

COMPRESSOR DEFINITION

Designation	VES H9C
Nominal Voltage/Frequency	230 V 32-150 Hz
Engineering Number	513907412

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	-	-
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)	6.55	[kg] (14.44 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

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	CF02D03 M 0.0 X	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	CF02D03	
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: @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]
237	60	69	33	0.28	0.74	7.12	1.79	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 +/- 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]
295	74	86	41	0.33	0.93	7.18	1.81	2.10

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	51	0.39	1.15	7.12	1.79	2.09

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]
718	181	210	110	0.87	2.25	6.51	1.64	1.91

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]
741	187	217	115	0.96	2.33	6.44	1.62	1.89

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)	102	26	30	15	0.14	0.32	6.88	1.73	2.02	
-30 (-22)	136	34	40	17	0.16	0.43	7.83	1.97	2.30	
-25 (-13)	178	45	52	20	0.18	0.56	8.90	2.24	2.61	
-20 (- 4)	228	58	67	23	0.19	0.72	10.13	2.55	2.97	
-15 (+ 5)	288	73	84	25	0.20	0.91	11.61	2.93	3.40	
-10 (+14)	359	90	105	27	0.21	1.13	13.39	3.37	3.92	
-5 (+23)	442	111	129	28	0.22	1.40	15.53	3.91	4.55	
0 (+32)	538	136	158	29	0.23	1.71	18.11	4.56	5.31	

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)	94	24	28	16	0.14	0.29	6.06	1.53	1.78	
-30 (-22)	128	32	37	18	0.17	0.40	6.94	1.75	2.03	
-25 (-13)	169	43	50	22	0.19	0.53	7.83	1.97	2.29	
-20 (- 4)	218	55	64	25	0.21	0.69	8.80	2.22	2.58	
-15 (+ 5)	278	70	81	28	0.23	0.87	9.92	2.50	2.91	
-10 (+14)	348	88	102	31	0.25	1.10	11.24	2.83	3.29	
-5 (+23)	430	108	126	34	0.27	1.36	12.84	3.24	3.76	
0 (+32)	526	133	154	36	0.30	1.67	14.78	3.72	4.33	

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)	86	22	25	16	0.14	0.27	5.22	1.32	1.53	
-30 (-22)	118	30	35	19	0.17	0.37	6.13	1.54	1.80	
-25 (-13)	158	40	46	23	0.20	0.50	6.97	1.76	2.04	
-20 (- 4)	206	52	60	27	0.23	0.65	7.79	1.96	2.28	
-15 (+ 5)	264	67	77	30	0.25	0.83	8.66	2.18	2.54	
-10 (+14)	333	84	98	34	0.28	1.05	9.65	2.43	2.83	
-5 (+23)	414	104	121	38	0.31	1.31	10.82	2.73	3.17	
0 (+32)	508	128	149	42	0.35	1.61	12.24	3.08	3.59	

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]	[W/W]
-35 (-31)	139	35	41	20	0.17	0.44	6.81	1.72	1.99	
-30 (-22)	187	47	55	24	0.20	0.58	7.80	1.96	2.28	
-25 (-13)	244	61	71	27	0.23	0.76	8.87	2.23	2.60	
-20 (- 4)	313	79	92	31	0.25	0.98	10.09	2.54	2.96	
-15 (+ 5)	395	100	116	34	0.28	1.24	11.54	2.91	3.38	
-10 (+14)	492	124	144	37	0.31	1.55	13.29	3.35	3.89	
-5 (+23)	606	153	178	39	0.34	1.92	15.40	3.88	4.51	
0 (+32)	738	186	216	40	0.38	2.34	17.95	4.52	5.26	

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)	129	32	38	21	0.21	0.40	6.05	1.53	1.77	
-30 (-22)	176	44	51	25	0.23	0.55	6.94	1.75	2.03	
-25 (-13)	232	58	68	30	0.25	0.73	7.84	1.97	2.30	
-20 (- 4)	300	76	88	34	0.26	0.94	8.80	2.22	2.58	
-15 (+ 5)	381	96	112	38	0.28	1.20	9.90	2.50	2.90	
-10 (+14)	478	120	140	43	0.31	1.51	11.22	2.83	3.29	
-5 (+23)	591	149	173	46	0.34	1.87	12.81	3.23	3.75	
0 (+32)	723	182	212	49	0.39	2.29	14.76	3.72	4.33	

