

COMPRESSOR DEFINITION

Designation	F FU130HAX
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	513200928

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	115-127 / 60	[V / Hz]	
4 Application type	Low-Medium Back Pressure		
4.1 Evaporating temperature range	-35°C to -5°C	(-31°F to 23°F)	
5 Motor type	CSIR		
6 Starting torque	LST/HST - Low/High 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)	Fan	-	98 to 140 V
8.2 LBP (43°C Ambient temperature)	Fan	-	98 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 ²] (202 psig)	/ °C - °F
9.2 Peak	15.9	[kgf/cm ²] (226 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/3+	[hp]
2 Displacement	10.61	[cm ³] (0.647 cu.in)
2.1 Bore [mm]	26.000	
2.2 Stroke [mm]	20.000	
3 Lubricant charge	280	[ml] (9.47 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO10	
4 Weight (with oil charge)	10.76	[kg] (23.72 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115-127 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	213516051	
3 Start capacitor	378-454(115)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	MRT26ADK-5590	
6 Start winding resistance	4.47	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.12	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	40.30	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	6.90	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CE - TUV - UKCA - UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V60Hz			ASHRAELBP32 Fan		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]
1250	315	366	260	4.05	7.10	4.80	1.21	1.41

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			ASHRAE32 Fan		(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)	649	164	190	181	3.68	3.67	3.58	0.90	1.05
-30 (-22)	889	224	260	212	3.84	5.04	4.23	1.07	1.24
-25 (-13)	1215	306	356	246	4.02	6.90	4.96	1.25	1.45
-20 (- 4)	1632	411	478	283	4.21	9.29	5.77	1.45	1.69
-15 (+ 5)	2143	540	628	322	4.42	12.23	6.65	1.68	1.95
-10 (+14)	2751	693	806	360	4.63	15.76	7.63	1.92	2.24
-5 (+23)	3461	872	1014	397	4.85	19.91	8.71	2.19	2.55

TEST CONDITIONS: @115V60Hz			ASHRAE32 Fan		(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)	517	130	152	167	3.64	2.92	3.13	0.79	0.92
-30 (-22)	777	196	228	204	3.80	4.41	3.80	0.96	1.11
-25 (-13)	1113	280	326	246	4.00	6.32	4.50	1.14	1.32
-20 (- 4)	1527	385	448	290	4.23	8.69	5.24	1.32	1.53
-15 (+ 5)	2024	510	593	336	4.48	11.55	6.01	1.51	1.76
-10 (+14)	2607	657	764	382	4.76	14.93	6.82	1.72	2.00
-5 (+23)	3279	826	961	428	5.06	18.86	7.69	1.94	2.25

TEST CONDITIONS: @115V60Hz			ASHRAE32 Fan		(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)	430	108	126	155	3.62	2.43	2.77	0.70	0.81
-30 (-22)	679	171	199	198	3.79	3.85	3.41	0.86	1.00
-25 (-13)	992	250	291	246	4.00	5.63	4.03	1.02	1.18
-20 (- 4)	1372	346	402	297	4.26	7.81	4.64	1.17	1.36
-15 (+ 5)	1823	459	534	350	4.57	10.40	5.24	1.32	1.54
-10 (+14)	2349	592	688	403	4.91	13.45	5.84	1.47	1.71
-5 (+23)	2952	744	865	457	5.29	16.98	6.44	1.62	1.89

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal EG/F/AMEM version 2		
2 Tray holder	Yes		
3 Connectors			
3.1 SUCTION	8.2 +0.12/-0.08	[mm]	(0.323" +0.005"/-0.003")
3.1.1 Material	Copper		
3.1.2 Shape	Straight		
3.2 DISCHARGE	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-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		