

COMPRESSOR DEFINITION

Designation	VEM T404U
Nominal Voltage/Frequency	230 V 40-150 Hz
Engineering Number	513903036

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	230 / 40-150	[V / Hz]	
4 Application type	Low-Medium Back Pressure (Light Commercial / Peak 65°C)		
4.1 Evaporating temperature range	-40°C to 0°C	(-40°F to 32°F)	
5 Motor type	BPM		
6 Starting torque	LST/HST - Low/High starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Operating voltage range		
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
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	60	[°C]	
9.2 Peak	65	[°C]	
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/3+	[hp]
2 Displacement	4.25	[cm ³] (0.259 cu.in)
2.1 Bore [mm]	19.000	
2.2 Stroke [mm]	15.000	
3 Lubricant charge	220	[ml] (7.44 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO22	
4 Weight (with oil charge)	7.18	[kg] (15.83 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	230 V 40-150 Hz 3 ~ (Three phase)	
2 Starting device type	Inverter	
2.1 Starting device	VCC31156SX A XX	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	VCC3 1156 SX A XX	
6 Start winding resistance	13.65	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	13.65	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50/60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	TUV - UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V1200RPM			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°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]
508	128	149	72	0.99	2.12	7.06	1.78	2.07

TEST CONDITIONS: @115V1600RPM			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°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]
645	163	189	88	1.17	2.70	7.33	1.85	2.15

TEST CONDITIONS: @115V2000RPM			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°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]
805	203	236	108	1.42	3.36	7.45	1.88	2.18

TEST CONDITIONS: @115V3000RPM			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°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]
1211	305	355	162	2.06	5.06	7.48	1.88	2.19

TEST CONDITIONS: @115V3600RPM			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°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]
1443	364	423	196	2.47	6.03	7.36	1.85	2.16

TEST CONDITIONS: @115V4500RPM			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°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]
1832	462	537	258	3.19	7.66	7.10	1.79	2.08

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V1200RPM			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]
363	91	106	58	0.80	1.08	6.26	1.58	1.83

TEST CONDITIONS: @115V1200RPM			ASHRAELBP32 Fan		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]
368	93	108	56	0.78	1.10	6.57	1.66	1.93

TEST CONDITIONS: @115V1600RPM			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]
448	113	131	69	0.95	1.33	6.49	1.64	1.90

TEST CONDITIONS: @115V1600RPM			ASHRAELBP32 Fan		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]
457	115	134	68	0.93	1.36	6.72	1.69	1.97

TEST CONDITIONS: @115V2000RPM			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]
551	139	161	85	1.13	1.64	6.48	1.63	1.90

TEST CONDITIONS: @115V2000RPM			ASHRAELBP32 Fan		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]
563	142	165	84	1.14	1.68	6.70	1.69	1.96

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V3000RPM			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]
807	203	236	126	1.63	2.40	6.40	1.61	1.88

TEST CONDITIONS: @115V3000RPM			ASHRAELBP32 Fan		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]
826	208	242	126	1.64	2.46	6.56	1.65	1.92

TEST CONDITIONS: @115V3600RPM			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]
939	237	275	149	1.91	2.79	6.30	1.59	1.85

TEST CONDITIONS: @115V3600RPM			ASHRAELBP32 Fan		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]
966	243	283	151	1.92	2.88	6.40	1.61	1.88

TEST CONDITIONS: @115V4500RPM			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]
1180	297	346	192	2.43	3.51	6.15	1.55	1.80

TEST CONDITIONS: @115V4500RPM			ASHRAELBP32 Fan		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]
1208	304	354	194	2.43	3.60	6.23	1.57	1.83

E - PERFORMANCE - CURVES

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **35°C (+95°F)**)
@115V1200RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%						+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	142	36	42	29	0.45	0.58	4.87	1.23	1.43
-35 (-31)	183	46	54	33	0.52	0.68	5.41	1.36	1.59
-30 (-22)	233	59	68	38	0.58	0.82	6.04	1.52	1.77
-25 (-13)	292	74	86	43	0.64	1.01	6.78	1.71	1.99
-20 (- 4)	360	91	106	48	0.69	1.24	7.65	1.93	2.24
-15 (+ 5)	437	110	128	51	0.74	1.51	8.67	2.18	2.54
-10 (+14)	522	131	153	54	0.77	1.83	9.86	2.49	2.89
-5 (+23)	614	155	180	55	0.78	2.19	11.25	2.83	3.30
0 (+32)	714	180	209	55	0.78	2.60	12.85	3.24	3.76

