

Model

Designation	NF10FX	220V/50Hz 1~220V/60Hz 1~	Sales code:	105G6846
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	32cST	Displacement	10,09cm ³ / 0,62cu.in
Oil quantity	300cm ³ / 10,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	460g / 16,2oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	10,5kg / 23,1lbs		
Motor protection	external		
Winding resistance main	4,5Ω (at 25°C)		
Winding resistance aux	12,8Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	110°C / 230°F		



General - Configurations with NF10FX

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	CSIR
Power supply (nominal)	220-230V/50Hz	208-230V/60Hz
Number of phases	1	1
Voltage range	198-242V	198-242V
Approvals	UL, VDE, CCC, EAC	UL, VDE, CCC, EAC
Starting torque	HST	HST
Note	- / -	

Applications with NF10FX

	Conf. 1	Conf. 2
Refrigerant	R134a	R134a
Application	LBP+MBP	LBP+MBP
System cooling	fan 1,5m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Electrical data - Configurations with NF10FX

	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	- / -	- / -
Start capacitor	125μF	125μF
LRA (locked rotor amps / 4s)	20A	19,4A
RLA (rated load amps / 1s)	3,7A	3,24A
Cut in current	20A	19,4A
IP class	21	21

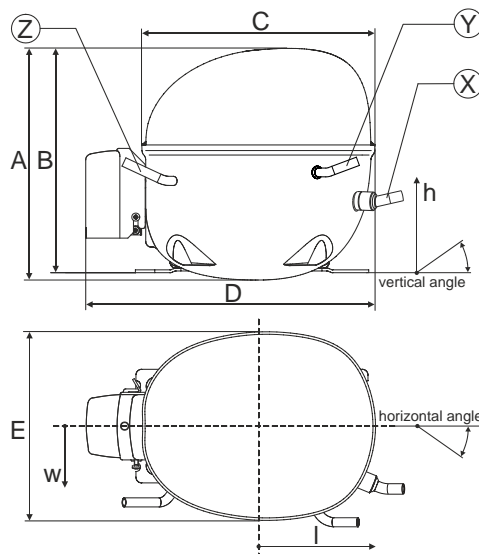
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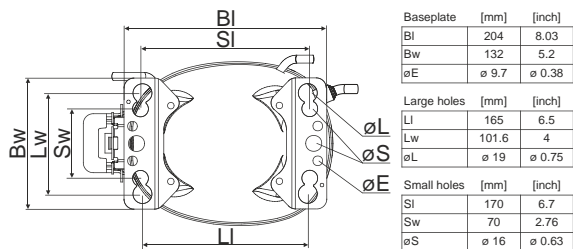
Compressor dimensions

Housing	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

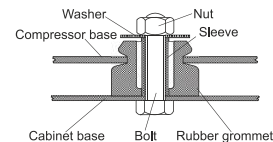
Connectors	Suction	Discharge	Process
	X	Y	Z
Diameter [mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material	copper	copper	copper
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	126/76/78	133/103/54	-107/94/72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



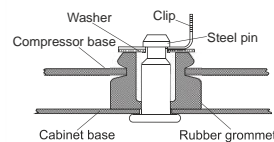
Compressor fixation



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

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

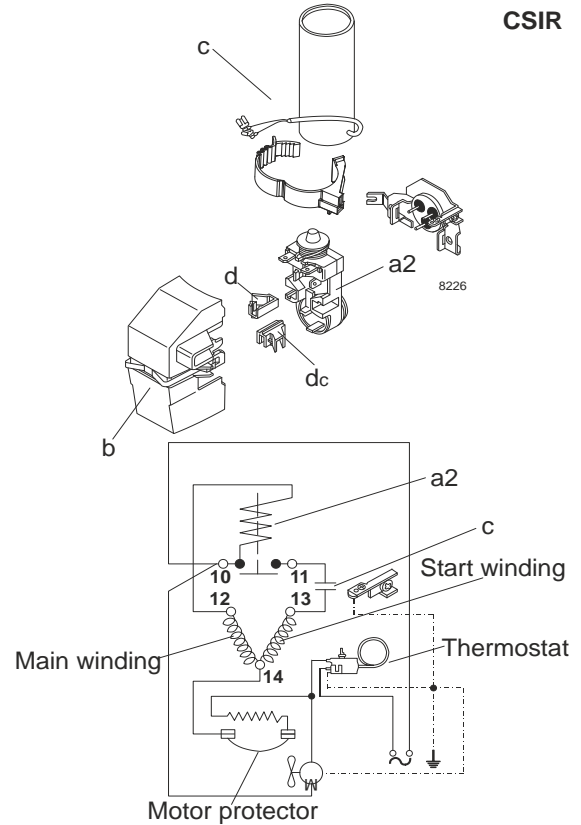
Model

Designation	NF10FX	220-230V/50Hz	Conf. 1	Sales code:	105G6846
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Configuration

