

COMPRESSOR DEFINITION

Designation	FMF T411U
Nominal Voltage/Frequency	230 V 60-150 Hz
Engineering Number	513805002

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	LST/HST - Low/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)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
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)	10.87	[kg] (23.96 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	CF10C01 M 0.1 X	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	CF10C01 M 0.1 XX A Y	
6 Start winding resistance	4.30	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	4.30	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	6.50/6.50	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	2.00	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50/60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CCC - CE - UKCA - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V1800RPM			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]
1191	300	349	196	1.00	3.54	6.08	1.53	1.78

TEST CONDITIONS: @220V2400RPM			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]
1592	401	466	252	1.25	4.74	6.31	1.59	1.85

TEST CONDITIONS: @220V3000RPM			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]
2024	510	593	322	1.54	6.02	6.28	1.58	1.84

TEST CONDITIONS: @220V3600RPM			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]
2335	588	684	380	1.78	6.95	6.14	1.55	1.80

TEST CONDITIONS: @220V4500RPM			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]
2959	746	867	494	2.27	8.81	5.99	1.51	1.76

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V1800RPM		ASHRAE32 Fan			(Condensing temperature 35°C (+95°F))					
Evaporating temperature	Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP			
	+/- 5%						+/- 7%			
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]	
-40 (-40)	514	130	151	96	0.69	1.52	5.38	1.36	1.58	
-35 (-31)	752	190	220	122	0.71	2.23	6.07	1.53	1.78	
-30 (-22)	989	249	290	143	0.75	2.93	6.84	1.72	2.00	
-25 (-13)	1238	312	363	160	0.81	3.68	7.72	1.95	2.26	
-20 (- 4)	1512	381	443	174	0.88	4.51	8.75	2.20	2.56	
-15 (+ 5)	1826	460	535	185	0.96	5.47	9.95	2.51	2.92	
-10 (+14)	2192	552	642	193	1.04	6.60	11.37	2.87	3.33	
-5 (+23)	2624	661	769	201	1.12	7.94	13.04	3.29	3.82	
0 (+32)	3136	790	919	209	1.19	9.53	14.99	3.78	4.39	

TEST CONDITIONS: @220V1800RPM		ASHRAE32 Fan			(Condensing temperature 45°C (+113°F))					
Evaporating temperature	Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP			
	+/- 5%						+/- 7%			
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]	
-40 (-40)	515	130	151	106	0.77	1.52	4.89	1.23	1.43	
-35 (-31)	729	184	214	133	0.78	2.16	5.46	1.38	1.60	
-30 (-22)	945	238	277	156	0.82	2.80	6.06	1.53	1.78	
-25 (-13)	1174	296	344	175	0.88	3.49	6.72	1.69	1.97	
-20 (- 4)	1432	361	420	192	0.96	4.27	7.47	1.88	2.19	
-15 (+ 5)	1730	436	507	207	1.05	5.18	8.36	2.11	2.45	
-10 (+14)	2084	525	611	221	1.15	6.27	9.41	2.37	2.76	
-5 (+23)	2506	632	734	234	1.25	7.58	10.66	2.69	3.12	
0 (+32)	3010	758	882	248	1.34	9.15	12.14	3.06	3.56	

