

COMPRESSOR DEFINITION

Designation	VES H7C
Nominal Voltage/Frequency	230 V 32-150 Hz
Engineering Number	513907507

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	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

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: @220V950RPM			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]
130	33	38	19	0.18	0.41	6.74	1.70	1.97

TEST CONDITIONS: @220V1300RPM			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]
181	46	53	25	0.23	0.57	7.13	1.80	2.09

TEST CONDITIONS: @220V1600RPM			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]
225	57	66	32	0.27	0.71	7.12	1.79	2.09

TEST CONDITIONS: @220V2000RPM			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]
283	71	83	39	0.31	0.89	7.22	1.82	2.12

TEST CONDITIONS: @220V3000RPM			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]
422	106	124	60	0.48	1.33	7.01	1.77	2.05

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]
559	141	164	83	0.69	1.76	6.74	1.70	1.97

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 (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP		
+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
587	148	172	87	0.68	1.84	6.75	1.70	1.98

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V950RPM			ASHRAE32 Static		(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	(-31)	81	20	24	12	0.13	0.25	6.85	1.73	2.01
-30	(-22)	109	28	32	14	0.14	0.34	7.77	1.96	2.28
-25	(-13)	143	36	42	16	0.16	0.45	8.79	2.22	2.58
-20	(- 4)	183	46	54	18	0.17	0.57	9.98	2.51	2.92
-15	(+ 5)	231	58	68	20	0.19	0.73	11.37	2.87	3.33
-10	(+14)	288	73	84	22	0.20	0.91	13.05	3.29	3.82
-5	(+23)	356	90	104	24	0.21	1.12	15.05	3.79	4.41
0	(+32)	435	109	127	25	0.21	1.38	17.43	4.39	5.11

TEST CONDITIONS: @220V950RPM			ASHRAE32 Static		(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	(-31)	72	18	21	12	0.13	0.23	6.12	1.54	1.79
-30	(-22)	102	26	30	15	0.14	0.32	6.88	1.73	2.02
-25	(-13)	136	34	40	18	0.17	0.43	7.67	1.93	2.25
-20	(- 4)	176	44	51	20	0.19	0.55	8.56	2.16	2.51
-15	(+ 5)	223	56	65	23	0.22	0.70	9.60	2.42	2.81
-10	(+14)	279	70	82	26	0.24	0.88	10.84	2.73	3.18
-5	(+23)	345	87	101	28	0.25	1.09	12.34	3.11	3.62
0	(+32)	421	106	124	30	0.25	1.34	14.16	3.57	4.15

TEST CONDITIONS: @220V950RPM			ASHRAE32 Static		(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	(-31)	59	15	17	11	0.11	0.18	5.25	1.32	1.54
-30	(-22)	89	22	26	15	0.14	0.28	5.95	1.50	1.74
-25	(-13)	123	31	36	19	0.18	0.39	6.62	1.67	1.94
-20	(- 4)	163	41	48	22	0.21	0.51	7.32	1.84	2.14
-15	(+ 5)	209	53	61	26	0.24	0.66	8.10	2.04	2.37
-10	(+14)	264	67	77	29	0.27	0.83	9.01	2.27	2.64
-5	(+23)	328	83	96	32	0.28	1.04	10.12	2.55	2.97
0	(+32)	402	101	118	35	0.28	1.28	11.48	2.89	3.37

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)	111	28	33	16	0.16	0.35	6.85	1.73	2.01
-30	(-22)	149	38	44	19	0.18	0.47	7.82	1.97	2.29
-25	(-13)	195	49	57	22	0.20	0.61	8.88	2.24	2.60
-20	(- 4)	250	63	73	25	0.22	0.79	10.09	2.54	2.96
-15	(+ 5)	316	80	93	27	0.24	0.99	11.52	2.90	3.38
-10	(+14)	395	99	116	30	0.26	1.24	13.23	3.33	3.88
-5	(+23)	487	123	143	32	0.27	1.54	15.28	3.85	4.48
0	(+32)	595	150	174	33	0.28	1.89	17.75	4.47	5.20

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)	100	25	29	16	0.16	0.31	6.15	1.55	1.80
-30	(-22)	139	35	41	20	0.19	0.44	6.96	1.75	2.04
-25	(-13)	185	47	54	24	0.22	0.58	7.80	1.96	2.28
-20	(- 4)	240	60	70	27	0.25	0.75	8.71	2.20	2.55
-15	(+ 5)	305	77	89	31	0.27	0.96	9.78	2.46	2.87
-10	(+14)	381	96	112	34	0.29	1.20	11.06	2.79	3.24
-5	(+23)	471	119	138	37	0.31	1.49	12.61	3.18	3.70
0	(+32)	577	145	169	40	0.32	1.83	14.51	3.66	4.25

