



## OIL FIRED COUNTERFLOW/\*HORIZONTAL FURNACE SPECIFICATIONS

MODEL NO.	OD6F/RA072D48(V5)B			OD6F/RA072D48(V5)R		
	High Fire	Med Fire	Low Fire	High Fire	Med Fire	Low Fire
HEATING CAPACITY						
HEAT INPUT RATE (BTUH)	106,250	85,000	70,000	106,250	85,000	70,000
OUTPUT BTUH <sup>1</sup>	89,000	72,000	60,000	89,000	72,000	60,000
SEASONAL EFFICIENCY <sup>2</sup>	85.7			85.7		
LARGEST REC A/C <sup>3</sup>	4 Tons (5 Tons)			4 Tons (5 Tons)		
NOMINAL TEMP RISE	66°	66°	66°	66°	66°	66°
HEAT EXCHANGER AREA						
CASING HEIGHT (IN.):	45"			45"		
CASING WIDTH (IN.):	20"			20"		
CASING DEPTH (IN.):	30"			30"		
NOMINAL FLUE OUTLET DIA.	5"			5"		
APPROX SHIPPING WEIGHT	250			250		
APPROVAL AGENCY	U.L. 727			U.L. 727		
QTY AND SIZE OF PERMANENT FILTERS	(2) 18-3/4" x 12-3/4"			(2) 18-3/4" x 12-3/4"		
ELECTRICAL REQUIREMENTS	120 / 60 / 1			120 / 60 / 1		
MAX FUSE SIZE PSC / ECM	15 / 15			15 / 15		
TOTAL CURRENT (AMPS) PSC / ECM	8.7 / 12.3			8.7 / 12.3		
HEIGHT FROM FLOOR TO CENTER OF FLUE (FRONT FLUE) (REAR FLUE)	20-1/2" 20-1/2"			20-1/2" 20-1/2"		
SUPPLY AIR OUTLET SIZE (W-IN. X D-IN.)	18" x 20"			18" x 20"		
RETURN AIR INLET OPENING SIZE (W-IN. X D-IN.)	18" x 19"			18" x 19"		
	<b>ACCESSORY ITEMS</b>					
2-LINE SYSTEM KIT FOR RIELLO	N/A			380705		
COMBUSTION AIR INTAKE HOOD KIT	AOPS8397			AOPS8416		
FIELD VENT TERMINATION KIT	AOPS8393			AOPS8393		
SIDEWALL VENT ACCESSORIES KIT	AOPS8394			AOPS8395		
COMBUSTIBLE FLOOR BASE	D6-BASE			D6-BASE		
COTTAGE BASE	D6COT-BASE			D6COT-BASE		
COIL CABINET	CE112S, CE312T			CE112S, CE312T		
BLOCKED VENT KIT <sup>4</sup>	AOPS2686			AOPS2686		

\*Horizontal installation for left or right supply.

- SEE NEXT PAGE FOR MORE DATA -

<sup>1</sup> OUTPUT BTUH BASED ON ANNUAL FUEL UTILIZATION EFFICIENCY RATED BY MANUFACTURER.

<sup>2</sup> SEASONAL EFFICIENCY (ALSO CALLED AFUE - ANNUAL FUEL UTILIZATION EFFICIENCY) RATINGS ARE BASED ON TESTS FOLLOWING U.S. DEPARTMENT OF ENERGY TEST PROCEDURES.

