

ROOF TOP SINGLE AND DOUBLE WALL BELT DRIVE AIR HANDLER
DX OR CHILLED WATER COOLING HOT WATER OR
ELECTRIC HEATING



MADE IN USA



**SIZES FROM 600 CFM TO 9,000
CFM**

All Technical Specifications are Subject to
Change without Notice. For more
information contact Customer Service
Phone (817)624.0820 Fax (817)624.8581

STANDARD FEATURES

CONSTRUCTION

- Single and Double wall post and panel construction from heavy gauge galvanized steel.
- 1" Insulation sandwiched between double wall galvanized panels.
- 1" foil faced insulation on single wall units.
- IAQ drain pan sloped 3-ways.
- Drain pans made from 304 stainless steel.
- Integral auxiliary drain pan.
- Both sides of cabinet include gasket, service access panels.
- Factory installed mounting rails provided for unit suspension system
- All cabinet parts are assembled with stainless steel hardware.
- All access panels can be removed while unit is suspended without affecting the unit's structure.

BLOWER ASSEMBLY

- Blower sections feature base mounted motors and adjustable motor bases for ease of service mounted on RIS isolators for quite vibration free operation.
- All blowers are mounted to 12-gauge support channels on rubber isolators.
- Blower exits cabinet through flexible rubber isolators.
- A discharge duct flange is provided.

FILTER SECTION

- 2" TA flat filters are single wall standard.

COIL SECTION

- 3/8" O.D. seamless copper tube on sizes 24 and 36.
- 1/2" O.D. seamless copper tube on sizes 48 and 240.
- Coil and drain pan assembly slides into cabinet from either side of unit for left hand or right hand piping and electrical connections.
- Units can accept up to 10 rows of coil without modification.
- Manual air vents are accessible through a separate drain pan access panel.

STANDARD MOTORS

- ODP Motor is mounted to a 12 gauge adjustable base attached to the unit floor with rubber isolators
- 115/230v 1ph, 277v 1ph, 208/230/460v 3ph.
- All units are ETL listed.

OPTIONAL FEATURES

CONSTRUCTION

- Liner options include stainless steel, aluminum, or Anti-microbial coating. (double wall only)
- Stainless steel integral overflow pan.
- Powder coated cabinet.
- Pre-painted steel cabinet

FILTER SECTION

- Double wall filter section accepts 2" or 4" flat filters.
- Filter access can be from either side (24-240).
- 2" pleated (30%), 4" pleated (65%, 85%, 95%).

MIXING BOXES

- *MB3-** Mixing Box with 3 position Manual Control (None filtered)
- *MBM-** Mixing Box with Modulating Actuator Control (Non Filtered)
- *FMB3-** Filtered Mixing Box w/3position Manual Control (2" TA Filter)
- *FMBM-** Filtered Mixing Box w/ Mod. Act. Control (2" TA Filter)
- *ECO*** Economizer with enthalpy control & barometric relief
- *FS-** Return Filter Sec. w/ MERV-7 30% Pre Filter & MERV-11 65% Fin. Filter
- *DFS-** Discharge Filter Section w/12" MERV-15 & 95% HEPA Filters
- *MSS-** Motor Stop/Start Station with Single point power connection
- VDP** Vertical Discharge Plenum
- VRG** Return Grill for Vertical Unit

ELECTRIC HEAT SECTION

- Factory Supplied for Field Mounting
- Preheat or Reheat Configurations.
- Single point power connection.
- Custom staging and controls.
- Available Voltages: Single phase (115v, 230v, 277v)
Three phase (208v, 230v, 460v, 575v)

VFD'S - Variable Frequency Drives
Available for Factory or Field installation

COIL SECTION

- 2, 4, 6, 8 or 10 row coil options. (8 row max on 180/240)
- Heating coils are factory installed in preheat or reheat positions.
- Steam coils-Low Pressure, less than 2 PSI.
- Optional tube diameters.
- Optional stainless steel end plates.
- E-coated coil option
- Face split, row split, intertwined circuiting available.
- Face and bypass dampers.
- Automatic air vents.

MOTOR OPTIONS

- TEFC
- High efficient.
- 2-speed 2-winding.
- 575 volt

GUIDE SPECIFICATIONS

Unit Description:

Horizontal belt drive with optional chilled water, hot water, steam or DX coils. Galvanized steel cabinet can be double or single wall construction. Unit designated to be installed in above ceiling space. Units have full service access from both sides of the cabinet.

Quality Assurance:

Coils are factory tested under water at 500 psig for operating pressures to 400 psig. Insulation and adhesive shall meet the NFPA-90A standard for smoke and flame spread.

Delivery, Handling and Storage:

Units have to be stored and handled in accordance with equipment manufacturer's recommendations.

PRODUCTS

Equipment:

- A. Factory assembled, horizontal, draw-thru blower coil units, for installation above the ceiling. Units shall be complete with chilled or hot water, steam or DX coils, fans and motor, belt and drives, drain pan and filter rack to accept 2" or 4" TA filters.

Cabinet, Single wall:

- B. Post and panel construction shall be from heavy gauge galvanize steel, lined with 1" 1.5 lb density and 0.5" as an option fiber glass Thermal acoustical insulation 7/8" closed cell is offered as an option too. Unit sizes 024 to 060 include a factory mounted suspension rail mounted to the bottom of the unit. Capped Knockouts to be provided for units over 3000 cfm and larger to accommodate threaded rods to pass through unit corners. Supply and return flanges to be 1" long. Large removable access panels shall be on both sides of unit.

Cabinet, Double wall:

- C. Post and panel construction shall be from heavy gauge galvanize steel, lined with 1" 1.5 lb density fiber glass Thermal acoustical insulation, lined with smooth galvanized steel. Unit sizes 024 to 060 include a factory mounted suspension rail mounted to the bottom of the unit. Capped Knockouts to be provided for units over 3000 cfm and larger to accommodate threaded rods to pass through unit corners. Supply and return flanges to be 1" long. Large removable access panels shall be on both sides of unit.

Drain Pan:

- D. The primary shall be stainless steel and include a built in overflow pan with a 1" MPT secondary and a 1" MPT primary drain connection.

Secondary drain shall be galvanized or stainless steel to prevent corrosion should an overflow occur.

Coil Section:

- E. Entire coil section cabinet shall be double wall lined with smooth galvanized steel for easy cleaning and coil removal.

Blowers:

- F. Belt Drive DWDI (double with, Double Inlet) fan wheel shall be forward curved blades and be factory statically and dynamically balanced. Blower's drives shall consist of cast iron variable pitch motor pulley and V-belt. Blowers and scrolls shall be manufactured from galvanized steel.

Coils:

- G. Coil tube diameters shall be 0.375", 0.50" or 0.625" OD copper tubes, aluminum fins mechanically bonded to the tubes and have a working pressure of 250 psig at 200 °F. Each water coil shall have manual air vents and sweat connections, which have to be accessible from the exterior of cabinet. Coils shall be circuited so they can be switched from right to left hand piping access while maintaining counter flow water circuiting.

