



Aqua-TEC

INDOOR POOL DEHUMIDIFIERS

MODEL AP-0051

STANDARD FEATURES

Performance:

- ◆ Moisture Removal: 28.7 #/hr @ 82F, 60% RH
- ◆ CFM: 2800 CFM @ 0.5"ESP
- ◆ Ventilation Air Opening for 840 CFM (Max)

Refrigeration Circuit:

- ◆ Evaporator: 8-Row, 8 Fins per Inch, Totally Coated Coil
- ◆ Condenser: 3-Row, 12 Fins per Inch, 100% THR Capacity, Totally Coated
- ◆ Scroll Compressor, Vibration Isolated
- ◆ Coaxial Hot-Gas Pool Water Heating, On Demand

Fan Assembly:

- ◆ Fan: Forward Curved, Double Wide, Double Inlet Fan
- ◆ Blower Motor: Open Drip Proof, Standard Efficiency
- ◆ Vibration Isolation

Cabinet:

- ◆ End Supply, End Return, Top Ventilation Air Opening
- ◆ Service Access to Refrigeration Circuit and Control Panel from One Side
- ◆ 2" Pleated Air Filters: MERV 6 Minimum Rating
- ◆ 1.5" Insulation: 1.5#/ft³ Density, Anti-microbial Agent Treated Mat Facing

Controls:

- ◆ 24 V Control Voltage
- ◆ Electromechanical Controls
- ◆ Magnetic and Thermal Motor Protection
- ◆ Expanded Terminal Strip for Total Environmental Control
- ◆ Alarm Status for: Blower Overload, Refrigerant Circuit High Pressure Trip, Water Flow Interruption

...WHEN TOTAL ENVIRONMENTAL CONTROL IS VITAL



MODEL AP-0051		AIRFLOW (CFM)			FILTERS		
			Supply	Return	O/A	QTY	Size (in)
Base Unit R-22 (lbs)	Weight (lbs)	Max.	2,800	1,960	840	2	16 x 25 x 2
20.0	875	Min.	2,800	2,800	0		



SPECIFICATIONS: ENVIRONMENTAL PERFORMANCE

Ratings Based on ARI Standard 910 test conditions of 80° F water temperature, 82° F air temperature and 60% RH

MOISTURE REMOVAL & SPACE COOLING	RETURN AIR CONDITION	MOISTURE REMOVAL (lbs/hr)	SENSIBLE COOLING (btuh)	TOTAL COOLING (btuh)	TOTAL HEAT OF REJECTION (btuh)
	78° F / 50% RH	18.4	43,700	63,000	84,700
	78° F / 60% RH	25.8	38,500	65,800	
	80° F / 50% RH	19.5	43,900	64,300	
	80° F / 60% RH	27.3	38,500	67,300	
	82° F / 50% RH	20.7	43,900	65,700	
	82° F / 60% RH	28.7	38,400	68,800	
	84° F / 50% RH	22.0	44,020	67,700	
	84° F / 60% RH	30.2	38,300	70,300	
	86° F / 50% RH	23.4	44,000	68,500	
	86° F / 60% RH	31.7	38,250	71,800	

POOL HEATING	Heat Cap. (btuh)	27,700
	Water Flow (gpm)	5.5
	Pressure Drop (ft)	9.2
	Connections (in)	¾ FPT

SPACE HEATING	HOT WATER COIL	
	Heat Cap. (btuh)	111,770
	Water Flow (gpm)	11.0
	Pressure Drop (ft)	1.4
	Connections (in)	1¼ FPT
Ent. Water Temp.	180° F	



SPECIFICATIONS: HEAT REJECTION CONDENSER PERFORMANCE

AIR-COOLED CONDENSER	MAX. AMBIENT	MODEL	CONNECTIONS (in)		UNIT WEIGHT (LBS)	R-22 ADDER (lbs)	
			HOT GAS	LIQUID		50' RUN	100' RUN
	95° F	B-1310	7/8"	5/8"	185	24.0	31.0
	100° F	B-1410	7/8"	5/8"	200	30.0	36.0
	105° F	B-2210	7/8"	5/8"	350	30.0	36.0

Water-Cooled CONDENSER	THR (btuh)	84,700
	Water Flow (gpm)	15.0
	Pressure Drop (ft)	5.0
	Connections (in)	1.0 FPT
	R-22 Adder (lbs)	0



