

## Model

Designation	<b>NF7FK</b>	115-127V/60Hz 1~	Sales code:	<b>105G5745</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R134a</b>
Oil viscosity	32cST	Displacement	7,27cm <sup>3</sup> / 0,44cu.in
Oil quantity	268cm <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	10,5kg / 23,1lbs		
Motor protection	1# internal		
Winding resistance main	2,04Ω (at 25°C)		
Winding resistance aux	9,13Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



## General - Configurations with NF7FK

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSIR	RSIR
Power supply (nominal)	115-127V/60Hz	115-127V/60Hz
Number of phases	1	1
Voltage range	95-135V	95-135V
Approvals	UL, EAC	UL, EAC
Starting torque	HST	LST
Note	Electrical equipment will be pre-assembled to compressor.	

## Applications with NF7FK

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R134a	R134a
Application	LBP+MBP	LBP+MBP
System cooling	static	static
Hot gas defrost	-/-	-/-
Long interval pull down	OK	OK

## Electrical data - Configurations with NF7FK

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	PTC
Run capacitor	-/-	-/-
Start capacitor	320μF	-/-
LRA (locked rotor amps / 4s)	24A	
RLA (rated load amps / 1s)	3,6A	-/-A
Cut in current		

## Model

Designation

**NF7FK**

115-127V/60Hz 1~

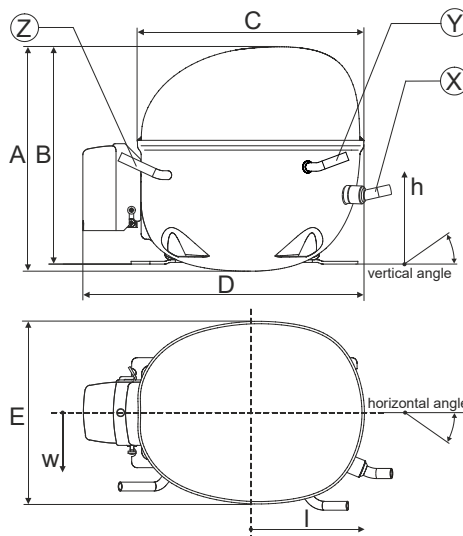
Sales code:

**105G5745**

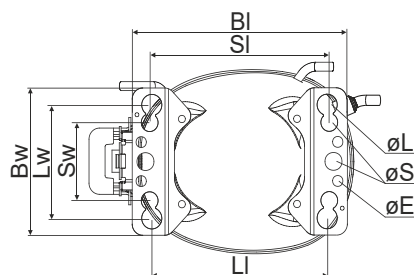
## Compressor dimensions

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 X	Discharge Y	Process 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

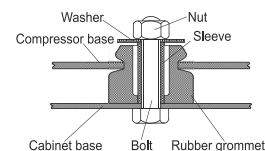


## Compressor fixation

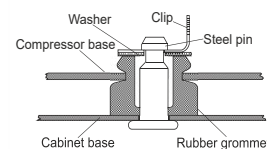


Baseplate	[mm]	[inch]
BI	204	8.03
BW	132	5.2
øE	ø 9.7	ø 0.38
Large holes	[mm]	[inch]
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63

### 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

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

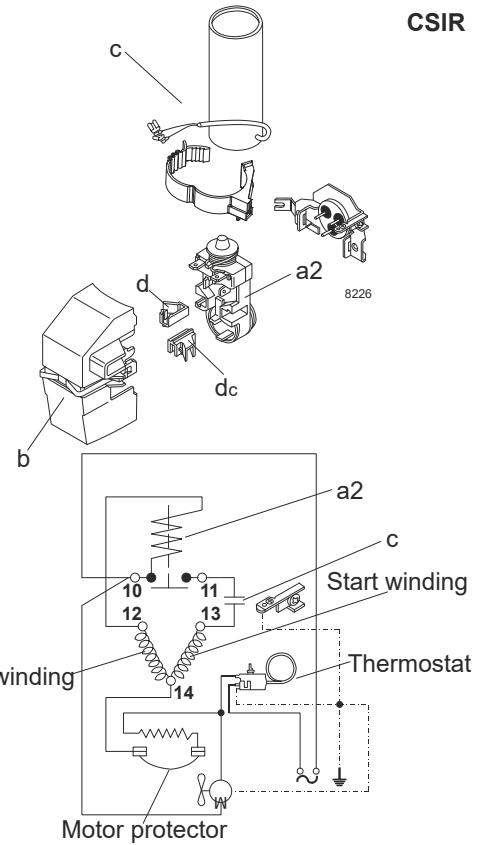
## Model

Designation	<b>NF7FK</b>	<b>115-127V/60Hz</b>	<b>Conf. 1</b>	Sales code:	<b>105G5745</b>
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## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115-127V/60Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	95-135V
Starting torque	HST
Approvals	UL EAC