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **45°C (+113°F)**)
@115V1200RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%						+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	122	31	36	33	0.49	0.30	3.81	0.96	1.12
-35 (-31)	158	40	46	38	0.56	0.49	4.21	1.06	1.23
-30 (-22)	204	51	60	43	0.63	0.72	4.65	1.17	1.36
-25 (-13)	259	65	76	49	0.70	0.98	5.16	1.30	1.51
-20 (- 4)	322	81	94	55	0.77	1.28	5.76	1.45	1.69
-15 (+ 5)	394	99	116	60	0.83	1.60	6.46	1.63	1.89
-10 (+14)	474	119	139	65	0.89	1.97	7.30	1.84	2.14
-5 (+23)	561	141	164	68	0.94	2.37	8.27	2.09	2.42
0 (+32)	656	165	192	70	0.97	2.80	9.42	2.37	2.76

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **55°C (+131°F)**)
@115V1200RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%						+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	101	25	30	36	0.52	0.51	2.87	0.72	0.84
-35 (-31)	129	33	38	41	0.60	0.66	3.17	0.80	0.93
-30 (-22)	167	42	49	48	0.69	0.84	3.47	0.88	1.02
-25 (-13)	214	54	63	56	0.78	1.04	3.80	0.96	1.11
-20 (- 4)	269	68	79	63	0.88	1.26	4.17	1.05	1.22
-15 (+ 5)	333	84	97	71	0.97	1.50	4.60	1.16	1.35
-10 (+14)	404	102	118	78	1.06	1.77	5.11	1.29	1.50
-5 (+23)	482	122	141	84	1.14	2.06	5.72	1.44	1.68
0 (+32)	568	143	166	89	1.22	2.38	6.46	1.63	1.89

E - PERFORMANCE - CURVES

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **65°C (+149°F)**)
@115V1200RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	79	20	23	37	0.55	0.00	2.01	0.51	0.59
-35 (-31)	96	24	28	44	0.65	- 0.03	2.27	0.57	0.66
-30 (-22)	123	31	36	53	0.76	- 0.05	2.47	0.62	0.72
-25 (-13)	158	40	46	63	0.88	- 0.06	2.66	0.67	0.78
-20 (- 4)	201	51	59	73	1.01	- 0.06	2.84	0.72	0.83
-15 (+ 5)	252	64	74	83	1.14	- 0.04	3.04	0.77	0.89
-10 (+14)	311	78	91	94	1.27	0.00	3.27	0.82	0.96
-5 (+23)	377	95	111	104	1.40	0.04	3.57	0.90	1.05
0 (+32)	450	113	132	113	1.53	0.11	3.95	0.99	1.16

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **35°C (+95°F)**)
@115V1600RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	181	46	53	37	0.57	0.72	4.89	1.23	1.43
-35 (-31)	227	57	66	42	0.65	0.84	5.40	1.36	1.58
-30 (-22)	291	73	85	48	0.72	1.03	6.06	1.53	1.78
-25 (-13)	371	93	109	54	0.79	1.29	6.89	1.74	2.02
-20 (- 4)	465	117	136	59	0.86	1.61	7.87	1.98	2.31
-15 (+ 5)	572	144	167	64	0.91	1.99	9.00	2.27	2.64
-10 (+14)	688	173	202	68	0.95	2.42	10.30	2.59	3.02
-5 (+23)	813	205	238	70	0.97	2.90	11.74	2.96	3.44
0 (+32)	943	238	276	70	0.97	3.43	13.34	3.36	3.91

