

COMPRESSOR DEFINITION

Designation	VES F7C
Nominal Voltage/Frequency	230 V 32-150 Hz
Engineering Number	503907488

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
3 Nominal voltage and frequency	230 / 32-150	[V / Hz]	
4 Application type	Low-Medium Back Pressure (Fullmotion Compressors)		
4.1 Evaporating temperature range	-35°C to 0°C	(-31°F to 32°F)	
5 Motor type	BPM		
6 Starting torque	LST - Low Starting Torque		
7 Expansion device	Capillary tube		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	Static	187 to 255 V	-
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	6.9	[kgf/cm ²] (98 psig)	/ °C - °F
9.2 Peak	7.8	[kgf/cm ²] (111 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/5	[hp]
2 Displacement	7.23	[cm ³] (0.441 cu.in)
2.1 Bore [mm]	24.000	
2.2 Stroke [mm]	16.000	
3 Lubricant charge	205	[ml] (6.93 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO5	
4 Weight (with oil charge)	6.2	[kg] (13.67 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	230 V 31.7-150 Hz 3~ (Three phase)	
2 Starting device type	Inverter	
2.1 Starting device	CF01F22 M	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	CF01F12 M 0.0 XX F X	
6 Start winding resistance	15.60	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	15.60	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (32/150 Hz)	2.10	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (32/150 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (32/150 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V4000RPM			ASHRAELBP32 Static		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]
560	141	164	88	0.67	1.76	6.34	1.60	1.86

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V950RPM			ASHRAE32 Static		(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]
-35	(-31)	82	21	24	13	0.13	0.26	6.34	1.60	1.86
-30	(-22)	109	28	32	15	0.15	0.34	7.25	1.83	2.13
-25	(-13)	142	36	42	17	0.16	0.45	8.30	2.09	2.43
-20	(- 4)	183	46	54	19	0.17	0.58	9.52	2.40	2.79
-15	(+ 5)	233	59	68	21	0.19	0.73	10.94	2.76	3.21
-10	(+14)	292	74	86	23	0.20	0.92	12.61	3.18	3.70
-5	(+23)	362	91	106	25	0.21	1.14	14.56	3.67	4.27
0	(+32)	444	112	130	26	0.22	1.41	16.83	4.24	4.93

TEST CONDITIONS: @220V950RPM			ASHRAE32 Static		(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]
-35	(-31)	74	19	22	13	0.14	0.23	5.67	1.43	1.66
-30	(-22)	101	25	30	16	0.16	0.32	6.43	1.62	1.88
-25	(-13)	134	34	39	18	0.17	0.42	7.26	1.83	2.13
-20	(- 4)	174	44	51	21	0.19	0.55	8.20	2.07	2.40
-15	(+ 5)	222	56	65	24	0.21	0.70	9.29	2.34	2.72
-10	(+14)	280	71	82	26	0.23	0.88	10.57	2.66	3.10
-5	(+23)	349	88	102	29	0.25	1.10	12.06	3.04	3.54
0	(+32)	429	108	126	31	0.27	1.36	13.82	3.48	4.05

TEST CONDITIONS: @220V950RPM			ASHRAE32 Static		(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]
-35	(-31)	63	16	18	13	0.13	0.20	4.86	1.23	1.43
-30	(-22)	88	22	26	16	0.15	0.28	5.56	1.40	1.63
-25	(-13)	120	30	35	19	0.18	0.38	6.26	1.58	1.83
-20	(- 4)	158	40	46	23	0.20	0.50	7.02	1.77	2.06
-15	(+ 5)	205	52	60	26	0.22	0.65	7.86	1.98	2.30
-10	(+14)	261	66	77	30	0.25	0.82	8.83	2.23	2.59
-5	(+23)	328	83	96	33	0.27	1.04	9.97	2.51	2.92
0	(+32)	406	102	119	36	0.30	1.29	11.30	2.85	3.31

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V1300RPM		ASHRAE32 Static			(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]
-35	(-31)	113	28	33	18	0.16	0.35	6.34	1.60	1.86
-30	(-22)	149	38	44	21	0.18	0.47	7.26	1.83	2.13
-25	(-13)	194	49	57	23	0.20	0.61	8.31	2.10	2.44
-20	(- 4)	250	63	73	26	0.22	0.78	9.53	2.40	2.79
-15	(+ 5)	317	80	93	29	0.24	1.00	10.95	2.76	3.21
-10	(+14)	397	100	116	32	0.25	1.25	12.62	3.18	3.70
-5	(+23)	492	124	144	34	0.27	1.56	14.57	3.67	4.27
0	(+32)	604	152	177	36	0.29	1.91	16.85	4.25	4.94