TEST CONDITIONS: @220V1800RPM		ASHRAE32 Fan			(Condensing temperature 55°C (+131°F))					
Evaporating temperature	Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP			
	+/- 5%						+/- 7%			
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]	
-40 (-40)	458	115	134	108	0.87	1.35	4.26	1.07	1.25	
-35 (-31)	663	167	194	138	0.88	1.96	4.80	1.21	1.41	
-30 (-22)	871	220	255	164	0.92	2.58	5.32	1.34	1.56	
-25 (-13)	1096	276	321	188	0.98	3.26	5.86	1.48	1.72	
-20 (- 4)	1351	340	396	211	1.07	4.03	6.44	1.62	1.89	
-15 (+ 5)	1649	416	483	232	1.18	4.94	7.10	1.79	2.08	
-10 (+14)	2005	505	587	253	1.29	6.03	7.89	1.99	2.31	
-5 (+23)	2431	613	712	274	1.41	7.35	8.82	2.22	2.58	
0 (+32)	2941	741	862	297	1.54	8.94	9.94	2.50	2.91	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V1800RPM		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)	342	86	100	102	1.01	1.01	3.37	0.85	0.99
-35	(-31)	552	139	162	137	1.01	1.63	3.99	1.00	1.17
-30	(-22)	768	193	225	170	1.05	2.28	4.53	1.14	1.33
-25	(-13)	1002	253	294	200	1.12	2.98	5.04	1.27	1.48
-20	(- 4)	1269	320	372	230	1.22	3.78	5.55	1.40	1.63
-15	(+ 5)	1581	399	463	260	1.35	4.74	6.10	1.54	1.79
-10	(+14)	1953	492	572	290	1.48	5.88	6.71	1.69	1.96
-5	(+23)	2398	604	703	322	1.63	7.25	7.42	1.87	2.17
0	(+32)	2929	738	858	355	1.79	8.90	8.27	2.08	2.42

TEST CONDITIONS: @220V3000RPM		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)	906	228	265	166	0.97	2.68	5.48	1.38	1.60
-35	(-31)	1243	313	364	205	1.05	3.68	6.06	1.53	1.78
-30	(-22)	1602	404	469	238	1.15	4.75	6.73	1.70	1.97
-25	(-13)	1999	504	586	267	1.26	5.94	7.52	1.89	2.20
-20	(- 4)	2452	618	718	292	1.38	7.32	8.44	2.13	2.47
-15	(+ 5)	2978	751	873	314	1.51	8.92	9.52	2.40	2.79
-10	(+14)	3596	906	1054	333	1.63	10.82	10.79	2.72	3.16
-5	(+23)	4321	1089	1266	351	1.75	13.07	12.28	3.10	3.60
0	(+32)	5172	1303	1515	368	1.86	15.72	14.02	3.53	4.11

TEST CONDITIONS: @220V3000RPM		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)	859	216	252	178	1.03	2.54	4.85	1.22	1.42
-35	(-31)	1198	302	351	220	1.12	3.55	5.41	1.36	1.58
-30	(-22)	1556	392	456	258	1.24	4.61	6.00	1.51	1.76
-25	(-13)	1950	491	571	292	1.37	5.80	6.66	1.68	1.95
-20	(- 4)	2398	604	703	323	1.52	7.15	7.41	1.87	2.17
-15	(+ 5)	2917	735	855	352	1.67	8.74	8.27	2.08	2.42
-10	(+14)	3523	888	1032	378	1.82	10.60	9.28	2.34	2.72
-5	(+23)	4236	1067	1241	404	1.97	12.81	10.46	2.64	3.06
0	(+32)	5071	1278	1486	430	2.11	15.42	11.83	2.98	3.47

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V3000RPM		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]
-40	(-40)	763	192	224	181	1.09	2.25	4.25	1.07	1.25
-35	(-31)	1106	279	324	228	1.20	3.27	4.83	1.22	1.42
-30	(-22)	1466	369	430	271	1.34	4.35	5.40	1.36	1.58
-25	(-13)	1860	469	545	311	1.49	5.53	5.99	1.51	1.76
-20	(- 4)	2304	581	675	348	1.66	6.87	6.62	1.67	1.94
-15	(+ 5)	2817	710	826	384	1.83	8.44	7.33	1.85	2.15
-10	(+14)	3416	861	1001	419	2.01	10.28	8.12	2.05	2.38
-5	(+23)	4118	1038	1207	454	2.19	12.45	9.04	2.28	2.65
0	(+32)	4940	1245	1448	490	2.36	15.01	10.11	2.55	2.96

