



Aqua-TEC

INDOOR POOL DEHUMIDIFIERS

MODEL AP-0081

STANDARD FEATURES

Performance:

- ◆ Moisture Removal: 45.5#/hr @ 82F, 60% RH
- ◆ CFM: 3400 CFM @ 0.5"ESP
- ◆ Ventilation Air Opening for 1020 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#/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-0081		AIRFLOW (CFM)				FILTERS	
			Supply	Return	O/A	QTY	Size (in)
Base Unit R-22 (lbs)	Weight (lbs)	Max.	3,400	2,380	1,020	4	20 x 20 x 2
29.0	1,550	Min.	3,400	3,400	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	29.9	67,000	98,600	131,800
	78° F / 60% RH	40.6	59,800	102,500	
	80° F / 50% RH	31.7	67,100	100,700	
	80° F / 60% RH	43.0	59,600	104,800	
	82° F / 50% RH	33.6	67,200	102,800	
	82° F / 60% RH	45.5	59,300	107,000	
	84° F / 50% RH	35.5	67,300	104,900	
	84° F / 60% RH	47.9	59,000	109,300	
	86° F / 50% RH	37.4	67,400	107,000	
86° F / 60% RH	50.3	58,800	111,600		

POOL HEATING	Heat Cap. (btuh)	44,700
	Water Flow (gpm)	7.0
	Pressure Drop (ft)	9.2
	Connections (in)	1.0 FPT

SPACE HEATING	HOT WATER COIL	
	Heat Cap. (btuh)	141,400
	Water Flow (gpm)	14.0
	Pressure Drop (ft)	1.3
	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-2210	7/8"	7/8"	350	36.0	52.0
	100° F	B-2310	7/8"	7/8"	370	46.0	61.0
105° F	B-3310	7/8"	7/8"	560	62.0	78.0	

Water-Cooled CONDENSER	THR (btuh)	131,800
	Water Flow (gpm)	26.0
	Pressure Drop (ft)	13.4
	Connections (in)	1¼ FPT
	R-22 Adder (lbs)	0



