

AH Series Hydronic Air Handlers

The AHFW / AHKW series Hydronic Air Handlers are designed to be installed in recessed areas, (furred down) between floors, ceiling/attic area or hung in an acoustic tile ceiling. Units are supplied as hot water heating only. Opeional remote pump kits consist of a 1209 volt pump with relay, water check valve, and air purge vent. The aluminum fin copper tube coil provides efficient heat transfer from the hot water source to the air stream. A variety of coils are available to meet the specific needs and applications. All models are supplied with a 24-volt control transformer, and two speed fan relays. All models are factory wired with 115 volts circuitry. A choice of access grille panels may be ordered (see illustrations back of this sheet). Also available in DX coil / electric heat models see AHF/AHK spec sheet.

Standard Features

- Hot water connection's 3/4" OD
- Primary and secondary drains 3/4 inch
- Built in mounting tabs on sides of cabinet
- Fully insulated embossed galvanized steel cabinet
- Five year limited factory warranty (see warranty for details)

Optional Equipment

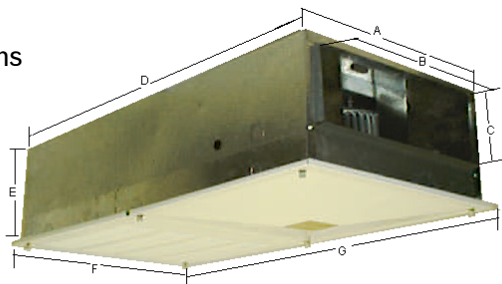
- Low limit freeze stat
- Hinged Access Panels (Powder Coated)
- High capacity pump kit with faucet or



Physical Dimensions

Nominal Tonnage	Model	Cabinet Width A	Plenum Width B	Plenum Height C	Cabinet Length D	Grill Width F	Grill Length G	Filter Size
1, 1 1/2, 2, 2 1/2	AHFW	23.00"	20.75"	7.50"	47.00"	11.50"	27.25"	51.25"
3 Tons	AHKW	23.00"	20.75"	7.50"	51.00"	11.50"	27.25"	55.25"

Water Connections
3/4" O.D.



Electrical Performance						
MODEL	VOL TS	NO PHASE	HERTZ	LOAD AMPS	MCA	MOP
AHFW 12 1-1	115	1	60	3.4	4.3	15
AHFW 12 2-1	230	1	60	1.45	1.8	15
AHFW 18 1-1	115	1	60	3.4	4.3	15
AHFW 18 2-1	230	1	60	1.45	1.8	15
AHFW 24 1-1	115	1	60	3.4	4.3	15
AHFW 24 2-1	2	1	60	1.45	1.8	15
AHFW 30 1-1	115	1	60	4.3	5.4	15
AHFW 30 2-1	230	1	60	2.7	3.4	15
AHFW 36 1-1	115	1	60	7	8.75	15
AHFW 36 2-1	230	1	60	4	5	15

Blower Performance				
MODEL	SPEED	STATIC PRESSURE		
		.1	.2	.3
AHFW 12	HIGH	800	730	620
	MEDIUM	700	630	540
	LOW	535	460	400
AHFW 18/24	HIGH	1020	950	840
	MEDIUM	970	850	730
	LOW	740	670	610
AHFW 30	LOW	1140	1090	1040
	HIGH	1200	1150	1100
AHKW 36	HIGH	1250	1200	1150
	LOW	1190	1140	1090

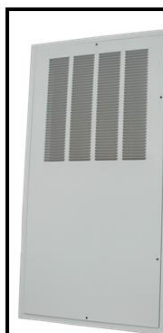
Water Heater Selection Chart			
18 MBH	40 gal	30 MBH	50 gal
24 MBH	40 gal	36 MBH	50 gal

Heating Performance								
MODEL	HTG ROW	CFM	GPM	PD	EWT 120	EWT 140	EWT 160	EWT 180
AHFW 12/18/24/30	2	600	3.5	3.0	17.7	24.1	30.5	36.9
	3			1.6	21.6	29.5	37.4	45.3
	4			1.0	24.2	33.1	42.0	50.9
AHFW 12/18/24/30	2	800	3.5	3.0	20.2	27.5	34.8	42.1
	3			1.6	24.9	34.0	43.2	52.4
	4			1.0	28.2	38.6	47.0	59.5
AHFW 12/18/24/30	2	1000	3.5	3.0	22.2	30.2	38.2	46.4
	3			1.6	27.6	37.7	47.9	58.1
	4			1.0	31.4	42.9	54.6	66.3
AHKW 36	2	1200	3.5	3.0	24.5	33.1	41.8	50.5
	3			1.6	30.3	41.2	52.2	63.3
	4			1.0	34.5	47.0	59.6	72.3

Sequence of Operation In the Heating Mode

When the space thermostat calls for heat, the unit circulating pump moves warm water from the water heater to the hydronic coil in the air handler. The fan relay energizes the blower motor in the air handler. The blower moves air from the conditioned space, across the hydronic coil, through the air duct system and into the conditioned space. The air passing over the hydronic coil absorbs heat from the water and this warms the air which is circulated through out the space via the air duct system. The warm water is returned to the water heat approximately 15-20 degrees cooler than it left the heater originally. The water is re-heated and circulated back to the hydronic coil. This process continues until the thermostat is satisfied and cycles the pump and the blower motor off.

The actual heating output of the unit can not exceed the BTU output of the water heating source. To select the proper size for the water heating source, determine the gallon capacity of the heater (refer to the chart below for recommended sizes for you unit). Then determine the required heating capacity of the water heater by multiplying the BTU input from the heater rating plate by the recovery efficiency of the water



AHF, AHK, & AHL DOOR KITS

Solid & louvered door kit.
Integral filter rack on louvered doors.
Appliance like powder paint finish.

AHF 1 thru 2.5 ton use #ACP-51-INS kit
(27.25" x 51.25" O.D. dimensions)

AHK 2.5 & 3.0 ton use #ACP-55-INS kit
(27.25" x 55.25" O.D. dimensions)