Motors:

- H. Motors shall be Open Type, Drip Proof, single or 2 speed, 60 Hz 1750 RPM, 1 or 3 phases, suitable for continuous duty at 130 °F; single phase motors are capacitor start, include automatic reset thermal over-load protection and are available in 115, 208, 230 and 277 volts. Three phase motors are available in 208, 230, 460 or 575 volts. Motors shall be resilient base mounted up to 2 hp. From 3 hp and up shall be rigid base mounted.

Electric Heat:

- I. Electric heat shall be designed to mount at the discharge air openings of the unit. Electric heat are factory supplied for field installation and shall include a de-energizing magnetic control contactor per stage with a capacity of 48 Amps per circuit and include a secondary over-temperature switch. Heaters shall include fan-interlocking, power and control terminal boards with grounding lugs. An automatic limit switch shall provide aver-temperature protection and a manual reset limit switch shall provide secondary over-temperature protection.

Filters:

- J. Standard filter rack shall include 2" TA filters but are suitable for 4" TA filters. With options for 2" and 4" pleated filters. Filter racks have to be accessible from both sides.

CAP DESCRIPTION MODEL NUMBER NOMENCLATURE - PAGE #1

HP	H	W	E	D	A	0	9	0	B	3	2	2	5	1	.	2	5	2	4	2	A	R	H
TYPE	MODEL				CM	SIZE			BS	CFM			ESP			COIL ROWS			RF	CN	MOTO		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>UNIT TYPE</p> <p>HP HIGH PERF EC ECM MOTOR BD BELT DRIVE</p> <p>UNIT CONFIGURATION</p> <p>H HORIZONTAL V VERTICAL M MODULAR R ROOFTOP</p> <p>COOLING OPTIONS</p> <p>W CHILLED WATER X DIRECT EXPANSION 0 NO COOLING</p> <p>HEATING OPTIONS</p> <p>H HOT WATER S STEAM E ELECTRIC NO O HEAT</p> <p>UNIT INSULATION</p> <p>S SINGLE WALL 1" F F FIBERGLAS D DOUBLE WALL U SINGLE WAL 7/8" CLOSED CELL X SPECIAL</p> <p>CABINET MATERIAL</p> <p>A GALVANIZED STEEL B PRE-PAINTED STEEL C POWDER PAINTED</p> <p>UNIT SIZE</p> <p>024 24000 036 36000 048 48000 060 60000 090 90000 120 120000 180 180000 240 240000</p> <p>BLOWER SIZE OPTIONS</p> <p>1 9 X 4 2 9 X 6 3 9 X 9 4 10 X 10 5 12 X 12 6 15 X 11 7 15 X 15 8 18 X 18</p> </div> <div style="width: 50%;"> <p>PRE-HEAT</p> <p>0 NO PH 1 1- ROW 2 2-ROW</p> <p>COOLING</p> <p>0 NO COOLING 2 2-ROWS 4 4-ROWS 6 6-ROWS 8 8-ROWS</p> <p>RE-HEAT</p> <p>0 NO RH 1 1- ROW 2 2-ROW</p> <p>REFRIGERANT</p> <p>A R-410A B R-22 C R-NU22 D R-134A 0 NONE</p> <p>PIPING CONNECTIONS</p> <p>R RIGHT HAND L LEFT HAND ALL CONNECTIONS ARE SET LOOKING THE UNIT IN THE AIR FLOW DIRECTION</p> <p>MOTOR SIZE AND VOLTAGE OPTIONS</p> <p>1ST DIGIT</p> <p>A 0.25 HP B 0.33 HP C 0.50 HP D 0.75 HP E 1.00 HP F 1.50 HP G 2.00 HP H 3.00 HP I 5.00 HP J 7.50 HP K 10.0 HP</p> <p>2ND DIGIT</p> <p>1 115/1 ODP/HE 2 208/1 ODP/HE 3 230/1 ODP/HE 4 277/1 ODP 5 208/3/60/ODP/HE 6 230/3/60/ODP/HE 7 460/3/60/ODP/HE 8 575 /3/60/ ODP/HE</p> </div> </div>																							

BELT DRIVE UNITS

CAP DESCRIPTION MODEL NUMBER NOMENCLATURE - PAGE #2

B	B	C	0	E	1	0	0	.	0	C	0	0	C	F	0	1	1
OAO	UNIT ACCS			V	EH KW				HTR ACCS			V	VFD ACCS		REV.		REV.

OUTSIDE AIR OPTIONS

- O NONE
- A MIXING BOX W/ PLEATED FILTER 2"
- B MB W/ 3 POSITION CONTROL PACKAGE
- C MB W/MODULATING CONTROL PACKAGE
- E FACE & BYPASS DAMPER W/FILTER SEC.
- F 100% OUTSIDE AIR HOOD W/DAMPER
- G 30% OUTSIDE AIR HOOD W/DAMPER
- X SPECIAL

UNIT ACCESSORIES

- O NONE
- A PLEATED FILTER 2"
- B DISCHARGE GRILL PLENUM
- C RETURN GRILL AIR PLENUM
- E MOTOR START STOP STATION
- F ROOF CURB 12"
- G ROOF CURB 14"
- X SPECIAL

HEATER VOLTAGE

- O NO HEATERS
- A 115/1
- B 208/1
- C 230/1
- E 277/1
- F 208/3
- G 230/3
- H 460/3
- J 575/3

HEATER CAPACITY

1.0 to 100.0 KW IN .1 Kw increments

- O NO HEATERS

HEATER ACCESSORIES

- O NO ACCESSORIES
- A Single point line Conn.
- B SCR Controls
- C Start Stop Control St
- D None

FACTORY USE		
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VFD ACCESSORIES

- O NO ACCESSORIES
- A REM MTG KIT
- B LCP11 CONT PANEL
- C LCP12 CONT PANEL
- D NE/UL TY1 K FOR M1 FR
- E NE/UL TY1 K FOR M2 FR
- F NE/UL TY1 K FOR M3 FR
- G DECOUPLING PLT KIT FOR M1&M2 FRAME
- H DECOUPLING PLT KIT FOR M3 FRAME
- I IP21 FOR M1 FRAME
- J IP21 FOR M2 FRAME
- K IP21 FOR M3 FRAME
- L DIN RAIL MTG KIT

VFD SIZE

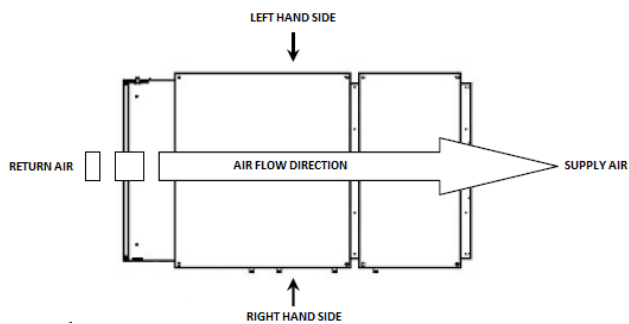
- O NO VFD
- A 0.25 HP 230/1
- B 0.50 HP 230/1
- C 1.00 HP 230/1
- D 2.00 HP 230/1
- E 3.00 HP 230/1
- F 0.33 HP 230/3
- G 0.50 HP230/3
- H 1.00 HP 230/3
- I 2.00 HP 230/3
- J 3.00 HP 230/3
- K 5.00 HP 230/3
- L 0.50 HP 460/3
- M 1.00 HP 460/3
- N 2.00 HP 460/3
- P 3.00 HP 460/3
- Q 5.00 HP 460/3
- R 7.50 HP 460/3
- S 10.0 HP 460/3

