

## Single Pack NF7CLX 115-127V 60Hz CSIR

Single pack code number: **195B4075**

Position	Title	Code	Amount
1	Compressor NF7CLX	105F1721	1
2	Starting relay (overload protector MRT22AFZ-6)	117U4129	1
3	Starting capacitor (320 $\mu$ F 125V, 6.3mm)	117U5022	1
4	Cord relief	117U0349	2
5	Cover	117U1021	1
6	Bolt joint for one compressor   M6   $\varnothing$ 16mm	118-1917	1

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**Model**

Designation	<b>NF7CLX</b>	<b>115-127V/60Hz 1~</b>	Sales code:	<b>105F1721</b>
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**Compressor design**

Oil type	Polyolester	Refrigerant(s)	<b>R404A, R452A, R507</b>
Oil viscosity	32cST	Displacement	7,27cm <sup>3</sup> / 0,44cu.in
Oil quantity	300cm <sup>3</sup> / 10,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2280cm <sup>3</sup> / 77,1fl.oz		
Weight	10kg / 22lbs		
Motor protection	external		
Winding resistance main	1,62Ω (at 25°C)		
Winding resistance aux	4,9Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



**General - Configurations with NF7CLX**

	<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, CCC, EAC	UL, CCC, EAC
Starting torque	HST	HST
Note	- / -	

**Applications with NF7CLX**

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R404A	R452A
Application	LBP+MBP	LBP+MBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	- / -	- / -
Long interval pull down	OK	OK

**Electrical data - Configurations with NF7CLX**

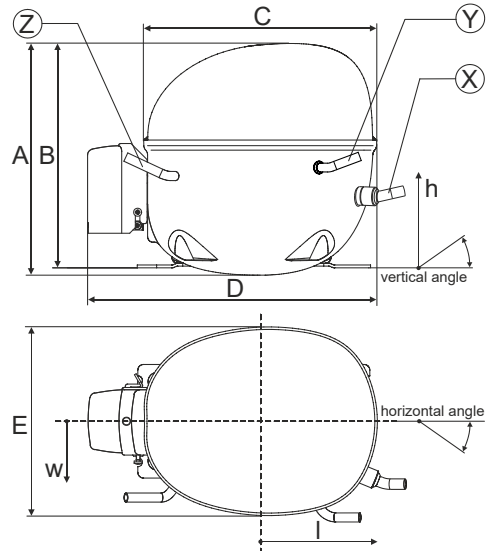
	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	relay
Run capacitor	- / -	- / -
Start capacitor	320μF	320μF
LRA (locked rotor amps / 4s)	30,8A	30,8A
RLA (rated load amps / 1s)	4,9A	4,9A
Cut in current	30,8A	30,8A
IP class	21	21

**Model**

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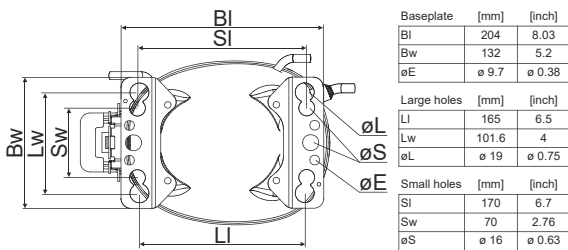
**Compressor dimensions**

<b>Housing</b>	A Height	203mm / 7,99in
	B Height	197mm / 7,76in
	C Length shell	205mm / 8,07in
	D Length w. cover	254mm / 10in
	E Width	166mm / 6,54in

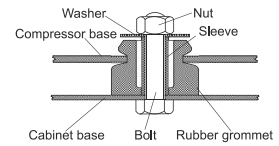


<b>Connectors</b>		<b>Suction</b>	<b>Discharge</b>	<b>Process</b>
		<b>X</b>	<b>Y</b>	<b>Z</b>
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	35°	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

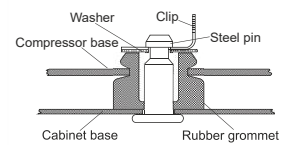
**Compressor fixation**



**Bolt joint**



**Snap-on**



<b>Mounting accessories</b>	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**

LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.

