



**TRANE®**

# Communicating Upflow/Horizontal Left Downflow/Horizontal Right Direct/Non-Direct Vent Variable Speed, Modulating Condensing Gas Furnace

## XC 95m

TUHMB060ACV3VB, TDHMB060BCV3VB

TUHMB080ACV3VB, TDHMB080ACV3VB

TUHMC100ACV4VB, TDHMC100ACV4VB

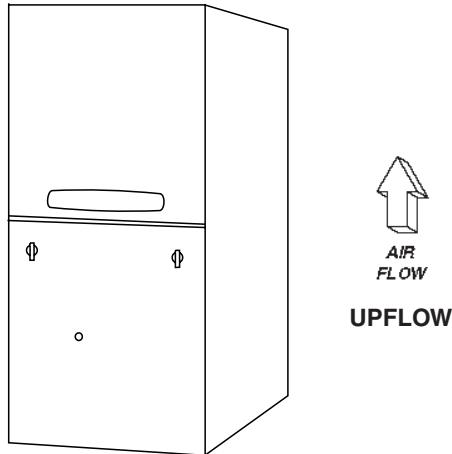
TUHMD120ACV5VB, TDHMD120BCV5VB

Direct or Non-Direct Vent with

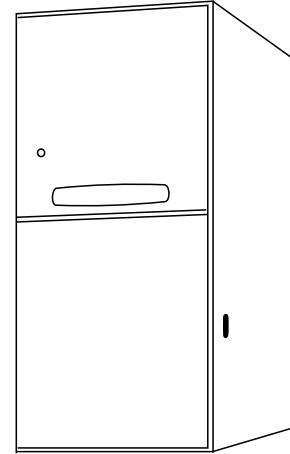
Variable Speed Blower

Variable Speed Inducer

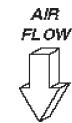
TUHM



TDHM



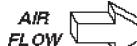
DNDFLOW



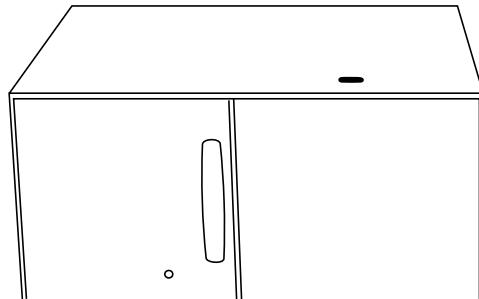
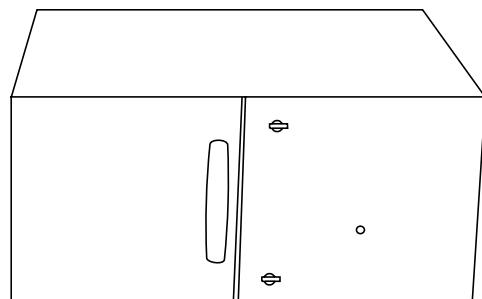
AIR FLOW

UPFLOW/HORIZONTAL

AIR FLOW



DNDFLOW/HORIZONTAL





# General Features

## MODULATING OPERATION

The modulating gas valves provides longer heating cycles for more consistent heating comfort. Modulates from 40% (45% for the TUHMD120) to 100% in less than 1% increments of the furnace's heating capacity saving energy, while at the same time maximizing homeowner comfort.

## COMMUNICATING MODE

Furnace is shipped ready to be connected in communicating mode using three wire hook-up using the TZONE950 or the TCONT900 comfort control.

## ALTERNATE 24V MODE

Furnace is field configurable to 24V non-communicating mode.

## COMFORT CONTROL

Comfortlink II™ Communicating furnace design, offers plug and play – walk away installation. Assures the entire heating and air conditioning system is set up in the proper modes to optimize the engineered performance of the matched system installed. The furnace can also be connected in conventional 24V mode.

## NATURAL GAS MODELS

Central Heating furnace designs are certified by the American Gas Association for both natural and L.P. gas. Limit setting and rating data were established and approved under standard rating conditions using American National Standards Institute standards.

## SAFE OPERATION

The Integrated System Control has solid state devices, which continuously monitor for presence of flame, when the system is in the heating mode of operation. Dual solenoid combination gas valve and regulator provide additional safety.

## QUICK HEATING

Durable, cycle tested, heavy gauge **aluminized steel heat exchanger** quickly transfers heat to provide warm conditioned air to the structure. **Low energy power vent blower**, to increase efficiency and provide a positive discharge of gas fumes to the outside.

## BURNERS

Multiport Inshot burners will give years of quiet and efficient service. All models can be converted to **L.P. gas** without changing burners.

## INTEGRATED SYSTEM CONTROL

Exclusively designed operational program provides total control of furnace limit sensors, blowers, gas valve, flame control and includes self diagnostics for ease of service. Also contains connection points for EAC and Humidifier hookup.

## AIR DELIVERY

The variable speed blower motor has sufficient airflow for most heating and cooling requirements and will switch from heating to cooling speeds on demand from room thermostat. The blower door safety switch will prevent or terminate furnace operation when the blower door is removed.

## SECONDARY HEAT EXCHANGER

The XC95m has a special type 29-4C™ stainless steel secondary heat exchanger to reclaim heat from flue gases which would normally be lost.

## STYLING

**Heavy gauge steel and "wrap-around" cabinet construction** is used in the cabinet with baked-on enamel finish for strength and beauty. The heat exchanger section of the cabinet is completely lined with foil faced fiberglass insulation. This results in quiet and efficient operation due to the excellent acoustical and insulating qualities of fiberglass. Built-in bottom pan and alternate bottom, left or right side return air connection provision.

## FEATURES AND GENERAL OPERATION

The XC95m High Efficiency Gas Furnaces utilize an Adaptive Heat Up Silicon Nitride Hot Surface Ignition system, which eliminates the waste of a constant burning pilot. The integrated system control lights the main burners upon a demand for heat from the room thermostat. Complete front service access.

- a. Low energy power venter
- b. Vent proving pressure switch.



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# Features and Benefits

## XC95m STANDARD EQUIPMENT

- **Comfortlink II™** Communication or 24 Volt control
  - Factory default is communication mode
  - Field configurable to 24 volt non-communicating mode
  - Communication requires comfort control TZONE950 or TCONT900
  - Plug and play installation in communication mode with communicating comfort control
  - Three wire connections to comfort control when used with communicating comfort control (TZONE950 or TCONT900)
  - Furnace modulates from 40% (45% for the TUHM1D120) to 100% of its heating capacity
  - Upflow models convertible to Horizontal Left
  - Downflow models convertible to Horizontal Right
  - Power supply 115/1/60
  - Modulating gas valve
  - Variable speed ECM blower motor with Comfort R™
  - Variable speed induced draft blower
  - Silicon Nitride hot surface igniter with adaptive heat up
  - PVC Venting - 1 or 2 pipe option
  - Integrated solid state control with self-diagnostics
  - Furnace certified to leak 2% or less of nominal air conditioning CFM delivered when pressurized to .5" water column with all inlets, outlets, and drains sealed
  - Stored fault code history in microprocessor nonvolatile memory
  - Insulated blower door
  - Gasketed blower door
  - Attractive color accents
  - Heavy gauge aluminized steel heat exchanger
  - Multi-port In-shot burners
  - Complete front service access
  - Slide out blower assembly
  - Direct / Non-direct Vent Option
  - Optional L.P conversion kit
  - Improved **CleanEffects™** connections
  - Left/right gas connection
  - Accessory hook-up capability
  - Manual reset flame roll out switches
  - Cleanable high velocity filters
  - Hinged blower door \*
  - Perfect fit door latches\*
  - **Optional extended warranties**
- \* (Upflow only)



