

COMPRESSOR DEFINITION

Designation	VEG T11C
Nominal Voltage/Frequency	230 V 53-116 Hz
Engineering Number	513800008

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
3 Nominal voltage and frequency	230 / 53-116	[V / Hz]	
4 Application type	Low Back Pressure		
4.1 Evaporating temperature range	-35°C to -10°C	(-31°F to 14°F)	
5 Motor type	BPM		
6 Starting torque	HST - Hight 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)	Static	198 to 255 V	198 to 242 V
8.2 LBP (43°C Ambient temperature)	Static	198 to 255 V	198 to 242 V
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	7.7	[kgf/cm ²] (109 psig)	/ °C - °F
9.2 Peak (gauge)	9.8	[kgf/cm ²] (139 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/4	[hp]
2 Displacement	11.14	[cm ³] (0.680 cu.in)
2.1 Bore [mm]	26.000	
2.2 Stroke [mm]	21.000	
3 Lubricant charge	430	[ml] (14.54 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	MINERAL / ISO10	
4 Weight (with oil charge)	10.97	[kg] (24.18 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	230 V 53-116 Hz 3 ~ (Three phase)	
2 Starting device type	Inverter	
2.1 Starting device	EU245606B01	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	EU2456 06B 01	
6 Start winding resistance	15.20	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	15.20	[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		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V1600RPM			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]
228	57	67	54	0.43	0.87	4.22	1.06	1.24

TEST CONDITIONS: @220V2400RPM			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]
361	91	106	81	0.61	1.38	4.46	1.12	1.31

TEST CONDITIONS: @220V3500RPM			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]
552	139	162	125	0.92	2.10	4.42	1.11	1.30

E - PERFORMANCE - CURVES

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]
-35	(-31)	132	33	39	35	0.29	0.46	3.76	0.95	1.10
-30	(-22)	207	52	61	43	0.34	0.72	4.80	1.21	1.41
-25	(-13)	294	74	86	50	0.39	1.02	5.82	1.47	1.71
-20	(- 4)	391	98	114	58	0.44	1.36	6.80	1.71	1.99
-15	(+ 5)	497	125	146	65	0.50	1.74	7.71	1.94	2.26
-10	(+14)	614	155	180	72	0.55	2.15	8.55	2.15	2.50

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]
-35	(-31)	107	27	31	35	0.27	0.41	3.16	0.80	0.93
-30	(-22)	174	44	51	44	0.33	0.66	4.00	1.01	1.17
-25	(-13)	254	64	75	53	0.40	0.97	4.84	1.22	1.42
-20	(- 4)	348	88	102	62	0.47	1.33	5.65	1.42	1.66
-15	(+ 5)	453	114	133	70	0.54	1.73	6.43	1.62	1.88
-10	(+14)	571	144	167	80	0.61	2.19	7.16	1.80	2.10

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V1600RPM		CECOMAF Static			(Condensing temperature 65°C (+149°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)	96	24	28	32	0.25	0.40	3.01	0.76	0.88	
-30 (-22)	155	39	45	42	0.33	0.65	3.67	0.92	1.07	
-25 (-13)	229	58	67	53	0.41	0.97	4.35	1.10	1.27	
-20 (- 4)	318	80	93	63	0.49	1.35	5.02	1.27	1.47	
-15 (+ 5)	422	106	124	74	0.57	1.80	5.69	1.43	1.67	
-10 (+14)	540	136	158	85	0.65	2.30	6.32	1.59	1.85	

TEST CONDITIONS: @220V2400RPM		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)	267	67	78	56	0.45	0.93	4.74	1.19	1.39	
-30 (-22)	353	89	103	65	0.50	1.23	5.40	1.36	1.58	
-25 (-13)	476	120	140	77	0.56	1.66	6.20	1.56	1.82	
-20 (- 4)	635	160	186	89	0.64	2.21	7.13	1.80	2.09	
-15 (+ 5)	824	208	242	101	0.73	2.88	8.19	2.06	2.40	
-10 (+14)	1042	263	305	112	0.81	3.65	9.39	2.37	2.75	

TEST CONDITIONS: @220V2400RPM		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)	208	52	61	62	0.45	0.79	3.40	0.86	1.00	
-30 (-22)	281	71	82	69	0.50	1.07	4.18	1.05	1.23	
-25 (-13)	398	100	117	78	0.58	1.51	5.12	1.29	1.50	
-20 (- 4)	553	139	162	89	0.67	2.11	6.21	1.57	1.82	
-15 (+ 5)	745	188	218	100	0.78	2.85	7.47	1.88	2.19	
-10 (+14)	969	244	284	110	0.88	3.72	8.87	2.24	2.60	

TEST CONDITIONS: @220V2400RPM		CECOMAF Static			(Condensing temperature 65°C (+149°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)	226	57	66	57	0.45	0.95	3.91	0.99	1.15	
-30 (-22)	278	70	82	68	0.51	1.18	4.20	1.06	1.23	
-25 (-13)	378	95	111	81	0.60	1.61	4.68	1.18	1.37	
-20 (- 4)	521	131	153	97	0.70	2.21	5.34	1.35	1.56	
-15 (+ 5)	705	178	207	113	0.81	3.00	6.18	1.56	1.81	
-10 (+14)	926	233	271	128	0.92	3.94	7.20	1.81	2.11	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V3500RPM		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)	406	102	119	86	0.66	1.41	4.63	1.17	1.36
-30	(-22)	529	133	155	104	0.75	1.84	5.13	1.29	1.50
-25	(-13)	700	177	205	119	0.85	2.43	5.91	1.49	1.73
-20	(- 4)	916	231	268	133	0.95	3.19	6.89	1.74	2.02
-15	(+ 5)	1171	295	343	147	1.06	4.09	7.96	2.01	2.33
-10	(+14)	1459	368	427	161	1.15	5.11	9.03	2.28	2.65

TEST CONDITIONS: @220V3500RPM		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)	299	75	88	86	0.64	1.14	3.58	0.90	1.05
-30	(-22)	430	108	126	107	0.76	1.64	4.09	1.03	1.20
-25	(-13)	606	153	178	125	0.89	2.31	4.86	1.22	1.42
-20	(- 4)	825	208	242	142	1.01	3.15	5.80	1.46	1.70
-15	(+ 5)	1079	272	316	157	1.13	4.13	6.83	1.72	2.00
-10	(+14)	1366	344	400	174	1.24	5.24	7.84	1.98	2.30

TEST CONDITIONS: @220V3500RPM		CECOMAF Static			(Condensing temperature 65°C (+149°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)	293	74	86	79	0.60	1.23	3.64	0.92	1.07
-30	(-22)	420	106	123	103	0.75	1.78	4.05	1.02	1.19
-25	(-13)	592	149	173	125	0.90	2.51	4.72	1.19	1.38
-20	(- 4)	803	202	235	145	1.04	3.41	5.54	1.40	1.62
-15	(+ 5)	1048	264	307	164	1.17	4.45	6.43	1.62	1.88
-10	(+14)	1322	333	387	183	1.30	5.63	7.28	1.84	2.13

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard EG/F/AMEM Version 2		
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		
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	Slanted		
3.3 PROCESS	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		