COMPRESSOR DEFINITION

Designation	**F F6BKW**
Nominal Voltage/Frequency	**220 V 60 Hz**
Engineering Number	**513200841**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	Blend		
3 Nominal voltage and frequency	220 / 60	[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 242 V
8.2 LBP (43ºC Ambient temperature)	Static	-	198 to 242 V
8.3 HBP (32ºC Ambient temperature)	Fan	-	198 to 242 V
8.4 HBP (43ºC Ambient temperature)	Fan	-	198 to 242 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 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	213516159/213516353	
3 Start capacitor	88-108(150)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	4TM739LFBYY-53	
6 Start winding resistance	41.12	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	9.92	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	11.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	1.60	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V60Hz**			**ASHRAEHBP32** **Static**		Evaporating temperature (Condensing temperature	**7.2°C (44.96°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]
2340	590	686	319	1.85	17.52	7.34	1.85	2.15

TEST CONDITIONS: **@220V60Hz**			**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]
655	165	192	168	1.06	4.79	3.90	0.98	1.14

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V60Hz** — **ASHRAE32** **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)**	360	91	105	117	0.89	2.62	3.07	0.77	0.90
-30	**(-22)**	463	117	136	139	0.96	3.39	3.36	0.85	0.98
-25	**(-13)**	600	151	176	161	1.03	4.40	3.73	0.94	1.09
-20	**(- 4)**	773	195	226	184	1.12	5.66	4.19	1.05	1.23
-15	**(+ 5)**	981	247	287	208	1.21	7.20	4.70	1.18	1.38
-10	**(+14)**	1225	309	359	232	1.30	9.02	5.27	1.33	1.54
-5	**(+23)**	1506	380	441	256	1.40	11.14	5.87	1.48	1.72
0	**(+32)**	1825	460	535	281	1.51	13.56	6.50	1.64	1.90
+5	**(+41)**	2183	550	640	307	1.62	16.31	7.14	1.80	2.09
+10	**(+50)**	2580	650	756	333	1.74	19.39	7.78	1.96	2.28
+15	**(+59)**	3017	760	884	359	1.86	22.81	8.40	2.12	2.46

TEST CONDITIONS: **@220V60Hz** — **ASHRAE32** **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)**	360	91	105	117	0.89	2.62	3.07	0.77	0.90
-30	**(-22)**	463	117	136	139	0.96	3.39	3.36	0.85	0.98
-25	**(-13)**	600	151	176	161	1.03	4.40	3.73	0.94	1.09
-20	**(- 4)**	773	195	226	184	1.12	5.67	4.19	1.05	1.23
-15	**(+ 5)**	981	247	287	208	1.21	7.20	4.70	1.18	1.38
-10	**(+14)**	1225	309	359	232	1.30	9.03	5.27	1.33	1.54
-5	**(+23)**	1506	380	441	256	1.40	11.14	5.87	1.48	1.72
0	**(+32)**	1825	460	535	281	1.51	13.57	6.50	1.64	1.90
+5	**(+41)**	2183	550	640	307	1.62	16.31	7.14	1.80	2.09
+10	**(+50)**	2580	650	756	333	1.74	19.39	7.78	1.96	2.28
+15	**(+59)**	3017	760	884	359	1.86	22.81	8.40	2.12	2.46

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **65ºC (+149ºF))**
@220V60Hz **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)**	360	91	105	117	0.89	2.62	3.07	0.77	0.90
-30	**(-22)**	463	117	136	139	0.96	3.39	3.36	0.85	0.98
-25	**(-13)**	600	151	176	161	1.03	4.40	3.73	0.94	1.09
-20	**(- 4)**	773	195	226	184	1.12	5.67	4.19	1.05	1.23
-15	**(+ 5)**	981	247	287	208	1.21	7.21	4.70	1.18	1.38
-10	**(+14)**	1225	309	359	232	1.30	9.03	5.27	1.33	1.54
-5	**(+23)**	1506	380	441	256	1.40	11.14	5.87	1.48	1.72
0	**(+32)**	1825	460	535	281	1.51	13.57	6.50	1.64	1.90
+5	**(+41)**	2183	550	640	307	1.62	16.32	7.14	1.80	2.09
+10	**(+50)**	2580	650	756	333	1.74	19.39	7.78	1.96	2.28
+15	**(+59)**	3017	760	884	359	1.86	22.82	8.40	2.12	2.46

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal EG/F/AMEM version 2		
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 plated steel		
3.1.2 Shape	Slanted		
3.2 DISCHARGE	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
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)	6.5 +0.09/-0.09	[mm]	(0.256" +0.004"/-0.004")
3.5 Connector sealing	Rubber Plugs		