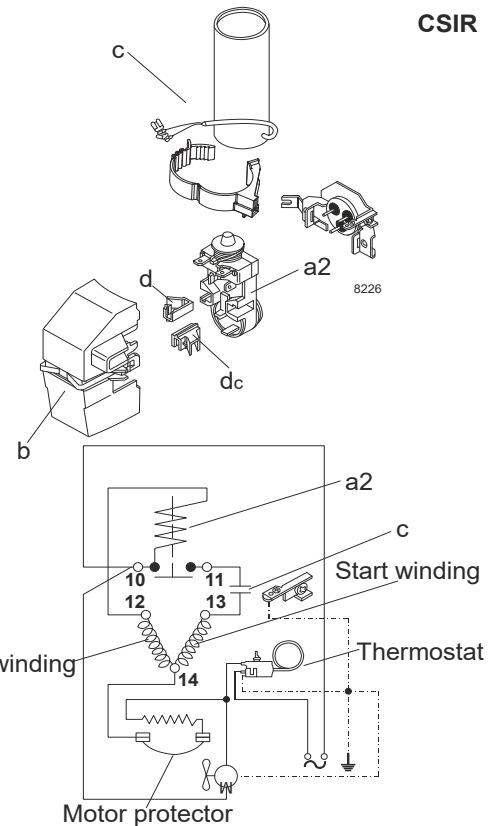
**Model**

Designation	<b>NF7CLX</b>	<b>115V/60Hz</b>	<b>Conf. 1</b>	Sales code:	<b>105F1721</b>
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**Configuration**

Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R404A
Application	LBP+MBP
Voltage range	95-135V
Starting torque	HST
Approvals	UL CCC EAC

**Electrical accessories / wiring diagram**

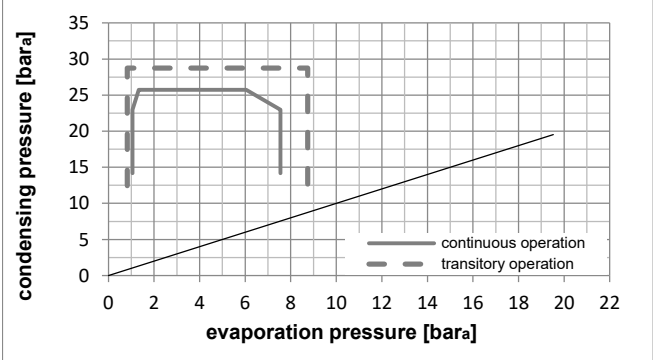
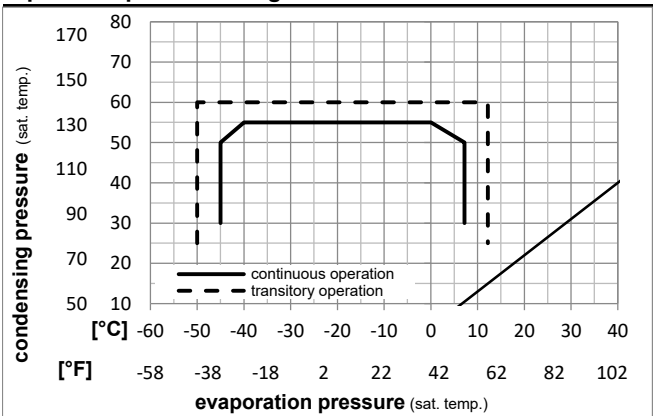


**Ambient temperatures / system cooling**

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a

**Operation pressure range**



**Components**

a2	current relay ( MRT22AFZ-6)	117U4129
c	start capacitor (320µF)	117U5022
b	plastic cover	117U1021
d/dc	cord relief	117U0349
d/dc	cord relief	117U0349

**Model**

Designation **NF7CLX 115V/60Hz** Conf. 1 Sales code: **105F1721**

**Optimization + standard conditions**

115V/60Hz, CSIR, fan 3m/s, UL, CCC, EAC

Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)				Power consumption				ASHRAE LBP		
Return gas temp.				Liquid temp.				Current consumption					Ref. mass flow ṁ	
Cooling capacity				COP	EER	P1	I							
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]		[kg/h]	
[°C]	-23,3	54,4	32,2	32,2	451,3	1541	388,4	1,23	4,19	1,06	367,7	4,53	10,52	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	305,5	1043	262,9	0,87	2,95	0,74	353,1	4,44	9,55	cecomaf LBP
[°F]	-13	131	89,6	131										
[°C]	-35	40	20	40	248,1	847	213,5	0,93	3,19	0,80	266,0	3,90	6,74	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-23,3	48,9	4,44	48,9	340,3	1162	292,9	0,94	3,20	0,81	362,8	4,46	12,05	ARI540 LBP
[°F]	-10	120	40	120										
[°C]	-23,3	40,6	32,2	32,2	512,7	1751	441,2	1,46	4,98	1,26	351,5	4,37	11,95	AHAM LBP
[°F]	-10	105	90	90										
[°C]	-35	45	32	45	230,4	787	198,3	0,86	2,95	0,74	267,1	3,91	6,16	opt
[°F]	-31	113	89,6	113										

