

### COMPRESSOR DEFINITION

Designation	VES H11C
Nominal Voltage/Frequency	230 V 32-150 Hz
Engineering Number	513907411

### 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		
4.1 Evaporating temperature range	-35°C to -5°C	(-31°F to 23°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	1/4	[hp]
2 Displacement	11.14	[cm <sup>3</sup> ] (0.680 cu.in)
2.1 Bore [mm]	26.000	
2.2 Stroke [mm]	21.000	
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 <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	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	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]
220	55	64	32	0.26	0.69	6.85	1.73	2.01

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]
293	74	86	42	0.32	0.92	7.06	1.78	2.07

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]
364	92	107	51	0.39	1.14	7.14	1.80	2.09

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]
454	114	133	64	0.50	1.43	7.10	1.79	2.08

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]
680	171	199	101	0.86	2.14	6.75	1.70	1.98

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]
865	218	253	135	1.12		6.43	1.62	1.88

### 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]
867	218	254	136	1.16	2.72	6.38	1.61	1.87

### 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)	118	30	35	18	0.14	0.37	6.49	1.63	1.90
-30	(-22)	161	41	47	21	0.17	0.51	7.54	1.90	2.21
-25	(-13)	213	54	62	25	0.20	0.67	8.61	2.17	2.52
-20	(- 4)	276	69	81	28	0.23	0.87	9.81	2.47	2.87
-15	(+ 5)	352	89	103	31	0.25	1.11	11.20	2.82	3.28
-10	(+14)	444	112	130	34	0.27	1.40	12.89	3.25	3.78
-5	(+23)	555	140	163	37	0.28	1.75	14.96	3.77	4.38

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)	107	27	31	19	0.15	0.34	5.50	1.38	1.61
-30	(-22)	150	38	44	23	0.18	0.47	6.51	1.64	1.91
-25	(-13)	200	50	59	27	0.21	0.63	7.45	1.88	2.18
-20	(- 4)	260	66	76	31	0.25	0.82	8.42	2.12	2.47
-15	(+ 5)	333	84	97	35	0.28	1.05	9.48	2.39	2.78
-10	(+14)	420	106	123	39	0.31	1.33	10.74	2.71	3.15
-5	(+23)	525	132	154	43	0.34	1.66	12.28	3.10	3.60

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)	89	22	26	21	0.16	0.28	4.35	1.10	1.27
-30	(-22)	134	34	39	24	0.19	0.42	5.45	1.37	1.60
-25	(-13)	185	47	54	29	0.23	0.58	6.39	1.61	1.87
-20	(- 4)	245	62	72	34	0.27	0.77	7.24	1.82	2.12
-15	(+ 5)	316	80	92	39	0.31	0.99	8.10	2.04	2.37
-10	(+14)	400	101	117	44	0.35	1.26	9.06	2.28	2.65
-5	(+23)	502	126	147	49	0.39	1.59	10.20	2.57	2.99

### 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)	167	42	49	25	0.20	0.52	6.65	1.68	1.95	
-30 (-22)	225	57	66	29	0.23	0.70	7.62	1.92	2.23	
-25 (-13)	295	74	87	34	0.27	0.93	8.65	2.18	2.54	
-20 (- 4)	380	96	111	39	0.31	1.19	9.83	2.48	2.88	
-15 (+ 5)	481	121	141	43	0.34	1.51	11.21	2.83	3.29	
-10 (+14)	600	151	176	47	0.37	1.89	12.88	3.25	3.77	
-5 (+23)	740	187	217	50	0.39	2.34	14.90	3.76	4.37	

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)	150	38	44	26	0.21	0.47	5.69	1.43	1.67	
-30 (-22)	207	52	61	31	0.25	0.65	6.61	1.66	1.94	
-25 (-13)	277	70	81	37	0.29	0.87	7.50	1.89	2.20	
-20 (- 4)	361	91	106	43	0.34	1.13	8.45	2.13	2.48	
-15 (+ 5)	461	116	135	48	0.38	1.45	9.52	2.40	2.79	
-10 (+14)	580	146	170	54	0.43	1.83	10.77	2.71	3.16	
-5 (+23)	720	181	211	59	0.47	2.28	12.29	3.10	3.60	

