COMPRESSOR DEFINITION

Designation	**EM U5132Y**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**877AA67**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	High Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-15°C to 10°C	(5°F to 50°F)	
5 Motor type	RSIR		
6 Starting torque	LST - Low Starting Torque		
7 Expantion device	Capillary tube		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	6.9	[kgf/cm²] (98 psig)	/ ºC - ºF
9.2 Peak	7.8	[kgf/cm²] (111 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/7	[hp]
2 Displacement	6.76	[cm³] (0.413 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	17.000	
3 Lubricant charge	180	[ml] (6.09 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO5	
4 Weight (with oil charge)	7.4	[kg] (16.31 lb.)
5 Nitrogen charge	-	[kgf/cm²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	PTC	
2.1 Starting device	V230	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	AE64FS	
6 Start winding resistance	21.70	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	24.30	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	6.05	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A]
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A]
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**EN12900MBP_HH** **Static**		Evaporating temperature (Condensing temperature	**-10°C (14°F)** **45°C (113°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]
711	179	208	109	0.79	2.49	6.53	1.65	1.91

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz**		**EN12900HH** **Static**			(Condensing temperature **35ºC (+95ºF))**					
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]
-15	**(+ 5)**	645	163	189	93	0.76	2.08	6.89	1.74	2.02
-10	**(+14)**	800	202	234	100	0.77	2.59	7.99	2.01	2.34
-5	**(+23)**	987	249	289	107	0.79	3.20	9.28	2.34	2.72
0	**(+32)**	1206	304	353	112	0.80	3.92	10.75	2.71	3.15
+5	**(+41)**	1457	367	427	118	0.82	4.75	12.40	3.12	3.63
+10	**(+50)**	1738	438	509	122	0.84	5.69	14.20	3.58	4.16

TEST CONDITIONS: **@220V50Hz**		**EN12900HH** **Static**			(Condensing temperature **45ºC (+113ºF))**					
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]
-15	**(+ 5)**	564	142	165	100	0.77	1.97	5.64	1.42	1.65
-10	**(+14)**	708	179	208	109	0.79	2.49	6.50	1.64	1.90
-5	**(+23)**	880	222	258	117	0.81	3.10	7.48	1.89	2.19
0	**(+32)**	1078	272	316	125	0.83	3.80	8.58	2.16	2.51
+5	**(+41)**	1301	328	381	133	0.86	4.61	9.78	2.46	2.87
+10	**(+50)**	1549	390	454	140	0.88	5.51	11.07	2.79	3.24

TEST CONDITIONS: **@220V50Hz**		**EN12900HH** **Static**			(Condensing temperature **55ºC (+131ºF))**					
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]
-15	**(+ 5)**	488	123	143	106	0.78	1.87	4.62	1.16	1.35
-10	**(+14)**	622	157	182	117	0.81	2.39	5.31	1.34	1.56
-5	**(+23)**	777	196	228	128	0.84	2.99	6.06	1.53	1.77
0	**(+32)**	951	240	279	139	0.87	3.68	6.85	1.73	2.01
+5	**(+41)**	1146	289	336	150	0.90	4.45	7.67	1.93	2.25
+10	**(+50)**	1360	343	399	160	0.93	5.31	8.50	2.14	2.49

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
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 42°		
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	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		