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)	117	29	34	22	0.21	0.37	5.23	1.32	1.53	
-30 (-22)	162	41	47	26	0.24	0.51	6.13	1.55	1.80	
-25 (-13)	216	54	63	31	0.26	0.68	6.96	1.75	2.04	
-20 (- 4)	282	71	83	36	0.29	0.89	7.76	1.96	2.28	
-15 (+ 5)	362	91	106	42	0.32	1.14	8.63	2.17	2.53	
-10 (+14)	457	115	134	47	0.36	1.44	9.62	2.43	2.82	
-5 (+23)	568	143	166	52	0.41	1.80	10.81	2.73	3.17	
0 (+32)	698	176	205	57	0.48	2.21	12.27	3.09	3.60	

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]
-35	(-31)	172	43	50	25	0.23	0.54	6.79	1.71	1.99
-30	(-22)	230	58	67	30	0.25	0.72	7.74	1.95	2.27
-25	(-13)	300	76	88	34	0.27	0.94	8.79	2.22	2.58
-20	(- 4)	385	97	113	39	0.29	1.21	10.01	2.52	2.93
-15	(+ 5)	486	123	142	43	0.31	1.53	11.45	2.89	3.36
-10	(+14)	606	153	178	46	0.33	1.91	13.18	3.32	3.86
-5	(+23)	746	188	219	49	0.35	2.36	15.26	3.85	4.47
0	(+32)	908	229	266	50	0.38	2.88	17.76	4.47	5.20

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]
-35	(-31)	159	40	47	26	0.26	0.50	6.06	1.53	1.78
-30	(-22)	216	54	63	31	0.27	0.68	6.92	1.74	2.03
-25	(-13)	285	72	84	36	0.29	0.89	7.80	1.96	2.28
-20	(- 4)	369	93	108	42	0.32	1.16	8.75	2.21	2.57
-15	(+ 5)	469	118	138	47	0.35	1.48	9.85	2.48	2.89
-10	(+14)	588	148	172	53	0.39	1.86	11.16	2.81	3.27
-5	(+23)	727	183	213	57	0.44	2.30	12.73	3.21	3.73
0	(+32)	889	224	260	61	0.50	2.82	14.63	3.69	4.29

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]
-35	(-31)	145	37	42	27	0.27	0.45	5.27	1.33	1.54
-30	(-22)	199	50	58	33	0.28	0.62	6.14	1.55	1.80
-25	(-13)	266	67	78	38	0.30	0.83	6.95	1.75	2.04
-20	(- 4)	347	88	102	45	0.32	1.09	7.75	1.95	2.27
-15	(+ 5)	445	112	131	52	0.36	1.40	8.61	2.17	2.52
-10	(+14)	562	142	165	58	0.41	1.77	9.59	2.42	2.81
-5	(+23)	699	176	205	65	0.48	2.21	10.76	2.71	3.15
0	(+32)	858	216	251	71	0.56	2.72	12.17	3.07	3.57

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]
-35	(-31)	215	54	63	32	0.25	0.67	6.74	1.70	1.97
-30	(-22)	287	72	84	37	0.28	0.90	7.65	1.93	2.24
-25	(-13)	375	94	110	43	0.32	1.18	8.67	2.18	2.54
-20	(- 4)	481	121	141	49	0.36	1.51	9.86	2.48	2.89
-15	(+ 5)	608	153	178	54	0.40	1.91	11.28	2.84	3.30
-10	(+14)	758	191	222	59	0.44	2.39	12.98	3.27	3.80
-5	(+23)	933	235	273	62	0.48	2.95	15.03	3.79	4.40
0	(+32)	1136	286	333	64	0.52	3.60	17.47	4.40	5.12

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]
-35	(-31)	199	50	58	33	0.25	0.62	6.03	1.52	1.77
-30	(-22)	270	68	79	39	0.30	0.84	6.86	1.73	2.01
-25	(-13)	356	90	104	46	0.35	1.12	7.71	1.94	2.26
-20	(- 4)	461	116	135	53	0.40	1.45	8.65	2.18	2.53
-15	(+ 5)	587	148	172	60	0.46	1.85	9.73	2.45	2.85
-10	(+14)	735	185	215	67	0.51	2.32	11.02	2.78	3.23
-5	(+23)	909	229	266	73	0.57	2.87	12.57	3.17	3.68
0	(+32)	1110	280	325	77	0.63	3.52	14.43	3.64	4.23

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]
-35	(-31)	181	46	53	34	0.27	0.57	5.29	1.33	1.55
-30	(-22)	248	63	73	41	0.32	0.78	6.12	1.54	1.79
-25	(-13)	332	84	97	48	0.37	1.04	6.90	1.74	2.02
-20	(- 4)	434	109	127	57	0.42	1.36	7.69	1.94	2.25
-15	(+ 5)	556	140	163	65	0.48	1.75	8.54	2.15	2.50
-10	(+14)	701	177	206	74	0.54	2.21	9.51	2.40	2.79
-5	(+23)	872	220	256	82	0.60	2.76	10.65	2.68	3.12
0	(+32)	1070	270	314	89	0.66	3.39	12.03	3.03	3.53