Motorconfiguration	CSIR	
Power supply (nominal)	220-230V/50Hz 1~	
Refrigerant	R134a	
Application	LBP+MBP	
Voltage range	198-242V	
Starting torque	HST	
Approvals	UL	SA3693
	VDE	
	CCC	
	EAC	

Electrical accessories / wiring diagram

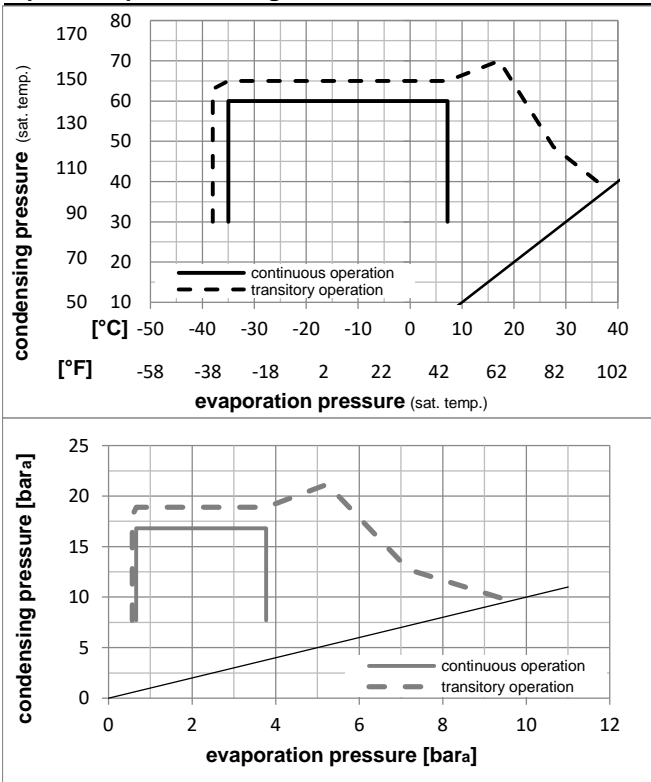


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 1,5m/s	fan 1,5m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	n/a	n/a	n/a

Operation pressure range



Components

a2	relay (protector: TI MRP56EN-6)	117U4139
c	start capacitor	117U5018
b	plastic cover	117U1021
d/dc	cord relief	117U0349
d/dc	cord relief	117U0349

Alternative components

a2	relay (protector: TI MRP56EN-6)	117U4139
c	start capacitor	117U5018
b	plastic cover	117U1021
d/dc	cord relief	117U0349
d	cord relief	117U0317

Model

Designation **NF10FX 220-230V/50Hz** Conf. 1 Sales code: **105G6846**

Optimization + standard conditions

220V/50Hz, CSIR, fan 1,5m/s, UL, VDE, CCC, EAC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption				ASHRAE LBP
					Return gas temp.						Current consumption				
					Liquid temp.						Ref. mass flow				
					Cooling capacity						P1				
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	COP	EER	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C]	-23,3	54,4	32,2	32,2	266,5	910	229,4	0,94	3,22	0,81	282,7	2,75	5,18		
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	196,4	671	169,0	0,72	2,47	0,62	271,1	2,73	4,70	cecomaf LBP	
[°F]	-13	131	89,6	131											
[°C]	-35	40	20	40	137,8	471	118,6	0,65	2,24	0,56	210,6	2,67	3,02	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-23,3	48,9	4,44	48,9	216,9	741	186,6	0,76	2,60	0,66	284,5	2,76	5,73	ARI540 LBP	
[°F]	-10	120	40	120											
[°C]	-23,3	40,6	32,2	32,2	294,6	1006	253,6	1,08	3,70	0,93	272,2	2,72	5,72	AHAM LBP	
[°F]	-10	105	90	90											
[°C]	-35	45	32	45	128,4	439	110,5	0,60	2,05	0,52	213,8	2,67	2,77	opt	
[°F]	-31	113	89,6	113											