# Features and Benefits

## XC95m OPTIONAL EQUIPMENT

Comfort Control XL950, Communicating.....	TZONE950AC52ZA [ ]
Comfort Control XL900, Communicating.....	TCONT900AC43UA [ ]
Comfort Control XL802 Programmable 7 Day, 3-Ht, 2-Cl .....	TCONT802AS32DA [ ]
Comfort Control XL803 Programmable 7 Day, 3-Ht, 2-Cl with dehumidification.....	TCONT803AS32DA [ ]
Propane Conversion Kit.....	BAYLPKT220B [ ]
Propane Conversion Kit (with stainless steel burners) .....	BAYLPSS220B [ ]
5" Expandable High Efficiency Media Air Filter, "Perfect Fit" (17-1/2" Wide Gas Furnace) .....	TFM175A9FR0 [ ]
5" Expandable High Efficiency Media Air Filter, "Perfect Fit" (21" Wide Gas Furnace).....	TFM210A9FR0 [ ]
5" Expandable High Efficiency Media Air Filter, "Perfect Fit" (24-1/2" Wide Gas Furnace) .....	TFM245A9FR0 [ ]
1" Expandable Standard Efficiency Media Air Filter, "Perfect Fit" (17-1/2" Wide Gas Furnace) .....	TFP175A9FR0 [ ]
1" Expandable Standard Efficiency Media Air Filter, "Perfect Fit" (21" Wide Gas Furnace) .....	TFP210A9FR0 [ ]
1" Expandable Standard Efficiency Media Air Filter, "Perfect Fit" (24-1/2" Wide Gas Furnace) .....	TFP245A9FR0 [ ]
Coil Enclosure (17-1/2" Wide Cabinets) .....	BAYCLE17A1722A [ ]
Coil Enclosure (21" Wide Cabinets) .....	BAYCLE21A2130A [ ]
Coil Enclosure (24-1/2" Wide Cabinets) .....	BAYCLE24A2430A [ ]
Downflow Subbase .....	BAYBASE205 [ ]
Side Filter Rack .....	BAYFLTR200 [ ]
Filter Rack Kit - Left & bottom return only for TUHMB060,080,C100. Left, right & bottom returns for TUHMD120BAYRACK960 .....	BAYRACK960 [ ]
Filter Kit/Horizontal Conversion TUHMB060,080.....	BAYFLTR203 [ ]
Filter Kit/Horizontal Conversion TUHMC100 .....	BAYFLTR204 [ ]
Filter Kit/Horizontal Conversion TUHMD120 .....	BAYFLTR205 [ ]
High Altitude Pressure Switch Kit TUHMB060 .....	BAYSWT07AHALTA [ ]
High Altitude Pressure Switch Kit TUHMB080,C100 .....	BAYSWT09AHALTA [ ]
High Altitude Pressure Switch Kit TUHMD120 .....	BAYSWT08AHALTA [ ]
Concentric Vent Kit TUHM Furnaces.....	BAYAIR30AVENTA [ ]
Sidewall Vent Termination Kit All 2 Pipe Direct Vent Furnaces .....	BAYVENT200B [ ]
Cleanable Filter (14.5"/17.5" wide Upflow models).....	BAYFLTR317 [ ]
Cleanable Filter (21" wide Upflow models).....	BAYFLTR321 [ ]
Cleanable Filter (24.5" wide Upflow models) .....	BAYFLTR324 [ ]
CleanEffects™, Whole House Air Cleaner (Upflow 17-1/2" Wide Gas Furnace) .....	TFD175ALFR000B [ ]
CleanEffects™, Whole House Air Cleaner (Upflow 21" Wide Gas Furnace) .....	TFD210ALFR000B [ ]
CleanEffects™, Whole House Air Cleaner (Upflow 24-1/2" Wide Gas Furnace) .....	TFD245ALFR000B [ ]
CleanEffects™, Whole House Air Cleaner (Downflow 17-1/2" Wide Gas Furnace) .....	TFD17DALFR000B [ ]
CleanEffects™, Whole House Air Cleaner (Downflow 21" Wide Gas Furnace) .....	TFD21DALFR000B [ ]
CleanEffects™, Whole House Air Cleaner (Downflow 24-1/2" Wide Gas Furnace) .....	TFD24DALFR000B [ ]
CleanEffects™, Whole House Transformer Kit (120 to 24 Volt - all TFD Air Cleaners).....	BAYTRANS12024 [ ]
CleanEffects™ Connection Kit for Modulating Furnace .....	BAYACCECOMM100 [ ]



# General Data

## TUHM PRODUCT SPECIFICATIONS<sup>①</sup>

MODEL	TUHMB060ACV3VB <sup>⑥</sup>	TUHMB080ACV3VB <sup>⑥</sup>	TUHMC100ACV4VB	TUHMD120ACV5VB <sup>⑥</sup>
TYPE	Upflow/Horizontal Left	Upflow/Horizontal Left	Upflow/Horizontal Left	Upflow/Horizontal Left
<b>RATINGS</b> <sup>②</sup>				
40% (low) heat Input BTUH	24,000	32,000	40,000	54,000
40% (low) heat Capacity BTUH (ICS) <sup>③⑥</sup>	23,352	30,944	38,400	52,000
100% (high) heat Input BTUH	60,000	80,000	100,000	120,000
100% (high) heat Capacity BTUH (ICS) <sup>③</sup>	58,380	77,360	96,000	114,000
Temp. rise (Min.-Max.) °F.	35 - 65	35 - 65	35 - 65	40 - 70
AFUE	97.3	96.7	96.0	95.0
<b>BLOWER DRIVE</b>	DIRECT	DIRECT	DIRECT	DIRECT
Diameter - Width (In.)	10 x 8	10 x 8	10 x 10	10 x 10
No. Used	1	1	1	1
Speeds (No.)	Variable	Variable	Variable	Variable
CFM vs. in. w.g.	See Fan Performance Table	See Fan Performance Table	See Fan Performance Table	See Fan Performance Table
Motor HP	1/2	1/2	1	1
R.P.M.	Variable	Variable	Variable	Variable
Volts / Ph / Hz	115/1/60	115/1/60	115/1/60	115/1/60
FLA	5.2	5.2	7.4	9.9
<b>COMBUSTION FAN - Type</b>	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Drive - No. Speeds	Direct - Variable	Direct - Variable	Direct - Variable	Direct - Variable
Motor HP - RPM	1/50 - 5000	1/50 - 5000	1/50 - 5000	1/50 - 5000
Volts / Ph / Hz	115/3/60	115/3/60	115/3/60	115/3/60
FLA	1.0	1.0	1.0	1.0
<b>FILTER — Furnished?</b>	Yes	Yes	Yes	Yes
Type Recommended	High Velocity	High Velocity	High Velocity	High Velocity
Hi Vel. (No.-Size-Thk.)	1 - 17x25 - 1 in.	1 - 17x25 - 1 in.	1 - 20x25 - 1 in.	1 - 24x25 - 1 in.
<b>VENT Size Min. (in.)</b>	2 Round	2 Round	2.5 Round	3 Round
<b>HEAT EXCHANGER</b>				
Type - Fired - Unfired	Aluminized Steel - Type I	Aluminized Steel - Type I	Aluminized Steel - Type I	Aluminized Steel - Type I
Gauge ( Fired)	20	20	20	20
<b>ORIFICES — Main</b>				
Nat. Gas. Qty. — Drill Size	3 — 45	4 — 45	5 — 45	6 — 45
L.P. Gas Qty. — Drill Size <sup>⑤</sup>	3 — 56	4 — 56	5 — 56	6 — 56
<b>GAS VALVE</b>	Redundant - Three Stage	Redundant - Three Stage	Redundant - Three Stage	Redundant - Three Stage
<b>PILOT SAFETY DEVICE</b>				
Type	Hot Surface Igniter	Hot Surface Igniter	Hot Surface Igniter	Hot Surface Igniter
<b>BURNERS — Type</b>	Multiport Inshot	Multiport Inshot	Multiport Inshot	Multiport Inshot
Number	3	4	5	6
<b>POWER CONN. — V/Ph/Hz</b> <sup>④</sup>	115/1/60	115/1/60	115/1/60	115/1/60
Ampacity (In Amps)	7.7	7.7	10.4	13.5
Max. Overcurrent Protection (Amps)	15	15	15	15
<b>PIPE CONN. SIZE (IN.)</b>	1/2	1/2	1/2	1/2
<b>DIMENSIONS</b>	H x W x D	H x W x D	H x W x D	H x W x D
Crated (In.)	41-3/4 x 19-1/2 x 30-1/2	41-3/4 x 19-1/2 x 30-1/2	41-3/4 x 23 x 30-1/2	41-3/4 x 26-1/2 x 30-1/2
<b>WEIGHT</b>				
Shipping (Lbs.) / Net (Lbs)	158 / 146	168 / 156	197 / 185	206 / 193

<sup>①</sup> Central Furnace heating designs are certified to ANSI Z21.47 / CSA 2.3.

<sup>②</sup> For U.S. applications, above input ratings (BTUH) are up to 2,000 feet, derate 4% per 1,000 feet for elevations above 2,000 feet above sea level.

For Canadian applications, above input ratings (BTUH) are up to 4,500 feet, derate 4% per 1,000 feet for elevations above 4,500 feet above sea level.

<sup>③</sup> Based on U.S. government standard tests.

<sup>④</sup> The above wiring specifications are in accordance with National Electrical Code; however, installations must comply with local codes.

<sup>⑤</sup> Furnace ships in natural gas configuration. The LP conversion kit used with the modulating furnace is BAYLPSS220B or BAYLPKT220B.

<sup>⑥</sup> 45% (low) heat for \*UHM1D120ACV5VB.