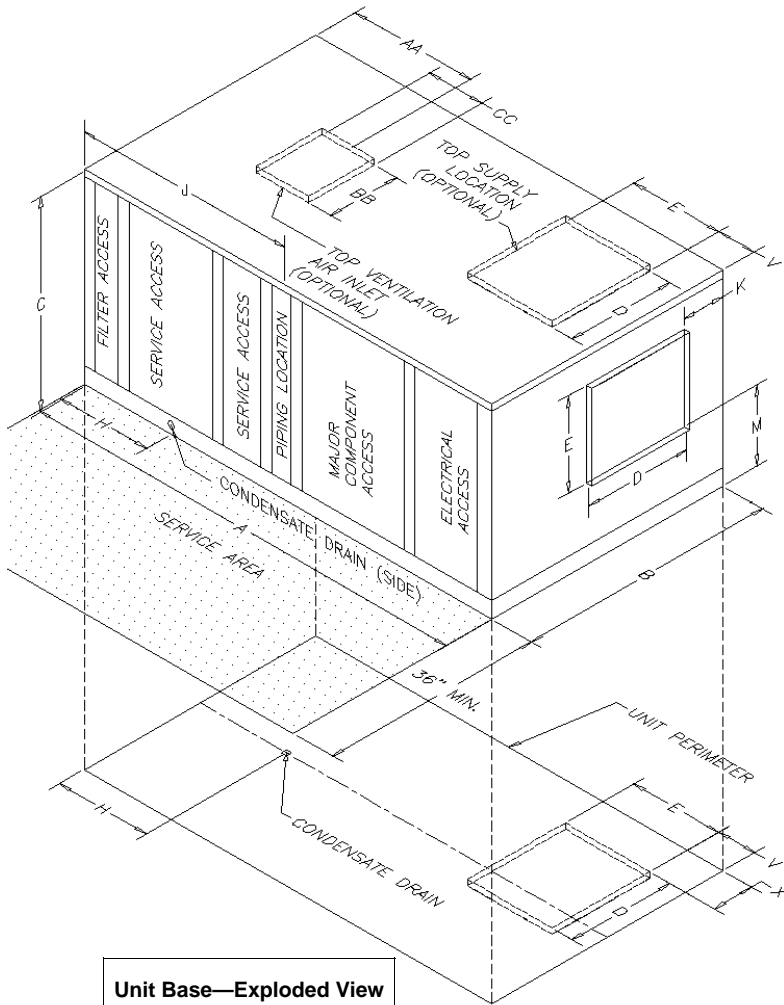
SPECIFICATIONS: ELECTRICAL PERFORMANCE

ELECTRICAL	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)	2	2	2	3	3	3
	Blower (FLA)	5.6	2.8	2.2	8.7	4.0	3.2
	Compressor (HP)	8.0	8.0	8.0	8.0	8.0	8.0
	Compressor (FLA)	32.1	16.4	12.0	32.1	16.4	12.0
	Compressor (LRA)	195	95	80	195	95	80
	Min. Circuit Amps	45.7	23.3	17.2	48.8	24.5	18.2
	Max. Overload Protection Device	70	35	25	80	40	30
	Unit Min. Wire Size (75° Insulation CU)	# 8	# 10	# 12	# 8	# 10	# 10
	Unit Total KW Input	9.1	9.1	9.0	10.1	9.9	9.9
	Control Voltage	24	24	24	24	24	24

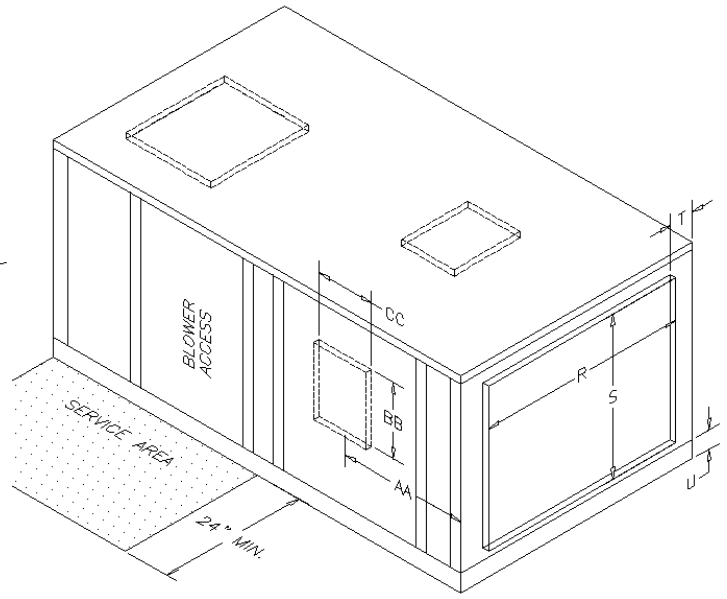
* Unit can also operate at 208V



MODEL AP-0081



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"	48"	48"	16 ⁷ / ₈ "	14 ⁷ / ₈ "	18 ¹ / ₈ "	38"	9 ⁵ / ₈ "	13 ¹ / ₄ "
R	S	T	U	V	X	AA	BB	CC
40"	38 ¹ / ₂ "	3"	5"	6 ⁵ / ₈ "	10 ¹ / ₄ "	21"	18"	13 ¹ / ₂ "
DIMENSIONS: UNIT WITH INTERNAL HOT WATER COIL OPTION								
A	B	C	D	E	H	J	K	M
100"	48"	48"	16 ⁷ / ₈ "	14 ⁷ / ₈ "	18 ¹ / ₈ "	50"	9 ⁵ / ₈ "	13 ¹ / ₄ "
R	S	T	U	V	X	AA	BB	CC
40"	38 ¹ / ₂ "	3"	5"	6 ⁵ / ₈ "	10 ¹ / ₄ "	21"	18"	13 ¹ / ₂ "