

COMPRESSOR DEFINITION

Designation	VES F9C
Nominal Voltage/Frequency	230 V 32-150 Hz
Engineering Number	513907484

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)	-	-	-
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	9.04	[cm ³] (0.552 cu.in)
2.1 Bore [mm]	24.000	
2.2 Stroke [mm]	20.000	
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)	6.17	[kg] (13.60 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELETRICAL 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	CF02F22 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: @220V950RPM			ASHRAELBP32 Static		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]
160	40	47	25	0.23	0.50	6.49	1.64	1.90

TEST CONDITIONS: @220V1300RPM			ASHRAELBP32 Static		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]
235	59	69	36	0.29	0.74	6.63	1.67	1.94

TEST CONDITIONS: @220V1600RPM			ASHRAELBP32 Static		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]
294	74	86	44	0.34	0.92	6.67	1.68	1.95

TEST CONDITIONS: @220V2000RPM			ASHRAELBP32 Static		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]
365	92	107	55	0.42	1.15	6.63	1.67	1.94

TEST CONDITIONS: @220V3000RPM			ASHRAELBP32 Static		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]
546	138	160	83	0.62	1.71	6.59	1.66	1.93

TEST CONDITIONS: @220V4000RPM			ASHRAELBP32 Static		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]
717	181	210	117	0.85	2.25	6.11	1.54	1.79

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V4500RPM			ASHRAELBP32 Static		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]
740	187	217	121	0.92	2.32	6.14	1.55	1.80

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V950RPM			ASHRAE32 Static		(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]
-35 (-31)	104	26	31		0.00	0.33	0.00	0.00	0.00
-30 (-22)	140	35	41		0.00	0.44	0.00	0.00	0.00
-25 (-13)	182	46	53		0.00	0.57	0.00	0.00	0.00
-20 (- 4)	232	58	68		0.00	0.73	0.00	0.00	0.00
-15 (+ 5)	292	74	86		0.00	0.92	0.00	0.00	0.00
-10 (+14)	364	92	107		0.00	1.15	0.00	0.00	0.00
-5 (+23)	448	113	131		0.00	1.42	0.00	0.00	0.00
0 (+32)	547	138	160		0.00	1.73	0.00	0.00	0.00

TEST CONDITIONS: @220V950RPM			ASHRAE32 Static		(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]
-35 (-31)	98	25	29		0.00	0.31	0.00	0.00	0.00
-30 (-22)	131	33	38		0.00	0.41	0.00	0.00	0.00
-25 (-13)	172	43	50		0.00	0.54	0.00	0.00	0.00
-20 (- 4)	221	56	65		0.00	0.69	0.00	0.00	0.00
-15 (+ 5)	280	71	82		0.00	0.88	0.00	0.00	0.00
-10 (+14)	352	89	103		0.00	1.11	0.00	0.00	0.00
-5 (+23)	437	110	128		0.00	1.38	0.00	0.00	0.00
0 (+32)	537	135	157		0.00	1.70	0.00	0.00	0.00

TEST CONDITIONS: @220V950RPM			ASHRAE32 Static		(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]
-35 (-31)	88	22	26		0.00	0.28	0.00	0.00	0.00
-30 (-22)	119	30	35		0.00	0.37	0.00	0.00	0.00
-25 (-13)	159	40	46		0.00	0.50	0.00	0.00	0.00
-20 (- 4)	207	52	61		0.00	0.65	0.00	0.00	0.00
-15 (+ 5)	267	67	78		0.00	0.84	0.00	0.00	0.00
-10 (+14)	339	85	99		0.00	1.07	0.00	0.00	0.00
-5 (+23)	425	107	125		0.00	1.34	0.00	0.00	0.00
0 (+32)	527	133	154		0.00	1.67	0.00	0.00	0.00

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V1300RPM		ASHRAE32 Static			(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]
-35	(-31)	143	36	42	22	0.19	0.45	6.51	1.64	1.91
-30	(-22)	190	48	56	26	0.22	0.60	7.43	1.87	2.18
-25	(-13)	247	62	72	29	0.25	0.78	8.46	2.13	2.48
-20	(- 4)	317	80	93	33	0.28	0.99	9.64	2.43	2.82
-15	(+ 5)	400	101	117	36	0.30	1.26	10.99	2.77	3.22
-10	(+14)	498	125	146	40	0.32	1.57	12.55	3.16	3.68
-5	(+23)	613	155	180	43	0.34	1.94	14.32	3.61	4.20
0	(+32)	747	188	219	45	0.36	2.37	16.35	4.12	4.79