For more information contact Customer Service

Phone: 817-624-0820 Fax: 817-624-8581

COIL DATA

MOD EL	FIN BLOCK H X W	FACE AREA	ROWS	FPI	WATER CONN.	DX CONN		MODEL	FIN BLOCK		FACE	ROWS	FPI	WATER CONN.		DX CONN				
					HEADE R OD	SUCT	LIQ.		H X W	AREA				HEADER OD	SUCT	LIQ.				
	024	10 X 31	2.15	1 2 4 6 8	10	5/8	N/A	N/A	090	22.5 X 47		7.34	2 4 6 8	10	7/8	N/A	N/A			
				7/8		7/8	3/8										1-1/8	1-3/8	5/8	
				7/8		7/8	3/8										1-3/8	1-5/8	5/8	
				7/8		7/8	3/8										1-3/8	1-5/8	5/8	
036	13 X 31	2.8	1 2 4 6 8			5/8	N/A	N/A	120	31 X 47		10.11	4 6 8			1-1/8	1-5/8	5/8		
				7/8		7/8	3/8										1-3/8	1-5/8	5/8	
				7/8		7/8	3/8										2-1/8	1-5/8	5/8	
				1-1/8		1-1/8	3/8										1-1/8	N/A	N/A	
048	15 X 40	4.17	1 2 4 6 8			5/8	N/A	N/A	180	31.5 X 60		13.13	6 8			1-5/8	2-1/8	5/8		
				7/8		7/8	1/2										1-5/8	N/A	N/A	
				7/8		1-1/8	1/2										1-5/8	2-1/8	5/8	
				1-1/8		1-3/8	1/2										2-1/8	2-1/8	5/8	
060	17.5 X 40	4.86	1 2 4 6 8			5/8	N/A	N/A	240	42 X 60		17.5	8			2-1/8	2-1/8	5/8		
				7/8		7/8	1/2	CONTACT THE FACTORY FOR ADDITIONAL COIL INFORMATION												
				1-1/8		1-1/8	1/2													
				1-1/8		1-3/8	1/2													

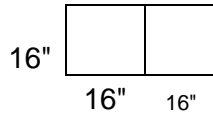


ROOF TOP FILTER ARRANGEMENTS

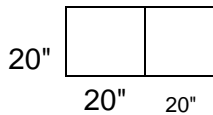
STANDARD FILTER RACK
SINGLE & DOUBLE WALL
HFDA ACCEPTS 2/4"
TA
OR PLATED
FILTERS

FILTER SIZE	UNIT					FILTER QUANTITY							
	MODEL					24	36	48	60	90	120	180	240
	14"	X	20"	X	2/4"							10	10
14"	X	25"	X	2/4"									
16"	X	16"	X	2/4"	2	2							
16"	X	20"	X	2/4"			2	2					
20"	X	20"	X	2/4"									
20"	X	24"	X	2/4"					4	4			
FILTER TOTAL					2	2	2	2	4	4	10	10	

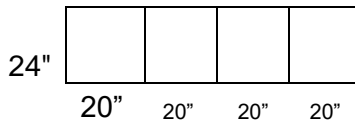
24/36
2-
16"X16"X2/4"



48/60
2-
20"X20"X2/4"



90/120
4-
20"X24"X2/4"



180/240
10-14"X20"X2/4"

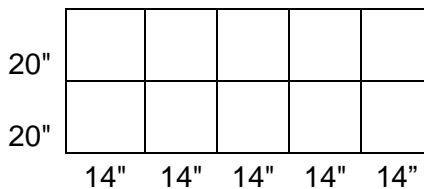
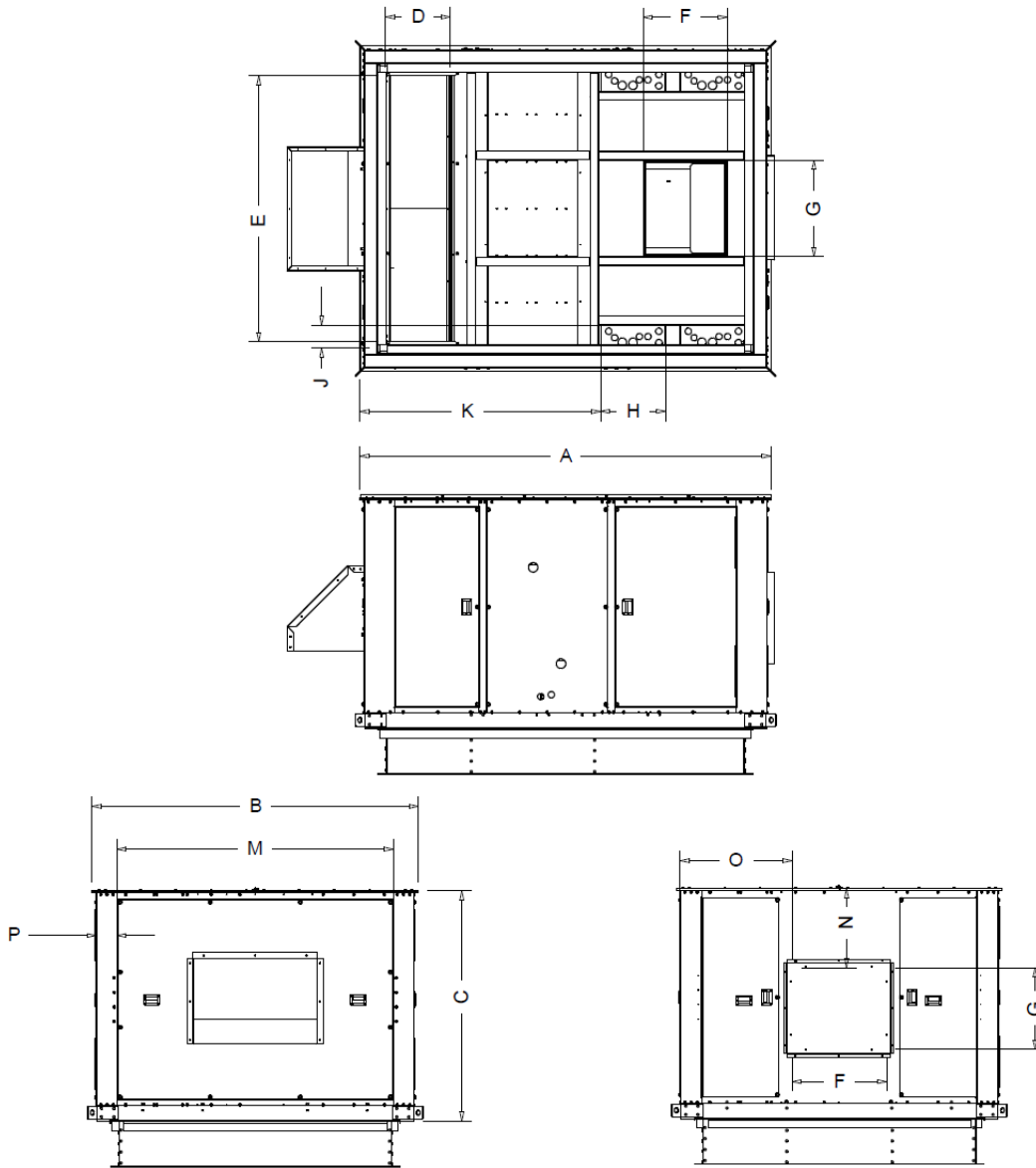