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)	84	21	25	16	0.15	0.26	5.34	1.34	1.56
-30	(-22)	123	31	36	20	0.19	0.39	6.10	1.54	1.79
-25	(-13)	170	43	50	25	0.23	0.53	6.81	1.72	2.00
-20	(- 4)	224	56	66	30	0.27	0.70	7.54	1.90	2.21
-15	(+ 5)	288	72	84	34	0.30	0.91	8.35	2.10	2.45
-10	(+14)	363	91	106	39	0.33	1.14	9.30	2.34	2.73
-5	(+23)	450	114	132	43	0.35	1.42	10.47	2.64	3.07
0	(+32)	553	139	162	47	0.37	1.75	11.91	3.00	3.49

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)	[Btu/h]				[kcal/h]	[W]	[Btu/Wh]	[kcal/Wh]
-35	(-31)	136	34	40	20	0.18	0.43	6.82	1.72	2.00
-30	(-22)	183	46	54	23	0.21	0.57	7.81	1.97	2.29
-25	(-13)	240	60	70	27	0.24	0.75	8.88	2.24	2.60
-20	(- 4)	307	77	90	30	0.26	0.97	10.10	2.55	2.96
-15	(+ 5)	388	98	114	34	0.28	1.22	11.54	2.91	3.38
-10	(+14)	485	122	142	37	0.30	1.53	13.26	3.34	3.89
-5	(+23)	599	151	176	39	0.32	1.89	15.33	3.86	4.49
0	(+32)	732	185	215	41	0.34	2.32	17.82	4.49	5.22

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)	[Btu/h]				[kcal/h]	[W]	[Btu/Wh]	[kcal/Wh]
-35	(-31)	124	31	36	20	0.19	0.39	6.15	1.55	1.80
-30	(-22)	171	43	50	25	0.23	0.54	6.99	1.76	2.05
-25	(-13)	227	57	67	29	0.26	0.71	7.84	1.98	2.30
-20	(- 4)	294	74	86	33	0.29	0.92	8.77	2.21	2.57
-15	(+ 5)	374	94	110	38	0.32	1.18	9.86	2.48	2.89
-10	(+14)	468	118	137	42	0.35	1.48	11.15	2.81	3.27
-5	(+23)	579	146	170	46	0.37	1.83	12.73	3.21	3.73
0	(+32)	709	179	208	49	0.39	2.25	14.66	3.69	4.30

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)	[Btu/h]				[kcal/h]	[W]	[Btu/Wh]	[kcal/Wh]
-35	(-31)	106	27	31	20	0.18	0.33	5.37	1.35	1.57
-30	(-22)	154	39	45	25	0.23	0.48	6.16	1.55	1.81
-25	(-13)	210	53	61	30	0.27	0.66	6.90	1.74	2.02
-20	(- 4)	276	70	81	36	0.31	0.87	7.65	1.93	2.24
-15	(+ 5)	354	89	104	42	0.35	1.12	8.48	2.14	2.48
-10	(+14)	446	113	131	47	0.38	1.41	9.45	2.38	2.77
-5	(+23)	555	140	163	52	0.41	1.75	10.64	2.68	3.12
0	(+32)	681	172	200	57	0.44	2.16	12.12	3.05	3.55

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)	170	43	50	25	0.22	0.53	6.75	1.70	1.98
-30	(-22)	228	57	67	29	0.25	0.71	7.73	1.95	2.26
-25	(-13)	298	75	87	34	0.28	0.93	8.80	2.22	2.58
-20	(- 4)	382	96	112	38	0.31	1.20	10.01	2.52	2.93
-15	(+ 5)	484	122	142	42	0.34	1.52	11.45	2.88	3.35
-10	(+14)	604	152	177	46	0.36	1.91	13.16	3.32	3.86
-5	(+23)	747	188	219	49	0.38	2.36	15.22	3.84	4.46
0	(+32)	913	230	268	51	0.39	2.89	17.69	4.46	5.18

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)	156	39	46	26	0.22	0.49	6.11	1.54	1.79
-30	(-22)	214	54	63	31	0.26	0.67	6.96	1.75	2.04
-25	(-13)	283	71	83	36	0.30	0.89	7.82	1.97	2.29
-20	(- 4)	366	92	107	42	0.34	1.15	8.77	2.21	2.57
-15	(+ 5)	465	117	136	47	0.38	1.46	9.86	2.49	2.89
-10	(+14)	582	147	171	52	0.41	1.84	11.17	2.81	3.27
-5	(+23)	721	182	211	57	0.44	2.28	12.75	3.21	3.73
0	(+32)	883	223	259	60	0.46	2.80	14.66	3.70	4.30