<sup>⑦</sup> Energy Star Most Efficient

<sup>⑧</sup> Energy Star



# General Data

## TDHM PRODUCT SPECIFICATIONS

MODEL	TDHMB060BCV3VB ⑥	TDHMC080ACV3VB ⑥	TDHMC100ACV4VB	TDHMD120BCV5VB ⑥
TYPE	Downflow/Horizontal Right	Downflow/Horizontal Right	Downflow/Horizontal Right	Downflow/Horizontal Right
<b>RATINGS ②</b>				
40% (low) heat Input BTUH	24,000	32,000	40,000	48,000
40% (low) heat Capacity BTUH (ICS) ③	22,800	30,400	38,400	45,600
100% (high) heat Input BTUH	60,000	80,000	100,000	120,000
100% (high) heat Capacity BTUH (ICS) ③	57,000	76,000	96,000	114,000
Temp. rise (Min.-Max.) °F.	30 - 60	35 - 65	35 - 65	40 - 70
AFUE	95.0	96.0	96.0	95.0
<b>BLOWER DRIVE</b>	DIRECT	DIRECT	DIRECT	DIRECT
Diameter - Width (In.)	10 x 8	10 x 8	10 x 10	10 x 10
No. Used	1	1	1	1
Speeds (No.)	Variable	Variable	Variable	Variable
CFM vs. in. w.g.	See Fan Performance Table			
Motor HP	1/2	1/2	3/4	1
R.P.M.	Variable	Variable	Variable	Variable
Volts/Ph/Hz	115/1/60	115/1/60	115/1/60	115/1/60
FLA	5.2	5.2	7.4	9.9
<b>COMBUSTION FAN - Type</b>	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Drive - No. Speeds	Direct - Variable	Direct - Variable	Direct - Variable	Direct - Variable
Motor HP - RPM	1/50 - 5000	1/50 - 5000	1/50 - 5000	1/50 - 5000
Volts/Ph/Hz	115/3/60	115/3/60	115/3/60	115/3/60
FLA	1.0	1.0	1.0	1.0
<b>FILTER — Furnished?</b>	Yes	Yes	Yes	Yes
Type Recommended	High Velocity	High Velocity	High Velocity	High Velocity
Hi Vel. (No.-Size-Thk.)	2 - 14x20 - 1 in.	2 - 14x20 - 1 in.	2 - 16x20 - 1 in.	2 - 16x20 - 1 in.
<b>VENT Size Min. (in.)</b>	2 Round	2 Round	2.5 Round	3 Round
<b>HEAT EXCHANGER</b>				
Type - Fired - Unfired	Aluminized Steel - Type I			
Gauge ( Fired)	20	20	20	20
<b>ORIFICES — Main</b>				
Nat. Gas. Qty. — Drill Size	3 — 45	4 — 45	5 — 45	6 — 45
L.P. Gas Qty. — Drill Size ⑤	3 — 56	4 — 56	5 — 56	6 — 56
<b>GAS VALVE</b>	Redundant - Three Stage			
<b>PILOT SAFETY DEVICE</b>				
Type	Hot Surface Igniter	Hot Surface Igniter	Hot Surface Igniter	Hot Surface Igniter
<b>BURNERS — Type</b>	Multiport Inshot	Multiport Inshot	Multiport Inshot	Multiport Inshot
Number	3	4	5	6
<b>POWER CONN. — V/Ph/Hz ④</b>	115/1/60	115/1/60	115/1/60	115/1/60
Ampacity (In Amps)	7.7	7.7	10.4	13.5
Max. Overcurrent Protection (Amps)	15	15	15	15
<b>PIPE CONN. SIZE (IN.)</b>	1/2	1/2	1/2	1/2
<b>DIMENSIONS</b>	H x W x D	H x W x D	H x W x D	H x W x D
Crated (In.)	41-3/4 x 19-1/2 x 30-1/2	41-3/4 x 19-1/2 x 30-1/2	41-3/4 x 23 x 30-1/2	41-3/4 x 26-1/2 x 30-1/2
<b>WEIGHT</b>				
Shipping (Lbs.)/Net (Lbs)	160 / 146	168 / 158	185 / 175	206 / 196

① Central Furnace heating designs are certified to ANSI Z21.47 / CSA 2.3.

② For U.S. applications, above input ratings (BTUH) are up to 2,000 feet, derate 4% per 1,000 feet for elevations above 2,000 feet above sea level.

For Canadian applications, above input ratings (BTUH) are up to 4,500 feet, derate 4% per 1,000 feet for elevations above 4,500 feet above sea level.

③ Based on U.S. government standard tests.

④ The above wiring specifications are in accordance with National Electrical Code; however, installations must comply with local codes.

⑤ Furnace ships in natural gas configuration. The LP conversion kit used with the modulating furnace is BAYLPSS220B or BAYLPKT220B.

⑥ Energy Star



## TUHM AIRFLOW - HEATING

		*UHMB060ACV3VB <sup>A</sup> Furnace Heating Airflow (CFM) and Power (watts) vs. External Static Pressure With Filter							
		Airflow Setting	Target Airflow (See Note 5)	External Static Pressure					
				0.1	0.3	0.5	0.7	0.9	
Heating	40% (low) Heat	Low	465	CFM	393	504	512	546	560
				Temp. Rise	73	57	56	53	51
				Watts	43	81	112	142	140
		Medium Low	504	CFM	435	541	549	580	593
				Temp. Rise	66	53	52	50	49
		Medium**	538	Watts	46	86	119	150	148
				CFM	472	573	580	609	621
				Temp. Rise	61	50	50	47	46
				Watts	50	90	125	159	155
	65% (medium) Heat	High	605	CFM	545	636	644	667	676
				Temp. Rise	53	45	45	43	43
				Watts	60	103	141	177	169
		Low	623	CFM	565	653	660	682	691
				Temp. Rise	68	59	58	57	56
				Watts	64	107	145	182	172
				CFM	622	703	710	727	734
	100% (high) Heat	Medium Low	675	Temp. Rise	62	55	54	53	53
				Watts	75	120	161	199	183
		Medium**	720	CFM	671	745	752	766	771
				Temp. Rise	58	52	51	50	50
		High	810	Watts	86	133	175	215	192
				CFM	769	831	837	843	846
				Temp. Rise	50	46	46	46	46
				Watts	114	164	210	250	211

		*UHMB080ACV3VB <sup>A</sup> Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter							
		Airflow Setting	Target Airflow (See Note 5)	External Static Pressure					
				0.1	0.3	0.5	0.7	0.9	
Heating	40% (low) Heat	Low	571	CFM	512	564	581	538	572
				Temp. Rise	70	63	62	66	62
				Watts	45	77	112	109	146
		Medium Low	643	CFM	586	634	649	606	634
				Temp. Rise	61	56	55	59	56
	65% (medium) Heat	Medium**	714	Watts	57	90	129	127	177
				CFM	661	704	717	673	696
				Temp. Rise	54	51	50	53	51
				Watts	71	106	148	146	207
		High	821	CFM	772	809	819	774	789
				Temp. Rise	46	44	44	46	45
				Watts	99	136	184	176	253
				CFM	757	794	805	760	776
	100% (high) Heat	Low	806	Temp. Rise	67	63	63	66	65
				Watts	95	132	179	172	246
				CFM	862	893	901	855	864
				Temp. Rise	59	56	56	59	58
		Medium Low	907	Watts	127	165	217	202	289
				CFM	967	992	997	951	951
				Temp. Rise	52	51	51	53	53
				Watts	165	205	262	235	332
		Medium**	1008	CFM	1125	1139	1141	1093	1083
				Temp. Rise	45	44	44	46	47
				Watts	233	276	341	288	395
				CFM	1084	1101	1104	1056	1048
	100% (high) Heat	Low	1120	Temp. Rise	65	64	63	66	67
				Watts	214	256	319	273	379
				CFM	1230	1238	1237	1188	1170
				Temp. Rise	57	57	57	59	60
		Medium Low	1260	Watts	286	331	401	325	437
				CFM	1376	1375	1370	1320	1292
				Temp. Rise	51	51	51	53	54
				Watts	369	418	495	381	496
	Medium**	1400	1595	CFM	1595	1580	1570	1519	1474
				Temp. Rise	44	44	45	46	48
				Watts	398	470	522	522	529

Notes:

1. \* First letter may be "A" or "T".
2. ^ Letter may be "A" through "Z".
3. \*\* Factory setting.
4. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.
6. Target airflow is field selectable for high (100%) heat. Target airflow for low and medium heat are percentages of high heat and are not field selectable.



## TUHM AIRFLOW - HEATING

		*UHMC100ACV4VB <sup>A</sup> Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter							
		Airflow Setting	Target Airflow (See Note 5)	External Static Pressure					
				0.1	0.3	0.5	0.7	0.9	
Heating	40% (low) Heat	Low	606	CFM	592	617	623	617	606
				Temp. Rise	61	59	58	59	60
				Watts	78	109	141	173	233
		Medium Low	639	CFM	626	651	655	649	639
				Temp. Rise	58	56	55	56	57
	65% (medium) Heat	Medium**	672	Watts	79	110	142	175	236
				CFM	660	684	688	682	671
				Temp. Rise	55	53	53	53	54
		High	743	Watts	81	111	144	177	241
				CFM	732	755	757	751	739
	100% (high) Heat	Low	1051	Temp. Rise	50	48	48	48	49
				Watts	87	115	149	185	254
				CFM	1048	1065	1060	1052	1038
				Temp. Rise	60	59	59	60	61
		Medium Low	1109	Watts	149	169	208	252	358
				CFM	1107	1123	1116	1108	1094
				Temp. Rise	57	56	56	57	58
		Medium**	1166	Watts	167	186	226	271	386
				CFM	1165	1181	1173	1165	1150
				Temp. Rise	54	53	54	54	55
				Watts	187	204	245	292	417
		High	1289	CFM	1291	1304	1293	1284	1269
				Temp. Rise	49	48	49	49	50
				Watts	236	250	293	343	490
				CFM	1466	1476	1461	1451	1435
		Low	1460	Temp. Rise	60	59	60	60	61
				Watts	319	330	374	430	613
				CFM	1548	1556	1540	1529	1512
	Medium Low	Medium Low	1540	Temp. Rise	57	56	57	57	58
				Watts	364	373	419	476	679
		Medium**	1620	CFM	1629	1637	1618	1608	1590
				Temp. Rise	54	54	54	54	55
		Medium**	1620	Watts	413	419	467	527	750
				CFM	1803	1807	1785	1774	1755
				Temp. Rise	49	48	49	49	50
				Watts	529	532	582	646	864

