



# Aqua-TEC

## INDOOR POOL DEHUMIDIFIERS

### MODEL AP-0121

#### STANDARD FEATURES

##### Performance:

- ◆ Moisture Removal: 68.8#/hr @ 82F, 60% RH
- ◆ CFM: 5300 CFM @ 0.5"ESP
- ◆ Ventilation Air Opening for 1590 CFM

##### 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:

- ◆ 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#/ft<sup>3</sup> 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



<b>MODEL AP-0121</b>		<b>AIRFLOW (CFM)</b>			<b>FILTERS</b>		
			Supply	Return	O/A	QTY	Size (in)
Base Unit R-22 (lbs)	Weight (lbs)	Max.	5,300	3,710	1,590	4	20 x 24 x 2
30.0	1,950	Min.	5,300	5,300	0		



**SPECIFICATIONS: ENVIRONMENTAL PERFORMANCE**

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

<b>MOISTURE REMOVAL &amp; SPACE COOLING</b>	RETURN AIR CONDITION	MOISTURE REMOVAL (lbs/hr)	SENSIBLE COOLING (btuh)	TOTAL COOLING (btuh)	TOTAL HEAT OF REJECTION (btuh)	
	78° F / 50% RH	46.8	94,900	144,300	X	
	78° F / 60% RH	61.3	85,300	150,000		
	80° F / 50% RH	49.3	95,000	147,100		
	80° F / 60% RH	64.7	84,800	153,200		
	82° F / 50% RH	52.0	95,000	149,900		
	82° F / 60% RH	68.2	84,300	156,400		194,200
	84° F / 50% RH	54.6	95,000	152,700		X
	84° F / 60% RH	71.7	83,800	159,500		
	86° F / 50% RH	57.4	95,000	155,600		
	86° F / 60% RH	75.1	83,200	162,600		

<b>POOL HEATING</b>	Heat Cap. (btuh)	69,000
	Water Flow (gpm)	11.0
	Pressure Drop (ft)	9.2
	Connections (in)	1 1/4 FPT

<b>SPACE HEATING</b>	HOT WATER COIL	
	Heat Cap. (btuh)	190,000
	Water Flow (gpm)	17.0
	Pressure Drop (ft)	2.1
	Connections (in)	1 1/2 FPT
	Ent. Water Temp.	180° F



**SPECIFICATIONS: HEAT REJECTION CONDENSER PERFORMANCE**

<b>AIR-COOLED CONDENSER</b>	MAX. AMBIENT	MODEL	CONNECTIONS (in)		UNIT WEIGHT (LBS)	R-22 ADDER (lbs)	
			HOT GAS	LIQUID		50' RUN	100' RUN
	95° F	B-2410	1 1/8"	7/8"	400	58.0	75.0
	100° F	B-3310	1 1/8"	7/8"	560	62.0	79.0
	105° F	B-4310	1 1/8"	7/8"	840	86.0	102.0

<b>Water-Cooled CONDENSER</b>	THR (btuh)	194,200
	Water Flow (gpm)	30.0
	Pressure Drop (ft)	14.8
	Connections (in)	1 1/2 FPT
	R-22 Adder (lbs)	0



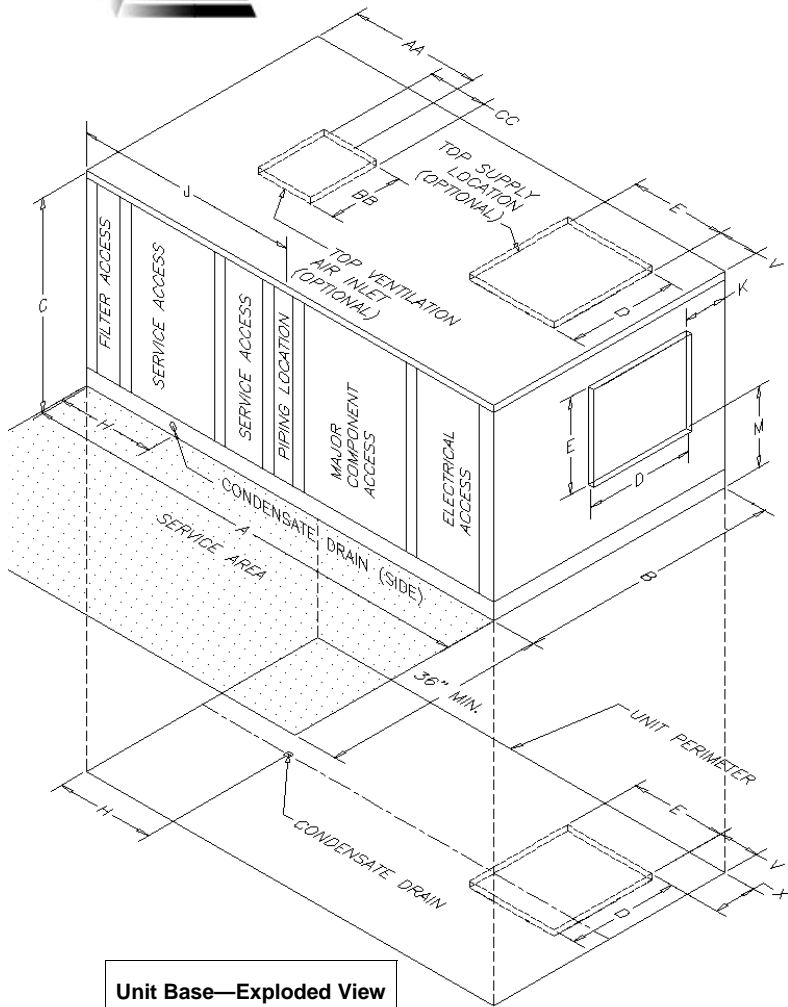
**SPECIFICATIONS: ELECTRICAL PERFORMANCE**