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)	320	81	94	50	0.34	1.00	6.42	1.62	1.88	
-30 (-22)	428	108	125	59	0.45	1.34	7.27	1.83	2.13	
-25 (-13)	560	141	164	68	0.53	1.76	8.22	2.07	2.41	
-20 (- 4)	719	181	211	77	0.60	2.26	9.33	2.35	2.73	
-15 (+ 5)	908	229	266	86	0.65	2.86	10.64	2.68	3.12	
-10 (+14)	1132	285	332	93	0.70	3.57	12.23	3.08	3.58	
-5 (+23)	1393	351	408	98	0.76	4.40	14.15	3.57	4.15	
0 (+32)	1696	427	497	102	0.83	5.37	16.46	4.15	4.82	

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)	296	75	87	51	0.37	0.93	5.83	1.47	1.71	
-30 (-22)	401	101	118	61	0.49	1.26	6.60	1.66	1.93	
-25 (-13)	530	134	155	72	0.59	1.66	7.39	1.86	2.17	
-20 (- 4)	686	173	201	83	0.67	2.16	8.26	2.08	2.42	
-15 (+ 5)	873	220	256	94	0.74	2.75	9.27	2.33	2.72	
-10 (+14)	1094	276	321	104	0.81	3.45	10.46	2.64	3.07	
-5 (+23)	1353	341	396	114	0.89	4.28	11.92	3.00	3.49	
0 (+32)	1653	417	484	121	0.98	5.24	13.68	3.45	4.01	

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)	267	67	78	52	0.36	0.84	5.15	1.30	1.51	
-30 (-22)	368	93	108	62	0.51	1.15	5.94	1.50	1.74	
-25 (-13)	492	124	144	74	0.63	1.54	6.67	1.68	1.95	
-20 (- 4)	643	162	188	87	0.74	2.02	7.40	1.86	2.17	
-15 (+ 5)	825	208	242	101	0.84	2.60	8.19	2.06	2.40	
-10 (+14)	1041	262	305	114	0.94	3.29	9.09	2.29	2.66	
-5 (+23)	1295	326	379	127	1.05	4.10	10.17	2.56	2.98	
0 (+32)	1590	401	466	139	1.18	5.04	11.49	2.90	3.37	

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)	420	106	123	71	0.59	1.31	5.92	1.49	1.73
-30	(-22)	563	142	165	84	0.68	1.76	6.69	1.69	1.96
-25	(-13)	736	185	216	98	0.78	2.31	7.54	1.90	2.21
-20	(- 4)	945	238	277	111	0.89	2.97	8.53	2.15	2.50
-15	(+ 5)	1194	301	350	123	1.00	3.76	9.71	2.45	2.84
-10	(+14)	1488	375	436	134	1.09	4.69	11.13	2.80	3.26
-5	(+23)	1833	462	537	142	1.16	5.80	12.85	3.24	3.77
0	(+32)	2233	563	654	147	1.20	7.08	14.93	3.76	4.38

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)	386	97	113	71	0.59	1.21	5.44	1.37	1.59
-30	(-22)	525	132	154	85	0.70	1.65	6.14	1.55	1.80
-25	(-13)	695	175	204	101	0.84	2.18	6.86	1.73	2.01
-20	(- 4)	900	227	264	117	0.98	2.83	7.64	1.92	2.24
-15	(+ 5)	1145	289	336	134	1.12	3.60	8.54	2.15	2.50
-10	(+14)	1435	362	421	149	1.25	4.53	9.62	2.42	2.82
-5	(+23)	1776	448	520	163	1.36	5.62	10.93	2.75	3.20
0	(+32)	2171	547	636	174	1.43	6.88	12.52	3.16	3.67

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)	347	87	102	71	0.56	1.09	4.88	1.23	1.43
-30	(-22)	479	121	140	86	0.70	1.50	5.59	1.41	1.64
-25	(-13)	642	162	188	103	0.85	2.02	6.25	1.57	1.83
-20	(- 4)	840	212	246	122	1.01	2.64	6.90	1.74	2.02
-15	(+ 5)	1078	272	316	142	1.18	3.39	7.61	1.92	2.23
-10	(+14)	1361	343	399	161	1.33	4.29	8.42	2.12	2.47
-5	(+23)	1694	427	496	180	1.46	5.36	9.40	2.37	2.75
0	(+32)	2082	525	610	197	1.56	6.60	10.59	2.67	3.10

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal VES		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.2 +0.12/-0.08	[mm]	(0.323" +0.005"/-0.003")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 63° up + 5° to Front		
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	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 47° up + 59° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		