



# Aqua-TEC

## INDOOR POOL DEHUMIDIFIERS

### MODEL AP-0041

#### STANDARD FEATURES

##### Performance:

- ◆ Moisture Removal: 22.5 #/hr @ 82F, 60% RH
- ◆ CFM: 2000 CFM @ 0.5"ESP
- ◆ Ventilation Air Opening for 600 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#/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-0041</b>		<b>AIRFLOW (CFM)</b>				<b>FILTERS</b>	
			<b>Supply</b>	<b>Return</b>	<b>O/A</b>	<b>QTY</b>	<b>Size (in)</b>
<b>Base Unit R-22 (lbs)</b>	<b>Weight (lbs)</b>	<b>Max.</b>	2,000	1,400	600	2	16 x 25 x 2
18.0	775	<b>Min.</b>	2,000	2,000	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>	<b>RETURN AIR CONDITION</b>	<b>MOISTURE REMOVAL (lbs/hr)</b>	<b>SENSIBLE COOLING (btuh)</b>	<b>TOTAL COOLING (btuh)</b>	<b>TOTAL HEAT OF REJECTION (btuh)</b>	
	78° F / 50% RH	14.3	31,900	47,250	X	
	78° F / 60% RH	20.2	28,250	49,500		
	80° F / 50% RH	15.2	32,000	48,300		
	80° F / 60% RH	21.3	28,175	50,600		
	82° F / 50% RH	16.1	32,050	49,350		
	82° F / 60% RH	22.5	28,100	51,750		65,300
	84° F / 50% RH	17.1	32,020	50,400		X
	84° F / 60% RH	23.6	28,000	52,900		
	86° F / 50% RH	18.2	31,900	51,500		
	86° F / 60% RH	24.8	27,900	54,000		

<b>POOL HEATING</b>	<b>Heat Cap. (btuh)</b>	21,600
	<b>Water Flow (gpm)</b>	3.2
	<b>Pressure Drop (ft)</b>	9.2
	<b>Connections (in)</b>	¾ FPT

<b>SPACE HEATING</b>	<b>HOT WATER COIL</b>	
	<b>Heat Cap. (btuh)</b>	96,400
	<b>Water Flow (gpm)</b>	10.0
	<b>Pressure Drop (ft)</b>	1.4
	<b>Connections (in)</b>	1.0 FPT
	<b>Ent. Water Temp.</b>	180° F



**SPECIFICATIONS: HEAT REJECTION CONDENSER PERFORMANCE**

<b>AIR-COOLED CONDENSER</b>	<b>MAX. AMBIENT</b>	<b>MODEL</b>	<b>CONNECTIONS (in)</b>		<b>UNIT WEIGHT (LBS)</b>	<b>R-22 ADDER (lbs)</b>	
			<b>HOT GAS</b>	<b>LIQUID</b>		<b>50' RUN</b>	<b>100' RUN</b>
	95° F	B-1210	7/8"	5/8"	181	18.0	26.0
	100° F	B-1310	7/8"	5/8"	185	23.0	31.0
	105° F	B-1410	7/8"	5/8"	200	30.0	36.0

<b>Water-Cooled CONDENSER</b>	<b>THR (btuh)</b>	65,300
	<b>Water Flow (gpm)</b>	14.0
	<b>Pressure Drop (ft)</b>	7.5
	<b>Connections (in)</b>	1.0 FPT
	<b>R-22 Adder (lbs)</b>	0