**Performance tables**

115V/60Hz, CSIR, fan 3m/s, UL, CCC, EAC

	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]	-45	-49	111,0	379	95,5	0,59	2,00	0,50	189,4	3,64	2,95
cond. pressure	-34,4	-30	238,3	814	205,1	0,88	3,00	0,76	271,4	3,93	6,37
pc= 45/113	-23,3	-10	429,9	1468	370,0	1,20	4,10	1,03	358,2	4,42	11,62
return gas temp.	-15	5	623,2	2128	536,4	1,46	4,98	1,25	427,8	4,91	17,02
RGT= 32/90	-3,9	25	961,8	3285	827,7	1,81	6,17	1,56	532,2	5,74	26,80
liquid temp	0	32	1105,1	3774	951,1	1,93	6,59	1,66	572,9	6,07	31,07
Tliq= 45/113	7,2	45	1409,4	4813	1213,0	2,15	7,34	1,85	656,1	6,76	40,42
[°C / °F]	-45	-49	70,3	240	60,5	0,40	1,37	0,34	175,3	3,60	2,16
cond. pressure	-34,4	-30	174,3	595	150,0	0,65	2,21	0,56	269,5	3,96	5,39
pc= 55/131	-23,3	-10	333,3	1138	286,8	0,91	3,09	0,78	368,2	4,53	10,44
return gas temp	-15	5	496,7	1696	427,5	1,11	3,80	0,96	446,0	5,09	15,75
RGT= 32/90	-3,9	25	788,1	2692	678,3	1,41	4,80	1,21	560,4	6,00	25,58
liquid temp	0	32	913,0	3118	785,7	1,51	5,16	1,30	604,5	6,36	29,94
Tliq= 55/131	7,2	45	1180,3	4031	1015,7	1,70	5,81	1,46	693,4	7,09	39,61

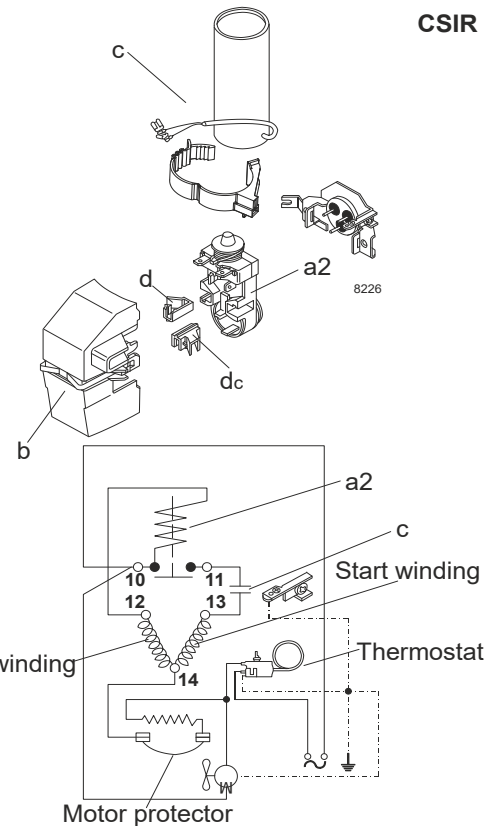
**Model**

Designation	<b>NF7CLX</b>	<b>115V/60Hz</b>	<b>Conf. 2</b>	Sales code:	<b>105F1721</b>
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**Configuration**

Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R452A
Application	LBP+MBP
Voltage range	95-135V
Starting torque	HST
Approvals	UL CCC EAC

**Electrical accessories / wiring diagram**

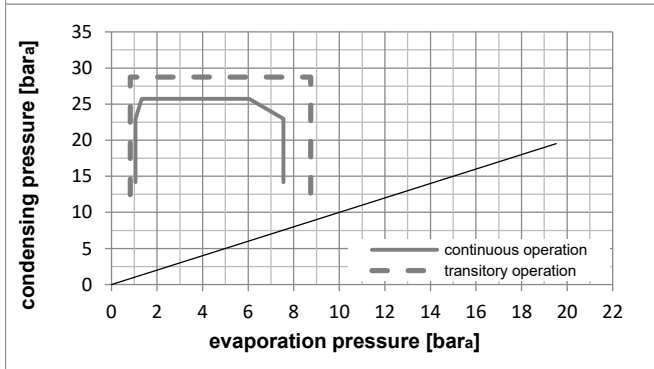
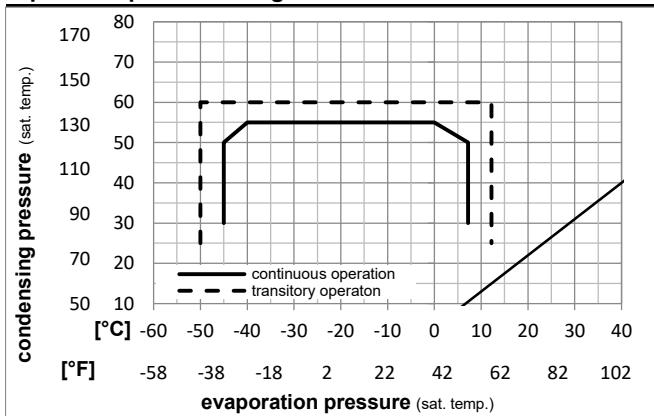