CHART ABOVE SHOWS SPECIFIC FILTER ARRANGEMENTS

2" & 4" FILTER RACKS FOR UNITS FROM 24 TO 240 ARE SIDE LOADING ONLY

UNIT DIMENSIONS SINGLE & DOUBLE WALL

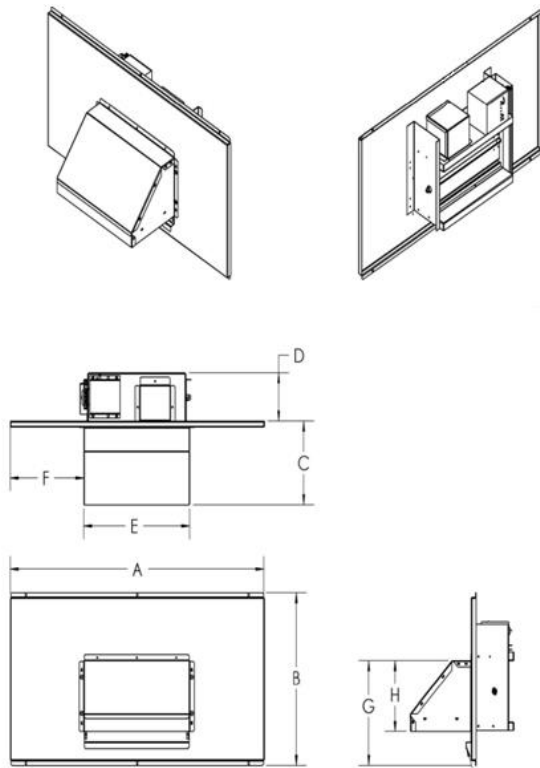


BACK CONFIGURATION CHANGES
BASED ON ACCESSORIES ORDERED

MODEL	A	B	C	D	E	F	G	H	J	K	M	N	O	P
2/3 TON	70.0	42.0	31.0	9.98	31.0	10.78	12.31	10.0	6.0	33.7	28.1	8.5	16.6	7
4/5 TON	70.4	50.5	33.0	12.0	34.0	14.0	16.2	10.0	6.0	36.0	34.0	6.2	17.2	3
7.5/10 TON	77.4	55.5	50.9	14.0	44.0	13.1	16.4	15.0	8.0	38.0	45.9	19.9	21.2	4.8
15/20 TON	96.0	76.2	53.8	15.0	62.0	19.3	22.4	14.9	5.4	56.4	64.4	18.6	26.1	4.9

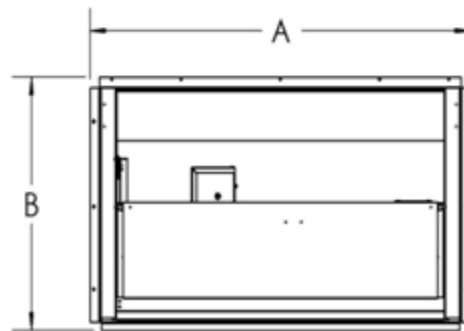
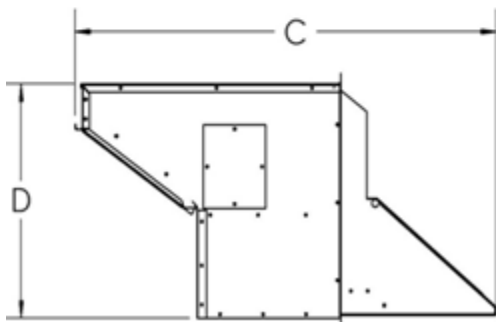
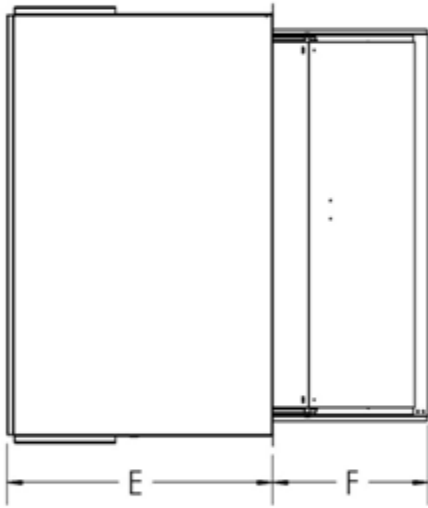
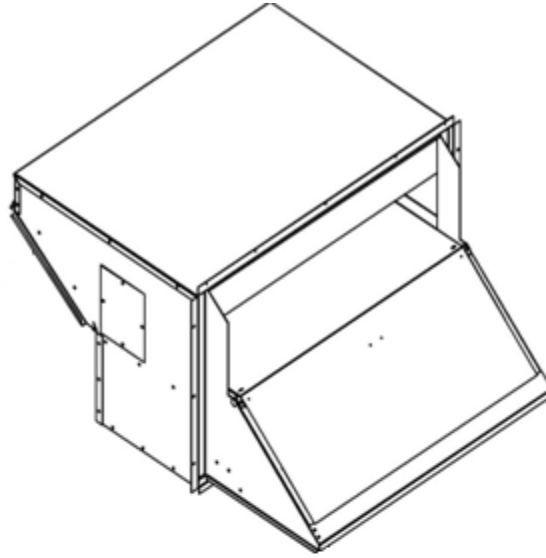
ROOFTOP UNITS WEIGHT AND DISTRIBUTION BASED ON 8 ROW SLAB COIL RH														
Unit Model			Corner weights 8 Row Coil				Total Weight	Correction Fact for Rows and S. Wall				Add for Accessories		
			A	B	C	D		6R	4R	2R	S Wall	R Curb	OAD	ECO
RWOD	-	024	111	116	104	105	435	-9	-17	-25	-45	110	55	154
RWOD	-	036	123	129	115	117	485	-11	-21	-33	-45	110	55	154
RWOD	-	048	176	184	164	167	690	-20	-39	-59	-60	150	59	184
RWOD	-	060	192	201	180	182	755	-22	-45	-65	-60	150	59	184
RWOD	-	090	266	278	249	252	1045	-36	-72	-103	-110	225	68	242
RWOD	-	120	293	306	274	278	1150	-47	-95	-140	-110	225	68	242
RWOD	-	180	469	491	439	446	1845	-54	-108	-160	-155	260	125	285
RWOD	-	240	496	519	464	471	1950	-55	-110	-162	-155	260	125	285

ROOF TOP ACCESSORIES DIMENSIONS – FIXED AND MOTORIZED OUTSIDE AIR DAMPER



MODEL	A	B	C	D	E	F	G	H
RFOD - 024/036	29	16	11	6	10	9	13	10
RFOD - 048/060	38	20	10	6	16	11	12	8
RFOD - 090/120	49	27	15	6	26	12	18	14
RFOD - 180	49	35	20	6	22	14	23	20
RFOD - 240	31	47	19	6	26	3	33	20
RFMOD - 24/36	30	19	9	6	24	3	14	11
RFMOD - 48/60	38	24	15	6	26	6	17	14
RFMOD - 090/120	49	29	18	6	45	2	22	20
RFMOD - 180	49	35	23	6	41	4	29	26
RFMOD - 240	31	47	25	6	25	3	39	32