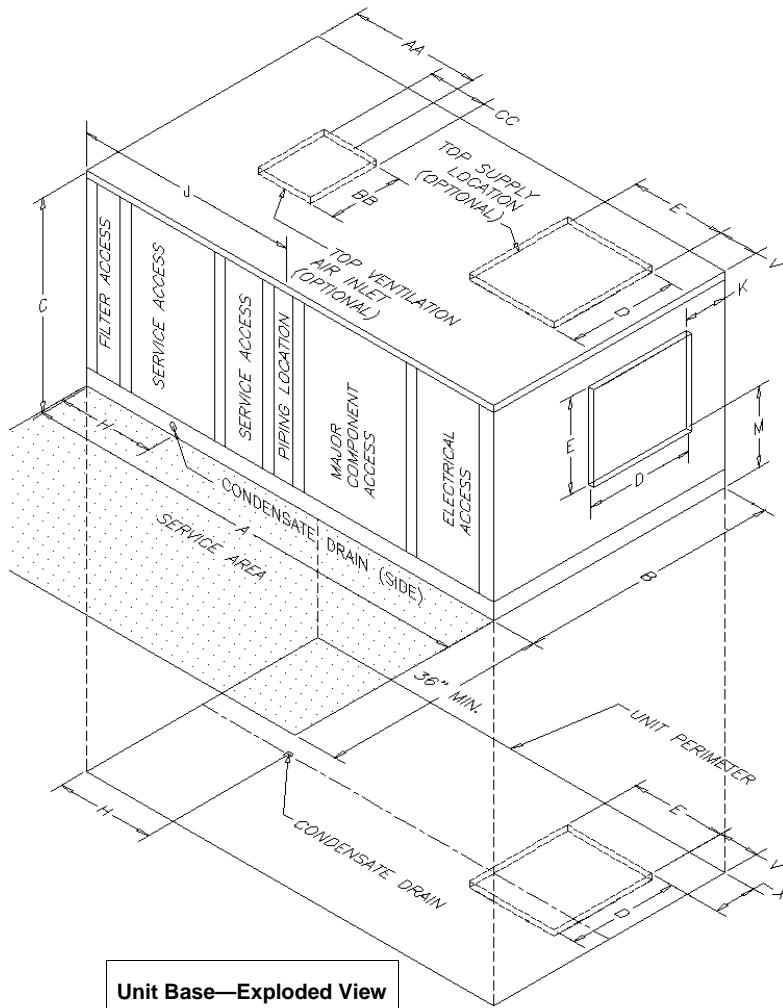
**SPECIFICATIONS: ELECTRICAL PERFORMANCE**

<b>ELECTRICAL</b>		<b>0.5" ESP</b>				<b>1.0" ESP</b>			
	<b>VOLTAGE/PH/Hz</b>	<b>230/1/60*</b>	<b>230/3/60*</b>	<b>460/3/60</b>	<b>575/3/60</b>	<b>230/1/60*</b>	<b>230/3/60*</b>	<b>460/3/60</b>	<b>575/3/60</b>
	<b>Blower (HP)</b>	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	<b>Blower (FLA)</b>	9.5	5.3	2.5	1.7	9.5	5.3	2.5	1.7
	<b>Compressor (HP)</b>	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	<b>Compressor (FLA)</b>	22.1	16.4	7.9	5.7	22.1	16.4	7.9	5.7
	<b>Compressor (LRA)</b>	137.0	91.0	50.0	37.0	137.0	91.0	50.0	37.0
	<b>Min. Circuit Amps</b>	37.1	25.8	12.3	8.8	37.1	25.8	12.3	8.8
	<b>Max. Overload Protection Device</b>	50	40	20	15	50.0	40	20	15
	<b>Unit Min. Wire Size (75° Insulation CU)</b>	8	10	12	12	6	10	12	12
	<b>Unit Total KW Input</b>	5.44	5.13	5.13	4.84	5.73	5.13	5.13	4.84
	<b>Control Voltage</b>	24	24	24	24	24	24	24	24

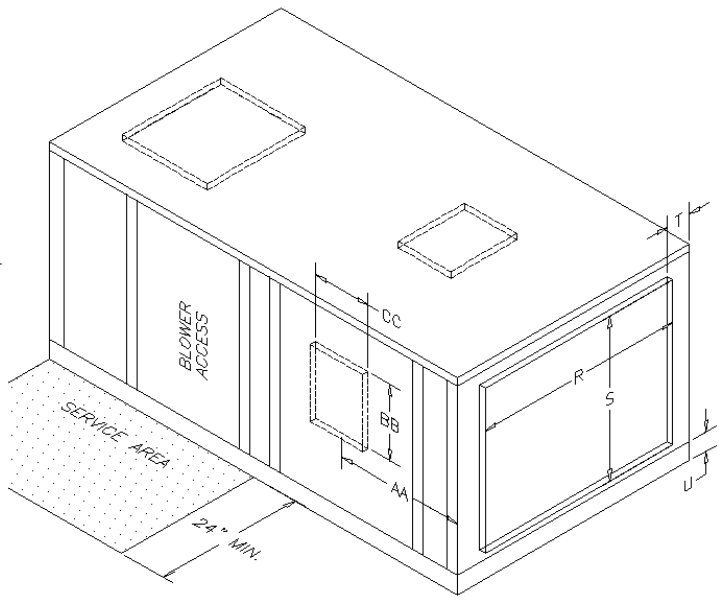
\* Unit can also operate at 208V



# MODEL AP-0041



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