



## OIL FIRED UPFLOW FURNACE SPECIFICATIONS

MODEL NO.	OH8FA119D60/DV5B			OH8FA119D60/DV5R			OH8FA119D60/DV5C		
HEATING CAPACITY	High Fire	Med Fire	Low Fire	High Fire	Med Fire	Low Fire	High Fire	Med Fire	Low Fire
HEAT INPUT RATE (BTUH)	156,250	140,000	119,000	156,250	140,000	119,000	156,250	140,000	119,000
OUTPUT BTUH <sup>1</sup>	132,000	120,000	101,000	132,000	120,000	101,000	132,000	120,000	101,000
SEASONAL EFFICIENCY <sup>2</sup>	85.8%			86.0%			85.0%		
LARGEST REC A/C <sup>3</sup>	5 Tons			5 Tons			5 Tons		
NOMINAL TEMP RISE	66°	66°	66°	66°	66°	66°	66°	66°	66°
HEAT EXCHANGER AREA									
CASING HEIGHT (IN.):	50 1/8"			50 1/8"			50 1/8"		
CASING WIDTH (IN.):	24 1/2"			24 1/2"			24 1/2"		
CASING DEPTH (IN.):	36 1/2"			36 1/2"			36 1/2"		
NOMINAL FLUE OUTLET DIA.	7"			7"			7"		
APPROX SHIPPING WEIGHT LBS	310			310			310		
APPROVAL STANDARDS	UL727 CAN/CSA B140.4			UL727 CAN/CSA B140.4			UL727 CAN/CSA B140.4		
QTY AND SIZE OF PERMANENT FILTERS	(1) 24 3/4" X 19 3/4"			(1) 24 3/4" X 19 3/4"			(1) 24 3/4" X 19 3/4"		
ELECTRICAL REQUIREMENTS VAC/HZ/PH	120/60/1			120/60/1			120/60/1		
MAX FUSE SIZE (AMPS) PSC/ECM	20/20			20/20			20/20		
TOTAL CURRENT (AMPS) PSC/ECM									
HEIGHT FROM FLOOR TO CENTER OF FLUE	42 1/2"			42 1/2"			42 1/2"		
SUPPLY AIR OUTLET SIZE (W-IN. X D-IN.)	20" X 20"			20" X 20"			20" X 20"		
RETURN AIR DUCTWORK CONNECTION FLANGE SIZE ON FILTER RACK (D-IN. X H-IN.)	23 3/4" X 19"			23 3/4" X 19"			23 3/4" X 19"		
RETURN AIR INLET OPENING SIZE IN SIDE CASING (TO BE CUTOUT BY DEALER) (D-IN. X H-IN.)	23" X 14"			23" X 14"			23" X 14"		
OPTIONAL REAR RETURN AIR OPENING (D-IN X H-IN)	22" X 14"			22" X 14"			22" X 14"		
	<b>ACCESSORY ITEMS</b>								
2-LINE SYSTEM KIT FOR RIELLO	N/A			380705			N/A		
FIELD VENT TERMINATION KIT <sup>5</sup>	AOPS8414			AOPS8414			N/A		
SIDEWALL VENT ACCESSORIES KIT <sup>5</sup>	AOPS8394			AOPS8395			N/A		
COMBUSTION AIR KIT	AOPS8397			AOPS8416			N/A		
BLOCKED VENT KIT <sup>4</sup>	AOPS2686			AOPS2686			AOPS2686		

<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.

