

Specification (PI)

Model : FBP13AA

No. 52-07-020

Item			Unit	Specification
Model / Series / Bland			-	FBP13AA / PAFMAC / PMAC
Performance *1	Cooling Capacity	FCU	BTU/Hr	2,700
		FCU and HP	BTU/Hr	6,800 (6,500~7,800)
		Cooling Capacity with Hot Water		BTU/Hr 3,100 (2,000~3,800)
	Heating Capacity	FCU	BTU/Hr	3,100
		FCU and HP	BTU/Hr	7,800 (4,800~9,200)
	Heating Capacity with Chilled Water		BTU/Hr	3,100 (2,700~3,400)
	T P I R *2	Cooling FCU	(BTU/Hr)/W	60.7
		Cooling FCU and HP	(BTU/Hr)/W	47.1
		Cooling (with Hot Water)	(BTU/Hr)/W	6.4
		Heating FCU	(BTU/Hr)/W	68.2
Heating FCU and HP		(BTU/Hr)/W	22.4	
Heating (with Chilled Water)		(BTU/Hr)/W	11.4	
Power Source			-	115V (104V~126V) 1 Phase 60Hz
Electrical Characteristics *1	Cooling FCU and HP	Power Consumption	kW	0.145 (0.135~0.235)
		Operating Current • Power Factor	A • %	1.7 (1.6~2.7)A • 74%
	Cooling (with Hot Water)	Power Consumption	kW	0.480 (0.350~0.650)
		Operating Current • Power Factor	A • %	5.4 (3.8~7.1)A • 77%
	Heating FCU and HP	Power Consumption	kW	0.350 (0.100~0.590)
		Operating Current • Power Factor	A • %	4.1 (1.2~6.5)A • 74%
	Heating (with Chilled Water)	Power Consumption	kW	0.270 (0.230~0.330)
		Operating Current • Power Factor	A • %	3.1 (2.7~3.7)A • 76 %
FCU only	Power Consumption	kW	0.045	
	Operating Current • Power Factor	A • %	0.57A • 69%	
Minimum circuit ampacity (MCA)			A	10
Maximum rating of overcurrent protective device (MOP)			A	15
Compressor	Type • Rated Output x Quantity		kW	Full Hermetic Rotary Type • 0.3 kW x 1
Fan System	Fan Type x Quantity		—	Double Suction Centrifugal Fan x 1
	Air Vol.		CFM	High : 177 , Middle : 141 , Low : 106
	Ex-unit Static Pressure		In. Water	0.12
	Fan Motor Rated Output		kW	0.03
Air	Suction Temp	For Cooling	℉	63~90
		For Heating	℉	63~82
Chilled / Hot Water	Inlet Temp. (Annual option)	For Cooling	℉	45 (45~113)
		For Heating	℉	113 (45~113)
	Water Press		PSI	0~142
	Water Vol.		GPM	0.8 (0.6~1.0)
	Water Press. Loss		PSI	1.9
	Water Contained		Gallon	0.26
Air Heat Exchanger			—	Plate Fin Type
Water Heat Exchanger			—	Plate Type
Refrigerant (GWP) • Quantity			lbs	R410A (GWP 2090) • 0.93 lb
Protection Device	Compressor		—	Thermostat, Current Transformer
	Fan Motor		—	DC Over Current, Thermal Cut-Off
	Refrigerant Cycle		—	High-Pressure Switch
	Control Circuit		—	Fuse
	Others		—	Drain Sensor
Piping Connection Part	Chilled / Hot Water Inlet • Outlet		—	NPT3/4 (Male)
	Drainage Outlet		Inch	OD ϕ 1
Power Supply Connection Part			—	Terminal block (M5)
Outer Dimensions	Height • Width • Depth		Inch	9 3/4 • 23 5/8 • 22 3/8
Unit Weight			lbs	112
Accessories			PI Jumper Cable	

Note

- The heating and cooling capacity and electrical characteristics are measured under the measurement conditions in Table 1 and are the values at 115V.(Refer to *1)
Table 1. Performance and electrical characteristics measurement conditions

	Inlet air		Inlet water	
	D.B. Temp.	W.B. Temp.	Temp.	water volume
Cooling Capacity	80 F	67 F	45 F	standard water volume
Cooling Capacity with Hot Water	80 F	67 F	113 F	standard water volume
Heating Capacity	70 F	---	113 F	standard water volume
Heating Capacity with Chilled Water	70 F	---	45 F	standard water volume

- TPIR stands for Total performance per Power Input Ratio, and it is shown as follows: (Refer to *2)
TPIR = (FCU capacity + HP capacity) / Power consumption
- The values of power factor is "overall power factor value". (Refer to *3)
- Electric Leakage Breaker is recommended, or follow the local electric code.
- FCU" and "HP" in the table represent the fan coil and heat pump, respectively.
- The compressor's heat is considered as an equivalent of work (power consumption W) for the heat source capacity.
- Specifications are subject to change without notice advanced. Please verify the specification before or

