

Model
NF7CLX

Sales code:
105F1721

Compressor Data

Refrigerant(s)	R404A / R452A
Refr. charge - tech. limit	400g / 14.11oz
Weight	10.00 kg / 22.05lbs
Displacement	7.27 cm3 / 0.44cu.in
Compressors on pallet	80



General – Configurations With NF7CLX

-	Conf. 1	Conf. 2
Motor configuration	CSIR	CSIR
Power supply (nominal)	115 V/60 Hz	115 V/60 Hz
Number of phases	1	1
Voltage range	95-135 V	95-135 V
Approvals	UL, CCC, EAC	UL, CCC, EAC
Starting torque	HST	HST
Refrigerant	R404A	R452A
Application	LBP+MBP	LBP+MBP
Long interval pull down	OK	OK

Application Notes

- Provision for PE Grounding is located at the PE Stamp on the compressor

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Compressor Design

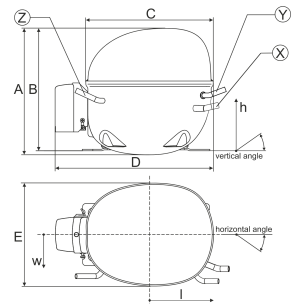
Oil type	POE	Winding resistance main	1.62 Ohm
Oil viscosity	32cSt	Winding resistance aux	4.9 Ohm
Oil quantity	303 / 10.25fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,280 cm ³ / 77.10fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	external		

Compressor Dimensions

Housing

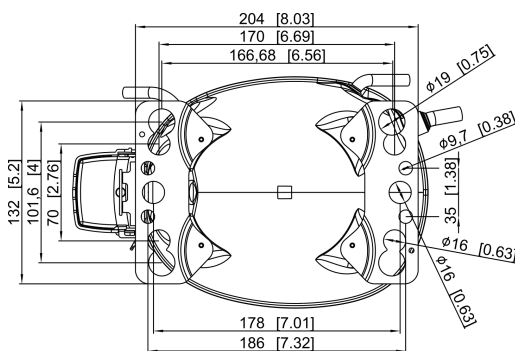
A Height	197mm / 7.76in
B Height	191mm / 7.52in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[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

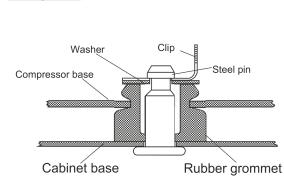
Mounting Accessories



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)	115 V/60 Hz 1~
Refrigerant	R404A
Application	LBP+MBP
Voltage range	95-135 V
Starting torque	HST
Approvals	UL, CCC, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	320 µF
LRA (locked rotor amps / 4s/ U(N))	30.8 A
RLA (rated load amps / 1s/ U(N))	4.9 A
Cut in current (U(N))	30.8 A

Ambient/ machine room temperatures minimum /maximum

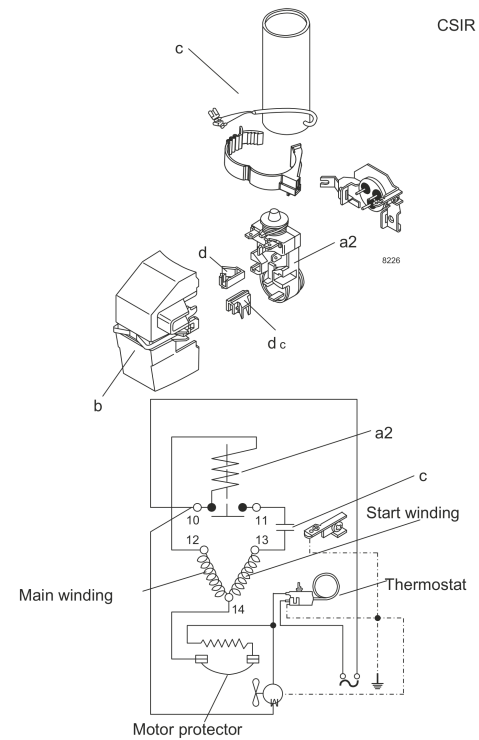
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

