

COMPRESSOR DEFINITION

Designation	VES D7C
Nominal Voltage/Frequency	230 V 32-150 Hz
Engineering Number	513907500

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)	6.21	[kg] (13.69 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	CF01D01 M	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	CF01D01 M	
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]
133	33	39	21	0.18	0.42	6.38	1.61	1.87

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	28	0.22	0.57	6.55	1.65	1.92

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	34	0.26	0.71	6.66	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 (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	43	0.31	0.89	6.66	1.68	1.95

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]
423	107	124	65	0.45	1.33	6.49	1.64	1.90

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	89	0.63	1.76	6.28	1.58	1.84

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]
607	153	178	97	0.72	1.91	6.24	1.57	1.83

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)	80	20	23	13	0.13	0.25	6.10	1.54	1.79
-30	(-22)	107	27	31	15	0.15	0.34	7.03	1.77	2.06
-25	(-13)	141	35	41	17	0.17	0.44	8.08	2.04	2.37
-20	(- 4)	182	46	53	20	0.18	0.57	9.30	2.34	2.73
-15	(+ 5)	231	58	68	22	0.20	0.73	10.73	2.70	3.14
-10	(+14)	289	73	85	23	0.21	0.91	12.40	3.12	3.63
-5	(+23)	358	90	105	25	0.22	1.13	14.35	3.62	4.20
0	(+32)	439	111	129	26	0.23	1.39	16.63	4.19	4.87

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)	75	19	22	13	0.14	0.23	5.67	1.43	1.66
-30	(-22)	102	26	30	16	0.16	0.32	6.38	1.61	1.87
-25	(-13)	134	34	39	19	0.18	0.42	7.18	1.81	2.10
-20	(- 4)	175	44	51	21	0.20	0.55	8.10	2.04	2.37
-15	(+ 5)	223	56	65	24	0.22	0.70	9.18	2.31	2.69
-10	(+14)	281	71	82	27	0.24	0.89	10.45	2.63	3.06
-5	(+23)	350	88	102	29	0.26	1.11	11.97	3.02	3.51
0	(+32)	430	108	126	31	0.28	1.36	13.77	3.47	4.03

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)	66	17	19	13	0.13	0.21	5.11	1.29	1.50
-30	(-22)	92	23	27	16	0.16	0.29	5.70	1.44	1.67
-25	(-13)	124	31	36	20	0.19	0.39	6.34	1.60	1.86
-20	(- 4)	163	41	48	23	0.21	0.51	7.05	1.78	2.06
-15	(+ 5)	210	53	62	27	0.24	0.66	7.87	1.98	2.31
-10	(+14)	267	67	78	30	0.27	0.84	8.85	2.23	2.59
-5	(+23)	335	84	98	33	0.29	1.06	10.02	2.53	2.94
0	(+32)	414	104	121	36	0.32	1.31	11.43	2.88	3.35

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)	110	28	32	18	0.17	0.34	6.13	1.55	1.80
-30	(-22)	147	37	43	21	0.20	0.46	7.09	1.79	2.08
-25	(-13)	193	49	56	24	0.22	0.60	8.16	2.06	2.39
-20	(- 4)	248	63	73	26	0.24	0.78	9.39	2.37	2.75
-15	(+ 5)	315	79	92	29	0.26	0.99	10.82	2.73	3.17
-10	(+14)	395	99	116	32	0.27	1.24	12.50	3.15	3.66
-5	(+23)	489	123	143	34	0.29	1.54	14.46	3.64	4.24
0	(+32)	598	151	175	35	0.31	1.89	16.76	4.22	4.91

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)	103	26	30	18	0.18	0.32	5.68	1.43	1.66
-30	(-22)	139	35	41	22	0.21	0.44	6.44	1.62	1.89
-25	(-13)	184	46	54	25	0.24	0.58	7.26	1.83	2.13
-20	(- 4)	238	60	70	29	0.27	0.75	8.19	2.06	2.40
-15	(+ 5)	304	77	89	33	0.29	0.96	9.27	2.34	2.72
-10	(+14)	382	96	112	36	0.31	1.20	10.55	2.66	3.09
-5	(+23)	474	119	139	39	0.34	1.50	12.07	3.04	3.54
0	(+32)	581	147	170	42	0.36	1.84	13.88	3.50	4.07

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)	91	23	27	18	0.17	0.28	5.09	1.28	1.49
-30	(-22)	126	32	37	22	0.21	0.39	5.75	1.45	1.68
-25	(-13)	169	43	50	26	0.25	0.53	6.43	1.62	1.88
-20	(- 4)	222	56	65	31	0.28	0.70	7.16	1.81	2.10
-15	(+ 5)	286	72	84	36	0.31	0.90	8.01	2.02	2.35
-10	(+14)	362	91	106	40	0.34	1.14	9.01	2.27	2.64
-5	(+23)	452	114	132	44	0.37	1.43	10.20	2.57	2.99
0	(+32)	557	140	163	48	0.40	1.77	11.62	2.93	3.41

