

### COMPRESSOR DEFINITION

Designation	VES F7C
Nominal Voltage/Frequency	230 V 32-150 Hz
Engineering Number	513907397

### 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	160 to 264 V	160 to 264 V
8.2 LBP (43°C Ambient temperature)	Static	160 to 264 V	160 to 264 V
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	7.23	[cm <sup>3</sup> ] (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)	6.57	[kg] (14.48 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### 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	VESF 2456 XXX X	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	INVERTER VES 2456X	
6 Start winding resistance	9.30	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	9.30	[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	CCC - VDE	

### 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]	
119	30	35	19	0.19	0.37	6.20	1.56	1.82	

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]	
171	43	50	27	0.24	0.54	6.45	1.63	1.89	

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]	
270	68	79	41	0.34	0.85	6.57	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]	
536	135	157	84	0.65	1.68	6.35	1.60	1.86	

### E - PERFORMANCE - CURVES

TEST CONDITIONS: <b>@220V950RPM</b>		<b>ASHRAE32</b> <b>Static</b>					(Condensing temperature <b>35°C (+95°F)</b> )			
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)	68	17	20	12	0.16	0.21	5.60	1.41	1.64
-30	(-22)	99	25	29	14	0.17	0.31	6.90	1.74	2.02
-25	(-13)	136	34	40	17	0.18	0.43	8.21	2.07	2.41
-20	(- 4)	178	45	52	19	0.19	0.56	9.57	2.41	2.81
-15	(+ 5)	227	57	66	21	0.21	0.71	11.04	2.78	3.24
-10	(+14)	283	71	83	22	0.22	0.89	12.67	3.19	3.71
-5	(+23)	347	87	102	24	0.23	1.10	14.49	3.65	4.25
0	(+32)	420	106	123	25	0.24	1.33	16.56	4.17	4.85

### E - PERFORMANCE - CURVES

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)	59	15	17	12	0.15	0.19	4.97	1.25	1.46
-30	(-22)	88	22	26	15	0.16	0.28	6.02	1.52	1.76
-25	(-13)	122	31	36	17	0.18	0.38	7.05	1.78	2.06
-20	(- 4)	163	41	48	20	0.20	0.51	8.11	2.04	2.37
-15	(+ 5)	211	53	62	23	0.22	0.66	9.24	2.33	2.71
-10	(+14)	267	67	78	25	0.24	0.84	10.50	2.65	3.08
-5	(+23)	332	84	97	28	0.26	1.05	11.94	3.01	3.50
0	(+32)	407	103	119	30	0.27	1.29	13.60	3.43	3.99

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)	50	13	15	11	0.15	0.16	4.43	1.12	1.30
-30	(-22)	76	19	22	15	0.17	0.24	5.30	1.34	1.55
-25	(-13)	109	27	32	18	0.19	0.34	6.13	1.55	1.80
-20	(- 4)	149	37	44	21	0.21	0.47	6.96	1.75	2.04
-15	(+ 5)	196	49	58	25	0.24	0.62	7.85	1.98	2.30
-10	(+14)	253	64	74	28	0.27	0.80	8.83	2.23	2.59
-5	(+23)	319	80	93	32	0.29	1.01	9.96	2.51	2.92
0	(+32)	395	100	116	35	0.31	1.25	11.29	2.84	3.31

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]	[W/W]
-35	(-31)	102	26	30	16	0.18	0.32	6.19	1.56	1.81
-30	(-22)	144	36	42	19	0.20	0.45	7.33	1.85	2.15
-25	(-13)	191	48	56	23	0.22	0.60	8.47	2.13	2.48
-20	(- 4)	247	62	72	25	0.24	0.77	9.71	2.45	2.85
-15	(+ 5)	313	79	92	28	0.27	0.99	11.13	2.81	3.26
-10	(+14)	394	99	115	31	0.29	1.24	12.82	3.23	3.76
-5	(+23)	491	124	144	33	0.30	1.55	14.85	3.74	4.35
0	(+32)	608	153	178	35	0.31	1.93	17.31	4.36	5.07

### E - PERFORMANCE - CURVES

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]	[W/W]
-35	(-31)	84	21	24	17	0.18	0.26	5.06	1.28	1.48
-30	(-22)	124	31	36	20	0.20	0.39	6.10	1.54	1.79
-25	(-13)	170	43	50	24	0.22	0.53	7.10	1.79	2.08
-20	(- 4)	225	57	66	28	0.25	0.71	8.14	2.05	2.39
-15	(+ 5)	291	73	85	31	0.28	0.92	9.31	2.35	2.73
-10	(+14)	372	94	109	35	0.31	1.17	10.70	2.70	3.14
-5	(+23)	469	118	137	38	0.33	1.48	12.39	3.12	3.63
0	(+32)	586	148	172	41	0.34	1.86	14.46	3.64	4.24