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)	135	34	40	25	0.22	0.42	5.35	1.35	1.57
-30	(-22)	194	49	57	31	0.27	0.61	6.17	1.55	1.81
-25	(-13)	263	66	77	38	0.32	0.82	6.93	1.75	2.03
-20	(- 4)	344	87	101	45	0.37	1.08	7.71	1.94	2.26
-15	(+ 5)	442	111	129	52	0.42	1.39	8.57	2.16	2.51
-10	(+14)	557	140	163	58	0.46	1.76	9.57	2.41	2.80
-5	(+23)	693	175	203	64	0.50	2.19	10.77	2.71	3.16
0	(+32)	851	214	249	70	0.53	2.70	12.24	3.09	3.59

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)	251	63	74	39	0.32	0.79	6.37	1.60	1.87
-30	(-22)	336	85	98	46	0.37	1.05	7.33	1.85	2.15
-25	(-13)	440	111	129	53	0.42	1.38	8.34	2.10	2.45
-20	(- 4)	566	143	166	60	0.47	1.78	9.49	2.39	2.78
-15	(+ 5)	717	181	210	66	0.51	2.26	10.82	2.73	3.17
-10	(+14)	897	226	263	72	0.55	2.83	12.42	3.13	3.64
-5	(+23)	1110	280	325	77	0.58	3.51	14.34	3.61	4.20
0	(+32)	1359	342	398	81	0.59	4.31	16.66	4.20	4.88

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)	232	58	68	40	0.33	0.73	5.81	1.47	1.70
-30	(-22)	315	79	92	47	0.38	0.99	6.68	1.68	1.96
-25	(-13)	417	105	122	55	0.44	1.31	7.53	1.90	2.21
-20	(- 4)	540	136	158	64	0.50	1.70	8.45	2.13	2.48
-15	(+ 5)	687	173	201	72	0.56	2.16	9.49	2.39	2.78
-10	(+14)	863	217	253	80	0.61	2.72	10.72	2.70	3.14
-5	(+23)	1070	270	314	88	0.65	3.38	12.22	3.08	3.58
0	(+32)	1313	331	385	94	0.68	4.16	14.04	3.54	4.11

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)	206	52	60	40	0.33	0.65	5.13	1.29	1.50
-30	(-22)	290	73	85	48	0.39	0.91	6.00	1.51	1.76
-25	(-13)	390	98	114	58	0.46	1.22	6.80	1.71	1.99
-20	(- 4)	511	129	150	68	0.54	1.61	7.58	1.91	2.22
-15	(+ 5)	656	165	192	78	0.61	2.06	8.43	2.12	2.47
-10	(+14)	828	209	243	88	0.67	2.61	9.41	2.37	2.76
-5	(+23)	1031	260	302	97	0.73	3.26	10.57	2.66	3.10
0	(+32)	1268	319	371	106	0.77	4.02	12.01	3.03	3.52

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)	[W]				[Btu/Wh]	[kcal/Wh]	[W/W]	
-35	(-31)	298	75	87	49	0.39	0.93	6.12	1.54	1.79
-30	(-22)	400	101	117	57	0.45	1.25	7.03	1.77	2.06
-25	(-13)	524	132	154	66	0.51	1.64	7.99	2.01	2.34
-20	(- 4)	675	170	198	75	0.57	2.12	9.05	2.28	2.65
-15	(+ 5)	857	216	251	83	0.63	2.70	10.29	2.59	3.02
-10	(+14)	1073	270	314	91	0.68	3.38	11.78	2.97	3.45
-5	(+23)	1328	335	389	98	0.72	4.20	13.58	3.42	3.98
0	(+32)	1626	410	477	102	0.74	5.15	15.75	3.97	4.62

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)	[W]				[Btu/Wh]	[kcal/Wh]	[W/W]	
-35	(-31)	275	69	81	49	0.40	0.86	5.62	1.42	1.65
-30	(-22)	375	95	110	58	0.47	1.18	6.47	1.63	1.90
-25	(-13)	497	125	146	68	0.54	1.56	7.30	1.84	2.14
-20	(- 4)	644	162	189	79	0.61	2.02	8.17	2.06	2.39
-15	(+ 5)	821	207	241	90	0.68	2.59	9.14	2.30	2.68
-10	(+14)	1032	260	303	100	0.75	3.26	10.30	2.59	3.02
-5	(+23)	1281	323	375	110	0.80	4.05	11.69	2.95	3.43
0	(+32)	1572	396	461	118	0.84	4.98	13.41	3.38	3.93

