

COMPRESSOR DEFINITION

Designation	FMF T411U
Nominal Voltage/Frequency	230 V 60-150 Hz
Engineering Number	513805008

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	230 / 60-150	[V / Hz]	
4 Application type	Low-Medium Back Pressure (Light Commercial - Curves until T.Evap -		
4.1 Evaporating temperature range	-40°C to 0°C	(-40°F to 32°F)	
5 Motor type	BPM		
6 Starting torque	HST - High starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	Fan	103 to 140 V	103 to 140 V
8.2 LBP (43°C Ambient temperature)	Fan	103 to 140 V	103 to 140 V
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	18.4	[kgf/cm ²] (262 psig)	/ °C - °F
9.2 Peak	20.6	[kgf/cm ²] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	3/4	[hp]
2 Displacement	11.14	[cm ³] (0.680 cu.in)
2.1 Bore [mm]	26.000	
2.2 Stroke [mm]	21.000	
3 Lubricant charge	430	[ml] (14.54 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO22	
4 Weight (with oil charge)	10.8	[kg] (23.81 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	230 V 60-150 Hz 3 ~ (Three phase)	
2 Starting device type	Inverter	
2.1 Starting device	CF05D01 N XX XX	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	INVERTER CF05D01 N X	
6 Start winding resistance	4.60	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	4.60	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	6.15	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	6.15	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50/60 Hz)	6.15	[A] - Measured according to UL 984
11 Approval boards certification	CCC - CE - TUV - UKCA - UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V1800RPM			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature)		-23.3°C (-9.94°F) 54.4°C (129.92°F)	
Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
1215	306	356	186	2.39	3.62	6.53	1.65	1.91

TEST CONDITIONS: @115V2400RPM			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature)		-23.3°C (-9.94°F) 54.4°C (129.92°F)	
Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
1611	406	472	246	3.10	4.80	6.55	1.65	1.92

TEST CONDITIONS: @115V3000RPM			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature)		-23.3°C (-9.94°F) 54.4°C (129.92°F)	
Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
2020	509	592	312	3.88	6.01	6.48	1.63	1.90

TEST CONDITIONS: @115V3600RPM			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature)		-23.3°C (-9.94°F) 54.4°C (129.92°F)	
Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
2337	589	685	369	4.53	6.96	6.34	1.60	1.86

TEST CONDITIONS: @115V4500RPM			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature)		-23.3°C (-9.94°F) 54.4°C (129.92°F)	
Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
2948	743	864	481	5.78	8.77	6.13	1.54	1.80

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V1800RPM		ASHRAE32 Fan			(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	639	161	187	105	1.43	1.89	6.11	1.54	1.79
-35	(-31)	830	209	243	121	1.62	2.46	6.80	1.71	1.99
-30	(-22)	1041	262	305	137	1.82	3.09	7.52	1.90	2.20
-25	(-13)	1282	323	376	154	2.03	3.81	8.34	2.10	2.44
-20	(- 4)	1561	393	457	169	2.22	4.66	9.30	2.34	2.72
-15	(+ 5)	1885	475	552	182	2.39	5.65	10.46	2.64	3.06
-10	(+14)	2264	570	663	193	2.52	6.81	11.88	2.99	3.48
-5	(+23)	2705	682	793	200	2.59	8.18	13.61	3.43	3.99
0	(+32)	3217	811	943	203	2.60	9.78	15.71	3.96	4.60

TEST CONDITIONS: @115V1800RPM		ASHRAE32 Fan			(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	582	147	171	109	1.46	1.72	5.41	1.36	1.58
-35	(-31)	764	193	224	127	1.68	2.26	5.99	1.51	1.76
-30	(-22)	970	244	284	147	1.91	2.88	6.56	1.65	1.92
-25	(-13)	1206	304	353	167	2.16	3.59	7.18	1.81	2.10
-20	(- 4)	1482	374	434	186	2.41	4.42	7.89	1.99	2.31
-15	(+ 5)	1807	455	529	205	2.64	5.41	8.76	2.21	2.57
-10	(+14)	2187	551	641	222	2.85	6.58	9.84	2.48	2.88
-5	(+23)	2632	663	771	236	3.01	7.96	11.18	2.82	3.28
0	(+32)	3150	794	923	246	3.12	9.58	12.85	3.24	3.77