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]				[W]	[A]	[kg/h]	[Btu/Wh]
-35	(-31)	135	34	40	22	0.21	0.42	6.14	1.55	1.80
-30	(-22)	181	46	53	25	0.24	0.57	7.10	1.79	2.08
-25	(-13)	237	60	69	29	0.26	0.74	8.16	2.06	2.39
-20	(- 4)	305	77	89	33	0.29	0.96	9.37	2.36	2.75
-15	(+ 5)	387	98	113	36	0.31	1.22	10.79	2.72	3.16
-10	(+14)	485	122	142	39	0.33	1.53	12.46	3.14	3.65
-5	(+23)	600	151	176	42	0.35	1.90	14.42	3.63	4.23
0	(+32)	734	185	215	43	0.36	2.33	16.74	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]				[W]	[A]	[kg/h]	[Btu/Wh]
-35	(-31)	126	32	37	22	0.21	0.40	5.68	1.43	1.67
-30	(-22)	171	43	50	26	0.24	0.54	6.46	1.63	1.89
-25	(-13)	226	57	66	31	0.28	0.71	7.29	1.84	2.14
-20	(- 4)	292	74	86	35	0.31	0.92	8.22	2.07	2.41
-15	(+ 5)	373	94	109	40	0.35	1.17	9.30	2.34	2.73
-10	(+14)	469	118	137	44	0.38	1.48	10.58	2.67	3.10
-5	(+23)	581	147	170	48	0.41	1.84	12.10	3.05	3.55
0	(+32)	713	180	209	51	0.44	2.26	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]				[W]	[A]	[kg/h]	[Btu/Wh]
-35	(-31)	112	28	33	22	0.21	0.35	5.06	1.27	1.48
-30	(-22)	155	39	45	27	0.25	0.49	5.77	1.45	1.69
-25	(-13)	208	52	61	32	0.29	0.65	6.49	1.63	1.90
-20	(- 4)	273	69	80	38	0.33	0.86	7.24	1.83	2.12
-15	(+ 5)	351	88	103	43	0.37	1.10	8.09	2.04	2.37
-10	(+14)	444	112	130	49	0.41	1.40	9.09	2.29	2.66
-5	(+23)	554	140	162	54	0.45	1.75	10.28	2.59	3.01
0	(+32)	683	172	200	59	0.48	2.17	11.71	2.95	3.43

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)	[W]				[W]	[A]	[kg/h]	[Btu/Wh]
-35	(-31)	169	43	50	28	0.25	0.53	6.10	1.54	1.79
-30	(-22)	226	57	66	32	0.29	0.71	7.06	1.78	2.07
-25	(-13)	295	74	87	36	0.32	0.93	8.12	2.05	2.38
-20	(- 4)	380	96	111	41	0.35	1.20	9.31	2.35	2.73
-15	(+ 5)	483	122	141	45	0.39	1.52	10.71	2.70	3.14
-10	(+14)	604	152	177	49	0.42	1.91	12.35	3.11	3.62
-5	(+23)	748	188	219	52	0.44	2.36	14.30	3.60	4.19
0	(+32)	915	231	268	55	0.46	2.90	16.59	4.18	4.86

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)	[W]				[W]	[A]	[kg/h]	[Btu/Wh]
-35	(-31)	158	40	46	28	0.26	0.49	5.62	1.42	1.65
-30	(-22)	213	54	63	33	0.30	0.67	6.43	1.62	1.88
-25	(-13)	281	71	82	39	0.34	0.88	7.28	1.83	2.13
-20	(- 4)	364	92	107	44	0.38	1.15	8.21	2.07	2.41
-15	(+ 5)	464	117	136	50	0.42	1.46	9.28	2.34	2.72
-10	(+14)	583	147	171	55	0.46	1.84	10.55	2.66	3.09
-5	(+23)	724	182	212	60	0.50	2.29	12.05	3.04	3.53
0	(+32)	887	224	260	64	0.53	2.81	13.85	3.49	4.06

