

### 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)	Static	187 to 255 V	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 <sup>2</sup> ] (98 psig)	/ °C - °F
9.2 Peak	7.8	[kgf/cm <sup>2</sup> ] (111 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1/5	[hp]
2 Displacement	9.04	[cm <sup>3</sup> ] (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 <sup>2</sup> ] (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	CF02F22 M 0.0 X	
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: <b>@220V950RPM</b>			<b>ASHRAELBP32</b> <b>Static</b>		Evaporating temperature (Condensing temperature)		<b>-23.3°C (-9.94°F)</b> <b>54.4°C (129.92°F)</b>	
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: <b>@220V1300RPM</b>			<b>ASHRAELBP32</b> <b>Static</b>		Evaporating temperature (Condensing temperature)		<b>-23.3°C (-9.94°F)</b> <b>54.4°C (129.92°F)</b>	
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: <b>@220V1600RPM</b>			<b>ASHRAELBP32</b> <b>Static</b>		Evaporating temperature (Condensing temperature)		<b>-23.3°C (-9.94°F)</b> <b>54.4°C (129.92°F)</b>	
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: <b>@220V2000RPM</b>			<b>ASHRAELBP32</b> <b>Static</b>		Evaporating temperature (Condensing temperature)		<b>-23.3°C (-9.94°F)</b> <b>54.4°C (129.92°F)</b>	
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: <b>@220V3000RPM</b>			<b>ASHRAELBP32</b> <b>Static</b>		Evaporating temperature (Condensing temperature)		<b>-23.3°C (-9.94°F)</b> <b>54.4°C (129.92°F)</b>	
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: <b>@220V4000RPM</b>			<b>ASHRAELBP32</b> <b>Static</b>		Evaporating temperature (Condensing temperature)		<b>-23.3°C (-9.94°F)</b> <b>54.4°C (129.92°F)</b>	
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	16	0.15	0.33	6.52	1.64	1.91
-30	(-22)	140	35	41	19	0.17	0.44	7.41	1.87	2.17
-25	(-13)	182	46	53	22	0.19	0.57	8.42	2.12	2.47
-20	(- 4)	232	58	68	24	0.21	0.73	9.59	2.42	2.81
-15	(+ 5)	292	74	86	27	0.23	0.92	10.94	2.76	3.21
-10	(+14)	364	92	107	29	0.24	1.15	12.49	3.15	3.66
-5	(+23)	448	113	131	31	0.26	1.42	14.28	3.60	4.18
0	(+32)	547	138	160	33	0.28	1.73	16.33	4.11	4.78

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	16	0.16	0.31	5.96	1.50	1.75
-30	(-22)	131	33	38	20	0.19	0.41	6.63	1.67	1.94
-25	(-13)	172	43	50	23	0.21	0.54	7.39	1.86	2.17
-20	(- 4)	221	56	65	27	0.24	0.69	8.28	2.09	2.43
-15	(+ 5)	280	71	82	30	0.26	0.88	9.31	2.35	2.73
-10	(+14)	352	89	103	33	0.28	1.11	10.52	2.65	3.08
-5	(+23)	437	110	128	37	0.31	1.38	11.93	3.01	3.50
0	(+32)	537	135	157	40	0.33	1.70	13.57	3.42	3.98

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	16	0.15	0.28	5.36	1.35	1.57
-30	(-22)	119	30	35	20	0.18	0.37	5.88	1.48	1.72
-25	(-13)	159	40	46	25	0.22	0.50	6.47	1.63	1.90
-20	(- 4)	207	52	61	29	0.25	0.65	7.15	1.80	2.09
-15	(+ 5)	267	67	78	34	0.28	0.84	7.94	2.00	2.33
-10	(+14)	339	85	99	38	0.32	1.07	8.88	2.24	2.60
-5	(+23)	425	107	125	43	0.35	1.34	9.99	2.52	2.93
0	(+32)	527	133	154	47	0.39	1.67	11.29	2.85	3.31

### 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]
-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]
-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]
-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]	[W/W]
-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]	[W/W]
-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]	[W/W]
-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]	[W/W]
-35 (-31)	321	81	94	53	0.41	1.00	6.02	1.52	1.76	
-30 (-22)	427	108	125	62	0.47	1.34	6.91	1.74	2.02	
-25 (-13)	557	140	163	71	0.53	1.75	7.84	1.98	2.30	
-20 (- 4)	715	180	210	81	0.60	2.25	8.87	2.24	2.60	
-15 (+ 5)	905	228	265	90	0.67	2.85	10.03	2.53	2.94	
-10 (+14)	1130	285	331	100	0.73	3.56	11.35	2.86	3.33	
-5 (+23)	1393	351	408	108	0.78	4.41	12.89	3.25	3.78	
0 (+32)	1700	428	498	115	0.82	5.39	14.69	3.70	4.30	

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]	[W/W]
-35 (-31)	301	76	88	54	0.43	0.94	5.55	1.40	1.63	
-30 (-22)	403	102	118	64	0.49	1.26	6.33	1.60	1.86	
-25 (-13)	531	134	156	74	0.57	1.67	7.13	1.80	2.09	
-20 (- 4)	687	173	201	86	0.65	2.16	7.97	2.01	2.34	
-15 (+ 5)	874	220	256	98	0.73	2.75	8.91	2.25	2.61	
-10 (+14)	1098	277	322	110	0.81	3.46	9.99	2.52	2.93	
-5 (+23)	1361	343	399	121	0.88	4.30	11.24	2.83	3.29	
0 (+32)	1667	420	489	132	0.93	5.29	12.71	3.20	3.72	