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]	[W/W]
-35	(-31)	67	17	20	15	0.17	0.21	4.34	1.09	1.27
-30	(-22)	104	26	30	20	0.20	0.33	5.27	1.33	1.54
-25	(-13)	147	37	43	24	0.23	0.46	6.10	1.54	1.79
-20	(- 4)	199	50	58	29	0.26	0.62	6.94	1.75	2.03
-15	(+ 5)	262	66	77	33	0.29	0.83	7.85	1.98	2.30
-10	(+14)	340	86	100	38	0.32	1.07	8.93	2.25	2.62
-5	(+23)	435	110	128	42	0.35	1.38	10.26	2.59	3.01
0	(+32)	550	139	161	47	0.37	1.75	11.93	3.01	3.49

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)	126	32	37	21	0.21	0.39	6.03	1.52	1.77
-30	(-22)	174	44	51	24	0.24	0.55	7.15	1.80	2.09
-25	(-13)	232	59	68	28	0.26	0.73	8.32	2.10	2.44
-20	(- 4)	301	76	88	32	0.28	0.95	9.58	2.41	2.81
-15	(+ 5)	383	97	112	35	0.30	1.21	10.96	2.76	3.21
-10	(+14)	478	120	140	38	0.32	1.51	12.52	3.16	3.67
-5	(+23)	587	148	172	41	0.34	1.86	14.29	3.60	4.19
0	(+32)	712	179	209	43	0.36	2.26	16.31	4.11	4.78

### E - PERFORMANCE - CURVES

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)	102	26	30	21	0.21	0.32	4.98	1.25	1.46
-30	(-22)	152	38	45	25	0.24	0.48	6.08	1.53	1.78
-25	(-13)	212	53	62	29	0.27	0.67	7.17	1.81	2.10
-20	(- 4)	283	71	83	34	0.30	0.89	8.29	2.09	2.43
-15	(+ 5)	366	92	107	39	0.33	1.15	9.49	2.39	2.78
-10	(+14)	463	117	136	43	0.36	1.46	10.80	2.72	3.16
-5	(+23)	573	144	168	47	0.40	1.81	12.25	3.09	3.59
0	(+32)	699	176	205	50	0.43	2.22	13.90	3.50	4.07

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)	82	21	24	19	0.20	0.26	4.27	1.08	1.25
-30	(-22)	131	33	39	25	0.24	0.41	5.33	1.34	1.56
-25	(-13)	191	48	56	30	0.27	0.60	6.33	1.59	1.85
-20	(- 4)	261	66	76	36	0.31	0.82	7.30	1.84	2.14
-15	(+ 5)	343	86	100	41	0.35	1.08	8.28	2.09	2.43
-10	(+14)	438	110	128	47	0.39	1.38	9.31	2.35	2.73
-5	(+23)	547	138	160	52	0.43	1.73	10.44	2.63	3.06
0	(+32)	671	169	197	57	0.48	2.13	11.70	2.95	3.43

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)	159	40	47	26	0.25	0.50	6.09	1.54	1.79
-30	(-22)	218	55	64	31	0.28	0.68	7.11	1.79	2.08
-25	(-13)	291	73	85	35	0.31	0.91	8.22	2.07	2.41
-20	(- 4)	380	96	111	40	0.35	1.19	9.48	2.39	2.78
-15	(+ 5)	487	123	143	45	0.38	1.53	10.91	2.75	3.20
-10	(+14)	615	155	180	49	0.41	1.94	12.57	3.17	3.68
-5	(+23)	765	193	224	53	0.43	2.42	14.48	3.65	4.24
0	(+32)	939	237	275	56	0.45	2.97	16.68	4.20	4.89

### E - PERFORMANCE - CURVES

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)	139	35	41	26	0.24	0.44	5.31	1.34	1.56
-30	(-22)	197	50	58	32	0.28	0.62	6.23	1.57	1.83
-25	(-13)	268	67	78	37	0.32	0.84	7.18	1.81	2.10
-20	(- 4)	353	89	103	43	0.36	1.11	8.20	2.07	2.40
-15	(+ 5)	455	115	133	49	0.40	1.43	9.34	2.35	2.74
-10	(+14)	576	145	169	54	0.43	1.82	10.62	2.68	3.11
-5	(+23)	717	181	210	59	0.47	2.27	12.09	3.05	3.54
0	(+32)	881	222	258	64	0.50	2.79	13.79	3.47	4.04

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)	112	28	33	25	0.24	0.35	4.48	1.13	1.31
-30	(-22)	172	43	51	32	0.28	0.54	5.43	1.37	1.59
-25	(-13)	244	62	72	38	0.33	0.77	6.35	1.60	1.86
-20	(- 4)	329	83	97	45	0.38	1.04	7.26	1.83	2.13
-15	(+ 5)	430	108	126	52	0.43	1.35	8.22	2.07	2.41
-10	(+14)	547	138	160	59	0.48	1.73	9.26	2.33	2.71
-5	(+23)	683	172	200	66	0.52	2.16	10.42	2.63	3.05
0	(+32)	841	212	246	72	0.56	2.67	11.73	2.96	3.44