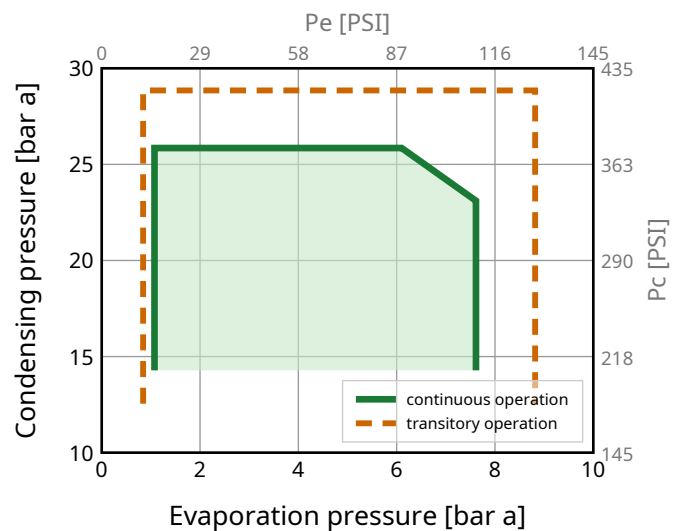
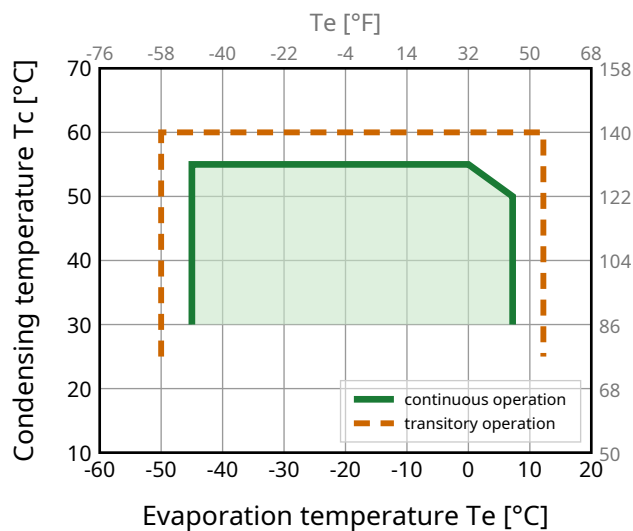
a2 current relay (MRT22AFZ-6) 117U4129

c start capacitor (320µF) 117U5022

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

R404A, 115 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	452	1543	389	1.23	4.19	368	4.53	10.52	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	306	1042	263	0.86	2.95	353	4.44	9.53	CECOMAF LBP
-35 -31	40 104	20 68	40 104	248	847	213	0.93	3.18	266	3.90	6.72	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	342	1166	294	0.94	3.21	363	4.46	12.06	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	514	1752	442	1.46	4.98	352	4.37	11.94	AHAM LBP
-35 -31	45 113	32 89.6	45 113	230	786	198	0.86	2.94	267	3.91	6.14	opt LBP

Performance Tables

R404A, 115 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]
-45	-49	111	379	95	0.59	2.00	189	3.64	2.94
-40	-40	166	565	143	0.72	2.47	228	3.76	4.40
-30	-22	307	1047	264	1.00	3.43	306	4.10	8.22
-20	-4	502	1711	431	1.30	4.44	385	4.60	13.58
-10	14	763	2604	656	1.61	5.51	473	5.26	20.98
0	32	1105	3771	950	1.93	6.58	573	6.07	31.03
7.2	45	1408	4805	1211	2.15	7.33	656	6.75	40.36

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

-45	-49	70	240	60	0.40	1.37	175	3.60	2.15
-40	-40	115	392	99	0.52	1.78	220	3.75	3.53
-30	-22	231	787	198	0.75	2.55	309	4.17	7.16
-20	-4	394	1343	338	0.99	3.37	399	4.74	12.36
-10	14	616	2103	530	1.24	4.24	496	5.47	19.71
0	32	913	3115	785	1.51	5.15	604	6.36	29.91
7.2	45	1179	4024	1014	1.70	5.81	693	7.09	39.56

Model
NF7CLX

Configuration 2

Sales code:
105F1721

Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R452A
Application	LBP+MBP
Voltage range	95-135 V
Starting torque	HST
Approvals	UL, CCC, EAC
Starting device type	relay
Run capacitor	-/-
Start capacitor	320 µF
LRA (locked rotor amps / 4s/ U(N))	30.8 A
RLA (rated load amps / 1s/ U(N))	4.9 A
Cut in current (U(N))	30.8 A

Ambient/ machine room temperatures minimum /maximum

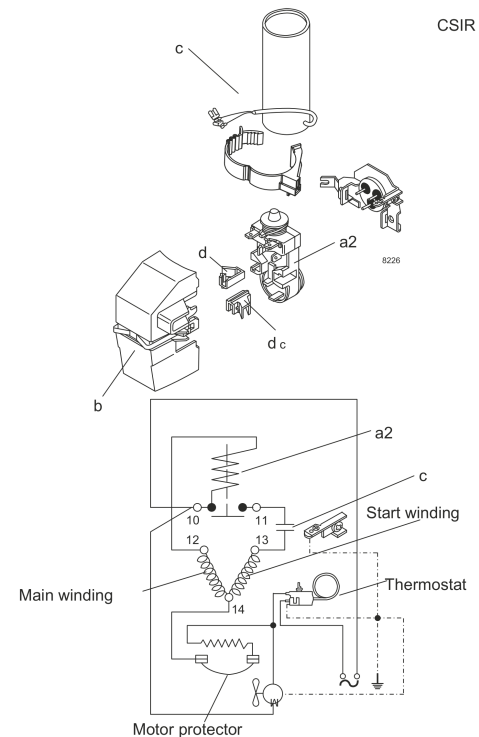
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