TEST CONDITIONS: @220V1300RPM		ASHRAE32 Static			(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]	[Btu/Wh]	[kcal/Wh]
-35	(-31)	102	26	30	18	0.17	0.32	5.70	1.44	1.67
-30	(-22)	138	35	41	21	0.20	0.43	6.48	1.63	1.90
-25	(-13)	183	46	54	25	0.22	0.57	7.33	1.85	2.15
-20	(- 4)	237	60	69	29	0.25	0.74	8.28	2.09	2.43
-15	(+ 5)	303	76	89	32	0.27	0.95	9.38	2.36	2.75
-10	(+14)	382	96	112	36	0.30	1.20	10.66	2.69	3.12
-5	(+23)	475	120	139	39	0.32	1.50	12.16	3.06	3.56
0	(+32)	585	147	171	42	0.34	1.85	13.93	3.51	4.08

TEST CONDITIONS: @220V1300RPM		ASHRAE32 Static			(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]
-35	(-31)	88	22	26	18	0.16	0.28	4.93	1.24	1.44
-30	(-22)	123	31	36	22	0.19	0.38	5.67	1.43	1.66
-25	(-13)	165	42	48	26	0.23	0.52	6.41	1.61	1.88
-20	(- 4)	218	55	64	30	0.26	0.69	7.19	1.81	2.11
-15	(+ 5)	282	71	83	35	0.29	0.89	8.06	2.03	2.36
-10	(+14)	359	90	105	40	0.32	1.13	9.05	2.28	2.65
-5	(+23)	450	113	132	44	0.35	1.42	10.20	2.57	2.99
0	(+32)	556	140	163	48	0.38	1.77	11.55	2.91	3.38

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V1600RPM		ASHRAE32 Static			(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)	[W]				[Btu/Wh]	[kcal/Wh]	[W/W]	
-35	(-31)	139	35	41	22	0.19	0.44	6.31	1.59	1.85
-30	(-22)	183	46	54	25	0.21	0.57	7.23	1.82	2.12
-25	(-13)	238	60	70	29	0.24	0.75	8.27	2.08	2.42
-20	(- 4)	306	77	90	32	0.26	0.96	9.47	2.39	2.78
-15	(+ 5)	388	98	114	36	0.29	1.22	10.88	2.74	3.19
-10	(+14)	486	123	142	39	0.31	1.53	12.54	3.16	3.67
-5	(+23)	603	152	177	42	0.33	1.90	14.48	3.65	4.24
0	(+32)	739	186	216	44	0.34	2.34	16.76	4.22	4.91

TEST CONDITIONS: @220V1600RPM		ASHRAE32 Static			(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)	[W]				[Btu/Wh]	[kcal/Wh]	[W/W]	
-35	(-31)	127	32	37	22	0.20	0.40	5.69	1.43	1.67
-30	(-22)	170	43	50	26	0.22	0.53	6.48	1.63	1.90
-25	(-13)	225	57	66	31	0.25	0.70	7.33	1.85	2.15
-20	(- 4)	291	73	85	35	0.29	0.91	8.27	2.09	2.42
-15	(+ 5)	372	94	109	40	0.32	1.17	9.37	2.36	2.74
-10	(+14)	468	118	137	44	0.35	1.48	10.64	2.68	3.12
-5	(+23)	582	147	171	48	0.38	1.84	12.15	3.06	3.56
0	(+32)	716	181	210	52	0.40	2.27	13.92	3.51	4.08

TEST CONDITIONS: @220V1600RPM		ASHRAE32 Static			(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)	[W]				[Btu/Wh]	[kcal/Wh]	[W/W]	
-35	(-31)	110	28	32	22	0.19	0.34	4.95	1.25	1.45
-30	(-22)	152	38	45	27	0.22	0.48	5.71	1.44	1.67
-25	(-13)	205	52	60	32	0.26	0.64	6.47	1.63	1.90
-20	(- 4)	270	68	79	37	0.30	0.85	7.27	1.83	2.13
-15	(+ 5)	348	88	102	43	0.34	1.10	8.15	2.05	2.39
-10	(+14)	442	111	130	48	0.38	1.40	9.15	2.30	2.68
-5	(+23)	554	140	162	54	0.42	1.75	10.31	2.60	3.02
0	(+32)	685	173	201	59	0.45	2.17	11.69	2.95	3.42