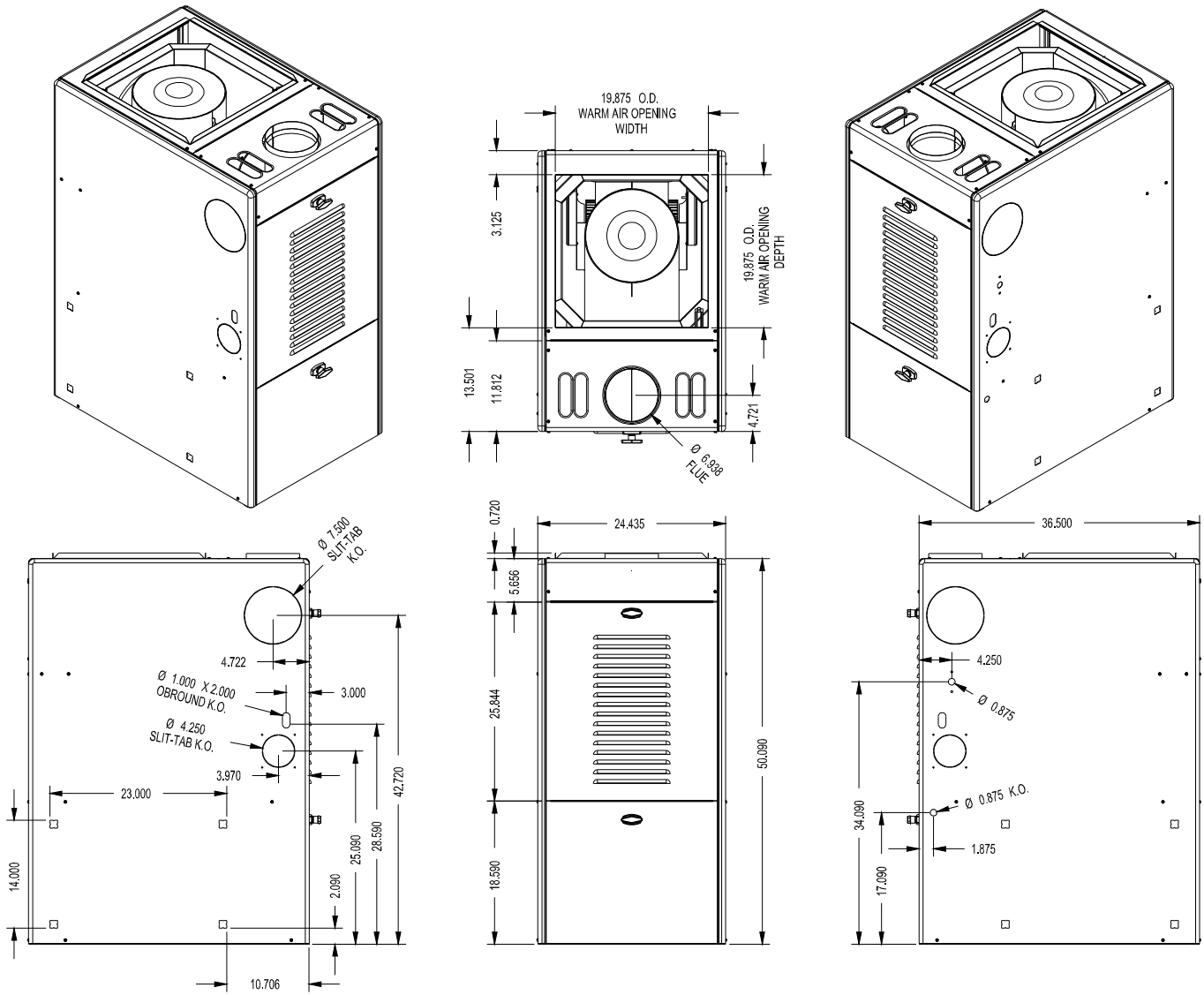
<sup>5</sup> NOT TO BE USED WITH CARLIN BURNER.

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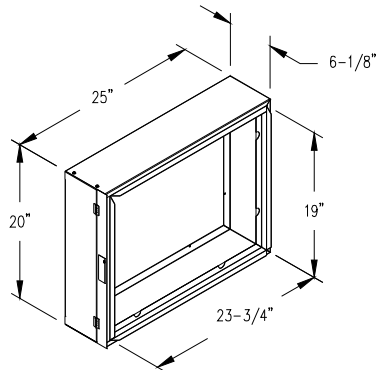
Model Number Digit	1	2	3	4	5	6	7	8	9	10	11	12
	Fuel	Configuration	Heat Exchanger Identifier	Flue	Design Change	Capacity	Capacity	Capacity	Blower Type	Clg Airflow Cap.	Clg Airflow Cap.	Burner
<b>Oil Furnace Model Nomenclature Example Model Numbers</b>	O	H	8	F	A	1	1	9	D	6	0	B
	O	H	8	F	A	1	1	9	D	V	5	R
<b>O = Oil</b>	O											
<b>H = Highboy</b>		H										
<b>6 = Heat Exchanger Size Identifier</b>			8									
<b>F = Front</b>				F								
<b>Design Change</b>					A							
<b>Heating Capacity MBTUH (000's) with factory installed nozzle</b>						1	1	9				
<b>D = Direct Drive</b>									D			
<b>Clg. Airflow: Example = 48MBTUH = 4 tons @ 400cfm/ton</b>										6	0	
<b>Clg. Airflow Variable Speed (ECM) V4= 4tons</b>										V	5	
<b>B = Beckett, R = Riello, N = Beckett NX, C = Carlin</b>												B

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# OIL FIRED UPFLOW FURNACE SPECIFICATIONS



## FILTER RACK SPECIFICATIONS



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## OIL FIRED UPFLOW FURNACE SPECIFICATIONS