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)	130	33	38	28	0.22	0.41	4.65	1.17	1.36	
-30 (-22)	186	47	55	33	0.26	0.58	5.64	1.42	1.65	
-25 (-13)	255	64	75	39	0.31	0.80	6.51	1.64	1.91	
-20 (- 4)	337	85	99	46	0.36	1.06	7.34	1.85	2.15	
-15 (+ 5)	436	110	128	53	0.42	1.37	8.20	2.07	2.40	
-10 (+14)	554	140	162	60	0.48	1.75	9.16	2.31	2.68	
-5 (+23)	692	174	203	67	0.53	2.19	10.29	2.59	3.01	

### 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]	[W/W]
-35 (-31)	206	52	60	31	0.24	0.64	6.66	1.68	1.95	
-30 (-22)	277	70	81	36	0.28	0.87	7.61	1.92	2.23	
-25 (-13)	364	92	107	42	0.33	1.14	8.62	2.17	2.53	
-20 (- 4)	468	118	137	48	0.38	1.47	9.78	2.46	2.87	
-15 (+ 5)	594	150	174	54	0.42	1.87	11.13	2.80	3.26	
-10 (+14)	743	187	218	58	0.46	2.34	12.74	3.21	3.73	
-5 (+23)	919	231	269	63	0.49	2.90	14.67	3.70	4.30	

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)	188	47	55	33	0.26	0.59	5.81	1.46	1.70	
-30 (-22)	258	65	76	39	0.31	0.81	6.68	1.68	1.96	
-25 (-13)	343	86	100	45	0.36	1.08	7.55	1.90	2.21	
-20 (- 4)	446	112	131	52	0.42	1.40	8.48	2.14	2.48	
-15 (+ 5)	569	143	167	60	0.47	1.79	9.52	2.40	2.79	
-10 (+14)	716	180	210	67	0.53	2.26	10.75	2.71	3.15	
-5 (+23)	889	224	260	73	0.58	2.81	12.22	3.08	3.58	

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)	166	42	49	34	0.27	0.52	4.87	1.23	1.43	
-30 (-22)	234	59	69	41	0.32	0.74	5.78	1.46	1.69	
-25 (-13)	317	80	93	48	0.38	1.00	6.60	1.66	1.93	
-20 (- 4)	418	105	123	57	0.45	1.31	7.40	1.86	2.17	
-15 (+ 5)	539	136	158	65	0.52	1.70	8.24	2.08	2.42	
-10 (+14)	683	172	200	74	0.59	2.16	9.19	2.31	2.69	
-5 (+23)	854	215	250	83	0.66	2.70	10.29	2.59	3.02	

### 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)	259	65	76	39	0.31	0.81	6.65	1.68	1.95	
-30 (-22)	348	88	102	46	0.36	1.09	7.55	1.90	2.21	
-25 (-13)	456	115	134	53	0.42	1.43	8.53	2.15	2.50	
-20 (- 4)	586	148	172	61	0.48	1.84	9.65	2.43	2.83	
-15 (+ 5)	742	187	217	68	0.54	2.34	10.99	2.77	3.22	
-10 (+14)	926	233	271	74	0.59	2.92	12.60	3.17	3.69	
-5 (+23)	1141	288	334	78	0.62	3.61	14.55	3.67	4.26	

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)	237	60	69	41	0.32	0.74	5.87	1.48	1.72	
-30 (-22)	324	82	95	48	0.38	1.02	6.70	1.69	1.96	
-25 (-13)	431	109	126	57	0.45	1.35	7.53	1.90	2.21	
-20 (- 4)	560	141	164	66	0.53	1.76	8.43	2.12	2.47	
-15 (+ 5)	714	180	209	75	0.60	2.25	9.45	2.38	2.77	
-10 (+14)	897	226	263	84	0.67	2.83	10.66	2.69	3.12	
-5 (+23)	1112	280	326	92	0.73	3.52	12.13	3.06	3.55	

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)	211	53	62	42	0.33	0.66	4.97	1.25	1.46	
-30 (-22)	295	74	86	51	0.40	0.92	5.85	1.47	1.71	
-25 (-13)	398	100	117	60	0.48	1.25	6.65	1.68	1.95	
-20 (- 4)	525	132	154	71	0.56	1.65	7.42	1.87	2.17	
-15 (+ 5)	677	171	198	82	0.65	2.13	8.24	2.08	2.41	
-10 (+14)	858	216	251	93	0.74	2.71	9.16	2.31	2.69	
-5 (+23)	1070	270	314	104	0.83	3.38	10.26	2.59	3.01	