TEST CONDITIONS: @220V1300RPM		ASHRAE32 Static			(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]
-35	(-31)	134	34	39	22	0.20	0.42	5.95	1.50	1.74
-30	(-22)	179	45	52	27	0.24	0.56	6.65	1.68	1.95
-25	(-13)	235	59	69	31	0.27	0.74	7.45	1.88	2.18
-20	(- 4)	303	76	89	36	0.31	0.95	8.36	2.11	2.45
-15	(+ 5)	385	97	113	41	0.34	1.21	9.41	2.37	2.76
-10	(+14)	482	121	141	45	0.37	1.52	10.63	2.68	3.12
-5	(+23)	597	150	175	50	0.40	1.89	12.05	3.04	3.53
0	(+32)	730	184	214	54	0.43	2.31	13.68	3.45	4.01

TEST CONDITIONS: @220V1300RPM		ASHRAE32 Static			(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]
-35	(-31)	121	31	36	23	0.20	0.38	5.36	1.35	1.57
-30	(-22)	165	41	48	28	0.25	0.52	5.93	1.50	1.74
-25	(-13)	218	55	64	33	0.29	0.69	6.56	1.65	1.92
-20	(- 4)	285	72	83	39	0.33	0.89	7.28	1.83	2.13
-15	(+ 5)	365	92	107	45	0.37	1.15	8.10	2.04	2.37
-10	(+14)	461	116	135	51	0.41	1.45	9.06	2.28	2.66
-5	(+23)	574	145	168	56	0.45	1.81	10.19	2.57	2.98
0	(+32)	706	178	207	62	0.49	2.24	11.50	2.90	3.37

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V1600RPM		ASHRAE32 Static			(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]
-35 (-31)	176	44	51	27	0.23	0.55	6.48	1.63	1.90	
-30 (-22)	233	59	68	31	0.26	0.73	7.40	1.87	2.17	
-25 (-13)	303	76	89	36	0.29	0.95	8.43	2.12	2.47	
-20 (- 4)	389	98	114	40	0.33	1.22	9.60	2.42	2.81	
-15 (+ 5)	491	124	144	45	0.36	1.54	10.94	2.76	3.21	
-10 (+14)	612	154	179	49	0.38	1.93	12.49	3.15	3.66	
-5 (+23)	754	190	221	53	0.41	2.38	14.27	3.60	4.18	
0 (+32)	919	232	269	56	0.44	2.91	16.31	4.11	4.78	

TEST CONDITIONS: @220V1600RPM		ASHRAE32 Static			(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]
-35 (-31)	164	41	48	28	0.24	0.51	5.91	1.49	1.73	
-30 (-22)	219	55	64	33	0.28	0.69	6.64	1.67	1.95	
-25 (-13)	288	73	84	39	0.32	0.90	7.45	1.88	2.18	
-20 (- 4)	371	94	109	44	0.36	1.17	8.36	2.11	2.45	
-15 (+ 5)	472	119	138	50	0.40	1.49	9.41	2.37	2.76	
-10 (+14)	592	149	174	56	0.44	1.87	10.63	2.68	3.11	
-5 (+23)	733	185	215	61	0.48	2.32	12.05	3.04	3.53	
0 (+32)	898	226	263	66	0.52	2.85	13.70	3.45	4.01	

TEST CONDITIONS: @220V1600RPM		ASHRAE32 Static			(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]
-35 (-31)	150	38	44	28	0.24	0.47	5.34	1.35	1.57	
-30 (-22)	203	51	59	34	0.29	0.64	5.96	1.50	1.75	
-25 (-13)	269	68	79	41	0.34	0.84	6.62	1.67	1.94	
-20 (- 4)	351	88	103	48	0.38	1.10	7.35	1.85	2.15	
-15 (+ 5)	449	113	132	55	0.43	1.41	8.19	2.06	2.40	
-10 (+14)	568	143	166	62	0.48	1.79	9.16	2.31	2.68	
-5 (+23)	707	178	207	69	0.53	2.24	10.30	2.59	3.02	
0 (+32)	870	219	255	75	0.58	2.76	11.63	2.93	3.41	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V2000RPM		ASHRAE32 Static			(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]
-35	(-31)	218	55	64	34	0.28	0.68	6.38	1.61	1.87
-30	(-22)	290	73	85	40	0.32	0.91	7.31	1.84	2.14
-25	(-13)	377	95	111	45	0.36	1.18	8.33	2.10	2.44
-20	(- 4)	484	122	142	51	0.40	1.52	9.49	2.39	2.78
-15	(+ 5)	611	154	179	57	0.44	1.92	10.80	2.72	3.16
-10	(+14)	762	192	223	62	0.48	2.40	12.30	3.10	3.60
-5	(+23)	940	237	275	67	0.51	2.97	14.03	3.54	4.11
0	(+32)	1146	289	336	71	0.54	3.63	16.02	4.04	4.69

