

COMPRESSOR DEFINITION

Designation	FM FT406U
Nominal Voltage/Frequency	230 V 46-150 Hz
Engineering Number	513805005

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	230 / 46-150	[V / Hz]	
4 Application type	Low-Medium Back Pressure (Light Commercial - Curves until T.Evap -4		
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	1/2	[hp]
2 Displacement	6.44	[cm ³] (0.393 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	16.200	
3 Lubricant charge	430	[ml] (14.54 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	10.28	[kg] (22.66 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	230 V 46-150 Hz 3~ (Three phase)	
2 Starting device type	Inverter	
2.1 Starting device	CF05D01 X 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	10.55	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	10.55	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	-	[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	TUV - UL - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V1400RPM			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature	-23.3°C (-9.94°F) 54.4°C (129.92°F)		
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
498	125	146	79	1.15	1.48	6.34	1.60	1.86

TEST CONDITIONS: @115V1800RPM			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature	-23.3°C (-9.94°F) 54.4°C (129.92°F)		
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
669	169	196	102	1.44	1.99	6.55	1.65	1.92

TEST CONDITIONS: @115V2400RPM			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature	-23.3°C (-9.94°F) 54.4°C (129.92°F)		
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
860	217	252	133	1.80	2.56	6.49	1.64	1.90

TEST CONDITIONS: @115V3000RPM			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature	-23.3°C (-9.94°F) 54.4°C (129.92°F)		
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
1123	283	329	174	2.30	3.34	6.45	1.63	1.89

TEST CONDITIONS: @115V3600RPM			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature	-23.3°C (-9.94°F) 54.4°C (129.92°F)		
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
1355	341	397	213	2.74	4.03	6.36	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 +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
1767	445	518	284	3.60	5.26	6.22	1.57	1.82

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 35°C (+95°F))					
@115V1400RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	251	63	74	49	0.44	0.74	5.08	1.28	1.49
-35	(-31)	331	83	97	54	0.65	0.98	6.07	1.53	1.78
-30	(-22)	423	107	124	60	0.80	1.25	7.00	1.76	2.05
-25	(-13)	531	134	156	67	0.91	1.58	7.95	2.00	2.33
-20	(- 4)	658	166	193	74	0.99	1.96	8.99	2.27	2.63
-15	(+ 5)	809	204	237	80	1.05	2.42	10.22	2.57	2.99
-10	(+14)	985	248	289	85	1.10	2.96	11.70	2.95	3.43
-5	(+23)	1190	300	349	88	1.15	3.60	13.53	3.41	3.97
0	(+32)	1428	360	418	90	1.21	4.34	15.79	3.98	4.63

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 45°C (+113°F))					
@115V1400RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	216	54	63	48	0.54	0.64	4.54	1.14	1.33
-35	(-31)	297	75	87	54	0.76	0.88	5.44	1.37	1.59
-30	(-22)	391	98	114	62	0.92	1.16	6.21	1.56	1.82
-25	(-13)	498	126	146	71	1.04	1.48	6.93	1.75	2.03
-20	(- 4)	624	157	183	81	1.13	1.86	7.69	1.94	2.25
-15	(+ 5)	772	195	226	89	1.21	2.31	8.57	2.16	2.51
-10	(+14)	944	238	277	98	1.27	2.84	9.65	2.43	2.83
-5	(+23)	1145	288	335	104	1.34	3.46	11.01	2.77	3.22
0	(+32)	1377	347	403	109	1.43	4.18	12.73	3.21	3.73