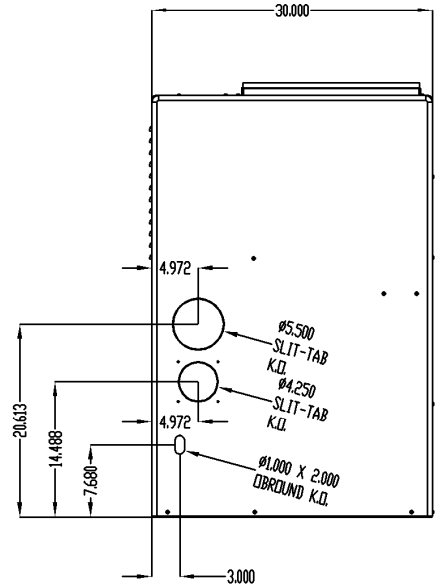
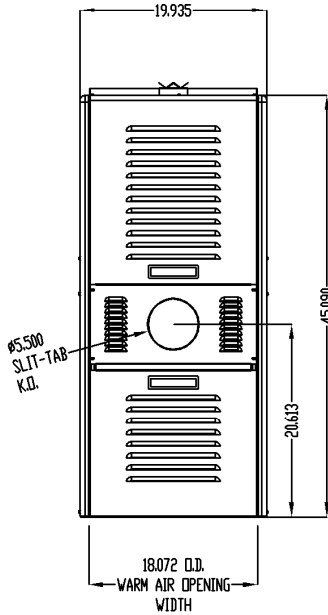
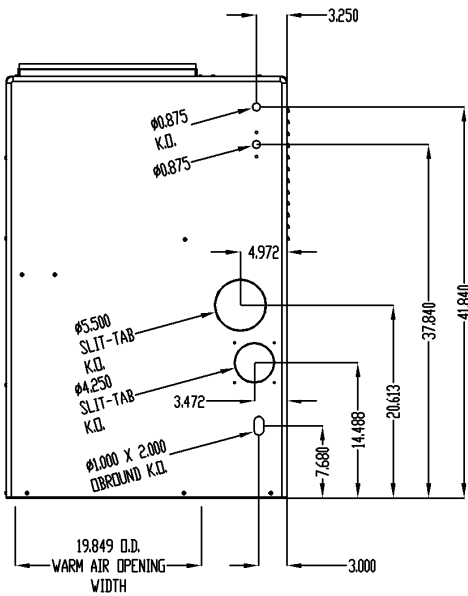
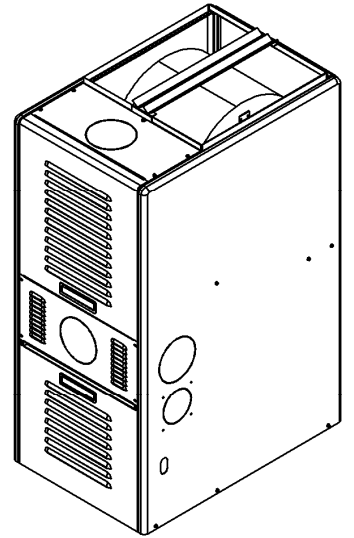
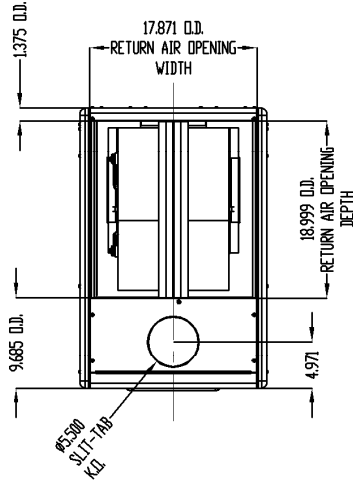
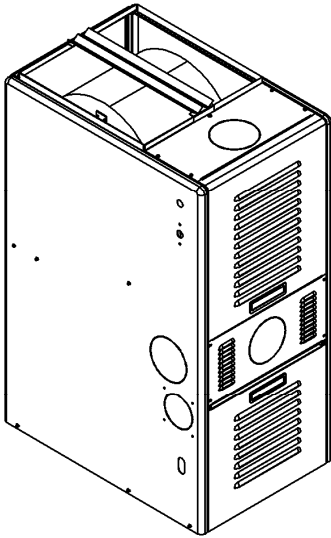
<sup>3</sup> TO PERMIT LARGEST RECOMMENDED AIR CONDITIONING (AT .5 STATIC PRESSURE), SELECTION OF THE HIGHEST MOTOR SPEED IS REQUIRED.

<sup>4</sup> NOT TO BE USED IN SIDEWALL VENT APPLICATIONS, USE ONLY WHEN CHIMNEY VENTED.