<b>BLOWER DATA:</b>	<b>OH8FA119D60</b>	<b>OH8FA119DV5</b>
<b>BLOWER MODEL</b>	<b>DD 120-11T</b>	<b>DD 120-11T</b>
<b>MOTOR H.P.</b>	3/4 HP	1 HP Variable Speed
<b>MOTOR TYPE &amp; NUMBER OF SPEEDS</b>	PSC - 4	ECM -
<b>HIGH SPEED AIRFLOW (SCFM) @ 0.5 IN. W.G. EXTERNAL STATIC PRESSURE:</b>	2000	2000
<b>Diameter x Width (IN.)</b>	11 x 11	11 x 11

<b>BURNER DATA</b>	<b>RIELLO "BF5" WITH CERA-FELT SLEEVE</b>		
<b>AIR TUBE LENGTH (IN.)</b>	4 1/2"		
<b>BURNER HEAD TYPE:</b>	Fixed		
<b>FUEL TYPE:</b>	#2		
<b>NOZZLE RATING (GPH):</b>	1.00	0.85	0.75
<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 3383 (2 3/4 U) 31517 CERAMIC</b>		
<b>AIR TUBE LENGTH (IN.)</b>	4 1/2"		
<b>BURNER HEAD TYPE:</b>	F-6		
<b>FUEL TYPE:</b>	#2		
<b>NOZZLE RATING (GPH):</b>	1.10	1.00	0.85
<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>BURNER DATA</b>	<b>CARLIN "EZ-1HP"</b>		
<b>AIR TUBE LENGTH (IN.)</b>	4 1/2"		
<b>BURNER HEAD TYPE:</b>	N/A		
<b>FUEL TYPE:</b>	#2		
<b>NOZZLE RATING (GPH):</b>	0.90	0.85	0.75
<b>SPRAY ANGLE (DEG.):</b>	60°	60°	60°
<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>CLEARANCES</b>	
	<b>MINIMUM CLEARANCES TO COMUSTIBLE MATERIALS:</b>
<b>SIDES</b>	0"
<b>FRONT (SERVICE ACCESS)</b>	(Clearance to Combustibles) 8"/ 24" (Service)
<b>REAR</b>	0"
<b>FLUE</b>	8"
<b>TOP PLENUM</b>	1"
<b>SIDES PLENUM</b>	1"

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# OIL FIRED UPFLOW FURNACE SPECIFICATIONS

OH8FA119D60

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	
36,000	L/ML	ML/MH	MH/H	Low (L)
42,000	L/ML	ML/MH	MH/H	Med Low (ML)
48,000	L/ML	ML/MH	MH/H	Med High (MH)
60,000	L/ML	ML/MH	MH/H	High (H)

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>	1254	1254	1251	1246	1221	1189	1126
<b>ML</b>	1473	1464	1460	1437	1415	1377	1329
<b>MH</b>	1733	1731	1718	1705	1686	1660	1627
<b>High</b>	2300	2243	2224	2166	2099	2048	1754
Blower Motor Current Draw (Amps)/Watts vs. External Static pressure (in. WC.)							
<b>Low</b>	6.6/648	6.6/648	6.4/639	6.2/630	6.0/612	5.8/592	5.4/565
<b>ML</b>	7.6/772	7.2/739	7.1/730	6.8/704	6.6/683	6.3/661	6.1/641
<b>MH</b>	9.0/908	9.0/905	8.7/888	8.5/871	8.3/842	8.0/818	7.7/796
<b>High</b>	12.5/1270	11.7/1200	11.2/1150	10.7/1110	10.2/1060	9.7/1020	9.2/969

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>	98	98	98	99	101	103	109
<b>ML</b>	83	84	84	86	87	89	93
<b>MH</b>	71	71	72	72	73	74	76
<b>High</b>	53	55	55	57	59	60	70

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>	88	88	88	89	90	93	98
<b>ML</b>	75	75	75	77	78	80	83
<b>MH</b>	64	64	64	65	65	66	68
<b>High</b>	48	49	50	51	52	54	63

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>	75	75	75	75	77	79	83
<b>ML</b>	64	64	64	65	66	68	70
<b>MH</b>	54	54	55	55	56	56	58
<b>High</b>	41	42	42	43	45	46	53

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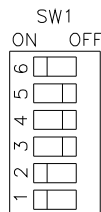
# OIL FIRED UPFLOW FURNACE SPECIFICATIONS

OH8FA119DV5

Heating Speed Set-ups

Furnace Motor Current  
Draw (Amps / Watts) vs.  
External Static Pressure (in W.C)