ROOF TOP ECONOMIZER FOR UNITS 024 TO 060



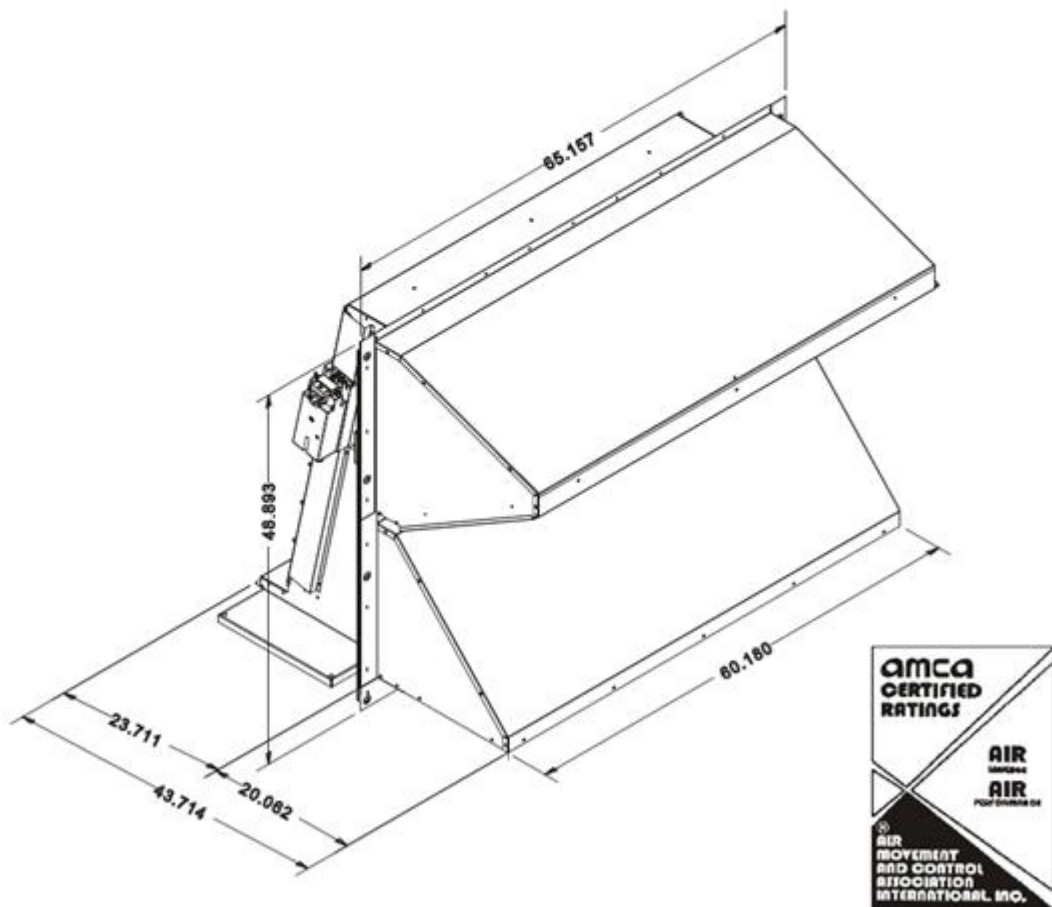
MODEL	A	B	C	D	E	F
RWE - 024/036	32	19	42	17	26	16
RWE - 048/060	40	23	44	21	28	16

ROOF TOP ECONOMIZER FOR UNITS 090 TO 240

ECONOMIZER 090 TO 240 DOWN DISCHARGE GEAR ECONOMIZER U.S. PATENT#S: 5836814, 5938524, 6099405

Features:

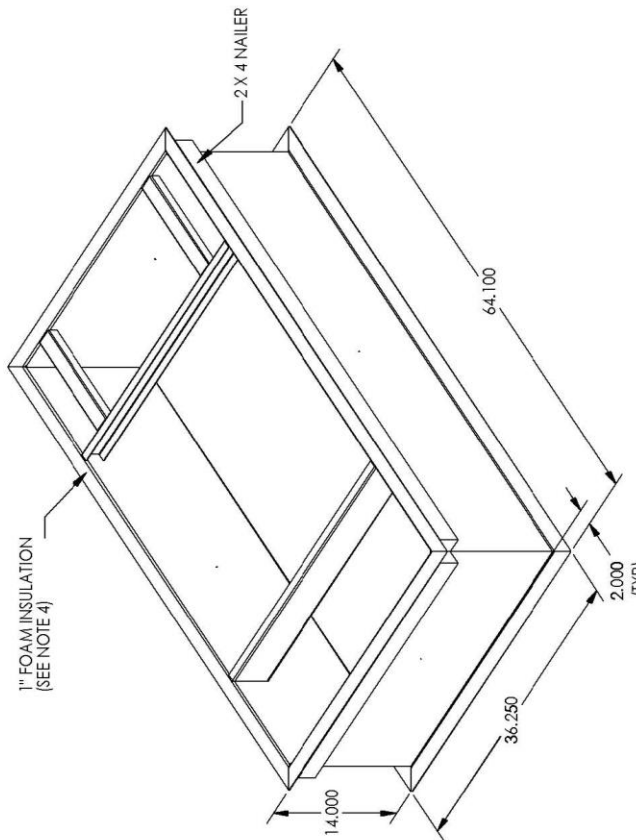
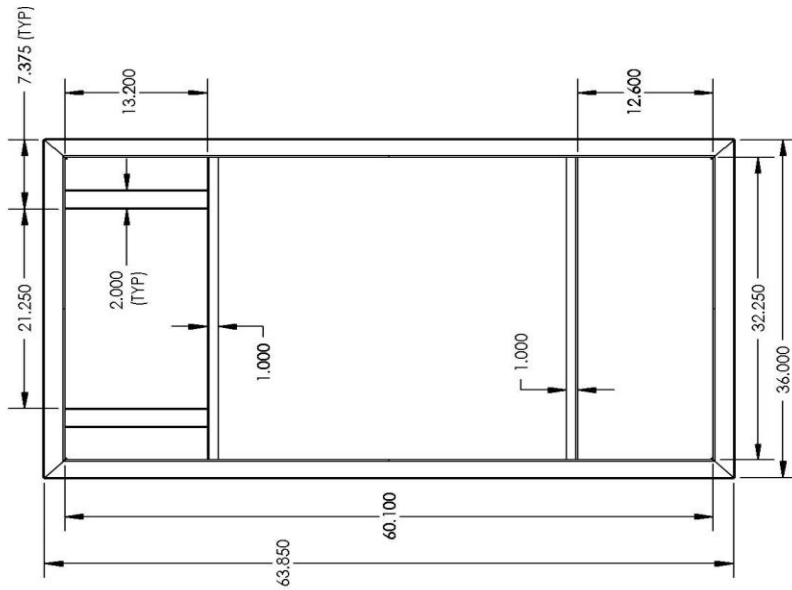
1. AMCA 511 Certified low leak damper sections with 14 gauge galvanized steel, roll formed airfoil for low pressure drop and low noise generation.
2. Zinc metal rack and pinion style gear drive mechanism with gears located outside airstream.
3. Painted to match the unit.
4. Controls factory installed and tested.
5. Includes barometric relief.