TEST CONDITIONS: @220V2000RPM		ASHRAE32 Static			(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]
-35	(-31)	204	51	60	35	0.29	0.64	5.83	1.47	1.71
-30	(-22)	273	69	80	41	0.34	0.85	6.59	1.66	1.93
-25	(-13)	358	90	105	48	0.39	1.12	7.41	1.87	2.17
-20	(- 4)	462	117	135	55	0.44	1.45	8.31	2.10	2.44
-15	(+ 5)	588	148	172	63	0.49	1.85	9.35	2.36	2.74
-10	(+14)	738	186	216	70	0.53	2.33	10.55	2.66	3.09
-5	(+23)	914	230	268	77	0.58	2.89	11.93	3.01	3.50
0	(+32)	1120	282	328	83	0.63	3.55	13.55	3.42	3.97

TEST CONDITIONS: @220V2000RPM		ASHRAE32 Static			(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]
-35	(-31)	188	47	55	35	0.29	0.59	5.28	1.33	1.55
-30	(-22)	253	64	74	43	0.35	0.79	5.94	1.50	1.74
-25	(-13)	336	85	98	51	0.41	1.05	6.63	1.67	1.94
-20	(- 4)	438	110	128	59	0.47	1.38	7.38	1.86	2.16
-15	(+ 5)	562	142	165	68	0.52	1.77	8.22	2.07	2.41
-10	(+14)	710	179	208	77	0.58	2.24	9.19	2.32	2.69
-5	(+23)	885	223	259	86	0.64	2.80	10.32	2.60	3.02
0	(+32)	1089	274	319	94	0.70	3.45	11.65	2.93	3.41

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V3000RPM		ASHRAE32 Static			(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]
-35	(-31)	318	80	93	53	0.41	1.00	5.96	1.50	1.75
-30	(-22)	355	89	104	62	0.47	1.11	6.43	1.62	1.88
-25	(-13)	565	142	165	71	0.53	1.77	8.06	2.03	2.36
-20	(- 4)	796	201	233	81	0.60	2.50	9.59	2.42	2.81
-15	(+ 5)	898	226	263	90	0.67	2.83	9.77	2.46	2.86
-10	(+14)	719	181	211	100	0.73	2.27	7.35	1.85	2.15
-5	(+23)	110	28	32	108	0.78	0.35	1.06	0.27	0.31
0	(+32)	- 1083	- 273	- 317	115	0.82	- 3.41	- 10.34	- 2.60	- 3.03

TEST CONDITIONS: @220V3000RPM		ASHRAE32 Static			(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]
-35	(-31)	301	76	88	54	0.43	0.94	5.52	1.39	1.62
-30	(-22)	326	82	96	64	0.49	1.02	5.68	1.43	1.66
-25	(-13)	531	134	156	74	0.57	1.67	7.14	1.80	2.09
-20	(- 4)	764	192	224	86	0.65	2.40	8.66	2.18	2.54
-15	(+ 5)	874	220	256	98	0.73	2.75	8.98	2.26	2.63
-10	(+14)	711	179	208	110	0.81	2.24	6.84	1.72	2.00
-5	(+23)	123	31	36	121	0.88	0.39	0.99	0.25	0.29
0	(+32)	- 1040	- 262	- 305	132	0.93	- 3.28	- 9.82	- 2.47	- 2.88

TEST CONDITIONS: @220V3000RPM		ASHRAE32 Static			(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]
-35	(-31)	278	70	82	55	0.42	0.87	5.07	1.28	1.49
-30	(-22)	291	73	85	66	0.50	0.91	4.92	1.24	1.44
-25	(-13)	491	124	144	77	0.58	1.54	6.23	1.57	1.82
-20	(- 4)	725	183	212	90	0.68	2.28	7.74	1.95	2.27
-15	(+ 5)	844	213	247	104	0.77	2.66	8.20	2.07	2.40
-10	(+14)	695	175	204	118	0.87	2.19	6.35	1.60	1.86
-5	(+23)	129	33	38	132	0.95	0.41	0.94	0.24	0.28
0	(+32)	- 1006	- 253	- 295	146	1.02	- 3.17	- 9.28	- 2.34	- 2.72

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V3600RPM		ASHRAE32 Static			(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]
-35	(-31)	385	97	113	66	0.50	1.21	5.78	1.46	1.69
-30	(-22)	499	126	146	75	0.57	1.56	6.63	1.67	1.94
-25	(-13)	654	165	192	87	0.65	2.05	7.48	1.89	2.19
-20	(- 4)	848	214	249	101	0.75	2.67	8.39	2.11	2.46
-15	(+ 5)	1082	273	317	115	0.84	3.40	9.40	2.37	2.75
-10	(+14)	1352	341	396	128	0.93	4.27	10.57	2.66	3.10
-5	(+23)	1659	418	486	139	0.99	5.24	11.96	3.01	3.51
0	(+32)	1999	504	586	145	1.03	6.34	13.63	3.44	3.99