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)	231	58	68	39	0.33	0.72	5.85	1.47	1.71
-30	(-22)	321	81	94	47	0.39	1.01	6.77	1.71	1.98
-25	(-13)	434	109	127	56	0.44	1.36	7.81	1.97	2.29
-20	(- 4)	571	144	167	64	0.50	1.79	8.96	2.26	2.63
-15	(+ 5)	732	185	215	72	0.55	2.30	10.22	2.57	2.99
-10	(+14)	918	231	269	80	0.60	2.90	11.58	2.92	3.39
-5	(+23)	1130	285	331	86	0.65	3.57	13.03	3.28	3.82
0	(+32)	1366	344	400	92	0.69	4.33	14.57	3.67	4.27

### E - PERFORMANCE - CURVES

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)	207	52	61	40	0.34	0.65	5.16	1.30	1.51
-30	(-22)	289	73	85	48	0.40	0.91	5.98	1.51	1.75
-25	(-13)	397	100	116	58	0.46	1.25	6.89	1.74	2.02
-20	(- 4)	531	134	156	67	0.52	1.67	7.89	1.99	2.31
-15	(+ 5)	690	174	202	77	0.59	2.17	8.97	2.26	2.63
-10	(+14)	877	221	257	87	0.65	2.77	10.13	2.55	2.97
-5	(+23)	1090	275	319	96	0.71	3.45	11.36	2.86	3.33
0	(+32)	1330	335	390	105	0.77	4.22	12.66	3.19	3.71

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)	186	47	55	40	0.35	0.58	4.66	1.17	1.36
-30	(-22)	262	66	77	49	0.41	0.82	5.41	1.36	1.59
-25	(-13)	366	92	107	59	0.48	1.15	6.23	1.57	1.83
-20	(- 4)	497	125	146	70	0.55	1.56	7.12	1.79	2.09
-15	(+ 5)	655	165	192	81	0.62	2.06	8.06	2.03	2.36
-10	(+14)	842	212	247	93	0.70	2.66	9.06	2.28	2.66
-5	(+23)	1058	267	310	105	0.78	3.35	10.11	2.55	2.96
0	(+32)	1303	328	382	116	0.86	4.13	11.19	2.82	3.28

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)	301	76	88	54	0.44	0.94	5.58	1.41	1.63
-30	(-22)	409	103	120	64	0.51	1.28	6.41	1.61	1.88
-25	(-13)	545	137	160	74	0.58	1.71	7.33	1.85	2.15
-20	(- 4)	713	180	209	85	0.65	2.24	8.37	2.11	2.45
-15	(+ 5)	917	231	269	96	0.73	2.89	9.54	2.40	2.79
-10	(+14)	1159	292	339	107	0.80	3.65	10.85	2.73	3.18
-5	(+23)	1442	363	422	117	0.87	4.56	12.33	3.11	3.61
0	(+32)	1770	446	519	127	0.93	5.61	13.98	3.52	4.10

### E - PERFORMANCE - CURVES

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)	286	72	84	56	0.45	0.89	5.09	1.28	1.49
-30	(-22)	390	98	114	67	0.52	1.22	5.85	1.47	1.71
-25	(-13)	519	131	152	78	0.60	1.63	6.68	1.68	1.96
-20	(- 4)	677	171	198	89	0.68	2.13	7.58	1.91	2.22
-15	(+ 5)	868	219	254	101	0.76	2.73	8.59	2.16	2.52
-10	(+14)	1093	275	320	112	0.84	3.45	9.71	2.45	2.84
-5	(+23)	1357	342	398	124	0.92	4.29	10.96	2.76	3.21
0	(+32)	1662	419	487	134	0.99	5.27	12.36	3.12	3.62

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)	256	64	75	56	0.44	0.80	4.52	1.14	1.32
-30	(-22)	358	90	105	68	0.52	1.12	5.25	1.32	1.54
-25	(-13)	483	122	142	80	0.61	1.52	6.01	1.51	1.76
-20	(- 4)	633	160	186	93	0.70	1.99	6.82	1.72	2.00
-15	(+ 5)	813	205	238	106	0.80	2.56	7.70	1.94	2.26
-10	(+14)	1024	258	300	118	0.89	3.23	8.67	2.18	2.54
-5	(+23)	1270	320	372	130	0.98	4.02	9.74	2.45	2.85
0	(+32)	1555	392	456	142	1.06	4.93	10.92	2.75	3.20



### F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal 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 0° up + 24° 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 47° up + 59° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		