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)	[W]				[Btu/Wh]	[kcal/Wh]	[W/W]	
-35	(-31)	244	61	71	49	0.40	0.76	4.94	1.25	1.45
-30	(-22)	343	87	101	59	0.47	1.08	5.83	1.47	1.71
-25	(-13)	463	117	136	70	0.55	1.45	6.63	1.67	1.94
-20	(- 4)	608	153	178	82	0.64	1.91	7.39	1.86	2.17
-15	(+ 5)	782	197	229	95	0.73	2.46	8.21	2.07	2.40
-10	(+14)	988	249	290	108	0.81	3.12	9.13	2.30	2.67
-5	(+23)	1232	310	361	120	0.88	3.90	10.22	2.58	3.00
0	(+32)	1516	382	444	132	0.94	4.81	11.57	2.92	3.39

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)	329	83	97	55	0.43	1.03	5.98	1.51	1.75
-30	(-22)	443	112	130	64	0.50	1.39	6.87	1.73	2.01
-25	(-13)	582	147	170	75	0.57	1.82	7.77	1.96	2.28
-20	(- 4)	750	189	220	85	0.64	2.36	8.77	2.21	2.57
-15	(+ 5)	952	240	279	96	0.71	3.00	9.94	2.50	2.91
-10	(+14)	1193	301	350	105	0.77	3.76	11.34	2.86	3.32
-5	(+23)	1477	372	433	113	0.82	4.67	13.04	3.29	3.82
0	(+32)	1810	456	530	119	0.86	5.73	15.13	3.81	4.43

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)	303	76	89	55	0.44	0.95	5.50	1.39	1.61
-30	(-22)	415	105	122	65	0.52	1.30	6.34	1.60	1.86
-25	(-13)	551	139	162	77	0.60	1.73	7.14	1.80	2.09
-20	(- 4)	716	180	210	90	0.68	2.25	7.97	2.01	2.34
-15	(+ 5)	913	230	268	103	0.76	2.87	8.89	2.24	2.61
-10	(+14)	1149	289	337	115	0.84	3.62	9.98	2.52	2.93
-5	(+23)	1426	359	418	126	0.91	4.51	11.32	2.85	3.32
0	(+32)	1751	441	513	136	0.97	5.55	12.96	3.27	3.80

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)	266	67	78	55	0.44	0.83	4.83	1.22	1.41
-30	(-22)	377	95	111	66	0.52	1.18	5.73	1.44	1.68
-25	(-13)	512	129	150	79	0.61	1.61	6.51	1.64	1.91
-20	(- 4)	673	170	197	93	0.70	2.12	7.26	1.83	2.13
-15	(+ 5)	867	218	254	108	0.80	2.73	8.04	2.03	2.35
-10	(+14)	1097	276	321	123	0.89	3.46	8.91	2.25	2.61
-5	(+23)	1369	345	401	137	0.98	4.33	9.97	2.51	2.92
0	(+32)	1686	425	494	150	1.06	5.35	11.27	2.84	3.30

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)	370	93	108	63	0.47	1.16	5.86	1.48	1.72
-30	(-22)	495	125	145	74	0.54	1.55	6.71	1.69	1.97
-25	(-13)	643	162	189	85	0.62	2.02	7.58	1.91	2.22
-20	(- 4)	818	206	240	96	0.69	2.57	8.54	2.15	2.50
-15	(+ 5)	1023	258	300	106	0.76	3.22	9.69	2.44	2.84
-10	(+14)	1261	318	370	114	0.82	3.98	11.09	2.80	3.25
-5	(+23)	1538	388	451	120	0.85	4.86	12.83	3.23	3.76
0	(+32)	1856	468	544	123	0.85	5.88	14.99	3.78	4.39

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)	338	85	99	63	0.48	1.06	5.40	1.36	1.58
-30	(-22)	461	116	135	74	0.56	1.44	6.24	1.57	1.83
-25	(-13)	604	152	177	86	0.64	1.90	7.03	1.77	2.06
-20	(- 4)	774	195	227	99	0.73	2.43	7.84	1.97	2.30
-15	(+ 5)	971	245	285	111	0.81	3.06	8.75	2.21	2.56
-10	(+14)	1202	303	352	122	0.88	3.79	9.85	2.48	2.89
-5	(+23)	1469	370	431	131	0.93	4.65	11.21	2.82	3.28
0	(+32)	1777	448	521	138	0.96	5.63	12.90	3.25	3.78

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)	289	73	85	61	0.47	0.90	4.71	1.19	1.38
-30	(-22)	410	103	120	73	0.55	1.29	5.63	1.42	1.65
-25	(-13)	552	139	162	86	0.64	1.73	6.43	1.62	1.88
-20	(- 4)	717	181	210	100	0.74	2.25	7.18	1.81	2.10
-15	(+ 5)	910	229	267	114	0.84	2.87	7.96	2.01	2.33
-10	(+14)	1134	286	332	128	0.93	3.58	8.84	2.23	2.59
-5	(+23)	1394	351	408	141	1.00	4.41	9.91	2.50	2.90
0	(+32)	1692	426	496	151	1.05	5.36	11.25	2.83	3.30

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 + 49° to 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		