		*UHMD120ACV5VB <sup>A</sup> Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter							
		Airflow Setting	Target Airflow (See Note 5)	External Static Pressure					
				0.1	0.3	0.5	0.7	0.9	
Heating	45% (low) Heat	Low	748	CFM	728	758	785	805	819
				Temp. Rise	62	59	57	56	55
				Watts	119	107	102	94	108
		Medium Low	788	CFM	769	797	822	840	853
				Temp. Rise	58	56	54	53	53
	65% (medium) Heat	Medium**	832	CFM	813	841	864	880	890
				Temp. Rise	55	53	52	51	50
		Medium**	832	Watts	108	107	122	135	160
				CFM	863	889	910	923	930
	100% (high) Heat	High	880	Temp. Rise	52	50	49	49	48
				Watts	104	108	135	160	191
				CFM	1213	1232	1237	1232	1220
				Temp. Rise	60	60	59	60	60
		Medium Low	1289	Watts	131	160	253	345	405
				CFM	1279	1297	1299	1290	1274
				Temp. Rise	57	57	56	57	58
				Watts	147	178	281	382	445
	100% (high) Heat	Medium**	1361	CFM	1353	1369	1367	1355	1335
				Temp. Rise	54	54	54	54	55
				Watts	168	201	313	423	489
				CFM	1434	1448	1443	1426	1402
		High	1440	Temp. Rise	51	51	51	51	52
				Watts	197	229	352	469	538
				CFM	1699	1707	1690	1659	1621
				Temp. Rise	60	60	60	61	63
		Medium Low	1790	Watts	325	349	495	628	698
				CFM	1790	1797	1775	1740	1696
				Temp. Rise	57	57	57	59	60
				Watts	382	400	551	685	752
	Medium**	Medium**	1890	CFM	1892	1896	1870	1830	1781
				Temp. Rise	54	54	54	56	57
		High	2000	Watts	453	462	616	750	813
				CFM	2004	2006	1975	1929	1873
				Temp. Rise	51	51	52	53	54
				Watts	540	538	694	822	880

Notes:  
1. \* First letter may be "A" or "T".  
2. ^ Letter may be "A" through "Z".  
3. \*\* Factory setting.  
4. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.  
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.  
6. Target airflow is field selectable for high (100%) heat. Target airflow for low and medium heat are percentages of high heat and are not field selectable.



## TUHM AIRFLOW - COOLING

*UHMB060ACV3VB <sup>^</sup> Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter						
Unit Outdoor	Airflow Setting	External Static Pressure				
		0.1	0.3	0.5	0.7	0.9
1.5	290 CFM/ton	CFM Watts	356 29	476 67	488 97	511 132
	310 CFM/ton	CFM Watts	389 32	504 71	516 102	538 138
	330 CFM/ton	CFM Watts	422 36	533 75	544 107	565 144
	350 CFM/ton	CFM Watts	455 39	561 79	566 111	589 150
	370 CFM/ton	CFM Watts	487 43	589 84	600 119	619 158
	400 CFM/ton	CFM Watts	537 50	631 92	655 130	669 171
	430 CFM/ton	CFM Watts	586 57	674 101	684 139	700 182
	450 CFM/ton	CFM Watts	619 63	695 106	717 150	727 193
	290 CFM/ton	CFM Watts	515 47	613 88	623 124	641 164
	310 CFM/ton	CFM Watts	559 53	650 96	660 133	677 175
2	330 CFM/ton	CFM Watts	602 60	688 104	698 143	713 186
	350 CFM/ton	CFM Watts	646 68	707 112	737 156	748 200
	370 CFM/ton	CFM Watts	690 76	763 123	772 165	785 211
	400 CFM/ton	CFM Watts	764 86	816 137	778 180	847 231
	430 CFM/ton	CFM Watts	821 108	876 159	884 206	892 256
	450 CFM/ton	CFM Watts	937 136	968 193	977 241	985 295
	290 CFM/ton	CFM Watts	673 73	749 119	758 161	771 206
	310 CFM/ton	CFM Watts	732 79	791 129	756 160	766 203
	330 CFM/ton	CFM Watts	783 98	843 147	852 193	861 242
	350 CFM/ton	CFM Watts	848 110	894 163	908 212	917 262
2.5	370 CFM/ton	CFM Watts	892 129	937 182	945 232	951 284
	400 CFM/ton	CFM Watts	972 160	1015 213	972 262	957 312
	430 CFM/ton	CFM Watts	1057 191	1078 249	1085 306	1085 360
	450 CFM/ton	CFM Watts	1115 214	1137 275	1142 333	1140 388
	290 CFM/ton	CFM Watts	832 111	885 162	894 210	901 260
	310 CFM/ton	CFM Watts	898 131	942 184	950 234	955 286
	330 CFM/ton	CFM Watts	964 154	998 209	1006 262	1009 314
	350 CFM/ton	CFM Watts	1039 181	1065 237	1073 292	1074 344
	370 CFM/ton	CFM Watts	1095 208	1111 268	1118 326	1116 380
	400 CFM/ton	CFM Watts	1189 257	1212 320	1214 380	1149 435
3	430 CFM/ton	CFM Watts	1292 317	1280 383	1285 448	1278 501
	450 CFM/ton	CFM Watts	1326 366	1317 433	1361 495	1242 510
Notes:						
1. * First letter may be "A" or "T".						
2. ^ Letter may be "A" through "Z".						
3. ** Factory setting.						
4. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.						
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.						

### NOTE:

**CONTINUOUS fan mode during COOLING operation may not be appropriate in humid climates. If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the fan only be used in the AUTO mode.**

## TUHM AIRFLOW - COOLING

*UHMB080ACV3VB <sup>A</sup> Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter							
Unit Outdoor	Airflow Setting	External Static Pressure					
		0.1	0.3	0.5	0.7	0.9	
<b>Cooling</b>	290 CFM/ton	CFM Watts	504 34	565 70	586 104	521 138	540 172
		CFM Watts	547 40	604 77	624 112	559 147	579 182
	310 CFM/ton	CFM Watts	590 47	644 85	663 121	597 157	617 193
		CFM Watts	656 54	695 93	701 130	703 167	694 204
	330 CFM/ton	CFM Watts	676 62	724 102	740 140	674 179	694 217
		CFM Watts	764 75	792 116	801 157	795 197	789 238
	350 CFM/ton	CFM Watts	806 89	844 133	856 175	788 216	810 259
		CFM Watts	877 102	899 145	901 188	895 230	886 275
	<b>2.5</b>	CFM Watts	660 59	709 99	726 136	659 174	680 212
		CFM Watts	740 70	768 109	772 149	769 189	764 229
		CFM Watts	768 81	809 123	822 164	755 205	776 246
		CFM Watts	848 94	869 138	871 179	868 220	858 265
		CFM Watts	875 107	909 153	918 197	850 240	872 284
		CFM Watts	978 130	994 179	992 224	989 270	980 316
		CFM Watts	1037 157	1058 209	1063 258	994 305	1017 354
		CFM Watts	1093 174	1096 227	1082 276	1065 324	1051 378
		CFM Watts	816 92	854 136	865 178	798 220	819 262
		CFM Watts	881 108	914 155	923 199	855 242	877 286
	<b>3</b>	CFM Watts	945 127	974 176	981 222	912 266	935 313
		CFM Watts	1029 148	1043 199	1043 246	1035 292	1028 340
		CFM Watts	1074 170	1093 224	1097 274	1027 322	1050 372
		CFM Watts	1170 206	1181 262	1184 317	1180 370	1174 423
		CFM Watts	1268 254	1276 314	1270 372	1199 430	1224 484
		CFM Watts	1321 287	1321 351	1306 415	1295 477	1251 518
		CFM Watts	972 135	998 185	1005 232	936 277	959 324
		CFM Watts	1047 161	1068 213	1073 262	1003 310	1026 359
	<b>3.5</b>	CFM Watts	1123 189	1138 244	1140 296	1070 347	1094 398
		CFM Watts	1195 215	1204 275	1208 329	1205 383	1195 437
		CFM Watts	1273 257	1278 317	1275 376	1204 433	1228 488
		CFM Watts	1375 316	1385 383	1384 444	1383 513	1305 513
		CFM Watts	1499 389	1487 457	1491 513	1392 513	1303 513
		CFM Watts	1513 398	1512 470	1508 529	1418 524	1341 522
Notes:							
1. * First letter may be "A" or "T".							
2. ^ Letter may be "A" through "Z"							
3. ** Factory setting.							
4. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.							
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.							

**NOTE:**  
**CONTINUOUS** fan mode during **COOLING** operation may not be appropriate in humid climates. If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the fan only be used in the **AUTO** mode.



