

Model
NF10FX

Sales code:
105G6863

Compressor Data

Refrigerant(s)	R134a
Refr. charge - tech. limit	460g / 16.23oz
Weight	10.50 kg / 23.15lbs
Displacement	10.09 cm3 / 0.62cu.in
Compressors on pallet	80



General – Configurations With NF10FX

-	Conf. 1	Conf. 2
Motor configuration	CSIR	CSIR
Power supply (nominal)	220-240 V/50 Hz	208-230 V/60 Hz
Number of phases	1	1
Voltage range	198-242 V	198-242 V
Approvals	CCC, EAC, UL	CCC, EAC, UL
Starting torque	HST	HST
Refrigerant	R134a	R134a
Application	LBP+MBP	LBP+MBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

- Electrical equipment is included and pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor

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Compressor Design

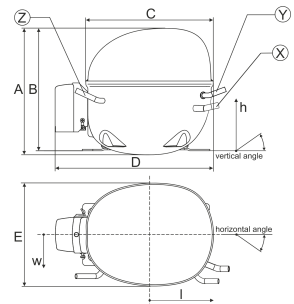
Oil type	POE	Winding resistance main	4.6 Ohm
Oil viscosity	32cSt	Winding resistance aux	12.8 Ohm
Oil quantity	298 / 10.08fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm ³ / 79.80fl.oz	Max. discharge temp.	110°C / 230°F
Motor protection	external		

Compressor Dimensions

Housing

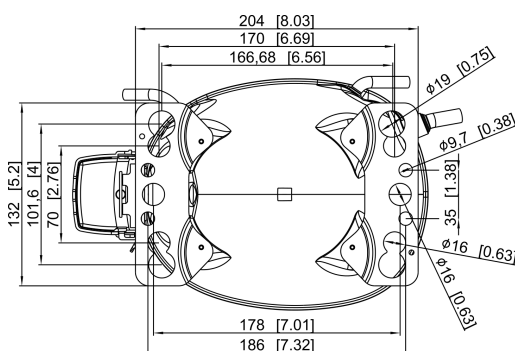
A Height	203mm / 7.99in
B Height	197mm / 7.76in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

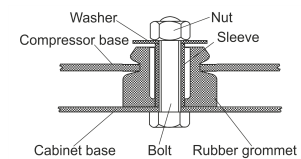


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in	-107/93.5/72 / -4.21/3.68/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

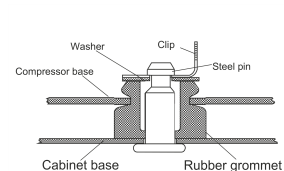
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	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

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Configuration 1

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Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-242 V
Starting torque	HST
Approvals	CCC, EAC, UL
Starting device type	relay
Run capacitor	-/-
Start capacitor	125 µF
LRA (locked rotor amps / 4s/ U(N))	20 A
RLA (rated load amps / 1s/ U(N))	3.7 A
Cut in current (U(N))	20 A

Ambient/ machine room temperatures minimum /maximum

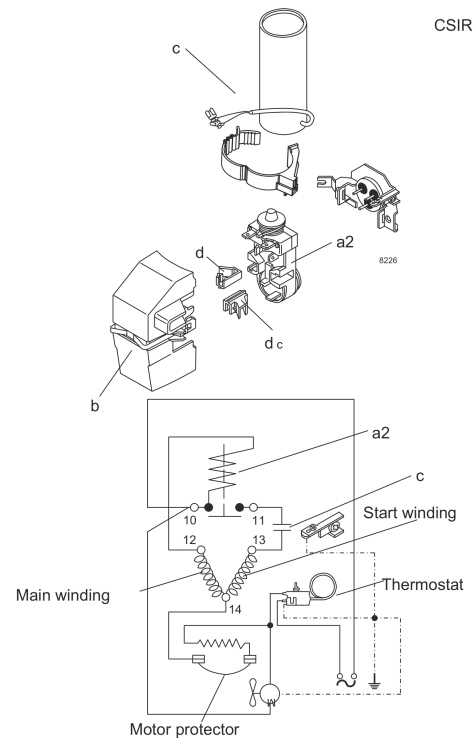
Ambient temperature range: 10 - 38°C / 50 - 100°F

Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling

fan 1,5m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components (already pre-assembled)

