

## OIL FIRED UPFLOW FURNACE SPECIFICATIONS

MODEL NO.	<b>THV1M119A960SA</b> (BECKETT AFG)		
HEATING CAPACITY	High Fire	* Med Fire	Low Fire
HEAT INPUT RATE (BTUH)	156,250	140,000	119,000
OUTPUT BTUH <sup>1</sup>	132,000	119,000	101,000
SEASONAL EFFICIENCY <sup>2</sup>	* 85.0%		
LARGEST REC A/C <sup>3</sup>	5 Tons		
NOMINAL TEMP RISE	66°	66°	66°
CASING HEIGHT (IN.):	50-1/8"		
CASING WIDTH (IN.):	24-1/2"		
CASING DEPTH (IN.):	36-1/2"		
NOMINAL FLUE OUTLET DIA.	7"		
APPROX SHIPPING WEIGHT (LBS)	316		
APPROVAL AGENCY	ETL		
QTY AND SIZE OF PERMANENT FILTERS	(1) 24-3/4" X 19-3/4"		
ELECTRICAL REQUIREMENTS	120/60/1		
MAX FUSE SIZE	20		
TOTAL CURRENT(AMPS) PSC	16		
HEIGHT FROM FLOOR TO CENTER OF FLUE	42-3/4"		
SUPPLY AIR OUTLET SIZE (W-IN. X D-IN.)	20" X 20"		
RETURN AIR DUCTWORK CONNECTION FLANGE SIZE ON FILTER RACK (D-IN. X H-IN.)	23-3/4" X 19"		
RETURN AIR INLET OPENING SIZE IN SIDE CASING (TO BE CUT-OUT BY DEALER) (D-IN. X H-IN.)	23" X 16-3/8"		
FIELD VENT TERMINATION KIT	AOPS8414		
SIDEWALL VENT ACCESSORIES KIT	AOPS8394		
COMBUSTION AIR KIT FOR BECKETT	AOPS8397		
BLOCKED VENT KIT <sup>4</sup>	AOPS2686		

\* AS SHIPPED SETTING

- 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.

ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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

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Model Number Digit	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Brand	Configuration	Flue	Heating Stages	Cabinet Width	Capacity	Capacity	Capacity	Major Modification	Voltage	Airflow Capacity for Cooling	Airflow Capacity for Cooling	Efficiency	Minor Modification
<b>Oil Furnace Model Nomenclature</b> <b>Example Model Numbers</b>	T	H	V	1	M	1	1	9	A	9	6	0	S	A
<b>T= Trane</b>	T													
<b>H = Highboy</b>		H												
<b>V = Vertical Front Flue</b>			V											
<b>1= Single Stage</b>				1										
<b>Cabinet Width: M=25"</b>					M									
<b>Heating Output MBTUH (000's) – factory shipped</b>						1	1	9						
<b>Major Design Change</b>									A					
<b>Voltage (9= 115 Volts)</b>										9				
<b>Airflow: 60MBTUH = 5 Tons</b>											6	0		
<b>S= Standard Efficiency</b>													S	
<b>Minor Design Change</b>														A

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<b>BLOWER DATA:</b>	<b>THV1M119A960SA</b>
<b>BLOWER MODEL</b>	<b>DD 12-11T</b>
<b>MOTOR H.P.</b>	3/4 HP
<b>MOTOR TYPE &amp; NUMBER OF SPEEDS</b>	PSC - 4
<b>HIGH SPEED AIRFLOW (SCFM) @ 0.5 IN. W.G. EXTERNAL STATIC PRESSURE:</b>	2069
<b>Diameter x Width</b>	11 x 11

<b>BURNER DATA</b>	<b>BECKETT "AFG" S - PLATE 3383 (2-3/4U) 31517 CERAMIC</b>		
<b>AIR TUBE LENGTH (IN.)</b>	4 ½"		
<b>BURNER HEAD TYPE:</b>	F6		
<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 FIBER)		

<b>CLEARANCES</b>	
	<b>MINIMUM CLEARANCES TO COMUSTIBLE MATERIALS:</b>
<b>SIDES</b>	0"
<b>FRONT (SERVICE ACCESS)</b>	24"
<b>REAR</b>	0"
<b>FLUE</b>	8"
<b>TOP PLENUM</b>	1"

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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	Low	ML	MH	Low
42,000	Low	ML	MH	Med Low
48,000	Low	ML	MH	Med High
60,000	Low	ML	MH	High

AS SHIPPED CLG. →

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
Low	1308	1300	1274	1265	1237	1169	1127
ML	1583	1526	1515	1491	1458	1420	1371
MH	1894	1874	1839	1804	1746	1683	1632
High	2254	2228	2195	2181	2069	1995	1897
Furnace Motor Current Draw (Amps/Watts) vs. External Static pressure (in. WC.)							
Low	7.56 698	6.99 660	6.66 637	6.50 623	6.21 602	5.91 578	5.83 568
ML	9.21 867	8.44 801	8.19 786	8.01 772	7.61 745	7.28 715	6.93 687
MH	10.6 1040	10.2 999	9.87 971	9.38 923	9.01 895	8.68 864	8.23 829
High	13.5 1320	13.2 1290	12.8 1270	12.4 1240	11.3 1130	10.7 1090	10.2 1020

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
Low	94	94	96	97	99	105	108
ML	78	80	81	82	84	86	90
MH	65	66	67	68	70	73	75
High	54	55	56	56	59	62	65

AS SHIPPED HTG. →

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
Low	84	84	86	87	89	94	98
ML	70	72	73	74	76	78	80
MH	58	59	60	61	63	65	68
High	49	49	50	51	53	55	58

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
Low	72	72	73	74	76	80	83
ML	59	61	62	63	64	66	68
MH	49	50	51	52	54	56	57
High	42	42	43	43	45	47	49

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