## Electrical accessories / wiring diagram

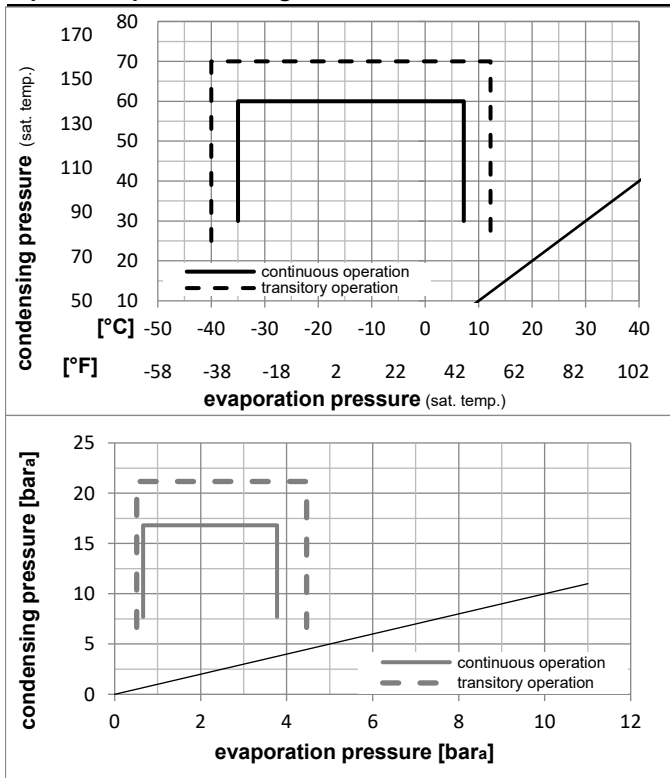


## Ambient temperatures / system cooling

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	static	static	n/a
38°C / 100°F	static	static	n/a
43°C / 110°F	fan 1,5m/s	fan 1,5m/s	n/a

## Operation pressure range



## Components (will be pre-assembled)

a2	current relay	117U4132
c	start capacitor (320µF)	117U5022
b	plastic cover	117U1021
d/dc	cord relief	117U0349

### Model

Designation **NF7FK** **115-127V/60Hz** Conf. 1 Sales code: **105G5745**

### Optimization + standard conditions

R134a, 115V/60Hz, CSIR, fan 3m/s, UL, EAC

		Evaporating pressure (saturation temperature)			Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption		
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Ref. mass flow							
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]							[W]	[A]	[kg/h]	ASHRAE LBP						
-23	54	32	32	244,1	834	210,1	1,20	4,09	1,03	203,6	2,87	4,74	ASHRAE LBP								
-10	130	90	90												ASHRAE LBP						
-25	55	32	55	180,0	615	154,9	0,93	3,17	0,80	193,9	2,82	4,30	cecomaf LBP								
-13	131	90	131												cecomaf LBP						
-35	40	20	40	119,4	408	102,8	0,98	3,34	0,84	122,1	2,52	2,62	EN12900 LBP								
-31	104	68	104												EN12900 LBP						
-7	54	35	46	487,7	1666	419,7	1,61	5,49	1,38	303,6	3,45	10,64	ASHRAE MBP								
20	130	95	115												ASHRAE MBP						
-10	55	32	55	380,5	1299	327,5	1,33	4,56	1,15	285,2	3,34	9,20	cecomaf MBP								
14	131	90	131												cecomaf MBP						
-10	45	20	45	423,0	1445	364,0	1,58	5,41	1,36	267,0	3,20	9,90	EN12900 MBP								
14	113	68	113												EN12900 MBP						

### Performance tables

R134a, 115V/60Hz, CSIR, fan 3m/s, UL, 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]	-35	-31	111,8	382	96,2	0,92	3,16	0,80	120,9	2,50	2,41
cond. pressure	-23	-10	229,3	783	197,4	1,18	4,04	1,02	193,7	2,81	4,97
pc= 45/113	-15	5	348,5	1190	299,9	1,45	4,95	1,25	240,3	3,05	7,60
return gas temp.	-9	15	449,9	1536	387,2	1,67	5,69	1,43	269,9	3,22	9,85
RGT= 32/90	-4	25	572,1	1954	492,3	1,92	6,54	1,65	298,7	3,40	12,59
liquid temp	0	32	671,6	2294	578,0	2,11	7,20	1,81	318,7	3,53	14,85
Tliq= 45/113	7,2	45	890,7	3042	766,5	2,50	8,55	2,15	356,0	3,78	19,90
[°C / °F]	-35	-31	90,6	309	78,0	0,71	2,43	0,61	127,1	2,50	2,16
cond. pressure	-23	-10	197,7	675	170,1	0,97	3,30	0,83	204,5	2,87	4,73
pc= 55/131	-15	5	302,0	1031	259,9	1,18	4,04	1,02	255,6	3,16	7,27
return gas temp	-9	15	390,1	1332	335,7	1,35	4,62	1,16	288,5	3,36	9,44
RGT= 32/90	-4	25	496,3	1695	427,1	1,55	5,28	1,33	321,1	3,57	12,08
liquid temp	0	32	583,0	1991	501,7	1,69	5,79	1,46	344,0	3,72	14,26
Tliq= 55/131	7,2	45	774,7	2646	666,7	2,00	6,83	1,72	387,1	4,01	19,16