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **45°C (+113°F)**)
@115V1600RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	157	39	46	40	0.59	0.40	4.04	1.02	1.18
-35 (-31)	197	50	58	46	0.67	0.63	4.38	1.10	1.28
-30 (-22)	255	64	75	52	0.76	0.91	4.83	1.22	1.42
-25 (-13)	326	82	96	59	0.85	1.24	5.39	1.36	1.58
-20 (- 4)	410	103	120	67	0.93	1.62	6.04	1.52	1.77
-15 (+ 5)	504	127	148	73	1.01	2.04	6.80	1.71	1.99
-10 (+14)	606	153	178	79	1.07	2.50	7.67	1.93	2.25
-5 (+23)	714	180	209	83	1.13	3.00	8.63	2.17	2.53
0 (+32)	827	208	242	86	1.16	3.52	9.69	2.44	2.84

E - PERFORMANCE - CURVES

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **55°C (+131°F)**)
@115V1600RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	129	33	38	42	0.60	0.66	3.16	0.80	0.93
-35 (-31)	163	41	48	49	0.70	0.83	3.42	0.86	1.00
-30 (-22)	211	53	62	57	0.80	1.04	3.73	0.94	1.09
-25 (-13)	271	68	79	66	0.90	1.29	4.09	1.03	1.20
-20 (- 4)	342	86	100	74	1.01	1.57	4.51	1.14	1.32
-15 (+ 5)	421	106	123	83	1.12	1.88	4.97	1.25	1.46
-10 (+14)	507	128	148	92	1.22	2.21	5.48	1.38	1.61
-5 (+23)	596	150	175	99	1.31	2.55	6.04	1.52	1.77
0 (+32)	688	173	202	105	1.39	2.92	6.65	1.67	1.95

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **65°C (+149°F)**)
@115V1600RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	99	25	29	43	0.62	0.00	2.19	0.55	0.64
-35 (-31)	123	31	36	51	0.73	- 0.05	2.44	0.62	0.72
-30 (-22)	159	40	47	61	0.85	- 0.07	2.70	0.68	0.79
-25 (-13)	206	52	60	72	0.98	- 0.07	2.95	0.74	0.87
-20 (- 4)	262	66	77	83	1.12	- 0.05	3.21	0.81	0.94
-15 (+ 5)	324	82	95	94	1.26	- 0.02	3.45	0.87	1.01
-10 (+14)	390	98	114	106	1.40	0.02	3.70	0.93	1.08
-5 (+23)	459	116	134	116	1.53	0.06	3.93	0.99	1.15
0 (+32)	528	133	155	125	1.66	0.10	4.16	1.05	1.22

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **35°C (+95°F)**)
@115V2000RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	230	58	67	46	0.70	0.92	4.93	1.24	1.44
-35 (-31)	291	73	85	53	0.79	1.08	5.46	1.38	1.60
-30 (-22)	372	94	109	61	0.88	1.32	6.13	1.54	1.80
-25 (-13)	472	119	138	68	0.96	1.64	6.95	1.75	2.04
-20 (- 4)	589	148	173	75	1.03	2.03	7.92	2.00	2.32
-15 (+ 5)	720	182	211	80	1.09	2.50	9.07	2.28	2.66
-10 (+14)	865	218	254	85	1.13	3.04	10.38	2.62	3.04
-5 (+23)	1021	257	299	87	1.16	3.64	11.88	3.00	3.48
0 (+32)	1186	299	348	86	1.17	4.31	13.58	3.42	3.98

E - PERFORMANCE - CURVES

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **45°C (+113°F)**)
@115V2000RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	198	50	58	49	0.70	0.50	4.10	1.03	1.20
-35 (-31)	252	63	74	57	0.81	0.80	4.46	1.12	1.31
-30 (-22)	324	82	95	65	0.92	1.15	4.91	1.24	1.44
-25 (-13)	412	104	121	74	1.02	1.57	5.45	1.37	1.60
-20 (- 4)	516	130	151	83	1.12	2.04	6.10	1.54	1.79
-15 (+ 5)	633	159	185	91	1.21	2.56	6.86	1.73	2.01
-10 (+14)	760	192	223	98	1.30	3.14	7.74	1.95	2.27
-5 (+23)	897	226	263	103	1.36	3.77	8.75	2.20	2.56
0 (+32)	1041	262	305	106	1.42	4.44	9.89	2.49	2.90