Performance tables

220V/50Hz, CSIR, fan 1,5m/s, UL, VDE, 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]	-35	-31	128,4	439	110,5	0,60	2,05	0,52	213,8	2,67	2,77
cond. pressure	-23,3	-10	254,9	870	219,3	0,91	3,11	0,78	279,6	2,74	5,53
pc= 45/113	-15	5	392,2	1340	337,6	1,20	4,08	1,03	328,2	2,81	8,55
return gas temp.	-9,4	15	509,8	1741	438,7	1,41	4,83	1,22	360,5	2,86	11,16
RGT= 32/90	-3,9	25	650,6	2222	559,9	1,66	5,67	1,43	392,2	2,92	14,32
liquid temp	0	32	764,2	2610	657,7	1,85	6,31	1,59	413,8	2,96	16,90
Tliq= 45/113	7,2	45	1010,7	3452	869,9	2,24	7,63	1,92	452,2	3,05	22,58
[°C / °F]	-35	-31	103,5	353	89,0	0,49	1,67	0,42	211,0	2,65	2,46
cond. pressure	-23,3	-10	216,4	739	186,2	0,77	2,62	0,66	281,6	2,74	5,18
pc= 55/131	-15	5	338,8	1157	291,6	1,01	3,45	0,87	335,4	2,84	8,16
return gas temp	-9,4	15	443,9	1516	382,1	1,19	4,08	1,03	372,1	2,92	10,74
RGT= 32/90	-3,9	25	570,4	1948	490,9	1,40	4,77	1,20	408,8	3,01	13,88
liquid temp	0	32	672,8	2298	579,0	1,55	5,29	1,33	434,3	3,07	16,46
Tliq= 55/131	7,2	45	896,1	3060	771,2	1,86	6,36	1,60	480,8	3,21	22,16

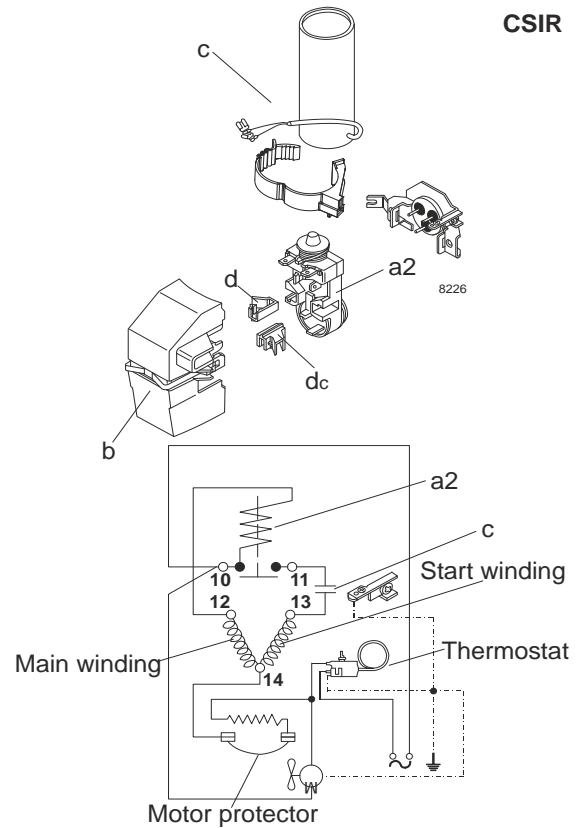
Model

Designation	NF10FX	208-230V/60Hz	Conf. 2	Sales code:	105G6846
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Configuration

Motorconfiguration	CSIR	
Power supply (nominal)	208-230V/60Hz 1~	
Refrigerant	R134a	
Application	LBP+MBP	
Voltage range	198-242V	
Starting torque	HST	
Approvals	UL	SA3693
	VDE	
	CCC	
	EAC	