## TUHM AIRFLOW - COOLING

*UHMC100ACV4VB <sup>A</sup> Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter								
	Unit Outdoor	Airflow Setting	External Static Pressure					
			0.1	0.3	0.5	0.7		
Cooling	2.5	290 CFM/ton	CFM Watts	714 79	734 118	739 157	733 194	722 231
		310 CFM/ton	CFM Watts	765 88	784 128	789 168	782 206	770 244
		330 CFM/ton	CFM Watts	816 96	834 138	838 179	831 220	819 258
		350 CFM/ton	CFM Watts	868 103	884 149	887 192	880 234	867 273
		370 CFM/ton	CFM Watts	919 117	934 161	936 205	929 249	916 290
		400 CFM/ton	CFM Watts	995 135	1009 181	1009 227	1002 274	989 316
		430 CFM/ton	CFM Watts	1072 156	1084 204	1083 253	1075 302	1061 346
		450 CFM/ton	CFM Watts	1123 171	1134 220	1132 271	1124 322	1110 368
		290 CFM/ton	CFM Watts	862 105	879 148	882 190	875 232	863 272
		310 CFM/ton	CFM Watts	924 118	939 162	941 207	934 250	921 291
		330 CFM/ton	CFM Watts	985 133	999 178	1000 224	992 270	979 313
		350 CFM/ton	CFM Watts	1046 149	1059 196	1059 244	1051 292	1037 336
		370 CFM/ton	CFM Watts	1108 167	1119 215	1117 265	1109 316	1095 362
		400 CFM/ton	CFM Watts	1200 197	1209 248	1206 301	1197 355	1183 404
		430 CFM/ton	CFM Watts	1292 232	1299 286	1294 343	1285 400	1270 453
		450 CFM/ton	CFM Watts	1353 258	1359 314	1353 373	1344 432	1328 488
Cooling	3.5	290 CFM/ton	CFM Watts	1011 139	1024 185	1024 232	1017 279	1003 322
		310 CFM/ton	CFM Watts	1082 159	1094 207	1093 256	1085 306	1071 351
		330 CFM/ton	CFM Watts	1154 181	1164 231	1162 283	1153 335	1139 382
		350 CFM/ton	CFM Watts	1225 206	1234 258	1230 312	1222 367	1207 417
		370 CFM/ton	CFM Watts	1297 234	1304 288	1299 345	1290 402	1275 455
		400 CFM/ton	CFM Watts	1404 281	1409 340	1402 400	1393 462	1377 520
		430 CFM/ton	CFM Watts	1512 336	1514 399	1505 464	1495 530	1478 595
		450 CFM/ton	CFM Watts	1583 377	1584 444	1574 512	1564 580	1546 650
		290 CFM/ton	CFM Watts	1159 183	1169 233	1167 285	1158 337	1144 385
		310 CFM/ton	CFM Watts	1241 212	1249 264	1245 319	1236 374	1221 425
		330 CFM/ton	CFM Watts	1323 244	1329 300	1324 358	1315 416	1299 470
		350 CFM/ton	CFM Watts	1404 281	1409 340	1402 400	1393 462	1377 520
		370 CFM/ton	CFM Watts	1486 322	1489 384	1481 448	1471 513	1454 576
		400 CFM/ton	CFM Watts	1609 393	1609 461	1599 530	1588 599	1571 671
		430 CFM/ton	CFM Watts	1732 475	1730 550	1716 624	1705 698	1687 781
		450 CFM/ton	CFM Watts	1813 536	1810 617	1795 694	1783 772	1765 864
Notes:								
1. * First letter may be "A" or "T".								
2. ^ Letter may be "A" through "Z".								
3. ** Factory setting.								
4. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.								
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.								

### NOTE:

CONTINUOUS fan mode during COOLING operation may not be appropriate in humid climates. If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the fan only be used in the AUTO mode.



## TUHM AIRFLOW - COOLING

*UHMD120ACV5VB <sup>A</sup> Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter												
Unit Outdoor	Airflow Setting	External Static Pressure										
		0.1	0.3	0.5	0.7	0.9						
3.5	290 CFM/ton	CFM Watts	1000 122	1024 168	1028 209	1022 251	1011 300					
	310 CFM/ton	CFM Watts	1072 140	1094 188	1097 234	1089 281	1076 331					
	330 CFM/ton	CFM Watts	1143 160	1164 211	1165 261	1157 313	1141 364					
	350 CFM/ton	CFM Watts	1214 182	1233 236	1234 291	1224 347	1207 400					
	370 CFM/ton	CFM Watts	1286 207	1303 264	1302 323	1291 384	1272 438					
	400 CFM/ton	CFM Watts	1393 250	1408 311	1405 377	1392 444	1370 500					
	430 CFM/ton	CFM Watts	1500 300	1513 365	1508 437	1492 509	1468 565					
	450 CFM/ton	CFM Watts	1571 337	1582 406	1576 481	1559 555	1533 611					
4	290 CFM/ton	CFM Watts	1148 161	1169 213	1170 263	1161 315	1146 367					
	310 CFM/ton	CFM Watts	1230 187	1248 242	1248 297	1238 355	1221 408					
	330 CFM/ton	CFM Watts	1311 217	1328 274	1327 335	1315 398	1295 452					
	350 CFM/ton	CFM Watts	1393 250	1408 311	1405 377	1392 444	1370 500					
	370 CFM/ton	CFM Watts	1474 287	1488 352	1483 422	1468 493	1445 549					
	400 CFM/ton	CFM Watts	1597 352	1607 421	1601 497	1583 572	1556 628					
	430 CFM/ton	CFM Watts	1719 427	1727 503	1718 581	1699 655	1668 711					
	450 CFM/ton	CFM Watts	1801 483	1807 563	1797 642	1775 712	1743 768					
5	290 CFM/ton	CFM Watts	1444 273	1458 336	1454 405	1440 475	1417 530					
	310 CFM/ton	CFM Watts	1546 324	1557 391	1552 465	1535 538	1510 594					
	330 CFM/ton	CFM Watts	1648 381	1657 454	1650 531	1631 606	1603 662					
	350 CFM/ton	CFM Watts	1750 447	1757 525	1748 603	1727 676	1696 732					
	370 CFM/ton	CFM Watts	1852 522	1857 604	1845 682	1823 749	1790 804					
	400 CFM/ton	CFM Watts	2004 651	2006 742	1992 811	1967 863	1947 966					
	430 CFM/ton	CFM Watts	2157 803	2156 902	2140 966	2050 966	1947 966					
	450 CFM/ton	CFM Watts	2259 966	2255 966	2140 966	2050 966	1947 966					
	Notes:											
1. * First letter may be "A" or "T".												
2. ^ Letter may be "A" through "Z"												
3. ** Factory setting.												
4. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.												
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.												

**NOTE:**  
**CONTINUOUS** fan mode during **COOLING** operation may not be appropriate in humid climates. If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the fan only be used in the **AUTO** mode.



## TDHM AIRFLOW - HEATING

*DHMB060BCV3VB <sup>A</sup> Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter									
	Airflow Setting	Target Airflow (See Note 5)		External Static Pressure					
				0.1	0.3	0.5	0.7	0.9	
Heating	40% (low) Heat	Low	414	CFM	438	436	458	462	474
				Temp. Rise	48	48	46	46	45
				Watts	26	49	70	90	115
		Medium Low	437	CFM	460	458	479	483	493
				Temp. Rise	46	46	44	44	43
		Medium**	478	Watts	28	52	73	92	118
				CFM	499	497	516	518	526
				Temp. Rise	42	42	41	41	40
				Watts	33	58	79	100	127
	65% (medium) Heat	High	534	CFM	553	551	567	567	571
				Temp. Rise	38	38	37	37	37
				Watts	42	68	90	114	144
		Low	702	CFM	715	713	720	714	708
				Temp. Rise	48	48	48	48	48
				Watts	76	106	140	176	217
				CFM	753	751	755	749	740
	100% (high) Heat	Medium Low	741	Temp. Rise	46	46	45	46	46
				Watts	87	117	154	194	237
				CFM	820	818	819	810	797
				Temp. Rise	42	42	42	42	43
		Medium**	811	Watts	108	140	183	228	275
				CFM	911	909	904	892	873
				Temp. Rise	38	38	38	38	39
				Watts	142	177	226	276	326
	High	Low	900	CFM	906	904	900	888	869
				Temp. Rise	58	58	59	59	61
				Watts	140	175	223	274	323
				CFM	954	952	945	931	910
		Medium Low	950	Temp. Rise	55	55	56	57	58
				Watts	160	197	248	300	350
				CFM	1041	1039	1027	1010	983
				Temp. Rise	51	51	51	52	54
	Medium**	High	1040	Watts	202	243	295	347	393
				CFM	1157	1155	1136	1115	1080
				Temp. Rise	46	46	46	47	49
				Watts	269	317	361	405	439

*DHMB080ACV3VB <sup>A</sup> Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter									
	Airflow Setting	Target Airflow (See Note 5)		External Static Pressure					
				0.1	0.3	0.5	0.7	0.9	
Heating	40% (low) Heat	Low	683	CFM	648	670	681	685	687
				Temp. Rise	57	55	54	54	54
				Watts	79	79	148	155	219
		Medium Low	709	CFM	676	698	708	711	712
				Temp. Rise	54	53	52	52	52
	Medium**	Medium**	735	Watts	85	85	156	163	230
				CFM	705	725	735	737	736
				Temp. Rise	52	51	50	50	50
				Watts	93	90	165	170	241
	65% (medium) Heat	High	845	CFM	824	841	849	846	838
				Temp. Rise	45	44	43	43	44
				Watts	129	119	207	206	291
		Low	936	CFM	923	937	943	936	923
				Temp. Rise	55	54	54	54	55
				Watts	166	148	249	241	336
				CFM	962	974	980	972	956
	100% (high) Heat	Medium Low	972	Temp. Rise	52	52	51	52	53
				Watts	183	161	268	256	355
		Medium**	1008	CFM	1001	1012	1017	1008	990
				Temp. Rise	50	50	50	50	51
				Watts	201	174	288	272	374
				CFM	1165	1171	1173	1158	1130
	High	High	1159	Temp. Rise	43	43	43	44	45
				Watts	286	240	382	348	460
				CFM	1318	1319	1319	1297	1261
				Temp. Rise	53	53	53	54	56
	Low	Low	1300	Watts	382	314	485	431	549
				CFM	1372	1372	1370	1347	1307
				Temp. Rise	51	51	51	52	54
				Watts	420	343	526	463	582
	Medium**	Medium**	1400	CFM	1426	1424	1422	1396	1354
				Temp. Rise	49	49	49	50	52
				Watts	460	373	569	497	617
				CFM	1654	1645	1639	1605	1549
	High	High	1610	Temp. Rise	42	43	43	44	45
				Watts	650	518	770	655	772

Notes:

1. \* First letter may be "A" or "T".
2. ^ Letter may be "A" through "Z".
3. \*\* Factory setting.
4. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL = 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.
6. Target airflow is field selectable for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL = 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.
7. Target airflow is field selectable for high (100%) heat. Target airflow for low and medium heat are percentages of high heat and are not field selectable.