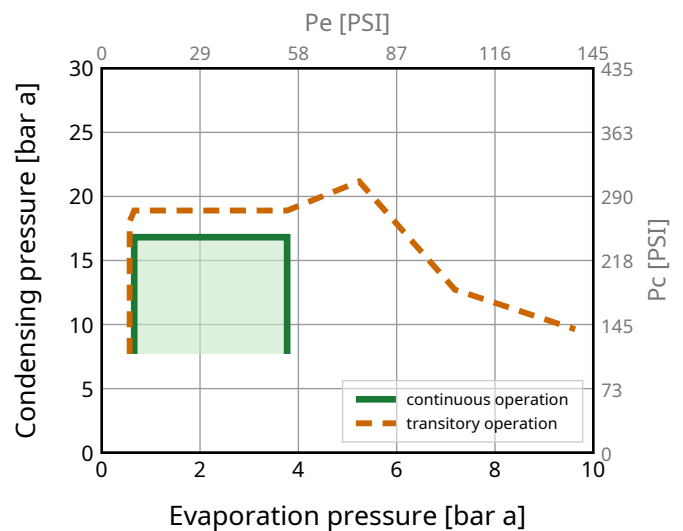
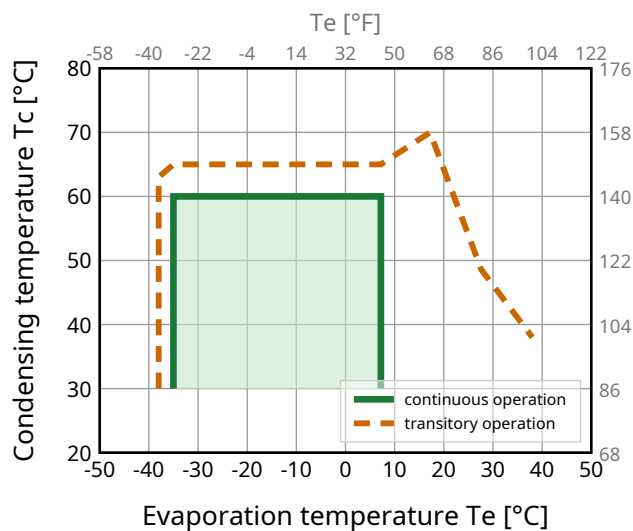
a2 relay (protector: TI MRP56EN-6) 117U4139

c start capacitor 117U5018

b plastic cover + clamp 117U1021

d/dc cord relief 117U0349

Operation Pressure Range



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Configuration 1

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Standard Conditions

R134a, 220 V/50 Hz, CSIR, fan 1,5m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	267	910	229	0.94	3.21	283	2.75	5.17	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	196	670	169	0.72	2.47	271	2.73	4.68	CECOMAF LBP
-35 -31	40 104	20 68	40 104	138	471	119	0.66	2.23	211	2.67	3.02	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	555	1895	478	1.42	4.85	391	2.96	12.09	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	432	1476	372	1.17	4.01	368	2.91	10.43	CECOMAF MBP
-10 14	45 113	20 68	45 113	480	1637	413	1.34	4.58	357	2.85	11.19	EN12900 MBP

Performance Tables

R134a, 220 V/50 Hz, CSIR, fan 1,5m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	128	438	110	0.60	2.05	214	2.67	2.77
-30	-22	174	594	150	0.72	2.46	242	2.70	3.76
-20	-4	305	1039	262	1.02	3.48	299	2.77	6.60
-10	14	497	1696	427	1.39	4.75	357	2.85	10.85
0	32	764	2607	657	1.85	6.30	414	2.96	16.86
7.2	45	1010	3446	869	2.23	7.62	452	3.05	22.50

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	104	353	89	0.49	1.67	211	2.65	2.46
-30	-22	144	493	124	0.60	2.05	240	2.68	3.44
-20	-4	261	889	224	0.86	2.93	303	2.78	6.23
-10	14	432	1476	372	1.17	4.01	368	2.91	10.43
0	32	673	2296	579	1.55	5.29	434	3.07	16.41
7.2	45	895	3055	770	1.86	6.36	481	3.21	22.07

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Configuration 2

Sales code:
105G6863

Configuration

Motor configuration	CSIR
Power supply (nominal)	208-230 V/60 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-242 V
Starting torque	HST
Approvals	CCC, EAC, UL
Starting device type	relay
Run capacitor	-/-
Start capacitor	125 µF
LRA (locked rotor amps / 4s/ U(N))	20 A
RLA (rated load amps / 1s/ U(N))	3.7 A
Cut in current (U(N))	20 A

Ambient/ machine room temperatures minimum /maximum

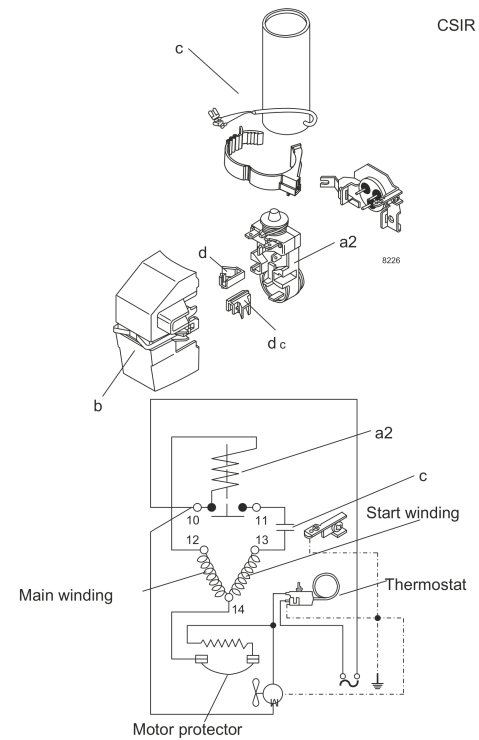
Ambient temperature range: 10 - 38°C / 50 - 100°F