### 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)	399	101	117	62	0.49	1.25	6.45	1.63	1.89	
-30 (-22)	506	128	148	71	0.56	1.59	7.20	1.82	2.11	
-25 (-13)	660	166	193	82	0.65	2.07	8.06	2.03	2.36	
-20 (- 4)	858	216	251	95	0.75	2.70	9.06	2.28	2.65	
-15 (+ 5)	1099	277	322	107	0.85	3.46	10.26	2.59	3.01	
-10 (+14)	1380	348	404	118	0.94	4.35	11.72	2.95	3.43	
-5 (+23)	1699	428	498	126	1.00	5.37	13.48	3.40	3.95	

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)	350	88	103	61	0.48	1.10	5.76	1.45	1.69	
-30 (-22)	473	119	139	73	0.57	1.48	6.49	1.64	1.90	
-25 (-13)	637	161	187	88	0.69	2.00	7.24	1.82	2.12	
-20 (- 4)	840	212	246	104	0.82	2.64	8.06	2.03	2.36	
-15 (+ 5)	1080	272	316	120	0.95	3.40	8.99	2.27	2.64	
-10 (+14)	1354	341	397	134	1.06	4.27	10.11	2.55	2.96	
-5 (+23)	1661	419	487	146	1.15	5.25	11.44	2.88	3.35	

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)	319	80	93	63	0.50	1.00	5.06	1.27	1.48	
-30 (-22)	442	111	129	76	0.60	1.38	5.84	1.47	1.71	
-25 (-13)	600	151	176	92	0.73	1.88	6.57	1.65	1.92	
-20 (- 4)	791	199	232	109	0.87	2.49	7.28	1.83	2.13	
-15 (+ 5)	1014	256	297	127	1.00	3.19	8.03	2.02	2.35	
-10 (+14)	1265	319	371	143	1.13	3.99	8.87	2.24	2.60	
-5 (+23)	1543	389	452	156	1.24	4.88	9.86	2.48	2.89	

### 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]	[W/W]
-35 (-31)	504	127	148	85	0.68	1.58	5.89	1.49	1.73	
-30 (-22)	628	158	184	97	0.77	1.97	6.55	1.65	1.92	
-25 (-13)	818	206	240	111	0.88	2.57	7.35	1.85	2.15	
-20 (- 4)	1057	266	310	126	1.00	3.32	8.35	2.10	2.45	
-15 (+ 5)	1332	336	390	139	1.10	4.19	9.56	2.41	2.80	
-10 (+14)	1627	410	477	148	1.17	5.13	11.03	2.78	3.23	
-5 (+23)	1926	485	564	151	1.19	6.09	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]	[W/W]
-35 (-31)	461	116	135	85	0.67	1.44	5.46	1.38	1.60	
-30 (-22)	595	150	174	99	0.78	1.86	6.09	1.53	1.78	
-25 (-13)	784	198	230	115	0.91	2.46	6.79	1.71	1.99	
-20 (- 4)	1014	256	297	133	1.05	3.19	7.61	1.92	2.23	
-15 (+ 5)	1269	320	372	148	1.17	4.00	8.57	2.16	2.51	
-10 (+14)	1535	387	450	158	1.25	4.84	9.72	2.45	2.85	
-5 (+23)	1795	452	526	162	1.28	5.68	11.08	2.79	3.25	

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)	412	104	121	84	0.66	1.29	4.91	1.24	1.44	
-30 (-22)	551	139	161	99	0.78	1.73	5.58	1.41	1.64	
-25 (-13)	736	186	216	118	0.93	2.31	6.26	1.58	1.83	
-20 (- 4)	952	240	279	136	1.08	2.99	6.98	1.76	2.05	
-15 (+ 5)	1184	298	347	152	1.21	3.73	7.78	1.96	2.28	
-10 (+14)	1416	357	415	164	1.30	4.47	8.68	2.19	2.54	
-5 (+23)	1633	412	479	168	1.33	5.17	9.73	2.45	2.85	



### 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		