## TDHM AIRFLOW - HEATING

*DHMC100ACV4VB <sup>A</sup> Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter									
	Airflow Setting	Target Airflow (See Note 5)		External Static Pressure					
				0.1	0.3	0.5	0.7	0.9	
Heating	40% (low) Heat	Low	668	CFM	666	657	643	628	609
				Temp. Rise	59	59	61	62	64
		Medium Low	712	Watts	24	92	116	206	206
				CFM	710	701	686	670	650
				Temp. Rise	55	56	57	58	60
	65% (medium) Heat	Medium**	734	Watts	32	105	128	220	227
				CFM	732	723	708	690	670
				Temp. Rise	53	54	55	56	58
		High	757	Watts	36	111	134	227	237
				CFM	755	744	729	711	690
	100% (high) Heat	Low	1080	Temp. Rise	52	52	53	55	56
				Watts	40	118	140	235	247
				CFM	1077	1063	1041	1016	985
				Temp. Rise	59	59	61	62	64
				Watts	128	237	237	368	398
		Medium Low	1152	CFM	1149	1134	1110	1083	1051
				Temp. Rise	55	56	57	58	60
				Watts	153	270	262	404	432
		Medium**	1188	CFM	1185	1169	1145	1117	1084
				Temp. Rise	53	54	55	56	58
				Watts	166	286	275	422	449
		High	1224	CFM	1221	1205	1180	1151	1117
				Temp. Rise	52	52	53	55	56
				Watts	180	304	288	441	466

*DHMD120BCV5VB <sup>A</sup> Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter									
	Airflow Setting	Target Airflow (See Note 5)		External Static Pressure					
				0.1	0.3	0.5	0.7	0.9	
Heating	40% (low) Heat	Low	780	CFM	827	870	800	779	785
				Temp. Rise	57	55	59	61	60
		Medium Low	827	Watts	76	98	142	175	212
				CFM	871	917	846	827	834
				Temp. Rise	55	52	56	57	57
	65% (medium) Heat	Medium**	870	Watts	85	108	153	188	226
				CFM	911	959	889	872	878
				Temp. Rise	52	50	53	54	54
		High	959	Watts	94	117	165	201	240
				CFM	994	1047	977	964	969
	100% (high) Heat			Temp. Rise	48	45	49	49	49
	Low	1195	Watts	116	140	191	230	272	
			CFM	1214	1282	1211	1209	1212	
			Temp. Rise	57	54	57	57	57	
			Watts	193	223	285	334	385	
	Medium Low	1267	CFM	1281	1353	1282	1283	1286	
			Temp. Rise	54	51	54	53	53	
			Watts	224	255	322	375	431	
	Medium**	1469	CFM	1470	1553	1482	1493	1493	
			Temp. Rise	47	44	46	46	46	
			Watts	329	366	449	517	592	
	High	1685	CFM	1671	1767	1696	1717	1715	
			Temp. Rise	41	39	40	40	40	
			Watts	479	519	633	722	831	
			CFM	1648	1743	1671	1691	1690	
			Temp. Rise	64	61	63	62	62	
	100% (high) Heat	Medium Low	1760	Watts	459	499	609	695	799
				CFM	1741	1842	1770	1795	1792
				Temp. Rise	61	57	60	59	59
		Medium**	1850	Watts	541	582	709	808	932
				CFM	1825	1931	1859	1888	1885
				Temp. Rise	58	55	57	56	56
		High	2040	Watts	624	663	811	922	1068
				CFM	2002	1983	1977	1902	1853
				Temp. Rise	53	53	53	55	57
				Watts	827	925	925	925	925

Notes:

1. \* First letter may be "A" or "T".
2. ^ Letter may be "A" through "Z".
3. \*\* Factory setting.
4. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.
6. Target airflow is field selectable for high (100%) heat. Target airflow for low and medium heat are percentages of high heat and are not field selectable.



## TDHM AIRFLOW - COOLING

*DHMB060BCV3VB <sup>A</sup> Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter							
Unit Outdoor Size (tons)	Airflow Setting	External Static Pressure					
		0.1	0.3	0.5	0.7	0.9	
1.5	290 CFM/ton	CFM Watts	458 28	456 52	477 73	481 92	491 118
	310 CFM/ton	CFM Watts	487 32	485 56	504 77	507 97	515 124
	330 CFM/ton	CFM Watts	516 36	514 61	532 82	533 104	540 132
	350 CFM/ton	CFM Watts	545 40	543 66	559 88	560 111	564 141
	370 CFM/ton	CFM Watts	574 45	572 72	586 95	586 120	589 151
	400 CFM/ton	CFM Watts	617 54	615 81	627 107	625 135	625 169
	430 CFM/ton	CFM Watts	660 63	658 91	668 120	665 152	662 189
	450 CFM/ton	CFM Watts	689 70	687 99	695 130	691 164	686 203
	290 CFM/ton	CFM Watts	598 50	596 77	609 101	608 128	609 161
	310 CFM/ton	CFM Watts	636 58	634 85	645 113	643 142	641 177
2	330 CFM/ton	CFM Watts	675 66	673 95	682 125	678 158	674 196
	350 CFM/ton	CFM Watts	713 76	711 105	718 139	713 175	706 216
	370 CFM/ton	CFM Watts	752 87	750 117	754 154	748 193	739 236
	400 CFM/ton	CFM Watts	810 104	808 136	809 178	800 222	788 269
	430 CFM/ton	CFM Watts	868 125	866 159	863 205	853 253	836 301
	450 CFM/ton	CFM Watts	906 140	904 175	900 223	888 274	869 323
	290 CFM/ton	CFM Watts	738 82	735 113	741 148	735 186	727 228
	310 CFM/ton	CFM Watts	786 97	784 128	786 168	778 210	767 255
	330 CFM/ton	CFM Watts	834 112	832 145	831 189	822 235	808 282
	350 CFM/ton	CFM Watts	882 130	880 164	877 212	866 261	849 310
2.5	370 CFM/ton	CFM Watts	930 150	928 186	922 236	909 287	889 337
	400 CFM/ton	CFM Watts	1003 183	1000 222	990 274	975 326	950 375
	430 CFM/ton	CFM Watts	1075 220	1073 263	1059 314	1041 364	1011 408
	450 CFM/ton	CFM Watts	1123 248	1121 294	1104 341	1084 389	1052 427
	290 CFM/ton	CFM Watts	877 128	875 162	872 209	861 258	845 307
	310 CFM/ton	CFM Watts	935 152	933 188	927 238	914 289	893 339
	330 CFM/ton	CFM Watts	993 178	991 217	981 268	966 321	942 370
	350 CFM/ton	CFM Watts	1051 207	1049 249	1036 300	1019 352	991 398
	370 CFM/ton	CFM Watts	1109 239	1106 284	1090 333	1071 381	1040 422
	400 CFM/ton	CFM Watts	1195 294	1193 345	1172 384	1150 422	1113 449
3	430 CFM/ton	CFM Watts	1282 357	1280 414	1254 436	1229 456	1186 463
	450 CFM/ton	CFM Watts	1334 405	1351 466	1272 463	1201 459	1125 455

Notes:

- \* First letter may be "A" or "T".
- <sup>A</sup> Letter may be "A" through "Z"
- \*\* Factory setting.
- Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.
- LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.

**NOTE:**  
**CONTINUOUS** fan mode during **COOLING** operation may not be appropriate in humid climates. If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the fan only be used in the **AUTO** mode.



## TDHM AIRFLOW - COOLING

*DHMB080ACV3VB <sup>A</sup> Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter						
Unit Outdoor	Airflow Setting		External Static Pressure			
			0.1	0.3	0.5	0.7
2	290 CFM/ton	CFM	535	558	572	580
		Watts	44	74	108	142
	310 CFM/ton	CFM	579	601	614	620
		Watts	51	82	118	152
	330 CFM/ton	CFM	622	643	655	660
		Watts	58	92	128	163
	350 CFM/ton	CFM	665	697	705	697
		Watts	67	104	141	175
	370 CFM/ton	CFM	709	728	738	741
		Watts	76	113	151	187
	400 CFM/ton	CFM	779	802	809	797
		Watts	90	131	169	207
2.5	430 CFM/ton	CFM	839	854	863	862
		Watts	110	152	192	231
	450 CFM/ton	CFM	903	917	916	906
		Watts	125	168	208	248
	290 CFM/ton	CFM	692	712	723	726
		Watts	72	109	146	182
	310 CFM/ton	CFM	747	765	774	776
		Watts	85	123	162	199
	330 CFM/ton	CFM	801	817	826	827
		Watts	99	140	179	217
	350 CFM/ton	CFM	855	870	878	877
		Watts	115	157	198	237
3	370 CFM/ton	CFM	909	923	930	927
		Watts	132	177	218	259
	400 CFM/ton	CFM	1005	1014	1014	1003
		Watts	164	211	252	295
	430 CFM/ton	CFM	1072	1082	1086	1078
		Watts	196	246	291	336
	450 CFM/ton	CFM	1126	1134	1137	1129
		Watts	221	272	319	366
	290 CFM/ton	CFM	849	865	873	872
		Watts	113	156	196	235
Notes:	310 CFM/ton	CFM	915	928	935	932
		Watts	134	179	221	261
	330 CFM/ton	CFM	980	992	997	993
		Watts	158	205	248	290
	350 CFM/ton	CFM	1045	1055	1060	1053
		Watts	184	233	278	322
	370 CFM/ton	CFM	1110	1119	1122	1114
		Watts	213	264	311	357
	400 CFM/ton	CFM	1211	1208	1209	1202
		Watts	260	312	366	418
	430 CFM/ton	CFM	1305	1309	1309	1295
		Watts	319	373	428	482
	450 CFM/ton	CFM	1370	1372	1371	1320
		Watts	360	415	473	502

Notes:

1. \* First letter may be "A" or "T".
2. ^ Letter may be "A" through "Z".
3. \*\* Factory setting.
4. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.