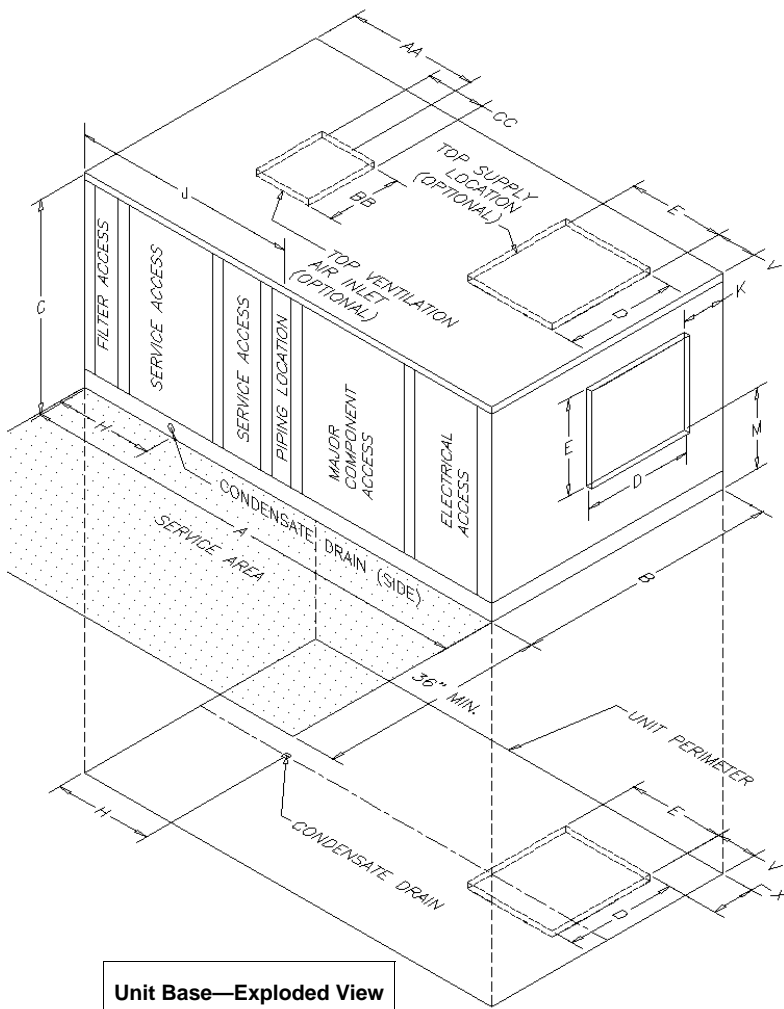
SPECIFICATIONS: ELECTRICAL PERFORMANCE

ELECTRICAL	VOLTAGE/PH/HZ	0.5" ESP				1.0" ESP			
		230/1/60*	230/3/60*	460/3/60	575/3/60	230/1/60*	230/3/60*	460/3/60	575/3/60
	Blower (HP)	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0
	Blower (FLA)	9.5	5.3	2.5	1.7	11.3	6.8	3.2	2.2
	Compressor (HP)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Compressor (FLA)	32.1	19.3	10.0	7.8	32.1	19.3	10.0	7.8
	Compressor (LRA)	169.0	123.0	62.0	50.0	169.0	123.0	62.0	50.0
	Min. Circuit Amps	49.6	29.4	15.0	11.5	51.4	30.9	15.7	12.0
	Max. Overload Protection Device	80	45	25	15	80	50	25	15
	Unit Min. Wire Size (75° Insulation CU)	6	10	12	12	4	8	12	12
	Unit Total KW Input	6.15	5.84	5.76	5.56	6.48	6.25	6.14	5.91
	Control Voltage	24	24	24	24	24	24	24	24

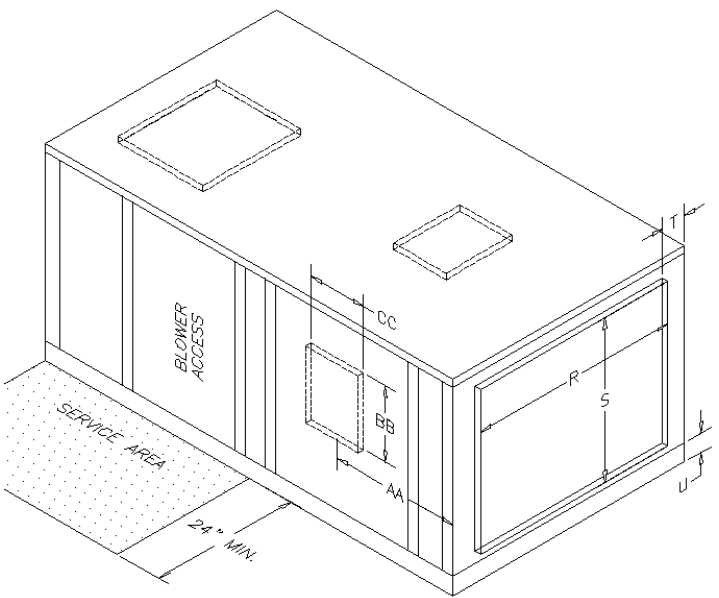
* Unit can also operate at 208V



MODEL AP-0051



Unit Base—Exploded View



RETURN END VIEW

- NOTES:**
- End Supply is standard—Optional top and bottom supply locations are also shown
 - Top Ventilation is standard—Optional side location is also shown
 - Drawings are not to scale
 - Drawings and dimensions are subject to change without notice
 - “J” Dimension locates the center of the piping mullion. Use for “rough-in” only as actual pipe locations will vary

SUPPLY END VIEW

DIMENSIONS: STANDARD UNIT								
A	B	C	D	E	H	J	K	M
74"	42"	34"	16 ⁷ / ₈ "	14 ⁷ / ₈ "	15 ⁵ / ₈ "	33"	6 ⁵ / ₈ "	13"
R	S	T	U	V	X	AA	BB	CC
34"	25 ⁷ / ₈ "	4"	5"	6 ⁵ / ₈ "	7 ¹ / ₄ "	21"	12"	9 ¹ / ₂ "
DIMENSIONS: UNIT WITH INTERNAL HOT WATER COIL OPTION								
A	B	C	D	E	H	J	K	M
86"	42"	34"	16 ⁷ / ₈ "	14 ⁷ / ₈ "	15 ⁵ / ₈ "	45"	6 ⁵ / ₈ "	13"
R	S	T	U	V	X	AA	BB	CC
34"	25 ⁷ / ₈ "	4"	5"	6 ⁵ / ₈ "	7 ¹ / ₄ "	21"	12"	9 ¹ / ₂ "