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 55°C (+131°F))					
@115V1400RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	175	44	51	46	0.56	0.52	3.88	0.98	1.14
-35	(-31)	257	65	75	54	0.79	0.76	4.78	1.21	1.40
-30	(-22)	350	88	102	64	0.97	1.04	5.49	1.38	1.61
-25	(-13)	455	115	133	75	1.11	1.35	6.09	1.54	1.79
-20	(- 4)	578	146	169	86	1.22	1.73	6.67	1.68	1.95
-15	(+ 5)	722	182	211	98	1.32	2.16	7.30	1.84	2.14
-10	(+14)	889	224	260	109	1.41	2.67	8.07	2.03	2.36
-5	(+23)	1083	273	317	119	1.51	3.27	9.05	2.28	2.65
0	(+32)	1307	329	383	127	1.62	3.97	10.34	2.61	3.03

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 65°C (+149°F))					
@115V1400RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	129	33	38	43	0.49	0.38	2.95	0.74	0.86
-35	(-31)	210	53	61	53	0.74	0.62	3.95	1.00	1.16
-30	(-22)	300	76	88	64	0.95	0.89	4.70	1.18	1.38
-25	(-13)	402	101	118	78	1.12	1.20	5.28	1.33	1.55
-20	(- 4)	520	131	153	91	1.26	1.55	5.77	1.45	1.69
-15	(+ 5)	658	166	193	106	1.39	1.97	6.25	1.58	1.83
-10	(+14)	818	206	240	120	1.52	2.46	6.81	1.72	2.00
-5	(+23)	1004	253	294	133	1.65	3.03	7.52	1.90	2.20
0	(+32)	1219	307	357	144	1.80	3.70	8.47	2.13	2.48

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 35°C (+95°F))					
@115V1800RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	300	76	88	58	0.58	0.89	5.15	1.30	1.51
-35	(-31)	418	105	123	68	0.85	1.24	6.09	1.53	1.78
-30	(-22)	546	138	160	78	1.03	1.62	7.00	1.77	2.05
-25	(-13)	689	174	202	87	1.15	2.05	7.98	2.01	2.34
-20	(- 4)	854	215	250	95	1.23	2.55	9.07	2.28	2.66
-15	(+ 5)	1046	264	307	102	1.28	3.13	10.35	2.61	3.03
-10	(+14)	1272	320	373	108	1.32	3.83	11.88	2.99	3.48
-5	(+23)	1537	387	450	112	1.38	4.65	13.73	3.46	4.02
0	(+32)	1848	466	541	115	1.46	5.62	15.97	4.02	4.68

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 45°C (+113°F))					
@115V1800RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	274	69	80	58	0.69	0.81	4.74	1.19	1.39
-35	(-31)	393	99	115	70	0.98	1.16	5.57	1.40	1.63
-30	(-22)	520	131	152	82	1.18	1.54	6.33	1.60	1.85
-25	(-13)	661	167	194	93	1.32	1.97	7.08	1.78	2.07
-20	(- 4)	823	208	241	104	1.42	2.46	7.88	1.99	2.31
-15	(+ 5)	1012	255	297	114	1.49	3.03	8.80	2.22	2.58
-10	(+14)	1233	311	361	124	1.56	3.71	9.92	2.50	2.91
-5	(+23)	1493	376	438	132	1.63	4.52	11.29	2.84	3.31
0	(+32)	1798	453	527	139	1.74	5.47	12.98	3.27	3.80

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 55°C (+131°F))					
@115V1800RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	232	59	68	57	0.66	0.69	4.13	1.04	1.21
-35	(-31)	350	88	102	70	0.98	1.04	4.97	1.25	1.46
-30	(-22)	475	120	139	84	1.22	1.41	5.67	1.43	1.66
-25	(-13)	613	155	180	98	1.39	1.82	6.30	1.59	1.84
-20	(- 4)	772	194	226	111	1.52	2.30	6.91	1.74	2.03
-15	(+ 5)	956	241	280	125	1.63	2.86	7.59	1.91	2.22
-10	(+14)	1171	295	343	138	1.73	3.52	8.39	2.12	2.46
-5	(+23)	1425	359	418	151	1.84	4.31	9.39	2.37	2.75
0	(+32)	1722	434	505	162	1.99	5.23	10.65	2.68	3.12