**NOTE:**  
**CONTINUOUS** fan mode during COOLING operation may not be appropriate in humid climates. If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the fan only be used in the AUTO mode.



## TDHM AIRFLOW - COOLING

*DHMC100ACV4VB <sup>A</sup> Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure With Filter							
Unit Outdoor	Airflow Setting	External Static Pressure					
		0.1	0.3	0.5	0.7	0.9	
2.5	290 CFM/ton	CFM Watts	723 58	713 109	699 157	682 204	661 234
	310 CFM/ton	CFM Watts	773 72	763 125	747 174	729 222	707 256
	330 CFM/ton	CFM Watts	823 87	812 141	795 182	776 241	753 279
	350 CFM/ton	CFM Watts	873 103	861 158	842 210	823 260	798 302
	370 CFM/ton	CFM Watts	923 120	910 177	892 229	870 279	844 325
	400 CFM/ton	CFM Watts	998 148	984 206	964 258	940 309	912 360
	430 CFM/ton	CFM Watts	1072 179	1058 238	1036 290	1011 341	981 396
	450 CFM/ton	CFM Watts	1122 201	1107 260	1084 312	1058 362	1026 420
	3	CFM Watts	868 101	856 157	839 208	818 258	794 299
		CFM Watts	928 122	915 179	896 231	874 281	849 327
		CFM Watts	988 144	974 202	954 254	931 305	903 356
		CFM Watts	1047 169	1033 227	1012 279	987 330	958 384
		CFM Watts	1107 195	1092 253	1070 305	1044 356	1013 413
		CFM Watts	1197 237	1181 296	1157 346	1128 395	1095 455
		CFM Watts	1287 284	1269 341	1243 390	1213 436	1177 498
		CFM Watts	1347 317	1329 373	1301 420	1269 465	1232 526
Cooling	3.5	CFM Watts	1013 154	999 212	978 265	954 315	926 367
		CFM Watts	1082 184	1068 242	1048 294	1020 345	990 401
		CFM Watts	1152 215	1137 274	1113 325	1086 375	1054 434
		CFM Watts	1222 250	1206 308	1181 358	1152 406	1118 467
		CFM Watts	1292 286	1274 344	1248 392	1218 439	1182 500
		CFM Watts	1397 346	1378 401	1349 446	1316 489	1277 548
		CFM Watts	1501 411	1481 463	1451 503	1415 541	1373 595
		CFM Watts	1571 457	1550 507	1518 543	1481 577	1437 625
		CFM Watts	1157 218	1142 276	1118 328	1091 377	1058 436
		CFM Watts	1237 257	1220 315	1195 365	1166 413	1131 474
4	4	CFM Watts	1317 300	1299 357	1272 405	1241 450	1204 512
		CFM Watts	1397 346	1378 401	1349 446	1316 489	1277 548
		CFM Watts	1476 395	1456 448	1426 489	1392 529	1350 584
		CFM Watts	1596 474	1575 523	1542 558	1504 591	1460 636
		CFM Watts	1716 560	1693 604	1658 631	1617 726	1569 726
		CFM Watts	1796 622	1771 661	1735 682	1693 726	1642 726
		Notes:					
		1. * First letter may be "A" or "T".					
2. ^ Letter may be "A" through "Z"							
3. ** Factory setting.							
4. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.							
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.							

**NOTE:**  
**CONTINUOUS fan mode during COOLING operation may not be appropriate in humid climates. If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the fan only be used in the AUTO mode.**

## TDHM AIRFLOW - COOLING

*DHMD120BCV5VB <sup>A</sup> Furnace Cooling Airflow (CFM) & Power (Watts) vs. External Static Pressure w/Filter							
Unit Outdoor Size (tons)	Airflow Setting		External Static Pressure				
			0.1	0.3	0.5	0.7	
3.5	290 CFM/ton	CFM	1046	1103	1032	1027	
		Watts	131	157	210	251	
	310 CFM/ton	CFM	1111	1172	1102	1099	
		Watts	153	180	237	280	
	330 CFM/ton	CFM	1177	1242	1171	1171	
		Watts	178	207	266	313	
	350 CFM/ton	CFM	1242	1311	1240	1243	
		Watts	205	236	300	350	
	370 CFM/ton	CFM	1307	1381	1310	1315	
		Watts	236	269	337	392	
	400 CFM/ton	CFM	1405	1485	1414	1422	
		Watts	289	325	401	464	
4	430 CFM/ton	CFM	1503	1589	1518	1530	
		Watts	351	389	476	547	
	450 CFM/ton	CFM	1569	1658	1587	1602	
		Watts	397	436	533	610	
	290 CFM/ton	CFM	1181	1247	1176	1176	
		Watts	180	209	269	316	
	310 CFM/ton	CFM	1256	1326	1255	1258	
		Watts	212	243	308	359	
	330 CFM/ton	CFM	1331	1405	1335	1340	
		Watts	248	282	352	408	
5	350 CFM/ton	CFM	1405	1485	1414	1422	
		Watts	289	325	401	464	
	370 CFM/ton	CFM	1480	1564	1493	1505	
		Watts	336	373	457	526	
	400 CFM/ton	CFM	1592	1683	1612	1628	
		Watts	415	454	554	634	
	430 CFM/ton	CFM	1704	1802	1731	1751	
		Watts	507	548	667	761	
	450 CFM/ton	CFM	1778	1882	1810	1833	
		Watts	577	617	753	857	
<b>Notes:</b>							
1. * First letter may be "A" or "T".							
2. ^ Letter may be "A" through "Z"							
3. ** Factory setting.							
4. Continuous Fan Setting: Heating or cooling airflow is approximately 50% of selected cooling value.							
5. LOW 350 cfm/ton is recommended for variable speed application for COMFORT & HUMID CLIMATE setting; NORMAL is 400 cfm/ton; HIGH 450 cfm/ton is for DRY CLIMATE setting.							

### NOTE:

**CONTINUOUS** fan mode during **COOLING** operation may not be appropriate in humid climates. If the indoor air exceeds 60% relative humidity or simply feels uncomfortably humid, it is recommended that the fan only be used in the **AUTO** mode.



# Maximum Vent Length Table

VENT LENGTH TABLE - MODULATING FURNACE						
ALTITUDE	MAXIMUM TOTAL EQUIVALENT LENGTH IN FEET FOR VENT AND INLET AIR (SEE NOTES)					
0-7000 Feet	2 INCH PIPE		2.5 INCH PIPE		3 or 4 INCH PIPE	
	NATURAL GAS	PROPANE	NATURAL GAS	PROPANE	NATURAL GAS	PROPANE
UH/DHMB060ACV3V	200	Not Allowed	200	Not Allowed	200	150
UH/DHMB080ACV3V	50	Not Allowed	120	Not Allowed	200	150
UH/DHMC100ACV4V	Not Allowed	Not Allowed	60	Not Allowed	200	150
UHMD120ACV5V	Not Allowed	Not Allowed	Not Allowed	Not Allowed	200	150
DHMD120ACV5V	Not Allowed	Not Allowed	Not Allowed	Not Allowed	200	100
7000-9500 Feet	2 INCH PIPE		2.5 INCH PIPE		3 or 4 INCH PIPE	
	NATURAL GAS	PROPANE	NATURAL GAS	PROPANE	NATURAL GAS	PROPANE
UH/DHMB060ACV3V	100	Not Allowed	100	Not Allowed	100	100
UH/DHMB080ACV3V	25	Not Allowed	60	Not Allowed	100	100
UH/DHMC100ACV4V	Not Allowed	Not Allowed	30	Not Allowed	100	100
UHMD120ACV5V	Not Allowed	Not Allowed	Not Allowed	Not Allowed	100	100
DHMD120ACV5V	Not Allowed	Not Allowed	Not Allowed	Not Allowed	100	50
9500-12000 Feet	2 INCH PIPE		2.5 INCH PIPE		3 or 4 INCH PIPE	
	NATURAL GAS	PROPANE	NATURAL GAS	PROPANE	NATURAL GAS	PROPANE
UH/DHMB060ACV3V	50	Not Allowed	50	Not Allowed	50	38
UH/DHMB080ACV3V	Not Allowed	Not Allowed	30	Not Allowed	50	38
UH/DHMC100ACV4V	Not Allowed	Not Allowed	Not Allowed	Not Allowed	50	38
UHMD120ACV5V	Not Allowed	Not Allowed	Not Allowed	Not Allowed	50	38
DHMD120ACV5V	Not Allowed	Not Allowed	Not Allowed	Not Allowed	50	25