TEST CONDITIONS: @115V1800RPM		ASHRAE32 Fan			(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	515	130	151	108	1.47	1.52	4.79	1.21	1.40
-35	(-31)	690	174	202	130	1.71	2.04	5.34	1.34	1.56
-30	(-22)	889	224	261	153	1.99	2.64	5.82	1.47	1.71
-25	(-13)	1122	283	329	178	2.29	3.33	6.30	1.59	1.85
-20	(- 4)	1397	352	409	203	2.60	4.17	6.83	1.72	2.00
-15	(+ 5)	1721	434	504	228	2.91	5.15	7.47	1.88	2.19
-10	(+14)	2104	530	616	252	3.19	6.33	8.27	2.08	2.42
-5	(+23)	2553	643	748	273	3.45	7.72	9.30	2.34	2.72
0	(+32)	3077	775	902	292	3.66	9.35	10.59	2.67	3.10

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V1800RPM		ASHRAE32 Fan			(Condensing temperature 65°C (+149°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	438	110	128	104	1.45	1.29	4.13	1.04	1.21
-35	(-31)	605	152	177	129	1.73	1.79	4.70	1.19	1.38
-30	(-22)	799	201	234	158	2.06	2.37	5.17	1.30	1.51
-25	(-13)	1029	259	302	188	2.42	3.06	5.58	1.41	1.63
-20	(- 4)	1303	328	382	220	2.80	3.88	5.99	1.51	1.76
-15	(+ 5)	1628	410	477	252	3.18	4.87	6.47	1.63	1.90
-10	(+14)	2014	507	590	283	3.56	6.06	7.06	1.78	2.07
-5	(+23)	2468	622	723	313	3.92	7.46	7.82	1.97	2.29
0	(+32)	2999	756	879	341	4.24	9.11	8.82	2.22	2.58

TEST CONDITIONS: @115V3000RPM		ASHRAE32 Fan			(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	1038	262	304	183	2.35	3.07	5.67	1.43	1.66
-35	(-31)	1358	342	398	215	2.74	4.02	6.26	1.58	1.83
-30	(-22)	1715	432	503	245	3.10	5.09	6.97	1.76	2.04
-25	(-13)	2124	535	622	272	3.43	6.32	7.82	1.97	2.29
-20	(- 4)	2595	654	761	298	3.73	7.74	8.80	2.22	2.58
-15	(+ 5)	3143	792	921	320	4.00	9.41	9.93	2.50	2.91
-10	(+14)	3779	952	1107	341	4.22	11.37	11.20	2.82	3.28
-5	(+23)	4516	1138	1323	358	4.39	13.66	12.64	3.19	3.70
0	(+32)	5366	1352	1572	374	4.51	16.32	14.24	3.59	4.17

TEST CONDITIONS: @115V3000RPM		ASHRAE32 Fan			(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	989	249	290	190	2.42	2.92	5.24	1.32	1.54
-35	(-31)	1289	325	378	225	2.84	3.81	5.69	1.43	1.67
-30	(-22)	1635	412	479	259	3.25	4.85	6.23	1.57	1.83
-25	(-13)	2041	514	598	293	3.65	6.07	6.88	1.73	2.02
-20	(- 4)	2520	635	738	326	4.04	7.52	7.66	1.93	2.24
-15	(+ 5)	3082	777	903	358	4.40	9.23	8.55	2.16	2.51
-10	(+14)	3742	943	1096	390	4.75	11.26	9.58	2.41	2.81
-5	(+23)	4511	1137	1322	421	5.06	13.64	10.75	2.71	3.15
0	(+32)	5402	1361	1583	451	5.34	16.42	12.06	3.04	3.53

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V3000RPM		ASHRAE32 Fan			(Condensing temperature 55°C (+131°F))					
Evaporating temperature	Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%			
	°C	(°F)	[Btu/h]				[kcal/h]	[W]	[Btu/Wh]	[kcal/Wh]
-40	(-40)	921	232	270	192	2.44	2.72	4.87	1.23	1.43
-35	(-31)	1173	296	344	226	2.86	3.47	5.22	1.32	1.53
-30	(-22)	1480	373	434	262	3.29	4.39	5.66	1.43	1.66
-25	(-13)	1856	468	544	298	3.73	5.52	6.19	1.56	1.81
-20	(- 4)	2312	583	677	336	4.17	6.90	6.81	1.72	2.00
-15	(+ 5)	2861	721	838	375	4.62	8.57	7.54	1.90	2.21
-10	(+14)	3516	886	1030	416	5.05	10.58	8.38	2.11	2.46
-5	(+23)	4289	1081	1257	457	5.48	12.97	9.34	2.35	2.74
0	(+32)	5192	1308	1521	500	5.90	15.78	10.43	2.63	3.06