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V2000RPM		ASHRAE32 Static			(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]
-35	(-31)	173	44	51	28	0.23	0.54	6.20	1.56	1.82
-30	(-22)	228	57	67	32	0.26	0.71	7.12	1.79	2.09
-25	(-13)	296	75	87	36	0.29	0.93	8.15	2.05	2.39
-20	(- 4)	380	96	111	41	0.32	1.19	9.34	2.35	2.74
-15	(+ 5)	482	121	141	45	0.35	1.52	10.72	2.70	3.14
-10	(+14)	603	152	177	49	0.37	1.90	12.35	3.11	3.62
-5	(+23)	748	188	219	52	0.40	2.36	14.26	3.59	4.18
0	(+32)	916	231	268	55	0.43	2.90	16.50	4.16	4.83

TEST CONDITIONS: @220V2000RPM		ASHRAE32 Static			(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]	[Btu/Wh]	[kcal/Wh]
-35	(-31)	158	40	46	28	0.24	0.50	5.62	1.42	1.65
-30	(-22)	212	54	62	33	0.27	0.67	6.43	1.62	1.88
-25	(-13)	280	70	82	38	0.31	0.88	7.28	1.84	2.13
-20	(- 4)	362	91	106	44	0.35	1.14	8.23	2.07	2.41
-15	(+ 5)	462	116	135	49	0.38	1.45	9.32	2.35	2.73
-10	(+14)	582	147	171	55	0.42	1.84	10.58	2.67	3.10
-5	(+23)	724	182	212	60	0.46	2.29	12.06	3.04	3.53
0	(+32)	890	224	261	65	0.50	2.82	13.81	3.48	4.05

TEST CONDITIONS: @220V2000RPM		ASHRAE32 Static			(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]
-35	(-31)	139	35	41	28	0.23	0.43	4.93	1.24	1.44
-30	(-22)	192	48	56	34	0.27	0.60	5.72	1.44	1.68
-25	(-13)	257	65	75	40	0.32	0.81	6.50	1.64	1.91
-20	(- 4)	338	85	99	46	0.36	1.06	7.31	1.84	2.14
-15	(+ 5)	436	110	128	53	0.41	1.37	8.19	2.06	2.40
-10	(+14)	553	139	162	60	0.46	1.75	9.19	2.32	2.69
-5	(+23)	692	174	203	67	0.51	2.19	10.34	2.61	3.03
0	(+32)	855	216	251	73	0.56	2.71	11.70	2.95	3.43

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V3000RPM		ASHRAE32 Static			(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]
-35	(-31)	255	64	75	44	0.34	0.80	5.86	1.48	1.72
-30	(-22)	337	85	99	50	0.38	1.06	6.74	1.70	1.97
-25	(-13)	438	110	128	57	0.43	1.37	7.71	1.94	2.26
-20	(- 4)	562	142	165	64	0.49	1.76	8.81	2.22	2.58
-15	(+ 5)	712	179	209	71	0.54	2.24	10.08	2.54	2.95
-10	(+14)	892	225	261	77	0.58	2.81	11.58	2.92	3.39
-5	(+23)	1105	279	324	83	0.62	3.49	13.34	3.36	3.91
0	(+32)	1355	341	397	87	0.65	4.29	15.41	3.88	4.52

TEST CONDITIONS: @220V3000RPM		ASHRAE32 Static			(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]	[Btu/Wh]	[kcal/Wh]
-35	(-31)	235	59	69	44	0.34	0.73	5.35	1.35	1.57
-30	(-22)	315	79	92	51	0.39	0.99	6.15	1.55	1.80
-25	(-13)	414	104	121	59	0.45	1.30	6.99	1.76	2.05
-20	(- 4)	537	135	157	68	0.51	1.69	7.89	1.99	2.31
-15	(+ 5)	685	173	201	77	0.58	2.16	8.90	2.24	2.61
-10	(+14)	863	217	253	85	0.64	2.72	10.08	2.54	2.95
-5	(+23)	1074	271	315	94	0.70	3.40	11.46	2.89	3.36
0	(+32)	1321	333	387	101	0.75	4.19	13.10	3.30	3.84