TEST CONDITIONS: @220V3000RPM		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]
-40	(-40)	618	156	181	176	1.15	1.82	3.53	0.89	1.04
-35	(-31)	968	244	284	228	1.28	2.86	4.20	1.06	1.23
-30	(-22)	1332	336	390	276	1.43	3.95	4.80	1.21	1.41
-25	(-13)	1727	435	506	323	1.61	5.13	5.38	1.35	1.58
-20	(- 4)	2171	547	636	368	1.80	6.47	5.95	1.50	1.74
-15	(+ 5)	2680	675	785	412	2.00	8.03	6.54	1.65	1.92
-10	(+14)	3273	825	959	456	2.20	9.85	7.19	1.81	2.11
-5	(+23)	3967	1000	1162	501	2.41	11.99	7.90	1.99	2.32
0	(+32)	4778	1204	1400	547	2.60	14.52	8.72	2.20	2.56

TEST CONDITIONS: @220V3600RPM		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]
-40	(-40)	1090	275	319	214	1.13	3.22	5.11	1.29	1.50
-35	(-31)	1458	367	427	251	1.24	4.32	5.78	1.46	1.69
-30	(-22)	1892	477	554	289	1.37	5.61	6.51	1.64	1.91
-25	(-13)	2400	605	703	328	1.53	7.14	7.32	1.84	2.14
-20	(- 4)	2991	754	876	365	1.70	8.92	8.22	2.07	2.41
-15	(+ 5)	3674	926	1077	400	1.87	11.01	9.25	2.33	2.71
-10	(+14)	4459	1124	1306	431	2.04	13.42	10.42	2.63	3.05
-5	(+23)	5353	1349	1569	457	2.19	16.19	11.76	2.96	3.45
0	(+32)	6366	1604	1865	476	2.32	19.36	13.29	3.35	3.89

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V3600RPM		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)	1042	263	305	225	1.20	3.07	4.66	1.17	1.37
-35	(-31)	1384	349	406	263	1.31	4.10	5.24	1.32	1.54
-30	(-22)	1795	452	526	305	1.45	5.32	5.86	1.48	1.72
-25	(-13)	2285	576	670	348	1.63	6.79	6.52	1.64	1.91
-20	(- 4)	2862	721	839	392	1.82	8.54	7.27	1.83	2.13
-15	(+ 5)	3535	891	1036	435	2.02	10.59	8.11	2.04	2.37
-10	(+14)	4313	1087	1264	476	2.23	12.98	9.06	2.28	2.66
-5	(+23)	5204	1311	1525	513	2.43	15.74	10.16	2.56	2.98
0	(+32)	6218	1567	1822	546	2.61	18.90	11.43	2.88	3.35

TEST CONDITIONS: @220V3600RPM		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)	976	246	286	232	1.26	2.88	4.23	1.07	1.24
-35	(-31)	1285	324	377	271	1.38	3.80	4.77	1.20	1.40
-30	(-22)	1667	420	488	314	1.53	4.94	5.31	1.34	1.56
-25	(-13)	2131	537	625	362	1.72	6.34	5.88	1.48	1.72
-20	(- 4)	2686	677	787	411	1.93	8.01	6.50	1.64	1.90
-15	(+ 5)	3341	842	979	462	2.17	10.01	7.19	1.81	2.11
-10	(+14)	4105	1034	1203	512	2.41	12.35	7.98	2.01	2.34
-5	(+23)	4986	1256	1461	560	2.64	15.08	8.88	2.24	2.60
0	(+32)	5993	1510	1756	605	2.87	18.21	9.92	2.50	2.91

TEST CONDITIONS: @220V3600RPM		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)	893	225	262	235	1.34	2.64	3.74	0.94	1.10
-35	(-31)	1161	293	340	274	1.45	3.44	4.27	1.08	1.25
-30	(-22)	1507	380	441	319	1.61	4.47	4.78	1.20	1.40
-25	(-13)	1938	488	568	370	1.81	5.76	5.29	1.33	1.55
-20	(- 4)	2464	621	722	424	2.04	7.35	5.83	1.47	1.71
-15	(+ 5)	3093	779	906	482	2.30	9.26	6.42	1.62	1.88
-10	(+14)	3835	966	1124	540	2.57	11.54	7.07	1.78	2.07
-5	(+23)	4698	1184	1377	599	2.85	14.20	7.82	1.97	2.29
0	(+32)	5691	1434	1668	656	3.12	17.30	8.68	2.19	2.54