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)	[W]				[W]	[A]	[kg/h]	[Btu/Wh]
-35	(-31)	140	35	41	28	0.25	0.44	4.98	1.26	1.46
-30	(-22)	194	49	57	34	0.30	0.61	5.76	1.45	1.69
-25	(-13)	260	65	76	40	0.35	0.81	6.51	1.64	1.91
-20	(- 4)	340	86	100	47	0.40	1.07	7.29	1.84	2.14
-15	(+ 5)	437	110	128	54	0.45	1.38	8.15	2.05	2.39
-10	(+14)	553	139	162	60	0.50	1.74	9.14	2.30	2.68
-5	(+23)	689	174	202	67	0.54	2.18	10.32	2.60	3.02
0	(+32)	849	214	249	73	0.58	2.69	11.73	2.96	3.44

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)	253	64	74	43	0.37	0.79	5.87	1.48	1.72
-30	(-22)	337	85	99	49	0.42	1.06	6.81	1.72	1.99
-25	(-13)	441	111	129	56	0.47	1.38	7.81	1.97	2.29
-20	(- 4)	568	143	166	64	0.53	1.78	8.94	2.25	2.62
-15	(+ 5)	720	181	211	70	0.58	2.27	10.23	2.58	3.00
-10	(+14)	902	227	264	77	0.62	2.84	11.76	2.96	3.45
-5	(+23)	1115	281	327	82	0.66	3.53	13.56	3.42	3.97
0	(+32)	1364	344	400	86	0.69	4.32	15.70	3.96	4.60

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)	236	59	69	43	0.38	0.74	5.43	1.37	1.59
-30	(-22)	318	80	93	51	0.44	1.00	6.26	1.58	1.84
-25	(-13)	420	106	123	59	0.50	1.32	7.10	1.79	2.08
-20	(- 4)	543	137	159	68	0.57	1.71	8.00	2.02	2.34
-15	(+ 5)	692	174	203	77	0.63	2.18	9.01	2.27	2.64
-10	(+14)	870	219	255	85	0.69	2.74	10.20	2.57	2.99
-5	(+23)	1079	272	316	93	0.75	3.41	11.60	2.92	3.40
0	(+32)	1322	333	387	100	0.80	4.19	13.28	3.35	3.89

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	0.37	0.65	4.77	1.20	1.40
-30	(-22)	288	73	84	51	0.44	0.90	5.61	1.41	1.64
-25	(-13)	386	97	113	61	0.51	1.21	6.39	1.61	1.87
-20	(- 4)	505	127	148	71	0.58	1.59	7.18	1.81	2.10
-15	(+ 5)	650	164	190	81	0.66	2.05	8.03	2.02	2.35
-10	(+14)	822	207	241	91	0.74	2.59	8.98	2.26	2.63
-5	(+23)	1025	258	300	101	0.81	3.24	10.10	2.54	2.96
0	(+32)	1263	318	370	111	0.87	4.00	11.43	2.88	3.35

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)	302	76	88	53	0.45	0.94	5.71	1.44	1.67
-30	(-22)	403	102	118	61	0.51	1.26	6.61	1.67	1.94
-25	(-13)	528	133	155	70	0.58	1.66	7.56	1.91	2.22
-20	(- 4)	680	171	199	79	0.65	2.14	8.62	2.17	2.53
-15	(+ 5)	864	218	253	88	0.72	2.72	9.83	2.48	2.88
-10	(+14)	1082	273	317	96	0.78	3.41	11.27	2.84	3.30
-5	(+23)	1338	337	392	103	0.83	4.23	12.97	3.27	3.80
0	(+32)	1638	413	480	108	0.87	5.19	15.01	3.78	4.40

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)	281	71	82	53	0.45	0.88	5.31	1.34	1.56
-30	(-22)	381	96	112	62	0.52	1.19	6.14	1.55	1.80
-25	(-13)	503	127	147	72	0.61	1.58	6.95	1.75	2.04
-20	(- 4)	651	164	191	83	0.69	2.05	7.80	1.97	2.29
-15	(+ 5)	830	209	243	95	0.78	2.61	8.76	2.21	2.57
-10	(+14)	1043	263	306	106	0.86	3.29	9.87	2.49	2.89
-5	(+23)	1295	326	379	116	0.94	4.09	11.20	2.82	3.28
0	(+32)	1588	400	465	124	1.00	5.03	12.81	3.23	3.75

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	53	0.44	0.77	4.64	1.17	1.36
-30	(-22)	343	86	100	62	0.52	1.08	5.50	1.39	1.61
-25	(-13)	461	116	135	74	0.62	1.45	6.28	1.58	1.84
-20	(- 4)	605	152	177	86	0.71	1.90	7.04	1.77	2.06
-15	(+ 5)	778	196	228	99	0.81	2.45	7.85	1.98	2.30
-10	(+14)	985	248	289	112	0.91	3.11	8.76	2.21	2.57
-5	(+23)	1229	310	360	125	1.00	3.89	9.82	2.47	2.88
0	(+32)	1515	382	444	137	1.08	4.80	11.10	2.80	3.25