TEST CONDITIONS: @220V3600RPM		ASHRAE32 Static			(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]
-35	(-31)	353	89	103	66	0.50	1.10	5.38	1.36	1.58
-30	(-22)	477	120	140	78	0.59	1.50	6.16	1.55	1.81
-25	(-13)	637	160	187	92	0.69	2.00	6.91	1.74	2.03
-20	(- 4)	830	209	243	108	0.80	2.61	7.69	1.94	2.25
-15	(+ 5)	1055	266	309	123	0.91	3.32	8.54	2.15	2.50
-10	(+14)	1311	330	384	138	1.01	4.13	9.54	2.40	2.79
-5	(+23)	1596	402	468	149	1.08	5.05	10.72	2.70	3.14
0	(+32)	1909	481	559	156	1.13	6.05	12.16	3.06	3.56

TEST CONDITIONS: @220V3600RPM		ASHRAE32 Static			(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]
-35	(-31)	323	81	95	68	0.51	1.01	4.77	1.20	1.40
-30	(-22)	446	113	131	80	0.61	1.40	5.55	1.40	1.63
-25	(-13)	599	151	176	95	0.71	1.88	6.28	1.58	1.84
-20	(- 4)	779	196	228	111	0.82	2.45	7.00	1.76	2.05
-15	(+ 5)	984	248	288	127	0.93	3.10	7.78	1.96	2.28
-10	(+14)	1214	306	356	140	1.02	3.83	8.67	2.18	2.54
-5	(+23)	1466	369	430	151	1.09	4.64	9.72	2.45	2.85
0	(+32)	1740	439	510	157	1.12	5.52	11.00	2.77	3.22

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V4000RPM		ASHRAE32 Static			(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]
-35 (-31)	417	105	122	75	0.57	1.30	5.59	1.41	1.64	
-30 (-22)	454	114	133	75	0.57	1.42	5.91	1.49	1.73	
-25 (-13)	741	187	217	100	0.74	2.33	7.37	1.86	2.16	
-20 (- 4)	1059	267	310	127	0.93	3.33	8.75	2.20	2.56	
-15 (+ 5)	1188	299	348	135	0.98	3.74	8.81	2.22	2.58	
-10 (+14)	908	229	266	100	0.72	2.86	6.31	1.59	1.85	
-5 (+23)				- 1	0.00	0.00	0.03	0.01	0.01	
0 (+32)	- 1755	- 442	- 514	- 190	- 1.37	- 5.53	- 11.26	- 2.84	- 3.30	

TEST CONDITIONS: @220V4000RPM		ASHRAE32 Static			(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]
-35 (-31)	396	100	116	75	0.58	1.24	5.27	1.33	1.55	
-30 (-22)	422	106	124	77	0.59	1.32	5.41	1.36	1.59	
-25 (-13)	704	177	206	104	0.78	2.21	6.79	1.71	1.99	
-20 (- 4)	1022	258	300	132	0.98	3.21	8.17	2.06	2.39	
-15 (+ 5)	1158	292	339	139	1.02	3.65	8.33	2.10	2.44	
-10 (+14)	892	225	261	103	0.75	2.81	6.02	1.52	1.76	
-5 (+23)	5	1	1		0.00	0.01	0.02	0.00	0.01	
0 (+32)	- 1724	- 434	- 505	- 192	- 1.39	- 5.43	- 10.91	- 2.75	- 3.20	

TEST CONDITIONS: @220V4000RPM		ASHRAE32 Static			(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]
-35 (-31)	353	89	104	75	0.57	1.11	4.69	1.18	1.37	
-30 (-22)	368	93	108	80	0.61	1.15	4.69	1.18	1.37	
-25 (-13)	646	163	189	108	0.81	2.03	6.01	1.52	1.76	
-20 (- 4)	967	244	283	137	1.01	3.04	7.43	1.87	2.18	
-15 (+ 5)	1112	280	326	144	1.05	3.50	7.72	1.95	2.26	
-10 (+14)	861	217	252	106	0.77	2.71	5.63	1.42	1.65	
-5 (+23)	- 5	- 1	- 1		0.00	- 0.01	- 0.05	- 0.01	- 0.01	
0 (+32)	- 1705	- 430	- 500	- 195	- 1.42	- 5.38	- 10.57	- 2.66	- 3.10	

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 45° up + 15° to Back		
3.2 DISCHARGE	4.9 +0.10/-0.05	[mm]	(0.193" +0.004"/-0.002")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted 47° up + 59° to Back		
3.3 PROCESS	6.35 +0.08/-0.08	[mm]	(0.250" +0.003"/-0.003")
3.3.1 Material	Copper(OD)		
3.3.2 Shape	Slanted 0° up + 24° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		