TEST CONDITIONS: @220V3000RPM		ASHRAE32 Static			(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]
-35	(-31)	209	53	61	44	0.34	0.65	4.73	1.19	1.39
-30	(-22)	287	72	84	52	0.40	0.90	5.56	1.40	1.63
-25	(-13)	385	97	113	61	0.46	1.21	6.36	1.60	1.86
-20	(- 4)	505	127	148	71	0.54	1.59	7.16	1.80	2.10
-15	(+ 5)	651	164	191	81	0.61	2.05	8.02	2.02	2.35
-10	(+14)	827	208	242	92	0.69	2.61	8.97	2.26	2.63
-5	(+23)	1035	261	303	103	0.77	3.27	10.08	2.54	2.95
0	(+32)	1279	322	375	113	0.84	4.06	11.37	2.86	3.33

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V3600RPM		ASHRAE32 Static			(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]
-35	(-31)	303	76	89	54	0.41	0.95	5.65	1.42	1.65
-30	(-22)	401	101	117	62	0.47	1.26	6.49	1.64	1.90
-25	(-13)	522	132	153	70	0.53	1.64	7.41	1.87	2.17
-20	(- 4)	671	169	197	80	0.60	2.11	8.44	2.13	2.47
-15	(+ 5)	852	215	250	88	0.67	2.68	9.64	2.43	2.83
-10	(+14)	1068	269	313	97	0.73	3.37	11.06	2.79	3.24
-5	(+23)	1324	334	388	104	0.78	4.19	12.73	3.21	3.73
0	(+32)	1624	409	476	110	0.82	5.15	14.72	3.71	4.31

TEST CONDITIONS: @220V3600RPM		ASHRAE32 Static			(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]	[Btu/Wh]	[kcal/Wh]
-35	(-31)	279	70	82	54	0.42	0.87	5.18	1.31	1.52
-30	(-22)	375	94	110	63	0.48	1.17	5.97	1.51	1.75
-25	(-13)	494	125	145	73	0.55	1.55	6.77	1.71	1.98
-20	(- 4)	641	162	188	84	0.64	2.02	7.63	1.92	2.24
-15	(+ 5)	820	207	240	95	0.72	2.58	8.59	2.17	2.52
-10	(+14)	1034	261	303	106	0.80	3.26	9.71	2.45	2.84
-5	(+23)	1288	325	377	117	0.88	4.07	11.02	2.78	3.23
0	(+32)	1585	399	464	127	0.95	5.02	12.58	3.17	3.69

TEST CONDITIONS: @220V3600RPM		ASHRAE32 Static			(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]
-35	(-31)	247	62	72	54	0.41	0.77	4.58	1.15	1.34
-30	(-22)	341	86	100	63	0.48	1.07	5.42	1.37	1.59
-25	(-13)	459	116	134	74	0.56	1.44	6.20	1.56	1.82
-20	(- 4)	604	152	177	87	0.66	1.90	6.99	1.76	2.05
-15	(+ 5)	780	197	229	100	0.76	2.46	7.81	1.97	2.29
-10	(+14)	991	250	290	113	0.86	3.13	8.72	2.20	2.56
-5	(+23)	1242	313	364	127	0.96	3.93	9.78	2.46	2.86
0	(+32)	1536	387	450	140	1.06	4.87	11.01	2.77	3.23

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V4000RPM		ASHRAE32 Static			(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]
-35	(-31)	335	84	98	61	0.46	1.05	5.54	1.40	1.62
-30	(-22)	444	112	130	70	0.53	1.39	6.36	1.60	1.86
-25	(-13)	580	146	170	80	0.60	1.82	7.25	1.83	2.12
-20	(- 4)	746	188	219	91	0.68	2.34	8.24	2.08	2.42
-15	(+ 5)	948	239	278	101	0.76	2.98	9.40	2.37	2.75
-10	(+14)	1190	300	349	111	0.84	3.75	10.75	2.71	3.15
-5	(+23)	1476	372	433	119	0.90	4.67	12.36	3.12	3.62
0	(+32)	1812	457	531	126	0.95	5.74	14.27	3.60	4.18