TEST CONDITIONS: @115V3000RPM		ASHRAE32 Fan			(Condensing temperature 65°C (+149°F))					
Evaporating temperature	Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%			
	°C	(°F)	[Btu/h]				[kcal/h]	[W]	[Btu/Wh]	[kcal/Wh]
-40	(-40)	836	211	245	188	2.42	2.47	4.34	1.09	1.27
-35	(-31)	1011	255	296	219	2.81	2.99	4.66	1.18	1.37
-30	(-22)	1250	315	366	252	3.23	3.70	5.05	1.27	1.48
-25	(-13)	1566	395	459	289	3.68	4.65	5.52	1.39	1.62
-20	(- 4)	1972	497	578	329	4.15	5.88	6.05	1.53	1.77
-15	(+ 5)	2479	625	726	372	4.65	7.42	6.68	1.68	1.96
-10	(+14)	3100	781	908	418	5.15	9.33	7.39	1.86	2.17
-5	(+23)	3848	970	1128	467	5.67	11.64	8.21	2.07	2.41
0	(+32)	4736	1193	1388	519	6.18	14.39	9.13	2.30	2.67

TEST CONDITIONS: @115V3600RPM		ASHRAE32 Fan			(Condensing temperature 35°C (+95°F))					
Evaporating temperature	Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%			
	°C	(°F)	[Btu/h]				[kcal/h]	[W]	[Btu/Wh]	[kcal/Wh]
-40	(-40)	1281	323	375	226	2.96	3.79	5.59	1.41	1.64
-35	(-31)	1437	362	421	239	3.02	4.25	6.12	1.54	1.79
-30	(-22)	1794	452	526	268	3.29	5.32	6.77	1.71	1.98
-25	(-13)	2319	584	679	307	3.71	6.89	7.53	1.90	2.21
-20	(- 4)	2975	750	872	352	4.21	8.88	8.41	2.12	2.46
-15	(+ 5)	3728	939	1092	396	4.72	11.17	9.40	2.37	2.75
-10	(+14)	4543	1145	1331	435	5.18	13.68	10.49	2.64	3.07
-5	(+23)	5386	1357	1578	464	5.50	16.29	11.69	2.95	3.42
0	(+32)	6223	1568	1823	477	5.63	18.92	12.98	3.27	3.80

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V3600RPM		ASHRAE32 Fan			(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	1092	275	320	218	3.01	3.23	4.98	1.25	1.46
-35	(-31)	1311	330	384	245	3.22	3.88	5.43	1.37	1.59
-30	(-22)	1708	430	500	285	3.61	5.06	5.99	1.51	1.76
-25	(-13)	2248	566	659	334	4.12	6.68	6.66	1.68	1.95
-20	(- 4)	2895	730	848	385	4.67	8.64	7.43	1.87	2.18
-15	(+ 5)	3616	911	1060	433	5.21	10.84	8.30	2.09	2.43
-10	(+14)	4376	1103	1282	474	5.65	13.17	9.26	2.33	2.71
-5	(+23)	5139	1295	1506	502	5.94	15.54	10.32	2.60	3.02
0	(+32)	5872	1480	1721	512	5.99	17.85	11.47	2.89	3.36

TEST CONDITIONS: @115V3600RPM		ASHRAE32 Fan			(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	979	247	287	214	2.93	2.89	4.58	1.15	1.34
-35	(-31)	1222	308	358	251	3.26	3.61	4.96	1.25	1.45
-30	(-22)	1618	408	474	298	3.75	4.80	5.43	1.37	1.59
-25	(-13)	2133	537	625	351	4.33	6.34	6.00	1.51	1.76
-20	(- 4)	2732	689	801	404	4.92	8.15	6.67	1.68	1.95
-15	(+ 5)	3381	852	991	452	5.46	10.13	7.43	1.87	2.18
-10	(+14)	4045	1019	1185	490	5.88	12.17	8.27	2.08	2.42
-5	(+23)	4689	1182	1374	513	6.11	14.17	9.19	2.32	2.69
0	(+32)	5278	1330	1547	516	6.07	16.04	10.19	2.57	2.99

TEST CONDITIONS: @115V3600RPM		ASHRAE32 Fan			(Condensing temperature 65°C (+149°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	942	237	276	216	2.71	2.78	4.29	1.08	1.26
-35	(-31)	1168	294	342	258	3.16	3.45	4.59	1.16	1.35
-30	(-22)	1523	384	446	307	3.73	4.52	4.99	1.26	1.46
-25	(-13)	1974	498	578	360	4.36	5.87	5.47	1.38	1.60
-20	(- 4)	2486	626	728	410	4.97	7.41	6.03	1.52	1.77
-15	(+ 5)	3023	762	886	453	5.49	9.05	6.68	1.68	1.96
-10	(+14)	3551	895	1041	484	5.86	10.67	7.40	1.86	2.17
-5	(+23)	4036	1017	1182	497	6.01	12.19	8.19	2.06	2.40
0	(+32)	4442	1119	1302	487	5.87	13.51	9.06	2.28	2.65