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]	[W/W]
-35 (-31)	276	70	81	55	0.42	0.86	4.98	1.25	1.46	
-30 (-22)	374	94	110	66	0.50	1.17	5.73	1.44	1.68	
-25 (-13)	498	126	146	77	0.58	1.56	6.46	1.63	1.89	
-20 (- 4)	651	164	191	90	0.68	2.05	7.21	1.82	2.11	
-15 (+ 5)	836	211	245	104	0.77	2.63	8.01	2.02	2.35	
-10 (+14)	1058	267	310	118	0.87	3.34	8.91	2.25	2.61	
-5 (+23)	1319	332	387	132	0.95	4.17	9.95	2.51	2.92	
0 (+32)	1625	409	476	146	1.02	5.15	11.18	2.82	3.28	

### 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]	[W/W]
-35 (-31)	381	96	112	66	0.50	1.19	5.78	1.46	1.69	
-30 (-22)	508	128	149	77	0.58	1.59	6.62	1.67	1.94	
-25 (-13)	663	167	194	89	0.66	2.08	7.47	1.88	2.19	
-20 (- 4)	852	215	250	102	0.75	2.68	8.38	2.11	2.46	
-15 (+ 5)	1077	271	316	115	0.84	3.39	9.41	2.37	2.76	
-10 (+14)	1345	339	394	127	0.92	4.24	10.59	2.67	3.10	
-5 (+23)	1659	418	486	139	0.99	5.24	11.96	3.01	3.51	
0 (+32)	2023	510	593	148	1.05	6.41	13.58	3.42	3.98	

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]	[W/W]
-35 (-31)	357	90	105	66	0.51	1.12	5.38	1.35	1.58	
-30 (-22)	481	121	141	78	0.59	1.51	6.16	1.55	1.80	
-25 (-13)	635	160	186	92	0.69	1.99	6.91	1.74	2.03	
-20 (- 4)	822	207	241	107	0.80	2.58	7.70	1.94	2.26	
-15 (+ 5)	1047	264	307	122	0.90	3.30	8.55	2.15	2.51	
-10 (+14)	1315	331	385	138	1.01	4.15	9.52	2.40	2.79	
-5 (+23)	1629	411	477	153	1.11	5.15	10.65	2.68	3.12	
0 (+32)	1995	503	585	167	1.20	6.32	11.98	3.02	3.51	

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]	[W/W]
-35 (-31)	323	82	95	68	0.51	1.01	4.77	1.20	1.40	
-30 (-22)	442	112	130	80	0.60	1.39	5.56	1.40	1.63	
-25 (-13)	591	149	173	94	0.71	1.86	6.29	1.59	1.84	
-20 (- 4)	775	195	227	111	0.82	2.43	7.01	1.77	2.05	
-15 (+ 5)	997	251	292	128	0.94	3.14	7.76	1.96	2.27	
-10 (+14)	1262	318	370	147	1.06	3.98	8.59	2.16	2.52	
-5 (+23)	1574	397	461	165	1.18	4.98	9.53	2.40	2.79	
0 (+32)	1939	489	568	183	1.29	6.15	10.65	2.68	3.12	



### 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]
-35	(-31)	421	106	123	75	0.57	1.32	5.64	1.42	1.65
-30	(-22)	560	141	164	87	0.65	1.75	6.43	1.62	1.89
-25	(-13)	732	184	214	101	0.75	2.30	7.22	1.82	2.12
-20	(- 4)	942	237	276	117	0.86	2.96	8.05	2.03	2.36
-15	(+ 5)	1193	301	350	133	0.97	3.75	8.97	2.26	2.63
-10	(+14)	1489	375	436	148	1.08	4.70	10.04	2.53	2.94
-5	(+23)	1835	462	538	162	1.18	5.80	11.29	2.85	3.31
0	(+32)	2233	563	654	174	1.28	7.08	12.79	3.22	3.75

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]
-35	(-31)	393	99	115	74	0.58	1.23	5.29	1.33	1.55
-30	(-22)	533	134	156	88	0.67	1.67	6.06	1.53	1.78
-25	(-13)	705	178	207	104	0.78	2.21	6.79	1.71	1.99
-20	(- 4)	914	230	268	122	0.90	2.87	7.52	1.89	2.20
-15	(+ 5)	1165	293	341	140	1.03	3.67	8.30	2.09	2.43
-10	(+14)	1459	368	428	159	1.16	4.60	9.19	2.32	2.69
-5	(+23)	1802	454	528	176	1.28	5.70	10.24	2.58	3.00
0	(+32)	2197	554	644	192	1.39	6.96	11.49	2.90	3.37

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]
-35	(-31)	352	89	103	76	0.57	1.10	4.63	1.17	1.36
-30	(-22)	487	123	143	89	0.68	1.53	5.44	1.37	1.60
-25	(-13)	654	165	192	106	0.80	2.05	6.17	1.56	1.81
-20	(- 4)	857	216	251	125	0.93	2.69	6.86	1.73	2.01
-15	(+ 5)	1100	277	322	145	1.06	3.46	7.57	1.91	2.22
-10	(+14)	1388	350	407	166	1.20	4.38	8.35	2.10	2.45
-5	(+23)	1722	434	505	186	1.34	5.45	9.25	2.33	2.71
0	(+32)	2109	531	618	205	1.47	6.69	10.31	2.60	3.02

### 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		