		Low Fire	Med Fire	High Fire		
		101,000	119,000	132,000		
		BTUH				
Fan Control SW 1 Switch Settings	Heating CFM	Aprox. Rise (F <sup>0</sup> )	Aprox. Rise (F <sup>0</sup> )	Aprox. Rise (F <sup>0</sup> )	.02	.05
3-OFF 2-OFF 1-OFF	1202	78°			1.6/146	2.5/233
3-OFF 2-OFF 1-ON	1315	71°	84°		1.9/174	2.7/252
3-OFF 2-ON 1-OFF	1429	65°	77°		2.3/206	3.2/294
3-OFF 2-ON 1-ON	1565	60°	70°	78°	2.6/242	3.6/337
Factory SW1 Switch Settings 3-ON 2-OFF 1-OFF	1701	55°	65°	72°	3.1/292	4.1/399
3-ON 2-OFF 1-ON	1860		59°	66°	3.7/354	4.8/466
3-ON 2-ON 1-OFF	2041			60°	4.7/452	5.7/567
3-ON 2-ON 1-ON	2223			55°	5.9/587	7.2/719



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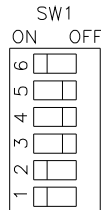
# OIL FIRED UPFLOW FURNACE SPECIFICATIONS

OH8FA119DV5

Cooling Speed Set-ups

Furnace Motor Current  
Draw (Amps/Watts) vs.  
External Static Pressure (in W.C.)

		Air Flow					
	Fan Control SW 1 Switch Settings	Clg.	Cool	Continuous	Dehum	.02	.05
		Tonnage					
	6-OFF 5-OFF 4-OFF	2	800	500	557	1.0/89	1.8/161
	6-OFF 5-OFF 4-ON	2.5	1018	509	703	1.4/121	2.1/192
	6-OFF 5-ON 4-OFF	3	1212	606	848	1.8/159	2.6/231
	6-OFF 5-ON 4-ON	3.5	1406	703	994	2.3/203	3.1/290
Factory SW1 Switch Settings	6-ON 5-OFF 4-OFF	4	1624	800	1139	3.0/278	4.0/378
	6-ON 5-OFF 4-ON	4.5	1818	897	1285	3.8/353	5.0/475
	6-ON 5-ON 4-OFF	5	2012	994	1406	4.8/456	6.0/582
	6-ON 5-ON 4-ON	5.5	2230	1115	1551	6.1/593	7.4/729



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### A/C Evaporator Coil Applications

Furnace Model Number	AC Tonnage	Line Set	Cond. Model Number	Coil Model Number	Capacity	EER	SEER	AHRI Reference Number
OH8FA119D60	3	LS01E-30 LS01E-50	TC4B3621H	HE33636PA212	34400	11.70	14.00	9136139
				HE47636PA212	34600	12.20	14.50	9136140
			TC7B3621S	HE33636PA212	34800	12.20	15.00	9136149
				HE47636PA212	36000	13.00	16.00	9136150
	3.5	LS02E-30 LS02E-50	TC7B4221S	-	-	-	-	-
				HE50660PA212	41500	13.00	16.00	9136152
	4	LS02E-30 LS02E-50	TC4B4821H	-	-	-	-	-
				HE50660PA212	47500	12.20	14.50	9136144
			TC7B4821S	-	-	-	-	-
				HE50660PA212	45500	12.50	15.00	9136154
	5	1 1/8" <sup>1</sup> 3/8"	TC4B6021S	-	-	-	-	-
				HE50660PA212	56000	12.20	14.00	10156162
OH8FA119DV5	2	LS01E-30 LS01E-50	TC4B2421H	HE33636PA212	23000	12.20	14.00	9136135
				HE47636PA212	23000	12.20	14.50	9136136
			TC7B2421S	HE33636PA212	23600	12.50	15.00	9136145
				HE47636PA212	23600	13.00	16.00	9136146
	2.5	LS01E-30 LS01E-50	TC4B3021H	HE33636PA212	29400	11.70	14.00	9136137
				HE47636PA212	29400	12.20	14.50	9136138
			TC7B3021S	HE33636PA212	28000	12.50	15.00	9136147
				HE47636PA212	28400	13.00	16.00	9136148
	3	LS01E-30 LS01E-50	TC4B3621H	HE33636PA212	34400	11.70	14.00	9136139
				HE47636PA212	34600	12.20	14.50	9136140
			TC7B3621S	HE33636PA212	34800	12.20	15.00	9136149
				HE47636PA212	36000	13.00	16.00	9136150
	3.5	LS02E-30 LS02E-50	TC7B4221S	-	-	-	-	-
				HE50660PA212	41500	13.00	16.00	9136152
	4	LS02E-30 LS02E-50	TC4B4821H	-	-	-	-	-
				HE50660PA212	47500	12.20	14.50	9136144
			TC7B4821S	-	-	-	-	-
				HE50660PA212	45500	12.50	15.00	9136154
	5	1 1/8" <sup>1</sup> 3/8"	TC4B6021S	-	-	-	-	-
				HE50660PA212	56000	12.20	14.00	10156162

<sup>1</sup> Adapter fitting must be field supplied to connect required 1 1/8" line set to 7/8" service valve connection.