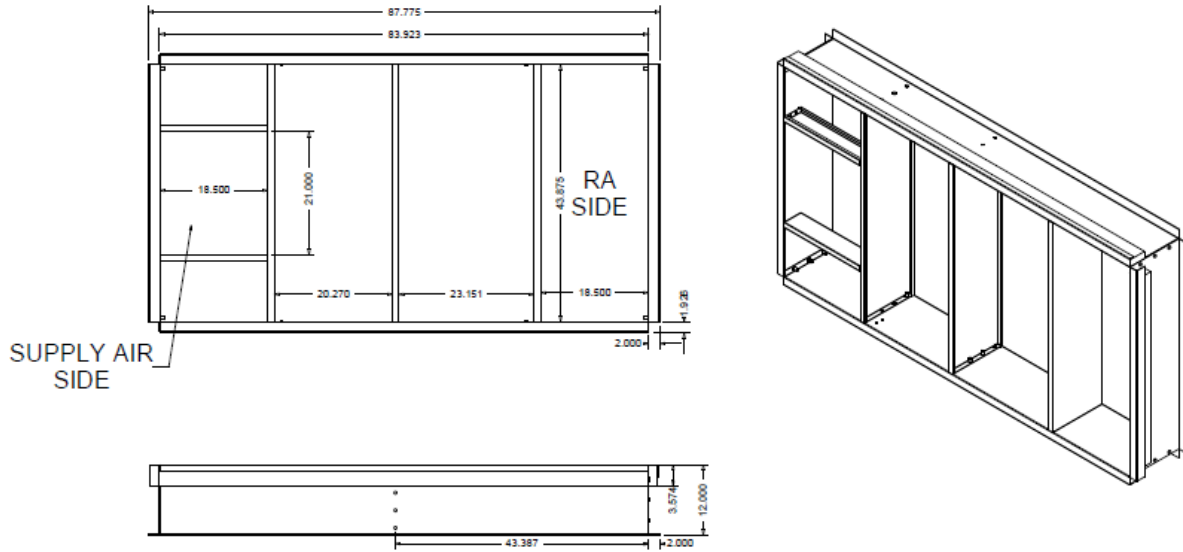
controls feature the Honeywell JADE™ W7220 economizer controller with communicating actuator. Controls capable of Economizer Fault Detection and Diagnostics for code compliance.

CONTROL PACKAGE
Modulating Control w/ Enthalpy

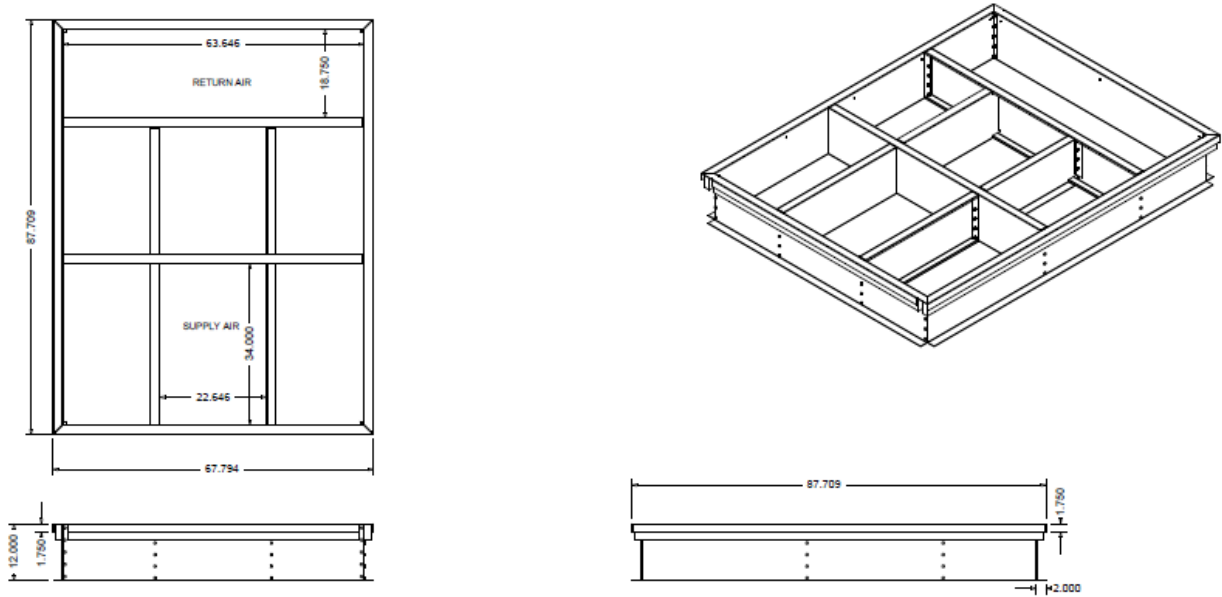
ROOF CURB FOR UNITS 024 TO 060



ROOF CURB FOR UNITS 090 TO 120.



ROOF CURB FOR UNIT 180/240



INTERNAL STATIC PRESSURES CHILLED AND HOT WATER COIL

SIZE	CFM	COIL FV	2"	MAXIMUM 10 ROWS 24 THRU 120 MAXIMUM 8 ROWS 180 & 240					TOTAL SP
			TA	1 ROW	2 ROW	4 ROW	6 ROW	8 ROW	
			ISP	ISP	ISP	ISP	ISP	ISP	
24	600	279	0.07	0.02	0.05	0.2	0.3	0.4	
	700	325	0.08	0.03	0.06	0.26	0.39	0.52	
	800	372	0.09	0.04	0.08	0.32	0.48	0.64	
	900	418	0.11	0.05	0.1	0.39	0.58	0.78	
	1000	465	0.12	0.06	0.12	0.46	0.7	0.93	
36	900	322	0.11	0.04	0.06	0.25	0.38	0.51	
	1050	375	0.12	0.05	0.08	0.33	0.49	0.65	
	1200	429	0.14	0.06	0.1	0.41	0.61	0.81	
	1350	482	0.16	0.07	0.13	0.49	0.74	0.99	
	1500	536	0.18	0.09	0.15	0.59	0.88	1.17	
48	1200	288	0.09	0.04	0.05	0.21	0.32	0.42	
	1400	336	0.11	0.06	0.06	0.27	0.41	0.54	
	1600	384	0.12	0.07	0.08	0.34	0.51	0.68	
	1800	432	0.14	0.09	0.1	0.41	0.62	0.82	
	2000	480	0.15	0.11	0.12	0.49	0.73	0.98	
60	1500	309	0.11	0.05	0.1	0.28	0.42	0.55	
	1750	360	0.13	0.06	0.13	0.36	0.54	0.72	
	2000	411	0.15	0.08	0.16	0.45	0.68	0.9	
	2250	463	0.17	0.10	0.2	0.55	0.83	1.1	
	2500	514	0.19	0.12	0.24	0.66	0.99	1.32	
90	2250	306	0.15	0.10	0.11	0.4	0.6	0.8	
	2625	357	0.18	0.11	0.14	0.5	0.75	1	
	3000	409	0.20	0.14	0.17	0.6	0.91	1.21	
	3375	460	0.23	0.16	0.21	0.71	1.07	1.43	
	3750	511	0.26	0.18	0.25	0.83	1.24	1.65	
120	3000	323	0.2	0.10	0.12	0.43	0.65	0.86	
	3500	376	0.24	0.11	0.15	0.54	0.81	1.07	
	4000	430	0.27	0.14	0.19	0.65	0.97	1.3	
	4500	483	0.31	0.17	0.23	0.77	1.15	1.53	
	5000	538	0.34	0.20	0.28	0.89	1.33	1.78	
180	5000	381	0.13	0.11	0.15	0.55	0.82	1.09	
	5500	419	0.15	0.14	0.18	0.63	0.94	1.25	
	6000	457	0.16	0.17	0.21	0.71	1.06	1.41	
	6500	495	0.17	0.19	0.24	0.79	1.19	1.58	
	7000	533	0.19	0.21	0.27	0.88	1.32	1.76	
240	7000	400	0.19	0.14	0.17	0.59	0.88	1.17	
	7500	429	0.2	0.16	0.19	0.65	0.97	1.29	
	8000	457	0.21	0.18	0.21	0.71	1.06	1.41	
	8500	485	0.23	0.20	0.23	0.77	1.16	1.54	
	9000	514	0.24	0.23	0.26	0.84	1.25	1.67	