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **55°C (+131°F)**)
@115V2000RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	163	41	48	51	0.72	0.84	3.28	0.83	0.96
-35 (-31)	206	52	60	59	0.84	1.06	3.56	0.90	1.04
-30 (-22)	266	67	78	69	0.97	1.32	3.88	0.98	1.14
-25 (-13)	341	86	100	80	1.09	1.63	4.23	1.07	1.24
-20 (- 4)	429	108	126	91	1.22	1.98	4.64	1.17	1.36
-15 (+ 5)	528	133	155	101	1.34	2.36	5.11	1.29	1.50
-10 (+14)	636	160	186	111	1.46	2.77	5.64	1.42	1.65
-5 (+23)	751	189	220	120	1.57	3.21	6.25	1.57	1.83
0 (+32)	871	220	255	127	1.67	3.68	6.94	1.75	2.03

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **65°C (+149°F)**)
@115V2000RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	123	31	36	51	0.75	0.00	2.30	0.58	0.67
-35 (-31)	154	39	45	61	0.89	- 0.06	2.60	0.66	0.76
-30 (-22)	200	50	58	72	1.03	- 0.08	2.88	0.72	0.84
-25 (-13)	258	65	76	85	1.17	- 0.09	3.14	0.79	0.92
-20 (- 4)	327	82	96	98	1.32	- 0.07	3.40	0.86	1.00
-15 (+ 5)	406	102	119	111	1.48	- 0.03	3.66	0.92	1.07
-10 (+14)	491	124	144	124	1.63	0.01	3.93	0.99	1.15
-5 (+23)	582	147	170	137	1.78	0.07	4.23	1.07	1.24
0 (+32)	676	170	198	147	1.92	0.14	4.55	1.15	1.33

E - PERFORMANCE - CURVES

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **35°C (+95°F)**)
@115V3000RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%						+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	343	86	101	71	1.02	1.39	4.83	1.22	1.41
-35 (-31)	435	110	128	81	1.15	1.62	5.35	1.35	1.57
-30 (-22)	556	140	163	92	1.28	1.97	6.01	1.51	1.76
-25 (-13)	704	177	206	103	1.40	2.43	6.79	1.71	1.99
-20 (- 4)	877	221	257	114	1.52	3.02	7.73	1.95	2.26
-15 (+ 5)	1074	271	315	123	1.62	3.72	8.82	2.22	2.59
-10 (+14)	1293	326	379	130	1.71	4.54	10.09	2.54	2.96
-5 (+23)	1533	386	449	134	1.76	5.47	11.54	2.91	3.38
0 (+32)	1792	452	525	135	1.79	6.51	13.18	3.32	3.86

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **45°C (+113°F)**)
@115V3000RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%						+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	297	75	87	75	1.03	0.74	4.02	1.01	1.18
-35 (-31)	378	95	111	87	1.18	1.18	4.39	1.11	1.29
-30 (-22)	485	122	142	99	1.33	1.71	4.84	1.22	1.42
-25 (-13)	616	155	180	113	1.48	2.33	5.39	1.36	1.58
-20 (- 4)	769	194	225	126	1.63	3.04	6.03	1.52	1.77
-15 (+ 5)	944	238	277	138	1.77	3.84	6.79	1.71	1.99
-10 (+14)	1138	287	333	148	1.90	4.72	7.68	1.93	2.25
-5 (+23)	1350	340	396	156	2.00	5.68	8.70	2.19	2.55
0 (+32)	1579	398	463	161	2.07	6.74	9.87	2.49	2.89

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **55°C (+131°F)**)
@115V3000RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%						+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	244	62	72	76	1.04	1.26	3.26	0.82	0.96
-35 (-31)	311	78	91	89	1.21	1.60	3.56	0.90	1.04
-30 (-22)	402	101	118	104	1.39	2.00	3.89	0.98	1.14
-25 (-13)	513	129	150	120	1.57	2.46	4.26	1.07	1.25
-20 (- 4)	644	162	189	136	1.76	2.98	4.69	1.18	1.37
-15 (+ 5)	794	200	233	151	1.93	3.56	5.18	1.31	1.52
-10 (+14)	960	242	281	165	2.10	4.19	5.76	1.45	1.69
-5 (+23)	1141	288	334	177	2.25	4.88	6.43	1.62	1.88
0 (+32)	1336	337	392	187	2.37	5.63	7.21	1.82	2.11

