,5	0,89	3,04	0,77	184,5	2,76	4,50	cecomaf LBP
-35	-31	40	104	20	68	111,6	381	96,0	0,78	2,66	0,67	143,3	2,54	2,76	EN12900 LBP
-23	-10	49	120	4,4	40	187,5	640	161,3	0,97	3,33	0,84	192,4	2,80	5,74	ARI540 LBP
-23	-10	41	105	32	90	266,0	908	228,9	1,40	4,79	1,21	189,8	2,79	5,72	AHAM LBP
-35	-31	45	113	32	90	102,1	349	87,9	0,73	2,50	0,63	139,5	2,52	2,48	opt

## Performance tables

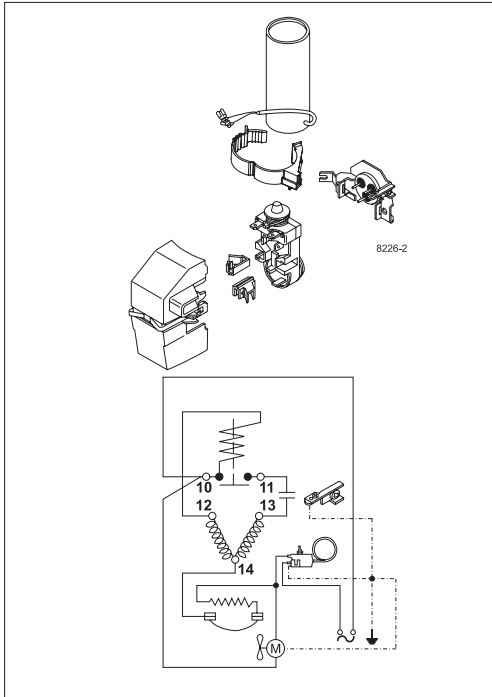
R513A, 115V/60Hz, CSIR, fan 1,5m/s, UL

	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



8238-23

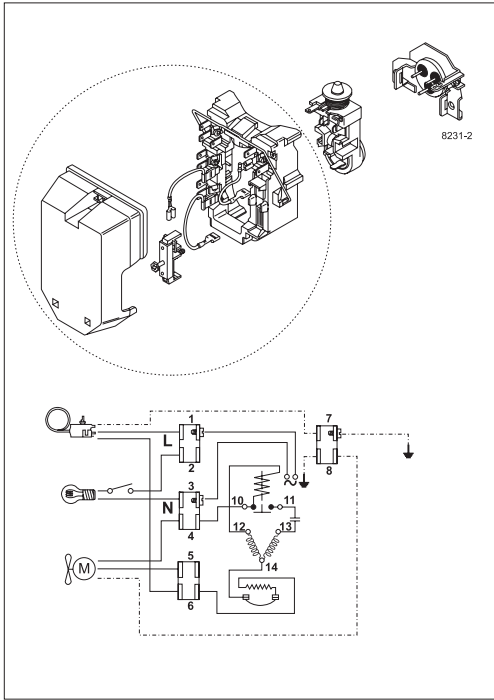
# NF Compressors







8238-23



Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved. [www.secop.com](http://www.secop.com)