## Model

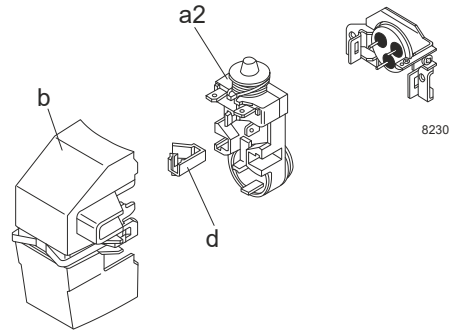
Designation	<b>NF7FK</b>	<b>115-127V/60Hz</b>	<b>Conf. 2</b>	Sales code:	<b>105G5745</b>
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## Configuration

Motorconfiguration	RSIR
Power supply (nominal)	115-127V/60Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	95-135V
Starting torque	LST
Approvals	UL EAC

## Electrical accessories / wiring diagram

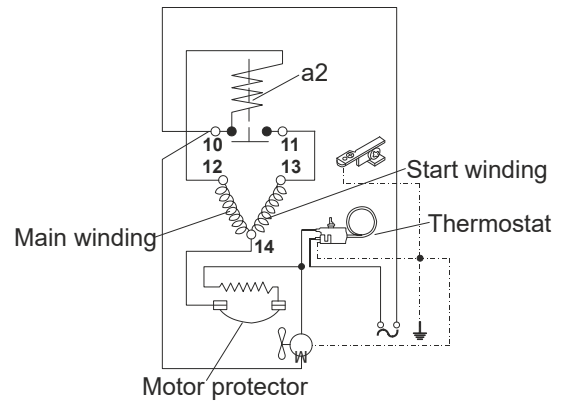
RSIR



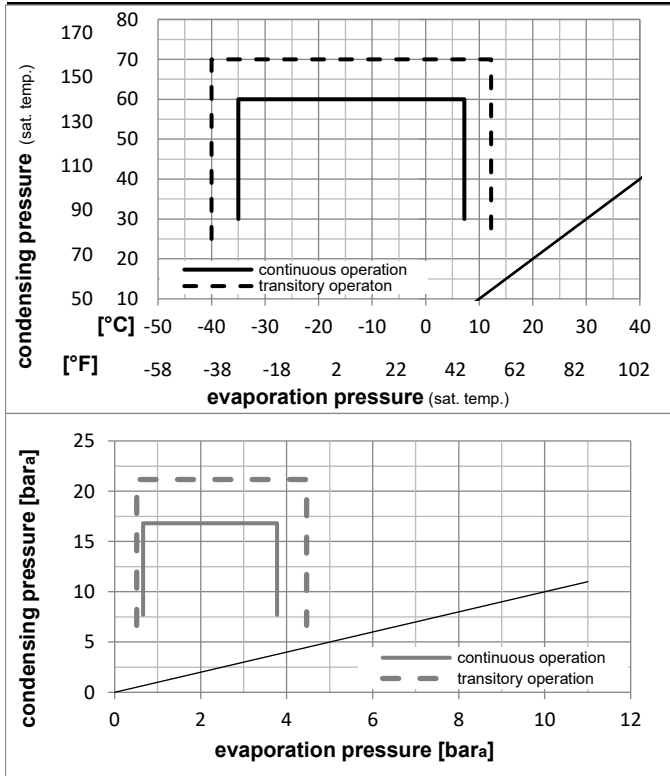
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T ambient	LBP	MBP	HBP
32°C / 90°F	static	static	n/a
38°C / 100°F	static	static	n/a
43°C / 110°F	fan 1,5m/s	fan 1,5m/s	n/a



## Operation pressure range



## Components (will be pre-assembled)

starter kit	117U4131
b plastic cover	117U1021
d/dc cord relief	117U0349

### Model

Designation **NF7FK** **115-127V/60Hz** Conf. 2 Sales code: **105G5745**

### Optimization + standard conditions

R134a, 115V/60Hz, RSIR, fan 3m/s, UL, EAC

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.	Liquid temp.	Cooling capacity	COP	EER	Power consumption			Ref. mass flow	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]						P1	I	m		
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
-23	-10	54	130	32	90	32	90	244,1	834	210,1	1,20	4,09	1,03	203,6	2,87	4,74	ASHRAE LBP
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