Internal Static Pressure Calculation

Select a Unit and Approximate CFM from the two left columns- Select the total number of rows and filter- Add filter to coil static pressure to obtain total ISP (internal static pressure) – Add the ISP to ESP for the system to obtain TSP (total static pressure)

INTERNAL STATIC PRESSURES CHILLED AND HOT WATER COIL

SIZE	CFM	COIL FV	2"	MAXIMUM 10 ROWS 24 THRU 120 MAXIMUM 8 ROWS 180 & 240					TOTAL SP
			TA	1 ROW	2 ROW	4 ROW	6 ROW	8 ROW	
			ISP	ISP	ISP	ISP	ISP	ISP	
24	600	279	0.07	0.02	0.05	0.19	0.28	0.37	
	800	372	0.09	0.04	0.08	0.3	0.45	0.6	
	1000	465	0.12	0.06	0.12	0.43	0.64	0.86	
36	900	322	0.11	0.04	0.06	0.24	0.35	0.47	
	1200	429	0.14	0.06	0.1	0.38	0.56	0.75	
	1500	536	0.18	0.09	0.15	0.54	0.62	1.09	
48	1200	288	0.09	0.04	0.05	0.23	0.34	0.46	
	1600	384	0.12	0.07	0.08	0.37	0.56	0.74	
	2000	480	0.15	0.11	0.12	0.54	0.81	1.08	
60	1500	309	0.11	0.05	0.10	0.26	0.38	0.51	
	2000	411	0.15	0.08	0.16	0.42	0.63	0.83	
	2500	514	0.19	0.12	0.24	0.61	0.91	1.22	
90	2250	306	0.15	0.06	0.11	0.38	0.57	0.75	
	3000	409	0.20	0.08	0.17	0.57	0.85	1.13	
	3750	511	0.26	0.12	0.25	0.77	1.16	1.55	
120	3000	323	0.20	0.06	0.12	0.41	0.61	0.81	
	4000	430	0.27	0.09	0.19	0.61	0.81	1.22	
	5000	538	0.34	0.14	0.28	0.83	1.25	1.67	
180	5000	381	0.13	0.07	0.15	0.51	0.77	1.02	
	6000	457	0.16	0.11	0.21	0.66	0.99	1.33	
	7000	533	0.19	0.13	0.27	0.82	1.24	1.65	
240	7000	400	0.19	0.09	0.17	0.55	0.82	1.1	
	8000	457	0.21	0.11	0.21	0.66	0.99	1.33	
	9000	514	0.24	0.13	0.26	0.78	1.17	1.57	

Internal Static Pressure Calculation

Select a Unit and Approximate CFM from the two left columns- Select the total number of rows and filter- Add filter to coil static pressure to obtain total ISP (internal static pressure) – Add the ISP to ESP for the system to obtain TSP (total static pressure)

BLOWER PERFORMANCE TABLES

Air Volume Capacity - 2-Pipe, 4-Row Coil														
Model	Internal SP	cfm	0.25" ESP		0.50" ESP		0.75" ESP		1.00" ESP		1.25" ESP		1.50" ESP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
RWH24	.17	600	864	0.12	998	0.17	1144	0.24	1288	0.32	1424	0.41	1549	0.49
	.22	700	966	0.18	1073	0.22	1193	0.29	1318	0.37	1443	0.46	1564	0.56
	.27	800	866	0.17	1025	0.22	1152	0.28	1267	0.34	1374	0.41	1475	0.47
	.33	900	955	0.22	1084	0.28	1202	0.35	1312	0.41	1415	0.48	1511	0.55
	.39	1000	1050	0.29	1143	0.35	1255	0.42	1359	0.49	1457	0.57	1550	0.64
RWH36	.17	900	865	0.19	1002	0.24	1416	0.48	1243	0.37	1350	0.44	1450	0.51
	.22	1050	958	0.27	N/A	N/A	1195	0.40	1494	0.63	1403	0.55	1498	0.63
	.27	1200	905	0.25	1041	0.33	1165	0.41	1281	0.50	1391	0.59	N/A	N/A
	.33	1350	978	0.33	1103	0.42	1219	0.50	1328	0.60	1431	0.69	1529	0.80
	.39	1500	1051	0.43	1166	0.52	1274	0.61	1377	0.71	1474	0.82	1568	0.93
RWH48	.14	1200	829	0.21	988	0.30	1102	0.37	1222	0.45	1335	0.54	1441	0.63
	.19	1400	919	0.31	1047	0.39	1165	0.48	1276	0.55	1381	0.67	1480	0.77
	.24	1600	1010	0.44	1126	0.53	1235	0.62	1337	0.72	1434	0.83	1527	0.94
	.29	1800	842	0.44	952	0.54	1054	0.65	1151	0.76	1244	0.88	1333	1.01
	.36	2000	912	0.58	1013	0.69	1108	0.80	1198	0.92	1285	1.05	1369	1.19
RWH60	.16	1500	721	0.26	848	0.35	966	0.45	1076	0.55	1181	0.66	1281	0.78
	.20	1750	790	0.38	905	0.48	1011	0.58	1112	0.69	1207	0.81	1299	0.93
	.26	2000	869	0.53	973	0.64	1070	0.76	1162	0.87	1126	1.01	1335	1.13
	.32	2250	949	0.72	1044	0.84	1133	0.97	1218	1.10	1300	1.23	1379	1.37
	.38	2500	1028	0.95	1115	1.08	1198	1.22	1277	1.36	1354	1.51	1427	1.65
RWH90	.15	2250	693	0.51	801	0.64	910	0.79	1011	0.95	1103	1.11	1187	1.27
	.19	2625	772	0.76	862	0.90	956	1.06	1049	1.23	1137	1.41	1220	1.60
	.24	3000	857	1.08	933	1.24	1014	1.41	1096	1.59	1178	1.79	1257	1.99
	.30	3375	947	1.50	1012	1.66	1082	1.84	1154	2.04	1228	2.25	1300	2.47
	.36	3750	1036	2.01	1094	2.18	1155	2.38	1218	2.58	1284	2.80	1350	3.03
RWH120	.16	3000	635	0.80	646	0.76	718	0.90	785	1.05	849	1.20	910	1.36
	.21	3500	635	0.93	705	1.09	769	1.25	831	1.41	889	1.58	945	1.76
	.26	4000	703	1.32	765	1.50	824	1.68	881	1.87	934	2.05	986	2.25
	.32	4500	773	1.81	830	2.02	884	2.22	936	2.43	986	2.64	1034	2.85
	.39	5000	846	2.43	898	2.66	948	2.89	995	3.11	1042	3.34	1087	3.57
RWH180	.21	5000	670	1.57	733	1.80	793	2.03	850	2.26	905	2.49	959	2.73
	.25	5500	723	2.03	782	2.28	837	2.53	891	2.79	942	3.04	992	3.30
	.29	6000	776	2.58	831	2.85	883	3.12	933	3.40	982	3.67	1029	3.95
	.33	6500	829	3.21	881	3.51	930	3.81	977	4.10	1023	4.40	1068	4.70
	.38	7000	869	3.86	933	4.28	980	4.60	1024	4.92	1068	5.23	1110	5.56
RWH240	.24	7000	856	3.78	906	4.10	954	4.42	1000	4.74	1044	5.06	1086	5.38
	.27	7500	909	4.59	957	4.93	1002	5.28	1045	5.62	1087	5.96	1128	6.30
	.30	8000	962	5.51	1007	5.88	1050	6.24	1091	6.61	1131	6.97	1170	7.33
	.34	8500	1017	6.55	1060	6.95	1100	7.34	1140	7.73	1178	8.11	1215	8.50
	.37	9000	1070	7.71	1111	8.13	1150	8.55	1187	8.96	1224	9.37	1260	9.78

