COMPRESSOR DEFINITION

Designation	**F F6BKW**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**513200203**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	Blend		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Low-Medium-High Back Pressure		
4.1 Evaporating temperature range	-35°C to 15°C	(-31°F to 59°F)	
5 Motor type	RSIR/CSIR		
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)	Static	198 to 255 V	-
8.2 LBP (43ºC Ambient temperature)	Static	198 to 255 V	-
8.3 HBP (32ºC Ambient temperature)	Fan	198 to 255 V	-
8.4 HBP (43ºC Ambient temperature)	Fan	198 to 255 V	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	14.5	[kgf/cm²] (206 psig)	/ ºC - ºF
9.2 Peak (gauge)	18.2	[kgf/cm²] (259 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/5	[hp]
2 Displacement	6.23	[cm³] (0.380 cu.in)
2.1 Bore [mm]	21.000	
2.2 Stroke [mm]	18.000	
3 Lubricant charge	280	[ml] (9.47 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO32	
4 Weight (with oil charge)	10.7	[kg] (23.59 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	213516221/213516302	
3 Start capacitor	88-108(180)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	MRA58020-5590	
6 Start winding resistance	40.63	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	14.13	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	10.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	1.30	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	IRAM	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**CECOMAFHBP** **Static**		Evaporating temperature (Condensing temperature	**5°C (41°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]
1965	495	576	270	1.41	17.68	7.28	1.83	2.13

TEST CONDITIONS: **@220V50Hz**			**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]
555	140	163	140	0.86	4.87	3.96	1.00	1.16

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz** — **CECOMAF** **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]
-35	**(-31)**	320	81	94	96	0.73	2.55	3.32	0.84	0.97
-30	**(-22)**	394	99	116	115	0.78	3.18	3.48	0.88	1.02
-25	**(-13)**	504	127	148	135	0.84	4.07	3.77	0.95	1.11
-20	**(- 4)**	647	163	190	155	0.90	5.24	4.19	1.05	1.23
-15	**(+ 5)**	824	208	241	175	0.97	6.68	4.69	1.18	1.37
-10	**(+14)**	1033	260	303	196	1.05	8.40	5.25	1.32	1.54
-5	**(+23)**	1274	321	373	217	1.14	10.40	5.85	1.48	1.72
0	**(+32)**	1546	389	453	239	1.24	12.68	6.47	1.63	1.90
+5	**(+41)**	1847	465	541	262	1.35	15.23	7.07	1.78	2.07
+10	**(+50)**	2177	549	638	286	1.47	18.08	7.63	1.92	2.24
+15	**(+59)**	2536	639	743	312	1.61	21.20	8.13	2.05	2.38

TEST CONDITIONS: **@220V50Hz** — **CECOMAF** **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]
-35	**(-31)**	320	81	94	96	0.73	2.81	3.32	0.84	0.97
-30	**(-22)**	394	99	116	115	0.78	3.47	3.48	0.88	1.02
-25	**(-13)**	504	127	148	135	0.84	4.43	3.77	0.95	1.11
-20	**(- 4)**	647	163	190	155	0.90	5.69	4.19	1.05	1.23
-15	**(+ 5)**	824	208	241	175	0.97	7.26	4.69	1.18	1.37
-10	**(+14)**	1033	260	303	196	1.05	9.13	5.25	1.32	1.54
-5	**(+23)**	1274	321	373	217	1.14	11.32	5.85	1.48	1.72
0	**(+32)**	1546	389	453	239	1.24	13.81	6.47	1.63	1.90
+5	**(+41)**	1847	465	541	262	1.35	16.62	7.07	1.78	2.07
+10	**(+50)**	2177	549	638	286	1.47	19.74	7.63	1.92	2.24
+15	**(+59)**	2536	639	743	312	1.61	23.18	8.13	2.05	2.38

E - PERFORMANCE - CURVES

TEST CONDITIONS: **CECOMAF** (Condensing temperature **65ºC (+149ºF))**
@220V50Hz **Static**

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)**	320	81	94	96	0.73	3.07	3.32	0.84	0.97
-30	**(-22)**	394	99	116	115	0.78	3.81	3.48	0.88	1.02
-25	**(-13)**	504	127	148	135	0.84	4.88	3.77	0.95	1.11
-20	**(- 4)**	647	163	190	155	0.90	6.28	4.19	1.05	1.23
-15	**(+ 5)**	824	208	241	175	0.97	8.02	4.69	1.18	1.37
-10	**(+14)**	1033	260	303	196	1.05	10.09	5.25	1.32	1.54
-5	**(+23)**	1274	321	373	217	1.14	12.51	5.85	1.48	1.72
0	**(+32)**	1546	389	453	239	1.24	15.27	6.47	1.63	1.90
+5	**(+41)**	1847	465	541	262	1.35	18.37	7.07	1.78	2.07
+10	**(+50)**	2177	549	638	286	1.47	21.82	7.63	1.92	2.24
+15	**(+59)**	2536	639	743	312	1.61	25.61	8.13	2.05	2.38

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 plated steel		
3.1.2 Shape	Slanted		
3.2 DISCHARGE	5 +0.18/-0.06	[mm]	(0.197" +0.007"/-0.002")
3.2.1 Material	Copper plated steel		
3.2.2 Shape	Slanted		
3.3 PROCESS	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
3.3.1 Material	Copper plated steel		
3.3.2 Shape	Slanted		
3.4 Oil cooler (Copper)	5.1 +0.10/+0.00	[mm]	(0.201" +0.004"/+0.000")
3.5 Connector sealing	Rubber Plugs		