<b>ELECTRICAL</b>	VOLTAGE/PH/Hz	0.5" ESP			1.0" ESP		
		230/3/60*	460/3/60	575/3/60	230/3/60*	460/3/60	575/3/60
	Blower (HP)	5	5	5	5	5	5
	Blower (FLA)	13.7	6.6	5.3	13.7	6.6	5.3
	Compressor (HP)	12.0	12.0	12.0	12.0	12.0	12.0
	Compressor (FLA)	47.1	19.6	15.8	47.1	19.6	15.8
	Compressor (LRA)	245	125	100	245	125	100
	Min. Circuit Amps	72.6	31.1	25.1	72.6	31.1	25.1
	Max. Overload Protection Device	110	50	40	110	50	40
	Unit Min. Wire Size (75° Insulation CU)	# 3	# 8	# 8	# 3	# 8	# 8
	Unit Total KW Input	15.7	15.6	15.6	15.7	15.6	15.6
	Control Voltage	24	24	24	24	24	24

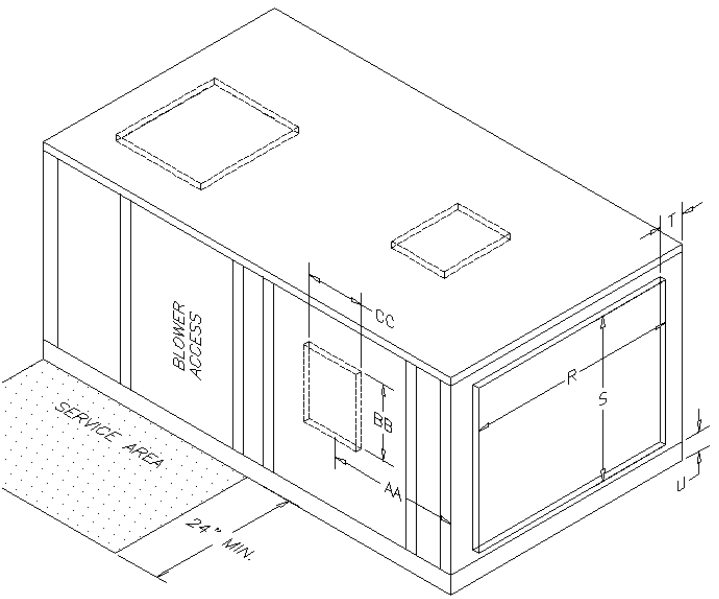
\* Unit can also operate at 208V



# MODEL AP-0121



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
88"	54"	50"	19 <sup>7</sup> / <sub>8</sub> "	17 <sup>7</sup> / <sub>8</sub> "	18 <sup>1</sup> / <sub>8</sub> "	38"	9 <sup>1</sup> / <sub>8</sub> "	14 <sup>1</sup> / <sub>2</sub> "
R	S	T	U	V	X	AA	BB	CC
46"	40 <sup>7</sup> / <sub>8</sub> "	4"	5"	5 <sup>1</sup> / <sub>2</sub> "	9 <sup>1</sup> / <sub>4</sub> "	20"	18"	13 <sup>1</sup> / <sub>2</sub> "
DIMENSIONS: UNIT WITH INTERNAL HOT WATER COIL OPTION								
A	B	C	D	E	H	J	K	M
100"	54"	50"	19 <sup>7</sup> / <sub>8</sub> "	17 <sup>7</sup> / <sub>8</sub> "	18 <sup>1</sup> / <sub>8</sub> "	50"	9 <sup>1</sup> / <sub>8</sub> "	14 <sup>1</sup> / <sub>2</sub> "
R	S	T	U	V	X	AA	BB	CC
46"	40 <sup>7</sup> / <sub>8</sub> "	4"	5"	5 <sup>1</sup> / <sub>2</sub> "	9 <sup>1</sup> / <sub>4</sub> "	20"	18"	13 <sup>1</sup> / <sub>2</sub> "