BLOWER PERFORMANCE TABLES

Air Volume Capacity - 4-Pipe, 4-Row Cooling and 2-Row Heating Coils														
Model	Internal SP	cfm	0.25" ESP		0.50" ESP		0.75" ESP		1.00" ESP		1.25" ESP		1.50" ESP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
RWH24	.25	600	906	0.14	1046	0.19	1191	0.26	1333	0.35	1464	0.43	1584	0.52
	.33	700	1012	0.19	1125	0.25	1247	0.32	1374	0.41	1497	0.50	1615	0.60
	.40	800	1117	0.27	1211	0.32	1313	0.39	1421	0.48	1531	0.57	1641	0.68
	.49	900	1039	0.26	1161	0.32	1274	0.39	1379	0.46	1477	0.53	1570	0.60
	.58	1000	1115	0.34	1229	0.40	1335	0.47	1434	0.06	1528	0.62	1618	0.70
RWH36	.25	900	826	0.15	1044	0.26	1165	0.33	1278	0.39	1383	0.46	1481	0.53
	.33	1050	905	0.22	1132	0.37	1243	0.44	1347	0.51	1445	0.58	1538	0.66
	.40	1200	977	0.29	1107	0.37	1320	0.57	1414	0.65	1509	0.73	1596	0.81
	.49	1350	1059	0.39	1178	0.47	1289	0.56	1394	0.66	1494	0.76	1590	0.87
	.58	1500	1139	0.50	1249	0.59	1353	0.69	1451	0.79	1546	0.90	1636	1.01
RWH48	.21	1200	870	0.23	1009	0.31	1136	0.39	1254	0.47	1365	0.57	N/A	N/A
	.29	1400	972	0.34	1096	0.43	1211	0.52	1319	0.61	1421	0.71	1519	0.81
	.36	1600	1222	0.61	1179	0.57	1284	0.67	1384	0.77	1479	0.88	1570	0.99
	.44	1800	909	0.50	1014	0.60	1113	0.71	1207	0.83	1298	0.96	1386	1.09
	.54	2000	985	0.66	1082	0.77	1173	0.89	1261	1.02	1345	1.15	1427	1.29
RWH60	.24	1500	763	0.29	887	0.38	1002	0.48	1110	0.58	1213	0.70	1312	0.82
	.31	1750	842	0.42	952	0.52	1056	0.63	1154	0.74	1248	0.86	1339	0.99
	.39	2000	925	0.59	1025	0.70	1119	0.82	1209	0.94	1295	1.07	1379	1.20
	.48	2250	1010	0.80	1102	0.92	1188	1.05	1271	1.18	1351	1.34	1428	1.46
	.58	2500	1098	1.06	1182	1.19	1262	1.34	1339	1.48	1413	1.62	1485	1.78
RWH90	.23	2250	727	0.55	836	0.69	943	0.84	1041	1.00	1131	1.16	1212	1.32
	.29	2625	807	0.81	899	0.96	993	1.13	1085	1.30	1171	1.48	1252	1.67
	.37	3000	896	1.16	975	1.32	1057	1.50	1139	1.69	1219	1.89	1296	2.10
	.46	3375	988	1.60	1056	1.78	1128	1.97	1201	2.17	1274	2.39	1346	2.61
	.55	3750	1080	2.14	1140	2.33	1203	2.53	1268	3.68	1334	2.98	1400	3.21
RWH120	.24	3000	635	0.78	670	0.81	740	0.95	806	1.10	869	1.25	929	1.41
	.32	3500	666	1.00	734	1.16	797	1.32	857	1.49	914	1.66	974	1.66
	.39	4000	736	1.41	796	1.59	854	1.78	909	1.96	962	2.15	1013	2.35
	.49	4500	761	1.49	820	1.67	876	1.85	930	2.04	982	2.23	1033	2.43
	.59	5000	888	2.61	938	2.84	986	3.07	1033	3.30	1078	3.53	1122	3.76
RWH180	.32	5000	698	1.67	760	1.90	818	2.13	875	2.36	929	2.60	982	2.84
	.38	5500	754	2.16	811	2.41	865	2.66	918	2.92	969	3.18	1018	3.44
	.44	6000	810	2.74	863	3.02	914	3.29	963	3.56	1010	3.84	1057	4.12
	.50	6500	865	3.42	915	3.71	962	4.01	1009	4.30	1053	4.60	1097	4.90
	.58	7000	924	4.22	971	4.53	1016	4.85	1059	5.17	1101	5.49	1143	5.81
RWH240	.36	7000	881	3.93	930	4.25	976	4.57	1021	4.89	1064	5.21	1106	5.53
	.41	7500	936	4.78	982	5.13	1026	5.47	1069	5.81	1110	6.15	1150	6.49
	.46	8000	991	5.74	1035	6.11	1077	6.48	1117	6.84	1156	7.20	1195	7.57
	.51	8500	1046	6.82	1088	7.22	1127	7.60	1166	7.99	1204	8.38	1240	8.76
	.56	9000	1101	8.03	1140	8.45	1178	8.86	1215	9.27	1251	9.68	1287	10.09