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 65°C (+149°F))					
@115V1800RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	173	44	51	54	0.49	0.51	3.17	0.80	0.93
-35	(-31)	288	73	84	69	0.86	0.85	4.12	1.04	1.21
-30	(-22)	410	103	120	85	1.14	1.22	4.87	1.23	1.43
-25	(-13)	544	137	160	101	1.36	1.62	5.48	1.38	1.61
-20	(- 4)	698	176	204	118	1.54	2.08	6.02	1.52	1.76
-15	(+ 5)	876	221	257	134	1.69	2.62	6.55	1.65	1.92
-10	(+14)	1085	273	318	151	1.84	3.26	7.15	1.80	2.10
-5	(+23)	1330	335	390	168	2.01	4.02	7.88	1.98	2.31
0	(+32)	1619	408	474	184	2.21	4.92	8.80	2.22	2.58

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 35°C (+95°F))					
@115V3000RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	524	132	154	106	1.07	1.55	4.98	1.25	1.46
-35	(-31)	697	176	204	118	1.39	2.06	5.85	1.47	1.71
-30	(-22)	899	227	264	133	1.64	2.67	6.71	1.69	1.97
-25	(-13)	1137	287	333	149	1.83	3.38	7.61	1.92	2.23
-20	(- 4)	1414	356	414	165	1.98	4.22	8.62	2.17	2.53
-15	(+ 5)	1737	438	509	179	2.10	5.20	9.79	2.47	2.87
-10	(+14)	2110	532	618	191	2.21	6.35	11.19	2.82	3.28
-5	(+23)	2539	640	744	199	2.31	7.68	12.87	3.24	3.77
0	(+32)	3028	763	887	202	2.43	9.21	14.89	3.75	4.36

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V3000RPM		ASHRAE32 Fan			(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	506	128	148	110	1.26	1.49	4.63	1.17	1.36
-35	(-31)	671	169	197	124	1.60	1.99	5.41	1.36	1.59
-30	(-22)	866	218	254	140	1.88	2.57	6.13	1.55	1.80
-25	(-13)	1097	276	321	159	2.09	3.26	6.85	1.73	2.01
-20	(- 4)	1367	345	401	178	2.27	4.08	7.61	1.92	2.23
-15	(+ 5)	1683	424	493	197	2.41	5.04	8.50	2.14	2.49
-10	(+14)	2050	517	601	215	2.54	6.17	9.55	2.41	2.80
-5	(+23)	2473	623	725	229	2.67	7.48	10.83	2.73	3.17
0	(+32)	2956	745	866	239	2.82	8.99	12.41	3.13	3.64

TEST CONDITIONS: @115V3000RPM		ASHRAE32 Fan			(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	459	116	135	112	1.24	1.36	4.13	1.04	1.21
-35	(-31)	619	156	181	127	1.63	1.83	4.92	1.24	1.44
-30	(-22)	809	204	237	145	1.94	2.40	5.59	1.41	1.64
-25	(-13)	1034	261	303	167	2.21	3.07	6.20	1.56	1.82
-20	(- 4)	1300	328	381	190	2.43	3.88	6.82	1.72	2.00
-15	(+ 5)	1612	406	472	213	2.62	4.83	7.50	1.89	2.20
-10	(+14)	1975	498	579	236	2.80	5.94	8.30	2.09	2.43
-5	(+23)	2393	603	701	257	2.98	7.24	9.28	2.34	2.72
0	(+32)	2873	724	842	274	3.17	8.73	10.50	2.65	3.08