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System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components (already pre-assembled)

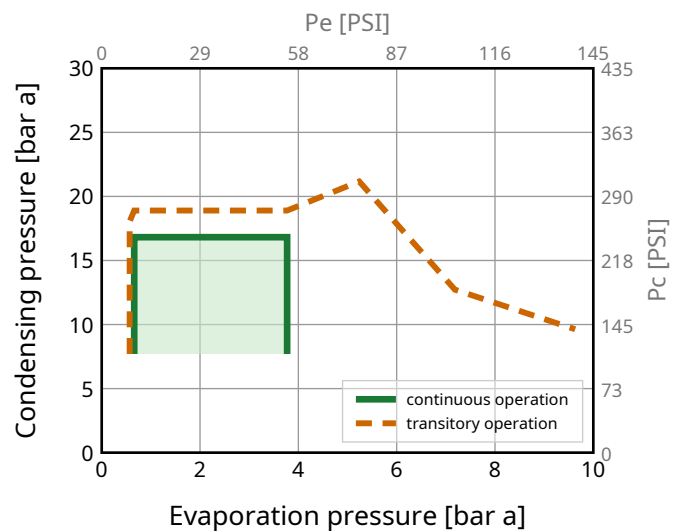
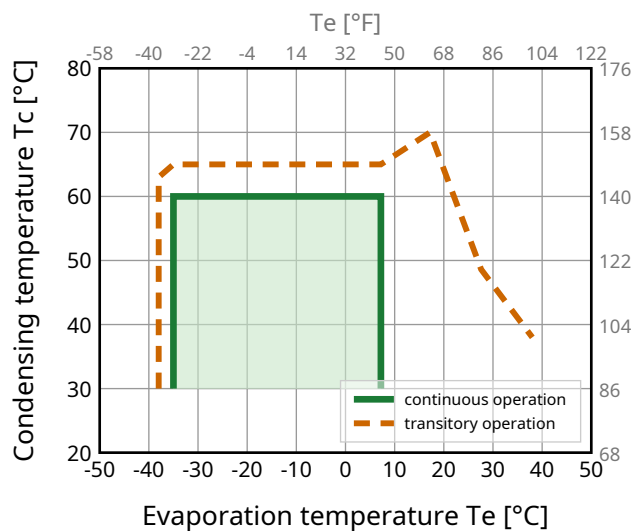
a2 relay (protector: TI MRP56EN-6) 117U4139

c start capacitor 117U5018

b plastic cover + clamp 117U1021

d/dc cord relief 117U0349

Operation Pressure Range



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Configuration 2

Sales code:
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Standard Conditions

R134a, 230 V/60 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	299	1020	257	1.14	3.89	262	1.86	5.80	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	223	761	192	0.89	3.03	251	1.82	5.32	CECOMAF LBP
-35 -31	40 104	20 68	40 104	158	538	136	0.92	3.15	171	1.67	3.45	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	583	1990	502	1.53	5.22	381	2.27	12.70	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	456	1555	392	1.28	4.36	357	2.18	10.99	CECOMAF MBP
-10 14	45 113	20 68	45 113	506	1726	435	1.49	5.07	340	2.12	11.80	EN12900 MBP

Performance Tables

R134a, 230 V/60 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	145	494	125	0.83	2.83	175	1.66	3.12
-30	-22	195	664	167	0.92	3.15	211	1.73	4.20
-20	-4	326	1113	281	1.18	4.02	277	1.91	7.08
-10	14	524	1788	451	1.54	5.25	340	2.12	11.44
0	32	816	2783	702	2.00	6.81	408	2.36	18.00
7.2	45	1100	3753	946	2.37	8.07	465	2.56	24.51

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	122	416	105	0.67	2.28	183	1.62	2.89
-30	-22	170	578	146	0.78	2.66	217	1.72	4.03
-20	-4	286	977	246	1.00	3.43	285	1.93	6.85
-10	14	456	1555	392	1.28	4.36	357	2.18	10.99
0	32	706	2409	607	1.61	5.48	439	2.47	17.21
7.2	45	952	3248	819	1.87	6.37	510	2.69	23.46