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 35°C (+95°F))					
@115V4500RPM		Fan								
Evaporating temperature	Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP			
	+/- 5%						+/- 5%	+/- 5%	+/- 7%	
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]	
-40 (-40)	1497	377	439	281	3.45	4.43	5.26	1.33	1.54	
-35 (-31)	1834	462	537	322	3.96	5.42	5.81	1.46	1.70	
-30 (-22)	2309	582	676	366	4.47	6.84	6.41	1.61	1.88	
-25 (-13)	2899	731	850	410	4.96	8.62	7.08	1.79	2.08	
-20 (- 4)	3586	904	1051	452	5.40	10.70	7.87	1.98	2.31	
-15 (+ 5)	4348	1096	1274	489	5.77	13.03	8.80	2.22	2.58	
-10 (+14)	5163	1301	1513	518	6.07	15.55	9.90	2.49	2.90	
-5 (+23)	6012	1515	1762	536	6.26	18.19	11.20	2.82	3.28	
0 (+32)	6873	1732	2014	542	6.34	20.89	12.73	3.21	3.73	

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 45°C (+113°F))					
@115V4500RPM		Fan								
Evaporating temperature	Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP			
	+/- 5%						+/- 5%	+/- 5%	+/- 7%	
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]	
-40 (-40)	1387	350	406	289	3.52	4.10	4.75	1.20	1.39	
-35 (-31)	1787	450	524	343	4.20	5.28	5.27	1.33	1.54	
-30 (-22)	2284	576	669	396	4.82	6.77	5.82	1.47	1.71	
-25 (-13)	2856	720	837	445	5.36	8.49	6.44	1.62	1.89	
-20 (- 4)	3483	878	1021	487	5.80	10.39	7.14	1.80	2.09	
-15 (+ 5)	4144	1044	1214	519	6.12	12.42	7.97	2.01	2.34	
-10 (+14)	4817	1214	1412	539	6.31	14.50	8.95	2.26	2.62	
-5 (+23)	5483	1382	1607	544	6.35	16.58	10.11	2.55	2.96	
0 (+32)	6121	1542	1794	531	6.20	18.61	11.49	2.90	3.37	

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 55°C (+131°F))					
@115V4500RPM		Fan								
Evaporating temperature	Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP			
	+/- 5%						+/- 5%	+/- 5%	+/- 7%	
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]	
-40 (-40)	1235	311	362	282	3.43	3.65	4.36	1.10	1.28	
-35 (-31)	1692	426	496	351	4.28	5.00	4.84	1.22	1.42	
-30 (-22)	2204	555	646	413	5.02	6.54	5.34	1.35	1.57	
-25 (-13)	2751	693	806	466	5.62	8.18	5.89	1.48	1.73	
-20 (- 4)	3311	834	970	508	6.07	9.88	6.50	1.64	1.91	
-15 (+ 5)	3864	974	1132	536	6.35	11.57	7.22	1.82	2.12	
-10 (+14)	4390	1106	1286	547	6.44	13.20	8.08	2.04	2.37	
-5 (+23)	4866	1226	1426	539	6.32	14.71	9.10	2.29	2.67	
0 (+32)	5273	1329	1545	508	5.97	16.03	10.31	2.60	3.02	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V4500RPM		ASHRAE32 Fan			(Condensing temperature 65°C (+149°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	1040	262	305	263	3.18	3.07	4.01	1.01	1.18
-35	(-31)	1546	390	453	345	4.21	4.58	4.46	1.12	1.31
-30	(-22)	2067	521	606	416	5.07	6.13	4.90	1.23	1.44
-25	(-13)	2582	651	757	475	5.74	7.68	5.37	1.35	1.57
-20	(- 4)	3069	773	899	517	6.21	9.16	5.89	1.48	1.72
-15	(+ 5)	3508	884	1028	540	6.45	10.50	6.49	1.64	1.90
-10	(+14)	3879	977	1137	543	6.44	11.66	7.21	1.82	2.11
-5	(+23)	4159	1048	1219	521	6.18	12.56	8.08	2.04	2.37
0	(+32)	4329	1091	1268	472	5.63	13.16	9.12	2.30	2.67

F - EXTERNAL CHARACTERISTICS

1 Base plate	Japanese Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.2 +0.12/-0.08	[mm]	(0.323" +0.005"/-0.003")
3.1.1 Material	Copper		
3.1.2 Shape	Straight		
3.2 DISCHARGE	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
3.3.1 Material	Copper		
3.3.2 Shape	Straight		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		