TEST CONDITIONS: @220V4000RPM		ASHRAE32 Static			(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]	[Btu/Wh]	[kcal/Wh]
-35	(-31)	307	77	90	60	0.46	0.96	5.09	1.28	1.49
-30	(-22)	415	104	121	71	0.53	1.30	5.87	1.48	1.72
-25	(-13)	548	138	161	82	0.62	1.72	6.66	1.68	1.95
-20	(- 4)	713	180	209	95	0.72	2.24	7.49	1.89	2.19
-15	(+ 5)	913	230	268	108	0.82	2.87	8.42	2.12	2.47
-10	(+14)	1153	290	338	121	0.92	3.64	9.49	2.39	2.78
-5	(+23)	1437	362	421	134	1.01	4.54	10.75	2.71	3.15
0	(+32)	1769	446	518	145	1.09	5.61	12.25	3.09	3.59

TEST CONDITIONS: @220V4000RPM		ASHRAE32 Static			(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]
-35	(-31)	270	68	79	60	0.46	0.85	4.50	1.13	1.32
-30	(-22)	376	95	110	71	0.54	1.18	5.33	1.34	1.56
-25	(-13)	507	128	149	83	0.63	1.59	6.11	1.54	1.79
-20	(- 4)	669	169	196	98	0.74	2.10	6.88	1.73	2.02
-15	(+ 5)	867	218	254	113	0.85	2.73	7.68	1.94	2.25
-10	(+14)	1103	278	323	129	0.97	3.48	8.56	2.16	2.51
-5	(+23)	1384	349	406	144	1.09	4.38	9.58	2.41	2.81
0	(+32)	1713	432	502	160	1.20	5.43	10.77	2.71	3.16

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V4500RPM		ASHRAE32 Static			(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]
-35	(-31)	376	95	110	69	0.52	1.18	5.47	1.38	1.60
-30	(-22)	499	126	146	79	0.60	1.56	6.26	1.58	1.84
-25	(-13)	646	163	189	91	0.68	2.03	7.12	1.80	2.09
-20	(- 4)	820	207	240	101	0.76	2.58	8.10	2.04	2.37
-15	(+ 5)	1026	259	301	111	0.84	3.23	9.24	2.33	2.71
-10	(+14)	1267	319	371	120	0.90	3.99	10.60	2.67	3.11
-5	(+23)	1544	389	453	126	0.95	4.88	12.23	3.08	3.58
0	(+32)	1863	470	546	130	0.99	5.91	14.16	3.57	4.15

TEST CONDITIONS: @220V4500RPM		ASHRAE32 Static			(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]
-35	(-31)	342	86	100	68	0.52	1.07	5.04	1.27	1.48
-30	(-22)	461	116	135	79	0.61	1.44	5.81	1.46	1.70
-25	(-13)	604	152	177	92	0.70	1.90	6.58	1.66	1.93
-20	(- 4)	775	195	227	105	0.79	2.43	7.40	1.86	2.17
-15	(+ 5)	976	246	286	117	0.88	3.07	8.32	2.10	2.44
-10	(+14)	1212	305	355	129	0.97	3.82	9.40	2.37	2.75
-5	(+23)	1484	374	435	139	1.05	4.69	10.68	2.69	3.13
0	(+32)	1798	453	527	148	1.12	5.70	12.20	3.08	3.58

TEST CONDITIONS: @220V4500RPM		ASHRAE32 Static			(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]
-35	(-31)	297	75	87	67	0.50	0.93	4.44	1.12	1.30
-30	(-22)	412	104	121	78	0.59	1.29	5.27	1.33	1.55
-25	(-13)	550	139	161	91	0.69	1.73	6.05	1.52	1.77
-20	(- 4)	716	181	210	105	0.79	2.25	6.81	1.72	2.00
-15	(+ 5)	913	230	268	120	0.90	2.87	7.62	1.92	2.23
-10	(+14)	1144	288	335	134	1.01	3.61	8.51	2.14	2.49
-5	(+23)	1411	356	414	148	1.12	4.46	9.54	2.40	2.79
0	(+32)	1719	433	504	160	1.22	5.45	10.75	2.71	3.15

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard VES		
2 Tray holder	Yes		
3 Connectors			
3.1 SUCTION	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 79° up + 0° back		
3.2 DISCHARGE	5.1 +0.10/+0.00	[mm]	(0.201" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted 47° up + 24° to Back		
3.3 PROCESS	6 +0.08/-0.08	[mm]	(0.236" +0.003"/-0.003")
3.3.1 Material	Copper(OD)		
3.3.2 Shape	Slanted 47° up + 59° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		