E - PERFORMANCE - CURVES

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **65°C (+149°F)**)
@115V3000RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	185	47	54	74	1.05	- 0.01	2.41	0.61	0.70
-35 (-31)	236	59	69	89	1.24	- 0.08	2.70	0.68	0.79
-30 (-22)	306	77	90	106	1.45	- 0.12	2.97	0.75	0.87
-25 (-13)	396	100	116	125	1.67	- 0.13	3.25	0.82	0.95
-20 (- 4)	502	126	147	144	1.89	- 0.11	3.54	0.89	1.04
-15 (+ 5)	623	157	183	162	2.10	- 0.07	3.85	0.97	1.13
-10 (+14)	759	191	222	180	2.31	0.01	4.19	1.06	1.23
-5 (+23)	907	229	266	197	2.50	0.11	4.58	1.16	1.34
0 (+32)	1066	269	312	211	2.68	0.23	5.03	1.27	1.47

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **35°C (+95°F)**)
@115V3600RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	417	105	122	87	1.21	1.68	4.77	1.20	1.40
-35 (-31)	528	133	155	99	1.35	1.96	5.31	1.34	1.55
-30 (-22)	672	169	197	113	1.50	2.37	5.95	1.50	1.74
-25 (-13)	847	213	248	126	1.65	2.93	6.71	1.69	1.97
-20 (- 4)	1054	266	309	139	1.80	3.63	7.60	1.91	2.23
-15 (+ 5)	1291	325	378	151	1.94	4.47	8.62	2.17	2.53
-10 (+14)	1557	392	456	161	2.07	5.47	9.79	2.47	2.87
-5 (+23)	1853	467	543	168	2.17	6.61	11.12	2.80	3.26
0 (+32)	2177	549	638	171	2.23	7.92	12.62	3.18	3.70

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **45°C (+113°F)**)
@115V3600RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	341	86	100	88	1.19	0.83	3.92	0.99	1.15
-35 (-31)	441	111	129	102	1.36	1.37	4.32	1.09	1.27
-30 (-22)	569	143	167	118	1.54	2.01	4.79	1.21	1.40
-25 (-13)	725	183	213	134	1.73	2.75	5.33	1.34	1.56
-20 (- 4)	909	229	266	150	1.92	3.60	5.97	1.50	1.75
-15 (+ 5)	1120	282	328	166	2.10	4.55	6.71	1.69	1.97
-10 (+14)	1356	342	397	179	2.27	5.62	7.57	1.91	2.22
-5 (+23)	1618	408	474	190	2.42	6.81	8.54	2.15	2.50
0 (+32)	1905	480	558	199	2.53	8.11	9.66	2.43	2.83

E - PERFORMANCE - CURVES

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **55°C (+131°F)**)
@115V3600RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	280	70	82	89	1.20	1.44	3.19	0.80	0.93
-35 (-31)	362	91	106	105	1.39	1.86	3.49	0.88	1.02
-30 (-22)	469	118	137	123	1.60	2.34	3.82	0.96	1.12
-25 (-13)	601	151	176	142	1.83	2.89	4.20	1.06	1.23
-20 (- 4)	756	191	222	161	2.05	3.51	4.64	1.17	1.36
-15 (+ 5)	935	236	274	179	2.27	4.20	5.15	1.30	1.51
-10 (+14)	1135	286	333	197	2.48	4.97	5.73	1.44	1.68
-5 (+23)	1358	342	398	212	2.67	5.81	6.40	1.61	1.88
0 (+32)	1601	403	469	224	2.83	6.74	7.17	1.81	2.10

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **65°C (+149°F)**)
@115V3600RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	232	59	68	91	1.24	0.00	2.48	0.62	0.73
-35 (-31)	292	73	85	109	1.45	- 0.08	2.72	0.69	0.80
-30 (-22)	372	94	109	128	1.69	- 0.13	2.97	0.75	0.87
-25 (-13)	474	119	139	149	1.94	- 0.15	3.23	0.81	0.95
-20 (- 4)	595	150	174	171	2.19	- 0.14	3.51	0.89	1.03
-15 (+ 5)	735	185	215	193	2.44	- 0.09	3.83	0.96	1.12
-10 (+14)	895	225	262	213	2.69	- 0.01	4.19	1.05	1.23
-5 (+23)	1072	270	314	232	2.91	0.12	4.60	1.16	1.35
0 (+32)	1266	319	371	248	3.11	0.29	5.08	1.28	1.49