TEST CONDITIONS: @115V3000RPM		ASHRAE32 Fan			(Condensing temperature 65°C (+149°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	384	97	112	112	1.01	1.13	3.37	0.85	0.99
-35	(-31)	540	136	158	128	1.47	1.60	4.25	1.07	1.25
-30	(-22)	727	183	213	149	1.85	2.16	4.96	1.25	1.45
-25	(-13)	950	239	278	173	2.19	2.82	5.56	1.40	1.63
-20	(- 4)	1213	306	356	200	2.48	3.62	6.11	1.54	1.79
-15	(+ 5)	1523	384	446	228	2.74	4.56	6.68	1.68	1.96
-10	(+14)	1884	475	552	256	2.99	5.67	7.31	1.84	2.14
-5	(+23)	2301	580	674	283	3.24	6.96	8.08	2.04	2.37
0	(+32)	2779	700	814	308	3.50	8.45	9.03	2.28	2.65

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 35°C (+95°F))					
@115V3600RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	627	158	184	127	1.19	1.85	4.93	1.24	1.44
-35	(-31)	843	212	247	145	1.63	2.50	5.77	1.45	1.69
-30	(-22)	1093	275	320	165	1.97	3.24	6.60	1.66	1.93
-25	(-13)	1383	349	405	185	2.22	4.11	7.48	1.89	2.19
-20	(- 4)	1722	434	505	205	2.41	5.14	8.45	2.13	2.48
-15	(+ 5)	2119	534	621	223	2.56	6.35	9.58	2.41	2.81
-10	(+14)	2580	650	756	239	2.68	7.77	10.90	2.75	3.19
-5	(+23)	3115	785	913	251	2.81	9.42	12.47	3.14	3.66
0	(+32)	3730	940	1093	258	2.96	11.34	14.35	3.62	4.21

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 45°C (+113°F))					
@115V3600RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	603	152	177	134	1.46	1.78	4.53	1.14	1.33
-35	(-31)	809	204	237	152	1.90	2.39	5.30	1.33	1.55
-30	(-22)	1047	264	307	173	2.24	3.10	6.02	1.52	1.76
-25	(-13)	1324	334	388	195	2.51	3.94	6.73	1.70	1.97
-20	(- 4)	1650	416	484	219	2.72	4.92	7.50	1.89	2.20
-15	(+ 5)	2032	512	595	242	2.89	6.09	8.37	2.11	2.45
-10	(+14)	2478	624	726	263	3.05	7.46	9.40	2.37	2.75
-5	(+23)	2996	755	878	282	3.22	9.06	10.64	2.68	3.12
0	(+32)	3594	906	1053	297	3.41	10.92	12.13	3.06	3.55

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 55°C (+131°F))					
@115V3600RPM		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	567	143	166	140	1.50	1.67	4.08	1.03	1.20
-35	(-31)	761	192	223	158	1.96	2.25	4.83	1.22	1.42
-30	(-22)	985	248	289	180	2.33	2.92	5.48	1.38	1.61
-25	(-13)	1249	315	366	205	2.64	3.71	6.09	1.54	1.78
-20	(- 4)	1560	393	457	232	2.89	4.65	6.70	1.69	1.96
-15	(+ 5)	1926	485	564	259	3.11	5.77	7.38	1.86	2.16
-10	(+14)	2355	594	690	287	3.33	7.09	8.16	2.06	2.39
-5	(+23)	2855	720	837	313	3.55	8.63	9.10	2.29	2.67
0	(+32)	3435	866	1006	336	3.82	10.44	10.26	2.59	3.01

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V3600RPM		ASHRAE32 Fan			(Condensing temperature 65°C (+149°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	517	130	152	144	1.33	1.53	3.53	0.89	1.03
-35	(-31)	698	176	205	162	1.84	2.07	4.31	1.09	1.26
-30	(-22)	909	229	266	186	2.27	2.69	4.95	1.25	1.45
-25	(-13)	1157	292	339	213	2.63	3.44	5.49	1.38	1.61
-20	(- 4)	1452	366	426	244	2.95	4.33	6.00	1.51	1.76
-15	(+ 5)	1801	454	528	277	3.24	5.39	6.52	1.64	1.91
-10	(+14)	2212	557	648	310	3.53	6.65	7.11	1.79	2.08
-5	(+23)	2693	679	789	343	3.85	8.14	7.81	1.97	2.29
0	(+32)	3253	820	953	375	4.20	9.88	8.68	2.19	2.54