Model Number Digit	1	2	3	4	5	6	7	8	9	10	11	12
	Fuel	Configuration	Heat Exchanger Identifier	Flue	Feature	Capacity	Capacity	Capacity	Blower Type	Clg Airflow Cap.	Clg Airflow Cap.	Burner
<b>Oil Furnace Model Nomenclature Example Model Numbers</b>	O	D	6	F	A	0	7	2	D	4	8	B
	O	D	6	F	A	0	7	2	D	V	5	R
	O	D	6	R	A	0	7	2	D	4	8	B
	O	D	6	R	A	0	7	2	D	V	5	R
<b>O = Oil</b>	O											
<b>H = Highboy D = Dual Poise</b>		D										
<b>6 = Heat Exchanger Size Identifier</b>			6									
<b>F = Front</b>				F								
<b>R = Rear</b>				R								
<b>A = Single Stage</b>					A							
<b>Heating Capacity MBTUH (000's) with factory installed nozzle</b>						0	7	2				
<b>D = Direct Drive</b>									D			
<b>Clg. Airflow: Example = 48MBTUH = 4 tons @ 400cfm/ton</b>										4	8	
<b>Clg. Airflow Variable Speed (ECM) V5= 5tons</b>										V	5	
<b>B = Beckett</b>												B
<b>R = Riello</b>												R

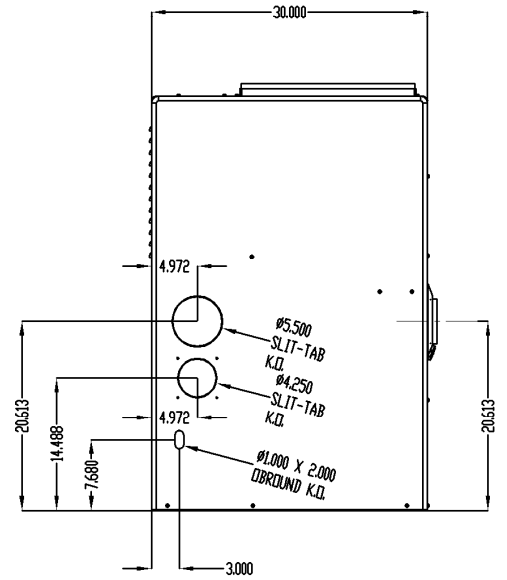
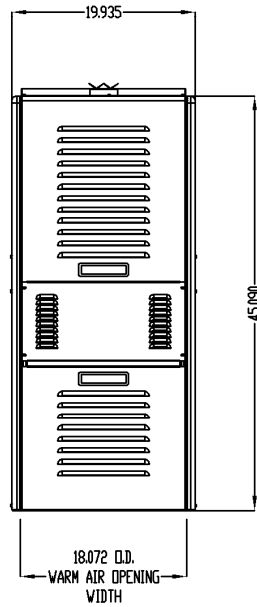
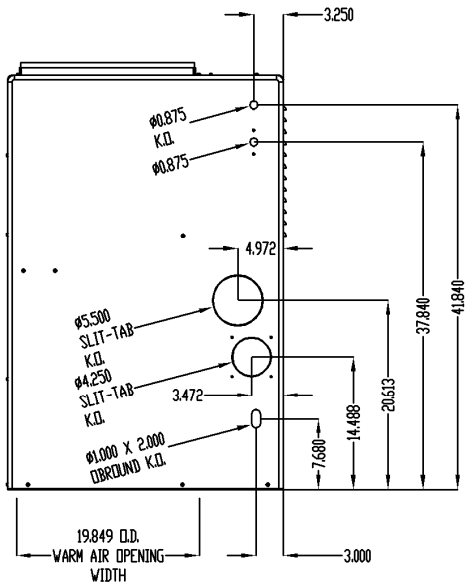
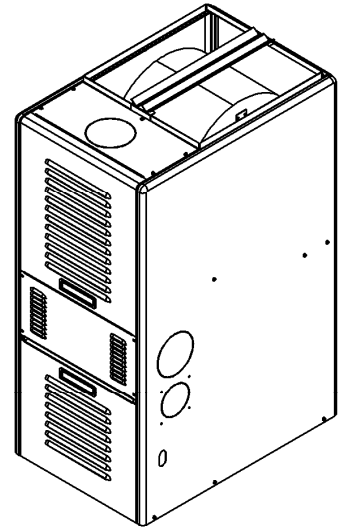
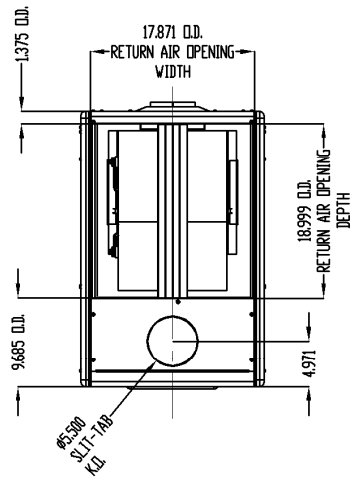
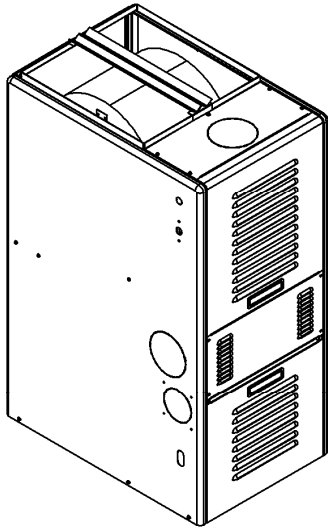
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# OIL FIRED COUNTERFLOW/HORIZONTAL FURNACE SPECIFICATIONS