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **35°C (+95°F)**)
@115V4500RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	523	132	153	113	1.53	2.13	4.61	1.16	1.35
-35 (-31)	673	170	197	130	1.73	2.50	5.18	1.30	1.52
-30 (-22)	859	217	252	147	1.93	3.03	5.82	1.47	1.71
-25 (-13)	1081	272	317	165	2.13	3.73	6.55	1.65	1.92
-20 (- 4)	1339	337	392	182	2.33	4.60	7.37	1.86	2.16
-15 (+ 5)	1633	412	478	198	2.51	5.65	8.29	2.09	2.43
-10 (+14)	1964	495	575	212	2.67	6.89	9.32	2.35	2.73
-5 (+23)	2332	588	683	224	2.80	8.32	10.47	2.64	3.07
0 (+32)	2737	690	802	232	2.89	9.95	11.75	2.96	3.44

E - PERFORMANCE - CURVES

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **45°C (+113°F)**)
@115V4500RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	432	109	127	117	1.57	1.04	3.72	0.94	1.09
-35 (-31)	560	141	164	135	1.79	1.72	4.14	1.04	1.21
-30 (-22)	720	181	211	155	2.03	2.52	4.60	1.16	1.35
-25 (-13)	913	230	267	176	2.27	3.45	5.13	1.29	1.50
-20 (- 4)	1138	287	334	197	2.51	4.51	5.73	1.44	1.68
-15 (+ 5)	1398	352	410	217	2.74	5.70	6.41	1.61	1.88
-10 (+14)	1691	426	495	236	2.96	7.03	7.17	1.81	2.10
-5 (+23)	2018	508	591	252	3.15	8.51	8.03	2.02	2.35
0 (+32)	2379	600	697	266	3.31	10.15	9.00	2.27	2.64

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **55°C (+131°F)**)
@115V4500RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	351	88	103	116	1.57	1.81	3.05	0.77	0.89
-35 (-31)	454	114	133	137	1.81	2.34	3.36	0.85	0.98
-30 (-22)	587	148	172	159	2.08	2.95	3.70	0.93	1.08
-25 (-13)	750	189	220	183	2.36	3.63	4.07	1.03	1.19
-20 (- 4)	942	237	276	208	2.64	4.40	4.50	1.13	1.32
-15 (+ 5)	1165	294	341	232	2.92	5.26	4.98	1.25	1.46
-10 (+14)	1419	357	416	255	3.19	6.21	5.52	1.39	1.62
-5 (+23)	1703	429	499	277	3.45	7.28	6.14	1.55	1.80
0 (+32)	2019	509	592	296	3.68	8.45	6.84	1.72	2.00

The current compressor speed may be different than the set speed at some operating conditions. The performance values herein presented refer to actual compressor speed, though.

TEST CONDITIONS: **ARI4** (Condensing temperature **65°C (+149°F)**)
@115V4500RPM **Fan**

Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40 (-40)	280	71	82	112	1.52	0.00	2.44	0.62	0.72
-35 (-31)	358	90	105	134	1.79	- 0.10	2.69	0.68	0.79
-30 (-22)	462	116	135	159	2.08	- 0.17	2.95	0.74	0.87
-25 (-13)	592	149	174	186	2.39	- 0.20	3.23	0.81	0.95
-20 (- 4)	750	189	220	214	2.72	- 0.19	3.52	0.89	1.03
-15 (+ 5)	935	236	274	243	3.05	- 0.14	3.86	0.97	1.13
-10 (+14)	1147	289	336	271	3.37	- 0.02	4.23	1.07	1.24
-5 (+23)	1388	350	407	297	3.68	0.15	4.65	1.17	1.36
0 (+32)	1657	418	485	322	3.98	0.39	5.13	1.29	1.50

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal EUEM		
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	Straight		
3.2 DISCHARGE	4.94 +0.08/-0.08	[mm]	(0.194" +0.003"/-0.003")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
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	Straight		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		