TEST CONDITIONS: @115V4500RPM		ASHRAE32 Fan			(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	834	210	244	185	1.48	2.46	4.51	1.14	1.32
-35	(-31)	1089	274	319	199	2.08	3.22	5.48	1.38	1.61
-30	(-22)	1399	353	410	220	2.52	4.15	6.36	1.60	1.86
-25	(-13)	1767	445	518	245	2.84	5.25	7.19	1.81	2.11
-20	(- 4)	2196	553	643	271	3.08	6.55	8.06	2.03	2.36
-15	(+ 5)	2688	677	788	297	3.25	8.05	9.03	2.28	2.65
-10	(+14)	3247	818	951	319	3.39	9.77	10.18	2.57	2.98
-5	(+23)	3875	976	1135	336	3.53	11.72	11.58	2.92	3.39
0	(+32)	4576	1153	1341	344	3.69	13.91	13.30	3.35	3.90

TEST CONDITIONS: @115V4500RPM		ASHRAE32 Fan			(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	783	197	229	182	1.77	2.31	4.29	1.08	1.26
-35	(-31)	1049	264	308	203	2.43	3.10	5.19	1.31	1.52
-30	(-22)	1361	343	399	230	2.93	4.04	5.94	1.50	1.74
-25	(-13)	1721	434	504	261	3.29	5.12	6.62	1.67	1.94
-20	(- 4)	2133	538	625	292	3.55	6.36	7.30	1.84	2.14
-15	(+ 5)	2599	655	762	323	3.74	7.78	8.04	2.03	2.36
-10	(+14)	3122	787	915	349	3.88	9.39	8.92	2.25	2.61
-5	(+23)	3705	934	1086	370	4.01	11.20	10.01	2.52	2.93
0	(+32)	4351	1096	1275	382	4.15	13.23	11.37	2.87	3.33

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V4500RPM		ASHRAE32 Fan			(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	657	165	192	171	1.65	1.94	3.82	0.96	1.12
-35	(-31)	944	238	277	200	2.41	2.79	4.72	1.19	1.38
-30	(-22)	1267	319	371	234	3.00	3.76	5.44	1.37	1.59
-25	(-13)	1629	410	477	272	3.44	4.84	6.04	1.52	1.77
-20	(- 4)	2033	512	596	310	3.77	6.06	6.59	1.66	1.93
-15	(+ 5)	2481	625	727	347	4.01	7.43	7.17	1.81	2.10
-10	(+14)	2978	750	873	379	4.20	8.96	7.85	1.98	2.30
-5	(+23)	3525	888	1033	405	4.36	10.66	8.70	2.19	2.55
0	(+32)	4126	1040	1209	421	4.52	12.54	9.79	2.47	2.87

TEST CONDITIONS: @115V4500RPM		ASHRAE32 Fan			(Condensing temperature 65°C (+149°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	445	112	130	149	1.11	1.31	3.04	0.77	0.89
-35	(-31)	762	192	223	187	2.02	2.26	4.02	1.01	1.18
-30	(-22)	1106	279	324	230	2.74	3.28	4.77	1.20	1.40
-25	(-13)	1479	373	433	276	3.31	4.40	5.36	1.35	1.57
-20	(- 4)	1885	475	552	322	3.75	5.62	5.87	1.48	1.72
-15	(+ 5)	2326	586	682	365	4.09	6.97	6.37	1.60	1.87
-10	(+14)	2806	707	822	404	4.36	8.44	6.92	1.74	2.03
-5	(+23)	3326	838	975	436	4.60	10.05	7.61	1.92	2.23
0	(+32)	3891	981	1140	459	4.82	11.82	8.49	2.14	2.49

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal EG/F/AMEM version 2		
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		