**Ambient temperatures / system cooling**

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a

**Operation pressure range**



**Components**

a2	current relay ( MRT22AFZ-6)	117U4129
c	start capacitor (320µF)	117U5022
b	plastic cover	117U1021
d/dc	cord relief	117U0349
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**Model**

Designation **NF7CLX 115V/60Hz** Conf. 2 Sales code: **105F1721**

**Optimization + standard conditions**

115V/60Hz, CSIR, fan 3m/s, UL, CCC, EAC

Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)				Power consumption				ASHRAE LBP		
Return gas temp.				Liquid temp.				Current consumption					Ref. mass flow	
Cooling capacity				COP	EER	P1	I	m						
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]			[kg/h]
[°C]	-23,3	54,4	32,2	32,2	411,9	1407	354,5	1,20	4,10	1,03	342,8	4,44	9,90	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	281,1	960	241,9	0,86	2,93	0,74	328,1	4,34	8,94	cecomaf LBP
[°F]	-13	131	89,6	131										
[°C]	-35	40	20	40	223,5	763	192,4	0,91	3,11	0,78	245,5	3,77	6,24	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-23,3	48,9	4,44	48,9	315,8	1078	271,8	0,93	3,18	0,80	339,0	4,42	11,35	ARI540 LBP
[°F]	-10	120	40	120										
[°C]	-23,3	40,6	32,2	32,2	471,4	1610	405,7	1,43	4,89	1,23	329,4	4,35	11,33	AHAM LBP
[°F]	-10	105	90	90										
[°C]	-35	45	32	45	206,8	706	178,0	0,84	2,88	0,73	245,5	3,77	5,68	opt
[°F]	-31	113	89,6	113										

**Performance tables**

115V/60Hz, CSIR, fan 3m/s, UL, CCC, EAC

	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]	-45	-49	94,3	322	81,2	0,56	1,90	0,48	169,1	3,24	2,57
cond. pressure	-34,4	-30	214,2	732	184,4	0,86	2,93	0,74	249,7	3,80	5,88
pc= 45/113	-23,3	-10	396,8	1355	341,5	1,18	4,04	1,02	335,2	4,39	10,99
return gas temp.	-15	5	583,0	1991	501,7	1,44	4,93	1,24	404,2	4,87	16,31
RGT= 32/90	-3,9	25	912,3	3116	785,1	1,79	6,13	1,54	508,5	5,59	25,98
liquid temp	0	32	1052,6	3595	905,9	1,92	6,54	1,65	549,6	5,87	30,21
Tliq= 45/113	7,2	45	1351,9	4617	1163,5	2,13	7,28	1,84	633,8	6,45	39,50
[°C / °F]	-45	-49	57,4	196	49,4	0,38	1,28	0,32	152,7	3,13	1,80
cond. pressure	-34,4	-30	155,6	531	133,9	0,63	2,17	0,55	245,4	3,77	4,91
pc= 55/131	-23,3	-10	307,9	1051	264,9	0,90	3,06	0,77	343,0	4,44	9,81
return gas temp	-15	5	466,3	1593	401,3	1,11	3,79	0,95	420,6	4,98	15,03
RGT= 32/90	-3,9	25	752,0	2568	647,2	1,40	4,79	1,21	535,7	5,77	24,74
liquid temp	0	32	875,3	2989	753,3	1,51	5,15	1,30	580,3	6,08	29,06
Tliq= 55/131	7,2	45	1140,4	3895	981,4	1,70	5,81	1,46	670,9	6,71	38,65



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# NF Compressors



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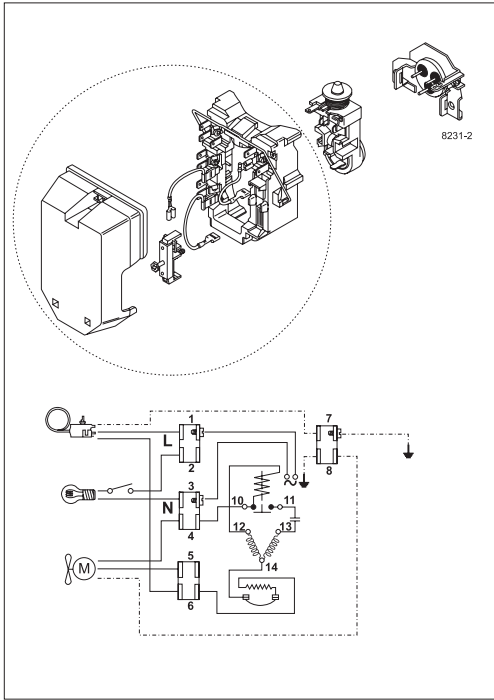


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