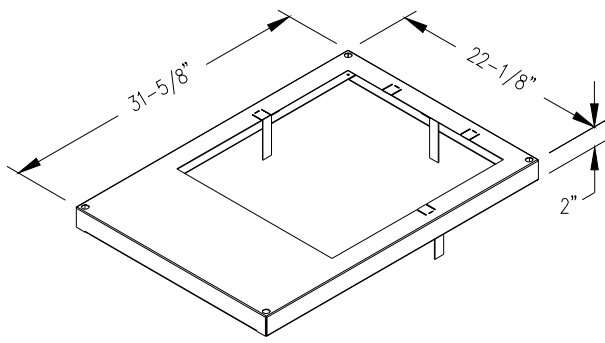
OD6FA072D\*\*\*

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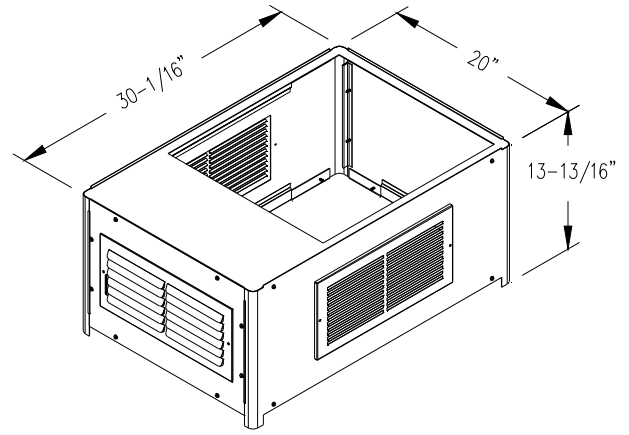


**OD6RA072D\*\*\***

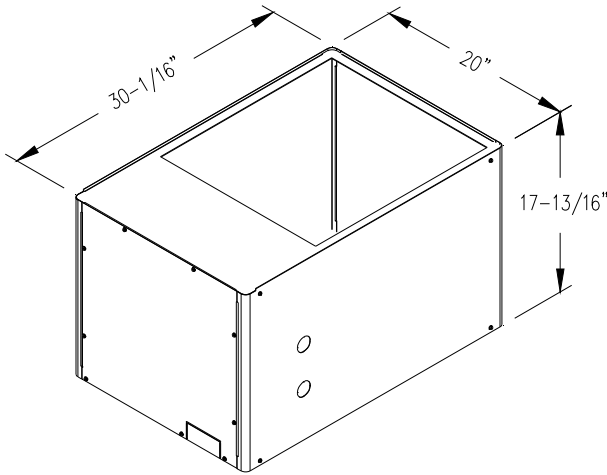
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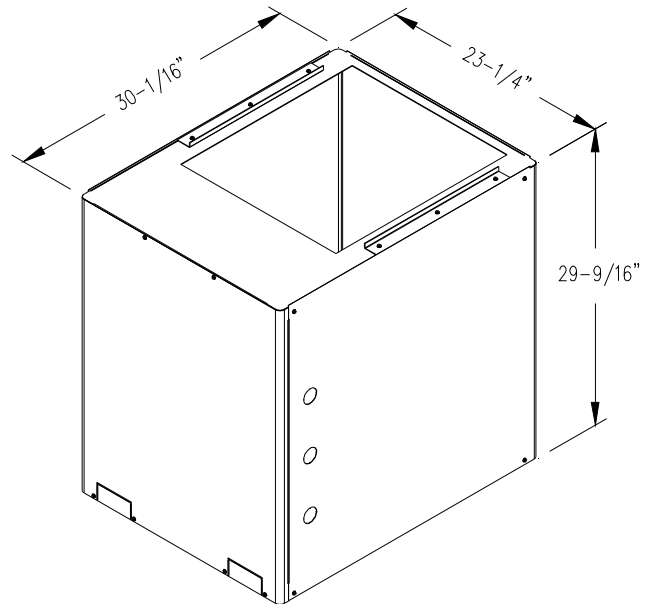
**COMBUSTIBLE FLOOR BASE MODEL: D6-BASE**



