

COMPRESSOR DEFINITION

Designation	VES F5C
Nominal Voltage/Frequency	230 V 32-150 Hz
Engineering Number	513907315

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 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	5.19	[cm ³] (0.317 cu.in)
2.1 Bore [mm]	21.000	
2.2 Stroke [mm]	15.000	
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)	6.7	[kg] (14.77 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	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		[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance		[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (40/150 Hz)	2.10	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (40/150 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (40/150 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V1300RPM			CECOMAFLBP Static		Evaporating temperature (Condensing temperature		-25°C (-13°F) 55°C (131°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]
85	21	25	18	0.18	0.32	4.70	1.18	1.38

TEST CONDITIONS: @220V4500RPM			CECOMAFLBP Static		Evaporating temperature (Condensing temperature		-25°C (-13°F) 55°C (131°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]
300	76	88	65	0.51	1.14	4.63	1.17	1.36

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V950RPM		CECOMAF 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)	47	12	14	9	0.13	0.15	5.25	1.32	1.54
-30	(-22)	68	17	20	11	0.14	0.22	6.42	1.62	1.88
-25	(-13)	93	23	27	12	0.15	0.30	7.58	1.91	2.22
-20	(- 4)	123	31	36	14	0.16	0.39	8.80	2.22	2.58
-15	(+ 5)	157	40	46	16	0.17	0.51	10.18	2.56	2.98
-10	(+14)	198	50	58	17	0.18	0.64	11.77	2.97	3.45
-5	(+23)	245	62	72	18	0.18	0.79	13.67	3.44	4.01
0	(+32)	300	76	88	18	0.18	0.97	15.94	4.02	4.67

TEST CONDITIONS: @220V950RPM		CECOMAF 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)	34	9	10	9	0.14	0.12	3.90	0.98	1.14
-30	(-22)	50	13	15	10	0.15	0.17	4.75	1.20	1.39
-25	(-13)	70	18	20	12	0.16	0.24	5.58	1.41	1.63
-20	(- 4)	94	24	28	15	0.17	0.33	6.45	1.63	1.89
-15	(+ 5)	125	31	37	17	0.18	0.43	7.45	1.88	2.18
-10	(+14)	161	41	47	19	0.19	0.56	8.66	2.18	2.54
-5	(+23)	204	52	60	20	0.20	0.72	10.16	2.56	2.98
0	(+32)	255	64	75	21	0.21	0.90	12.01	3.03	3.52

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V950RPM		CECOMAF 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)	25	6	7	9	0.14	0.10	2.89	0.73	0.85	
-30 (-22)	36	9	10	10	0.15	0.14	3.50	0.88	1.03	
-25 (-13)	50	13	15	13	0.16	0.19	4.07	1.03	1.19	
-20 (- 4)	70	18	20	15	0.17	0.27	4.67	1.18	1.37	
-15 (+ 5)	95	24	28	17	0.19	0.36	5.39	1.36	1.58	
-10 (+14)	127	32	37	20	0.21	0.49	6.29	1.58	1.84	
-5 (+23)	166	42	49	22	0.22	0.64	7.46	1.88	2.19	
0 (+32)	213	54	62	24	0.23	0.82	8.98	2.26	2.63	

TEST CONDITIONS: @220V1300RPM		CECOMAF 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)	71	18	21	12	0.13	0.23	5.99	1.51	1.76	
-30 (-22)	96	24	28	14	0.14	0.31	6.84	1.72	2.01	
-25 (-13)	128	32	38	16	0.16	0.41	7.87	1.98	2.31	
-20 (- 4)	168	42	49	19	0.17	0.54	9.10	2.29	2.67	
-15 (+ 5)	215	54	63	20	0.18	0.69	10.56	2.66	3.09	
-10 (+14)	271	68	80	22	0.20	0.88	12.30	3.10	3.60	
-5 (+23)	337	85	99	23	0.21	1.09	14.34	3.61	4.20	
0 (+32)	412	104	121	24	0.22	1.34	16.71	4.21	4.90	

TEST CONDITIONS: @220V1300RPM		CECOMAF 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)	52	13	15	12	0.15	0.18	4.31	1.09	1.26	
-30 (-22)	73	18	21	15	0.17	0.25	5.01	1.26	1.47	
-25 (-13)	100	25	29	17	0.18	0.35	5.79	1.46	1.70	
-20 (- 4)	134	34	39	20	0.19	0.47	6.68	1.68	1.96	
-15 (+ 5)	175	44	51	23	0.21	0.61	7.72	1.95	2.26	
-10 (+14)	224	57	66	25	0.22	0.79	8.94	2.25	2.62	
-5 (+23)	282	71	83	27	0.24	0.99	10.38	2.61	3.04	
0 (+32)	348	88	102	29	0.26	1.22	12.05	3.04	3.53	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V1300RPM		CECOMAF 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)	41	10	12	12	0.16	0.16	3.38	0.85	0.99	
-30 (-22)	58	15	17	15	0.18	0.22	4.03	1.02	1.18	
-25 (-13)	81	21	24	18	0.19	0.31	4.67	1.18	1.37	
-20 (- 4)	110	28	32	21	0.21	0.42	5.33	1.34	1.56	
-15 (+ 5)	145	37	43	24	0.23	0.56	6.04	1.52	1.77	
-10 (+14)	187	47	55	27	0.25	0.72	6.85	1.72	2.01	
-5 (+23)	237	60	69	30	0.27	0.91	7.77	1.96	2.28	
0 (+32)	294	74	86	33	0.29	1.14	8.84	2.23	2.59	