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	60	0.50	1.05	5.61	1.41	1.64
-30	(-22)	448	113	131	69	0.58	1.40	6.48	1.63	1.90
-25	(-13)	587	148	172	79	0.66	1.84	7.40	1.86	2.17
-20	(- 4)	756	191	222	90	0.75	2.38	8.40	2.12	2.46
-15	(+ 5)	961	242	281	101	0.83	3.02	9.56	2.41	2.80
-10	(+14)	1203	303	353	110	0.90	3.80	10.93	2.75	3.20
-5	(+23)	1490	375	436	119	0.96	4.71	12.56	3.17	3.68
0	(+32)	1823	459	534	125	1.00	5.78	14.52	3.66	4.26

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)	311	78	91	59	0.50	0.97	5.24	1.32	1.54
-30	(-22)	422	106	124	70	0.58	1.32	6.06	1.53	1.78
-25	(-13)	559	141	164	82	0.68	1.75	6.85	1.73	2.01
-20	(- 4)	725	183	212	94	0.79	2.28	7.67	1.93	2.25
-15	(+ 5)	925	233	271	107	0.89	2.91	8.59	2.17	2.52
-10	(+14)	1163	293	341	120	0.99	3.67	9.66	2.43	2.83
-5	(+23)	1443	364	423	132	1.08	4.56	10.94	2.76	3.21
0	(+32)	1770	446	519	142	1.15	5.61	12.49	3.15	3.66

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)	271	68	80	59	0.49	0.85	4.58	1.15	1.34
-30	(-22)	379	95	111	70	0.58	1.19	5.43	1.37	1.59
-25	(-13)	511	129	150	83	0.69	1.60	6.19	1.56	1.82
-20	(- 4)	671	169	197	97	0.80	2.11	6.94	1.75	2.03
-15	(+ 5)	864	218	253	112	0.92	2.72	7.71	1.94	2.26
-10	(+14)	1095	276	321	127	1.04	3.46	8.58	2.16	2.52
-5	(+23)	1367	345	401	142	1.15	4.32	9.60	2.42	2.81
0	(+32)	1685	425	494	156	1.25	5.34	10.83	2.73	3.17

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]	[Btu/Wh]	[kcal/Wh]
-35	(-31)	375	95	110	68	0.58	1.18	5.51	1.39	1.61
-30	(-22)	504	127	148	79	0.67	1.58	6.34	1.60	1.86
-25	(-13)	656	165	192	91	0.76	2.06	7.21	1.82	2.11
-20	(- 4)	836	211	245	102	0.85	2.62	8.19	2.06	2.40
-15	(+ 5)	1046	264	306	112	0.93	3.29	9.33	2.35	2.73
-10	(+14)	1291	325	378	121	0.99	4.07	10.69	2.69	3.13
-5	(+23)	1574	397	461	128	1.04	4.98	12.34	3.11	3.62
0	(+32)	1900	479	557	131	1.08	6.02	14.34	3.61	4.20

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]	[Btu/Wh]	[kcal/Wh]
-35	(-31)	348	88	102	67	0.57	1.09	5.20	1.31	1.52
-30	(-22)	473	119	139	79	0.67	1.48	5.99	1.51	1.76
-25	(-13)	621	156	182	92	0.78	1.95	6.76	1.70	1.98
-20	(- 4)	795	200	233	105	0.88	2.50	7.56	1.90	2.21
-15	(+ 5)	999	252	293	118	0.98	3.14	8.46	2.13	2.48
-10	(+14)	1237	312	362	130	1.07	3.90	9.53	2.40	2.79
-5	(+23)	1512	381	443	140	1.15	4.78	10.82	2.73	3.17
0	(+32)	1830	461	536	148	1.21	5.80	12.39	3.12	3.63

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]	[Btu/Wh]	[kcal/Wh]
-35	(-31)	300	76	88	66	0.55	0.94	4.52	1.14	1.33
-30	(-22)	419	106	123	78	0.66	1.32	5.37	1.35	1.57
-25	(-13)	561	141	164	92	0.78	1.76	6.13	1.54	1.80
-20	(- 4)	727	183	213	106	0.89	2.29	6.86	1.73	2.01
-15	(+ 5)	924	233	271	121	1.00	2.91	7.63	1.92	2.24
-10	(+14)	1153	291	338	135	1.11	3.64	8.50	2.14	2.49
-5	(+23)	1419	358	416	149	1.21	4.49	9.53	2.40	2.79
0	(+32)	1726	435	506	161	1.30	5.47	10.78	2.72	3.16

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	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		