Specification (SI)

Model : FBP13AA

No. 52-07-020

Item			Unit	Specification
Model / Series / Brand			-	FBP13AA / PAFMAC / PMAC
Performance *1	Cooling Capacity	FCU	kW	0.8
		FCU and HP	kW	2.0(1.9~2.3)
	Cooling Capacity with Hot Water		kW	0.9(0.6~1.1)
	Heating Capacity	FCU	kW	0.9
		FCU and HP	kW	2.3(1.4~2.7)
	Heating Capacity with Chilled Water		kW	0.9(0.8~1.0)
	T P I R *2	Cooling FCU	kW/kW	17.8
		Cooling FCU and HP	kW/kW	13.8
		Cooling (with Hot Water)	kW/kW	1.88
		Heating FCU	kW/kW	20.0
Heating FCU and HP		kW/kW	6.57	
Heating (with Chilled Water)		kW/kW	3.33	
Power Source			-	115V(104V~126V) 1 Phase-60
Electrical Characteristics *1	Cooling FCU and HP	Power Consumption	kW	0.145(0.135~0.235)
		Operating Current • Power Factor *3	A • %	1.7(1.6~2.7) • 74
	Cooling (with Hot Water)	Power Consumption	kW	0.480(0.350~0.650)
		Operating Current • Power Factor *3	A • %	5.4(3.8~7.1) • 77
	Heating FCU and HP	Power Consumption	kW	0.350(0.100~0.590)
		Operating Current • Power Factor *3	A • %	4.1(1.2~6.5) • 74
	Heating (with Chilled Water)	Power Consumption	kW	0.270(0.230~0.330)
		Operating Current • Power Factor *3	A • %	3.1(2.7~3.7) • 76
FCU	Power Consumption	kW	0.045	
	Operating Current • Power Factor *3	A • %	0.57 • 69	
Minimum circuit ampacity (MCA)			A	10
Maximum rating of overcurrent protective device (MOP)			A	15
Compressor	Type • Rated Output x Quantity		kW	Full Hermetic Rotary Type • 0.3 x 1
Fan System	Fan Type x Quantity		—	Double Suction Centrifugal Fan x 1
	Air Vol.		m ³ / m i n	High : 5, Middle : 4, Low : 3
	Ex-unit Static Pressure		Pa	30
	Fan Motor Rated Output		kW	0.03
Air	Suction Temp	For Cooling	°C	17~32
		For Heating	°C	17~28
Chilled / Hot Water	Inlet Temp. (Annual option)	For Cooling	°C	7 (7~45)
		For Heating	°C	45 (7~45)
	Water Press		kPa	0~980
	Water Vol.		L/min	3.0 (2.4~3.6)
	Water Press. Loss		kPa	13
	Water Contained		L	1.0
Air Heat Exchanger			—	Plate Fin Type
Water Heat Exchanger			—	Plate Type
Refrigerant (GWP) • Quantity			kg	R410A (2090) • 0.42
Protection Device	Compressor		—	Thermostat, Current Transformer
	Fan Motor		—	DC Over Current, Thermal Cut-Off
	Refrigerant Cycle		—	High-Pressure Switch
	Control Circuit		—	Fuse
	Others		—	Drain Sensor
Piping Connection Part	Chilled / Hot Water Inlet • Outlet		—	NPT3/4 (Male)
	Drainage Outlet		mm	○ D ϕ 2 6
Power Supply Connection Part			—	Terminal block (M5)
Outer Dimensions	Height • Width • Depth		mm	250 • 600 • 570
Unit Weight			kg	51
Accessories			PI Short-Circuit Line	

Note

1. The heating and cooling capacity and electrical characteristics are measured under the measurement conditions in Table 1 and are the values at 115V.(Refer to *1)
Table 1. Performance and electrical characteristics measurement conditions

	Inlet air		Inlet water	
	D.B. Temp.	W.B. Temp.	Temp.	water volume
Cooling Capacity	26.7°C	19.4°C	7°C	standard water volume
Cooling Capacity with Hot Water	26.7°C	19.4°C	45°C	standard water volume
Heating Capacity	21.1°C	---	45°C	standard water volume
Heating Capacity with Chilled Water	21.1°C	---	7°C	standard water volume

2. TPIR stands for Total performance per Power Input Ratio, and it is shown as follows: (Refer to *2)

TPIR = (FCU capacity + HP capacity) / Power consumption

3. The values of power factor is "overall power factor value". (Refer to *3)

4. Electric Leakage Breaker is recommended, or follow the local electric code.

5. FCU and "HP" in the table represent the fan coil and heat pump, respectively.

6. The compressor's heat is considered as an equivalent of work (power consumption W) for the heat source capacity.

7. Specifications are subject to change without notice advanced. Please verify the specification before or