**COTTAGE BASE MODEL: D6COT-BASE**



**COIL CABINET MODEL: CE112S**



**COIL CABINET MODEL: CE312T**

**- SEE NEXT PAGE FOR MORE DATA -**

## OIL FIRED COUNTERFLOW/HORIZONTAL FURNACE SPECIFICATIONS

<b>BLOWER DATA:</b>	<b>OD6F/RA072D48</b>	<b>OD6F/RA072DV5</b>
<b>BLOWER MODEL<sup>4</sup></b>	<b>12-9-T-DD-11</b>	<b>12-9-T-DD-11</b>
<b>MOTOR H.P.</b>	½ HP	1 HP
<b>MOTOR TYPE &amp; NUMBER OF SPEEDS</b>	PSC - 5	ECM (CONSTANT CFM)
<b>HIGH SPEED AIRFLOW (SCFM) @ 0.5 IN. W.G. EXTERNAL STATIC PRESSURE:</b>	1600	2000
<b>Diameter x Width</b>	12 x 9	12 x 9

<b>BURNER DATA:</b>	<b>RIELLO "BF3" WITH CERA-FELT SLEEVE</b>		
<b>AIR TUBE LENGTH (IN.)</b>	4 ½"		
<b>BURNER HEAD TYPE:</b>	Fixed		
<b>FUEL TYPE:</b>	#2		
<b>NOZZLE RATING (GPH):</b>	.70	.60	.50
<b>SPRAY ANGLE (DEG.):</b>	80°	80°	80°
<b>SPRAY PATTERN:</b>	HOLLOW (A)	HOLLOW (A)	HOLLOW (A)
<b>OIL PUMP PRESSURE (PSIG):</b>	140 PSI		
<b>COMBUSTION CHAMBER TYPE:</b>	REFRACTORY (SOFT CHAMBER)		

<b>BURNER DATA:</b>	<b>BECKETT "AFG" S-PLATE 3912 (3-5/8") 31517 CERAMIC</b>		
<b>AIR TUBE LENGTH (IN.)</b>	4 ½"		
<b>BURNER HEAD TYPE:</b>	F-3		
<b>FUEL TYPE:</b>	#2		
<b>NOZZLE RATING (GPH):</b>	.75	.60	.50
<b>SPRAY ANGLE (DEG.):</b>	80°	80°	80°
<b>SPRAY PATTERN:</b>	HOLLOW (A)	HOLLOW (A)	HOLLOW (A)
<b>OIL PUMP PRESSURE (PSIG):</b>	120 PSI		
<b>COMBUSTION CHAMBER TYPE:</b>	REFRACTORY (SOFT CHAMBER)		

<b>CLEARANCES:</b>	<b>FRONT FLUE</b>	<b>REAR FLUE</b>
	<b>MINIMUM CLEARANCES TO COMUSTIBLE MATERIALS:</b>	
<b>SIDES</b>	0"	0"
<b>FRONT (SERVICE ACCESS)</b>	(Clearance to Combustibles) 6"/ 24" (Service)	(Clearance to Combustibles) 6"/ 24" (Service)
<b>REAR</b>	0"	0"
<b>FLUE</b>	7"	7"
<b>TOP</b>	0"	0"
<b>SUPPLY PLENUM</b>	1"	1"

<sup>4</sup> DD - DIRECT DRIVE

- SEE NEXT PAGE FOR MORE DATA -

## OIL FIRED COUNTERFLOW/HORIZONTAL FURNACE SPECIFICATIONS OD6F/RA072D48

ALTERATIONS REQ'D FOR A/C @ DESIGN EXTERNAL STATIC PRESSURE				
COOLING UNIT	HTG Speed by Input			Recommended CLG Speed
	Low fire	Mid Fire	High Fire	
24,000	Low	ML	MH	Low / Med Low
30,000	Low	ML	MH	Med Low
36,000	Low	ML	MH	Med / Med High
42,000	Low	ML	MH	Med High / High
48,000	Low	ML	MH	High