TEST CONDITIONS: @220V1600RPM		CECOMAF 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)	90	23	26	15	0.16	0.29	6.03	1.52	1.77	
-30 (-22)	120	30	35	17	0.18	0.38	6.85	1.73	2.01	
-25 (-13)	158	40	46	20	0.20	0.51	7.82	1.97	2.29	
-20 (- 4)	205	52	60	23	0.22	0.66	8.98	2.26	2.63	
-15 (+ 5)	262	66	77	25	0.23	0.84	10.36	2.61	3.04	
-10 (+14)	329	83	96	28	0.25	1.06	12.01	3.03	3.52	
-5 (+23)	406	102	119	29	0.25	1.31	13.96	3.52	4.09	
0 (+32)	493	124	145	29	0.25	1.60	16.25	4.10	4.76	

TEST CONDITIONS: @220V1600RPM		CECOMAF 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)	61	15	18	15	0.17	0.21	4.21	1.06	1.23	
-30 (-22)	88	22	26	18	0.19	0.31	5.01	1.26	1.47	
-25 (-13)	123	31	36	21	0.21	0.43	5.88	1.48	1.72	
-20 (- 4)	167	42	49	24	0.23	0.58	6.86	1.73	2.01	
-15 (+ 5)	221	56	65	27	0.25	0.77	7.99	2.01	2.34	
-10 (+14)	283	71	83	30	0.27	0.99	9.32	2.35	2.73	
-5 (+23)	356	90	104	33	0.29	1.25	10.88	2.74	3.19	
0 (+32)	439	111	129	35	0.30	1.55	12.70	3.20	3.72	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V1600RPM		CECOMAF 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)	49	12	14	15	0.17	0.19	3.21	0.81	0.94	
-30 (-22)	69	17	20	18	0.19	0.26	3.87	0.97	1.13	
-25 (-13)	97	24	28	22	0.21	0.37	4.52	1.14	1.33	
-20 (- 4)	133	34	39	26	0.23	0.51	5.22	1.32	1.53	
-15 (+ 5)	178	45	52	30	0.26	0.68	6.00	1.51	1.76	
-10 (+14)	233	59	68	34	0.29	0.89	6.89	1.74	2.02	
-5 (+23)	297	75	87	37	0.32	1.14	7.94	2.00	2.33	
0 (+32)	372	94	109	41	0.34	1.43	9.19	2.32	2.69	

TEST CONDITIONS: @220V2000RPM		CECOMAF 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)	107	27	31	19	0.18	0.34	5.71	1.44	1.67	
-30 (-22)	148	37	43	22	0.21	0.48	6.67	1.68	1.96	
-25 (-13)	198	50	58	26	0.24	0.64	7.74	1.95	2.27	
-20 (- 4)	258	65	76	29	0.26	0.83	8.95	2.26	2.62	
-15 (+ 5)	331	83	97	32	0.28	1.06	10.36	2.61	3.04	
-10 (+14)	417	105	122	35	0.30	1.35	12.02	3.03	3.52	
-5 (+23)	519	131	152	37	0.31	1.68	13.97	3.52	4.09	
0 (+32)	638	161	187	39	0.33	2.07	16.28	4.10	4.77	

TEST CONDITIONS: @220V2000RPM		CECOMAF 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)	75	19	22	18	0.19	0.26	4.25	1.07	1.25	
-30 (-22)	114	29	33	22	0.22	0.40	5.15	1.30	1.51	
-25 (-13)	161	40	47	26	0.24	0.56	6.05	1.52	1.77	
-20 (- 4)	216	55	63	31	0.27	0.75	7.00	1.76	2.05	
-15 (+ 5)	283	71	83	35	0.29	0.99	8.06	2.03	2.36	
-10 (+14)	362	91	106	39	0.32	1.27	9.26	2.33	2.71	
-5 (+23)	456	115	133	43	0.35	1.60	10.67	2.69	3.13	
0 (+32)	565	142	165	46	0.38	1.99	12.33	3.11	3.61	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V2000RPM		CECOMAF 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)	59	15	17	18	0.19	0.22	3.15	0.79	0.92	
-30 (-22)	91	23	27	23	0.22	0.35	4.02	1.01	1.18	
-25 (-13)	130	33	38	27	0.25	0.49	4.80	1.21	1.41	
-20 (- 4)	176	44	52	32	0.28	0.67	5.54	1.40	1.62	
-15 (+ 5)	232	58	68	37	0.31	0.89	6.29	1.58	1.84	
-10 (+14)	299	75	88	42	0.34	1.15	7.09	1.79	2.08	
-5 (+23)	379	96	111	47	0.38	1.46	7.99	2.01	2.34	
0 (+32)	474	119	139	52	0.43	1.83	9.05	2.28	2.65	

