

### COMPRESSOR DEFINITION

Designation	VEG Y6H
Nominal Voltage/Frequency	230 V 53-150 Hz
Engineering Number	513800038

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	230 / 53-150	[ 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	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	103 to 140 V	103 to 140 V
8.2 LBP (43°C Ambient temperature)	Static	103 to 140 V	103 to 140 V
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	14.2	[kgf/cm <sup>2</sup> ] (202 psig)	/ °C - °F
9.2 Peak	15.9	[kgf/cm <sup>2</sup> ] (226 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1/5	[hp]
2 Displacement	6.36	[cm <sup>3</sup> ] (0.388 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	16.000	
3 Lubricant charge	430	[ml] (14.54 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO10	
4 Weight (with oil charge)	11.31	[kg] (24.93 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig)

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	230 V 53-150 Hz 3 ~ (Three phase)	
2 Starting device type	Inverter	
2.1 Starting device	VCC31156XXXX	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	VCC31156XXXXX	
6 Start winding resistance	6.40	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	6.40	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	3.30	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	3.30	[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	NOM - TUV - UL	

### D - PERFORMANCE - CHECK POINT DATA

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]
330	83	97	56	0.79	1.88	5.92	1.49	1.73

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]
410	103	120	69	0.95	2.33	5.94	1.50	1.74

TEST CONDITIONS: @115V2250RPM			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]
510	129	149	84	1.14	2.90	6.09	1.53	1.78

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]
670	169	196	113	1.50	3.81	5.94	1.50	1.74

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]
965	243	283	177	2.23	5.48	5.46	1.38	1.60

### E - PERFORMANCE - CURVES

### F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal EG/F/AMEM version 2		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	6.5 +0.12/-0.08	[mm]	(0.256" +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		