Speed Tap \ Static Pressure	Furnace Airflow (CFM) vs. External Static pressure (in. WC.)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
<b>Low</b>	797	792	770	735	692	643	613
<b>ML</b>	1019	1011	1002	982	953	935	913
<b>Med</b>	1230	1219	1203	1191	1150	1114	1090
<b>MH</b>	1370	1357	1335	1316	1280	1238	1203
<b>High</b>	1846	1789	1750	1705	1640	1588	1533

Motor Current Draw (Amps) vs. External Static pressure (in. WC.)							
<b>Low</b>	3.53	3.4	3.27	3.12	3	2.88	2.7
<b>ML</b>	4.6	4.53	4.46	4.33	4.2	4.09	3.99
<b>Med</b>	5.6	5.47	5.42	5.35	4.83	4.61	4.53
<b>MH</b>	6.7	6.28	5.97	5.76	5.46	5.22	5.01
<b>High</b>	8.26	8.02	7.78	7.49	7.14	6.86	6.58

Speed Tap \ Static Pressure	High Fire Temperature Rise vs. External Static Pressure (in. WC.)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
<b>Low</b>	104	106	109	115	121	128	143
<b>ML</b>	83	82	83	85	87	92	102
<b>Med</b>	68	69	70	72	74	76	79
<b>MH</b>	58	59	60	61	63	66	68
<b>High</b>	44	46	47	48	49	51	53

Speed Tap \ Static Pressure	Mid Fire Temperature Rise vs. External Static pressure (in. WC.)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
<b>Low</b>	83	85	87	92	97	102	115
<b>ML</b>	66	66	67	68	70	73	82
<b>Med</b>	55	55	56	57	59	61	63
<b>MH</b>	47	47	48	49	51	53	55
<b>High</b>	35	36	38	38	40	41	43


Speed Tap \ Static Pressure	Low Fire Temperature Rise vs. External Static pressure (in. WC.)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
<b>Low</b>	69	70	72	76	80	84	94
<b>ML</b>	54	54	55	56	58	60	67
<b>Med</b>	45	46	46	47	49	50	52
<b>MH</b>	38	39	40	40	42	43	45
<b>High</b>	29	30	31	32	33	34	35

= Recommended operation range

- SEE NEXT PAGE FOR MORE DATA -

## Heating Speed Set-ups

	BTUH	Low Fire	Med Fire	High Fire	Static Pressure (Amps/Watts)	
		60,000	72,000	90,000	0.2	0.5
Fan Control SW 1 Switch Settings	Heating CFM	Aprox. Rise (F°)	Aprox. Rise (F°)	Aprox. Rise (F°)		
3-OFF 2-OFF 1-OFF	755	73			1.3/114	1.9/173
3-OFF 2-OFF 1-ON	826	66	80		1.4/121	2.1/191
3-OFF 2-ON 1-OFF	898	61	74		1.5/136	2.2/203
3-OFF 2-ON 1-ON	983	56	67		1.7/155	2.4/227
3-ON 2-OFF 1-OFF	1068		62	77	1.9/176	2.7/259
3-ON 2-OFF 1-ON	1168		57	71	2.2/203	3.0/286
3-ON 2-ON 1-OFF	1282			64	2.6/245	3.5/333
3-ON 2-ON 1-ON	1424			58	3.1/299	4.2/400

 = Recommended Heating Speed Setting

- SEE NEXT PAGE FOR MORE DATA -



## Cooling Speed Set-ups

Fan Control SW 1 Switch Settings	Air Flow			Static Pressure (Amps/Watts)	
	Clg. Tonage	Cool	Continuous	0.2	0.5
6-OFF 5-OFF 4-OFF	2	799	500	1.3/115	2.0/185
6-OFF 5-OFF 4-ON	2.5	1017	508	1.8/168	2.5/234
6-OFF 5-ON 4-OFF	3	1210	605	2.4/219	3.2/308
6-OFF 5-ON 4-ON	3.5	1404	702	3.2/301	4.1/395
6-ON 5-OFF 4-OFF	4	1622	799	4.3/412	5.4/532
6-ON 5-ON 4-OFF	5	2010	993	7.2/720	8.6/861

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