Components

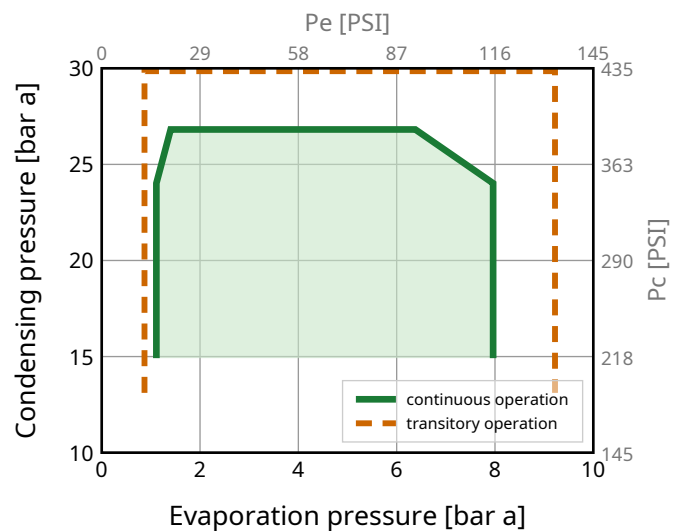
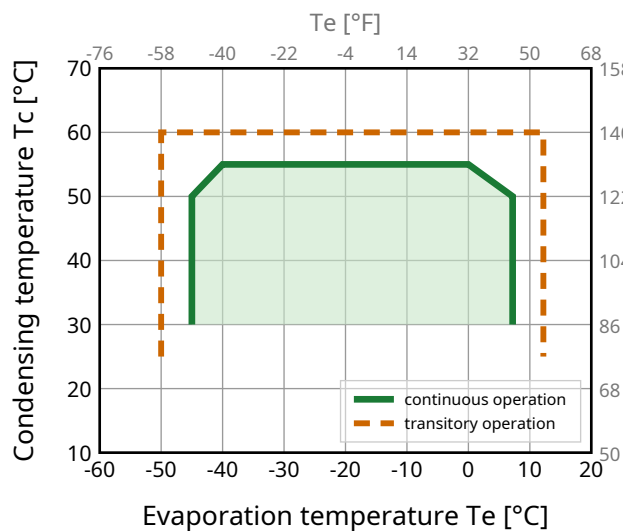
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c start capacitor (320µF) 117U5022

b plastic cover + clamp 117U1021

d/dc cord relief 117U0349

Operation Pressure Range



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Configuration 2

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Standard Conditions

R452A, 115 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	415	1417	357	1.21	4.13	343	4.45	10.05	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	281	959	242	0.86	2.92	328	4.34	9.07	CECOMAF LBP
-35 -31	40 104	20 68	40 104	224	763	192	0.91	3.10	246	3.77	6.29	EN12900 LBP
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	317	1080	272	0.93	3.18	339	4.42	11.56	ARI540 LBP
-23.3 -10	40.6 105.1	32.2 90	32.2 90	473	1615	407	1.44	4.90	330	4.35	11.45	AHAM LBP
-35 -31	45 113	32 89.6	45 113	207	706	178	0.84	2.87	246	3.77	5.73	opt LBP

Performance Tables

R452A, 115 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]
-45	-49	94	322	81	0.56	1.90	169	3.25	2.60
-40	-40	146	497	125	0.70	2.40	208	3.51	4.02
-30	-22	279	953	240	0.99	3.36	283	4.03	7.77
-20	-4	466	1589	401	1.29	4.39	362	4.58	13.10
-10	14	719	2453	618	1.60	5.46	449	5.18	20.52
0	32	1053	3591	905	1.92	6.53	550	5.87	30.69
7.2	45	1351	4609	1162	2.13	7.27	634	6.45	40.19

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

-45	-49	57	196	49	0.38	1.28	153	3.13	1.82
-40	-40	99	339	85	0.50	1.72	197	3.44	3.16
-30	-22	209	714	180	0.74	2.51	284	4.04	6.72
-20	-4	366	1249	315	0.98	3.35	373	4.65	11.89
-10	14	583	1991	502	1.24	4.23	470	5.32	19.28
0	32	875	2987	753	1.51	5.15	580	6.08	29.64
7.2	45	1140	3888	980	1.70	5.80	671	6.71	39.51