Electrical accessories / wiring diagram

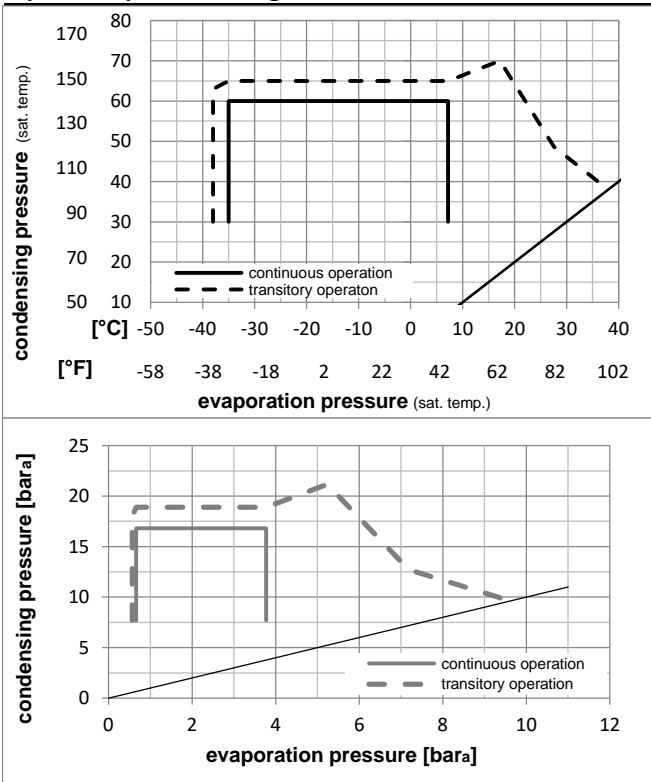


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°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	n/a	n/a	n/a

Operation pressure range



Components

a2	relay (protector: TI MRP56EN-6)	117U4139
c	start capacitor	117U5018
b	plastic cover	117U1021
d/dc	cord relief	117U0349
d/dc	cord relief	117U0349

Alternative components

a2	relay (protector: TI MRP56EN-6)	117U4139
c	start capacitor	117U5018
b	plastic cover	117U1021
d/dc	cord relief	117U0349
d	cord relief	117U0317

Model

Designation **NF10FX 208-230V/60Hz** Conf. **2** Sales code: **105G6846**

Optimization + standard conditions

220V/60Hz, CSIR, fan 3m/s, UL, VDE, CCC, EAC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)					Power consumption				
					Return gas temp.					Current consumption				
					Liquid temp.					Ref. mass flow				
					Cooling capacity					COP EER				
pe	pc	RGT	Tliq		[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	[°C]	[°C]	[°C]								[W]	[A]	[kg/h]	ASHRAE LBP
-23,3	54,4	32,2	32,2		299,0	1021	257,4	1,14	3,90	0,98	262,0	1,86	5,81	ASHRAE LBP
[°F]														
-10	130	90	90											
-25	55	32	55		223,1	762	192,0	0,89	3,03	0,76	251,1	1,82	5,33	cecomaf LBP
[°F]														
-13	131	89,6	131											
-35	40	20	40		157,5	538	135,5	0,92	3,14	0,79	171,0	1,67	3,46	EN12900 LBP
[°F]														
-31	104	68	104											
-23,3	48,9	4,44	48,9		238,9	816	205,6	0,92	3,16	0,80	258,3	1,85	6,31	ARI540 LBP
[°F]														
-10	120	40	120											
-23,3	40,6	32,2	32,2		317,0	1083	272,8	1,26	4,29	1,08	252,3	1,83	6,16	AHAM LBP
[°F]														
-10	105	90	90											
-35	45	32	45		144,8	495	124,6	0,83	2,83	0,71	174,7	1,66	3,12	opt
[°F]														
-31	113	89,6	113											

Performance tables

220V/60Hz, CSIR, fan 3m/s, UL, VDE, 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]	-35	-31	144,8	495	124,6	0,83	2,83	0,71	174,7	1,66	3,12	
cond. pressure	-23,3	-10	276,5	944	238,0	1,08	3,70	0,93	255,5	1,84	6,00	
pc= 45/113	-15	5	415,1	1418	357,3	1,35	4,60	1,16	308,5	2,01	9,05	
return gas temp.	-9,4	15	537,4	1835	462,5	1,56	5,34	1,34	343,9	2,13	11,77	
RGT= 32/90	-3,9	25	689,2	2354	593,2	1,81	6,18	1,56	381,0	2,26	15,17	
liquid temp	0	32	815,7	2786	702,0	2,00	6,82	1,72	408,5	2,36	18,04	
Tliq= 45/113	7,2	45	1100,9	3760	947,4	2,37	8,09	2,04	465,0	2,56	24,59	
[°C / °F]	-35	-31	121,9	416	104,9	0,67	2,28	0,57	182,6	1,62	2,90	
cond. pressure	-23,3	-10	242,9	830	209,1	0,93	3,16	0,80	262,3	1,86	5,81	
pc= 55/131	-15	5	362,7	1239	312,1	1,13	3,87	0,98	319,8	2,05	8,73	
return gas temp	-9,4	15	467,3	1596	402,1	1,30	4,42	1,11	360,8	2,20	11,30	
RGT= 32/90	-3,9	25	597,2	2040	514,0	1,47	5,03	1,27	405,3	2,35	14,54	
liquid temp	0	32	705,9	2411	607,5	1,61	5,49	1,38	439,3	2,47	17,27	
Tliq= 55/131	7,2	45	952,7	3254	819,9	1,87	6,38	1,61	510,2	2,70	23,56	