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V4500RPM		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)	1348	340	395	275	1.38	3.98	4.92	1.24	1.44
-35	(-31)	1804	455	529	324	1.56	5.34	5.55	1.40	1.63
-30	(-22)	2305	581	675	369	1.74	6.84	6.24	1.57	1.83
-25	(-13)	2871	723	841	410	1.92	8.54	7.01	1.77	2.05
-20	(- 4)	3522	887	1032	449	2.10	10.51	7.86	1.98	2.30
-15	(+ 5)	4277	1078	1253	486	2.28	12.81	8.79	2.22	2.58
-10	(+14)	5156	1299	1511	523	2.48	15.52	9.83	2.48	2.88
-5	(+23)	6179	1557	1811	562	2.68	18.69	10.97	2.77	3.22
0	(+32)	7366	1856	2158	603	2.89	22.40	12.23	3.08	3.58

TEST CONDITIONS: @220V4500RPM		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)	1321	333	387	290	1.47	3.90	4.55	1.15	1.33
-35	(-31)	1773	447	520	347	1.67	5.25	5.09	1.28	1.49
-30	(-22)	2268	571	665	399	1.87	6.72	5.68	1.43	1.67
-25	(-13)	2825	712	828	447	2.07	8.40	6.33	1.60	1.86
-20	(- 4)	3465	873	1015	493	2.27	10.34	7.05	1.78	2.07
-15	(+ 5)	4206	1060	1232	537	2.47	12.60	7.84	1.97	2.30
-10	(+14)	5069	1277	1485	581	2.69	15.25	8.71	2.19	2.55
-5	(+23)	6074	1531	1780	627	2.91	18.37	9.68	2.44	2.84
0	(+32)	7240	1824	2121	674	3.14	22.01	10.74	2.71	3.15

TEST CONDITIONS: @220V4500RPM		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)	1204	303	353	288	1.51	3.55	4.18	1.05	1.23
-35	(-31)	1664	419	488	355	1.74	4.92	4.67	1.18	1.37
-30	(-22)	2164	545	634	417	1.98	6.42	5.19	1.31	1.52
-25	(-13)	2724	686	798	475	2.21	8.10	5.75	1.45	1.69
-20	(- 4)	3364	848	986	530	2.45	10.03	6.36	1.60	1.86
-15	(+ 5)	4104	1034	1203	584	2.69	12.29	7.04	1.77	2.06
-10	(+14)	4963	1251	1454	638	2.94	14.93	7.78	1.96	2.28
-5	(+23)	5960	1502	1747	692	3.20	18.02	8.60	2.17	2.52
0	(+32)	7117	1793	2085	749	3.47	21.63	9.50	2.39	2.78

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V4500RPM		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)	997	251	292	267	1.50	2.94	3.76	0.95	1.10
-35	(-31)	1476	372	433	347	1.79	4.37	4.22	1.06	1.24
-30	(-22)	1993	502	584	422	2.07	5.91	4.70	1.19	1.38
-25	(-13)	2568	647	753	493	2.35	7.63	5.21	1.31	1.53
-20	(- 4)	3220	812	944	560	2.64	9.60	5.75	1.45	1.69
-15	(+ 5)	3970	1000	1163	626	2.94	11.89	6.34	1.60	1.86
-10	(+14)	4836	1219	1417	692	3.24	14.55	6.98	1.76	2.05
-5	(+23)	5838	1471	1711	759	3.55	17.65	7.69	1.94	2.25
0	(+32)	6997	1763	2050	828	3.88	21.26	8.46	2.13	2.48

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		