TEST CONDITIONS: @220V3000RPM		CECOMAF 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)	155	39	46	29	0.24	0.50	5.40	1.36	1.58	
-30 (-22)	219	55	64	34	0.28	0.70	6.42	1.62	1.88	
-25 (-13)	294	74	86	39	0.32	0.94	7.47	1.88	2.19	
-20 (- 4)	382	96	112	44	0.35	1.23	8.60	2.17	2.52	
-15 (+ 5)	487	123	143	49	0.39	1.57	9.86	2.49	2.89	
-10 (+14)	613	154	180	54	0.43	1.98	11.30	2.85	3.31	
-5 (+23)	761	192	223	59	0.47	2.46	12.97	3.27	3.80	
0 (+32)	936	236	274	63	0.51	3.04	14.91	3.76	4.37	

TEST CONDITIONS: @220V3000RPM		CECOMAF 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)	123	31	36	29	0.25	0.43	4.25	1.07	1.25	
-30 (-22)	182	46	53	35	0.29	0.63	5.17	1.30	1.51	
-25 (-13)	250	63	73	41	0.33	0.87	6.05	1.53	1.77	
-20 (- 4)	331	83	97	48	0.38	1.15	6.96	1.76	2.04	
-15 (+ 5)	427	108	125	54	0.42	1.49	7.95	2.00	2.33	
-10 (+14)	541	136	159	60	0.47	1.89	9.05	2.28	2.65	
-5 (+23)	677	171	198	65	0.52	2.38	10.33	2.60	3.03	
0 (+32)	838	211	246	71	0.57	2.95	11.83	2.98	3.47	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V3000RPM		CECOMAF 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)	87	22	25	28	0.25	0.33	3.12	0.79	0.92	
-30 (-22)	141	36	41	35	0.29	0.54	4.01	1.01	1.18	
-25 (-13)	203	51	60	42	0.34	0.77	4.81	1.21	1.41	
-20 (- 4)	276	70	81	50	0.39	1.06	5.59	1.41	1.64	
-15 (+ 5)	363	91	106	57	0.45	1.39	6.37	1.61	1.87	
-10 (+14)	467	118	137	65	0.50	1.79	7.23	1.82	2.12	
-5 (+23)	590	149	173	72	0.56	2.27	8.19	2.06	2.40	
0 (+32)	737	186	216	79	0.62	2.84	9.33	2.35	2.73	

TEST CONDITIONS: @220V4500RPM		CECOMAF 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)	230	58	67	47	0.38	0.74	4.89	1.23	1.43	
-30 (-22)	297	75	87	52	0.40	0.95	5.80	1.46	1.70	
-25 (-13)	398	100	117	59	0.45	1.28	6.77	1.71	1.98	
-20 (- 4)	531	134	156	67	0.51	1.70	7.84	1.98	2.30	
-15 (+ 5)	696	175	204	76	0.58	2.24	9.06	2.28	2.66	
-10 (+14)	892	225	261	85	0.65	2.88	10.47	2.64	3.07	
-5 (+23)	1118	282	328	93	0.70	3.62	12.10	3.05	3.55	
0 (+32)	1374	346	403	99	0.74	4.46	14.00	3.53	4.10	

TEST CONDITIONS: @220V4500RPM		CECOMAF 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)	193	49	57	47	0.38	0.67	4.16	1.05	1.22	
-30 (-22)	257	65	75	53	0.41	0.90	4.92	1.24	1.44	
-25 (-13)	347	87	102	62	0.47	1.21	5.69	1.43	1.67	
-20 (- 4)	462	116	135	71	0.54	1.61	6.50	1.64	1.90	
-15 (+ 5)	601	152	176	81	0.62	2.10	7.40	1.86	2.17	
-10 (+14)	764	193	224	91	0.68	2.68	8.43	2.12	2.47	
-5 (+23)	951	240	279	98	0.74	3.34	9.62	2.43	2.82	
0 (+32)	1159	292	339	103	0.76	4.08	11.03	2.78	3.23	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V4500RPM		CECOMAF 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)	137	34	40	43	0.35	0.52	3.12	0.79	0.92
-30	(-22)	205	52	60	52	0.41	0.78	3.89	0.98	1.14
-25	(-13)	292	74	86	63	0.48	1.12	4.61	1.16	1.35
-20	(- 4)	397	100	116	75	0.57	1.52	5.31	1.34	1.56
-15	(+ 5)	519	131	152	86	0.65	1.99	6.05	1.52	1.77
-10	(+14)	658	166	193	96	0.72	2.52	6.86	1.73	2.01
-5	(+23)	812	205	238	105	0.78	3.13	7.77	1.96	2.28
0	(+32)	981	247	287	110	0.81	3.79	8.85	2.23	2.59

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		