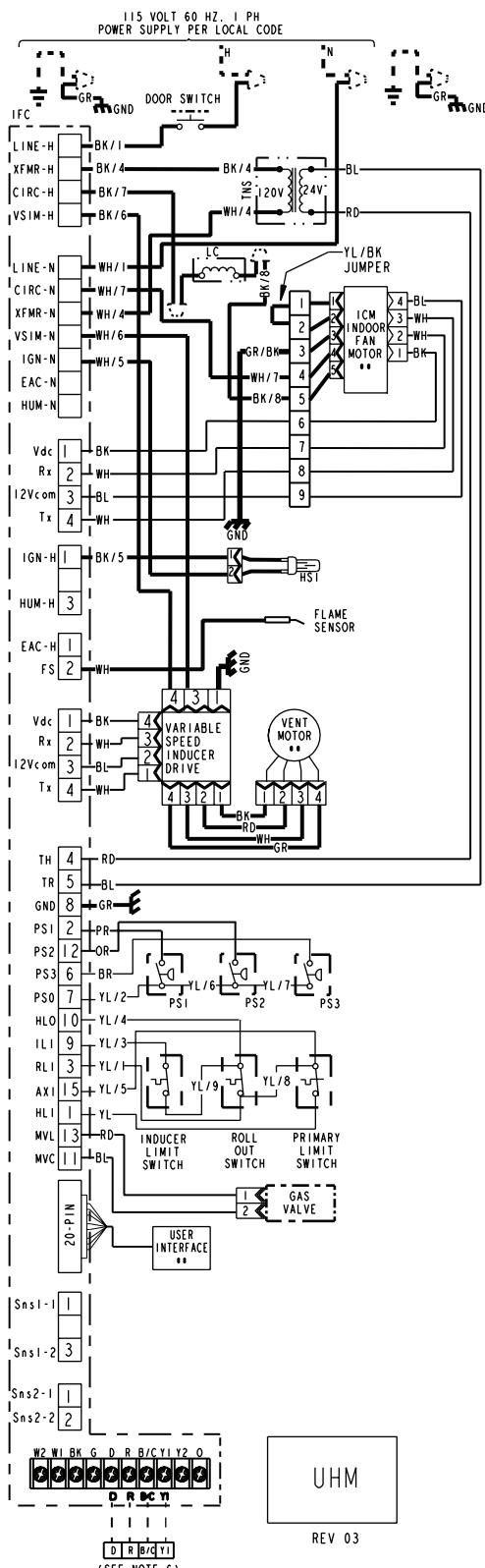
Notes: \* - First letter may be "A" or "T", \*\* - Last two digits may be "A" thru "Z"

1. Minimum vent length for all models: 3' horizontal or 3' vertical
2. DO NOT MIX PIPE DIAMETERS IN THE SAME LENGTH OF PIPE OUTSIDE THE FURNACE CABINET, (Except adapters at the top of the furnace). If different inlet and vent pipe sizes are used, the vent pipe must adhere to the maximum length limit shown in the table above (See note 6 below for exception). The inlet pipe can be of a larger diameter, but never smaller than the vent pipe.
3. MAXIMUM PIPE LENGTHS MUST NOT BE EXCEEDED! THE LENGTH SHOWN IS NOT A COMBINED TOTAL, IT IS THE MAXIMUM LENGTH OF EACH (Vent or Inlet air pipes).
4. One SHORT radius 90° elbow is equivalent to 10' of 3" pipe and one LONG radius elbow is equivalent to 6' of 3" pipe. One 90° elbow is equivalent to 7½' of 2½" pipe or 5' of 2" pipe. Two 45° elbows equal one 90° elbow.
5. The termination tee or bend must be included in the total number of elbows. If the BAYAIR30AVENTA termination kit is used, the equivalent length of pipe is 5 feet. BAYVENT200B equivalent length is 0 feet.
6. Pipe adapters are field supplied. Downflow models, UHM 100 and UHM 120 models include the 2" x 3" adapter.
7. For Canadian applications ONLY, IPEX 196006 may be used for horizontal and vertical terminations. IPEX 081216, IPEX 081218, and IPEX 081219 may only be used for horizontal vent terminations. Equivalent lengths are IPEX 196009 = 5 feet, IPEX 081216 = 11 feet, IPEX 081218 = 16 feet, and IPEX 081219 = 21 feet



# Electrical Data

## TUHM Schematic Diagram



DIAGNOSTIC CODES	
RED LED - FAULT Data - 1 Flash every 20 seconds	
2 FLASHES - SYSTEM LOCKOUT RETRIES OR RECYCLES EXCEEDED	6 FLASHES - 115 VOLT AC POWER REVERSED OR IGNITER FAULT
3 FLASHES - PRESSURE SWITCH FAULT	7 FLASHES - GAS VALVE CIRCUIT ERROR
4 FLASHES - OPEN LIMIT SWITCH	8 FLASHES - LOW FLAME SENSE SIGNAL
5 FLASHES - FLAME SENSED WHEN NO FLAME SHOULD BE PRESENT	9 FLASHES - OPEN INDUCER LIMIT
	10 FLASHES - COMMUNICATION FAULT
GREEN LED - STATUS	CONTINUOUS ON - INTERNAL CONTROL FAILURE
SLOW FLASH - NORMAL, NO CALL FOR HEAT	
FAST FLASH - NORMAL, CALL FOR HEAT PRESENT	
GREEN AND RED LED'S ON CONTINUOUS - INTERNAL CONTROL FAILURE	
GREEN AND RED LED'S OFF CONTINUOUS - FUSE OPEN	

WARNING	CAUTION
HAZARDOUS VOLTAGE	USE COPPER CONDUCTORS ONLY!
DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.	UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.	FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

### INTEGRATED FURNACE CONTROL

REPLACE WITH PART CNT 04829 OR EQUIVALENT  
ELECTRICAL RATING  
INPUT: 25 V.A.C., 60 HZ.  
XFRM SEC. CURRENT: 450 MA. + MV LOAD  
MV OUTPUT: 1.5 A @ 24 V.A.C.  
IND OUTPUT: 3 PHASE OUTPUT  
IGN OUTPUT: 2.0 @ 120V.A.C.  
CIRC. BLOWER OUTPUT: 14.5 FLA,  
25 LRA @ 120 VAC  
HUMIDIFIER & AIR CLEANER  
MAX. LOAD: 1.0 A @ 120 VAC

TIMINGS  
PREPURGE: 0 SEC.; INTERPURGE: 60 SEC.  
POST PURGE: 5 SECONDS  
IGNITOR WARMUP: 20 SECONDS  
IAP: 3; TFI: 5 SECONDS  
RETRIES: 2; RECYCLES: 10  
HEAT ON DELAY: 45 SECONDS  
COOL ON DELAY: 0 SECONDS  
AUTO RESTART: 60 MINUTES  
AUTO RESTART PURGE: 15 SECONDS

TCO THERMAL CUT OUT  
 PS PRESSURE SWITCH  
 FRS FLAME ROLLOUT SWITCH  
 FP FLAME SENSOR  
 CHASSIS GROUND  
 HSI HOT SURFACE IGNITER  
 DOOR SWITCH  
 FUSE  
 LC LINE CHOKE

WIRE COLOR  
BK BLACK GR GREEN  
WH WHITE BR BROWN  
YL YELLOW RD RED  
OR ORANGE BL BLUE

CF	CAPACITOR	L LINE	TH 24 VAC (HOT)
		N NEUTRAL	TR 24 VAC (COMMON)
		GND GROUND	MV MAIN GAS VALVE
		B/C COMMON	TNS TRANSFORMER
		HLO HIGH LIMIT OUTPUT	ILI INDUCER LIMIT INPUT
		HLI HIGH LIMIT INPUT	

### NOTES:

1. IF ANY OF THE ORIGINAL WIRING AS SUPPLIED WITH THIS FURNACE MUST BE REPLACED, IT, MUST BE WITH WIRE HAVING A TEMPERATURE RATING OF AT LEAST 105° C.
2. USER INTERFACE MUST BE INSTALLED FOR PROPER FURNACE INSTALLATION & SET-UP.
3. CORRECT PERSONALITY MODULE IS REQUIRED FOR PROPER FURNACE OPERATION. PERSONALITY MODULE IS SPECIFIC TO EACH MODEL & SERIAL NUMBER, AND IS TO REMAIN WITHIN IT'S ORIGINAL UNIT.
4. THESE LEADS PROVIDE 120V POWER CONNECTIONS FOR ELECTRONIC AIR CLEANER (EAC) AND HUMIDIFIER (HUM). MAX. LOAD: 1.0 AMPS EACH.
5. ON POWER-UP, LAST FOUR FAULTS, IF ANY, WILL BE FLASHED ON RED LED. GREEN LED WILL BE SOLID ON DURING LAST FAULT RECOVERY.
6. Y1 IS OUTPUT TO NON-COMMUNICATING OUTDOOR UNIT.
7. LINE CHOKE (LC) NOT USED ON ALL MODELS.
8. IN 24 VOLT MODE, AN OPTIONAL HUMIDISTAT CAN BE CONNECTED BETWEEN THE "R" AND "BK" TERMINALS. FACTORY INSTALLED "BK JUMPER" ON THE CIRCUIT BOARD MUST BE CUT. SEE FURNACE INSTALLERS GUIDE FOR DETAILS.
9. USED ON UHM/UXM MODELS ONLY.
10. THESE TWO MOTOR CONNECTIONS (E8 & E9) ARE INTERCHANGEABLE.

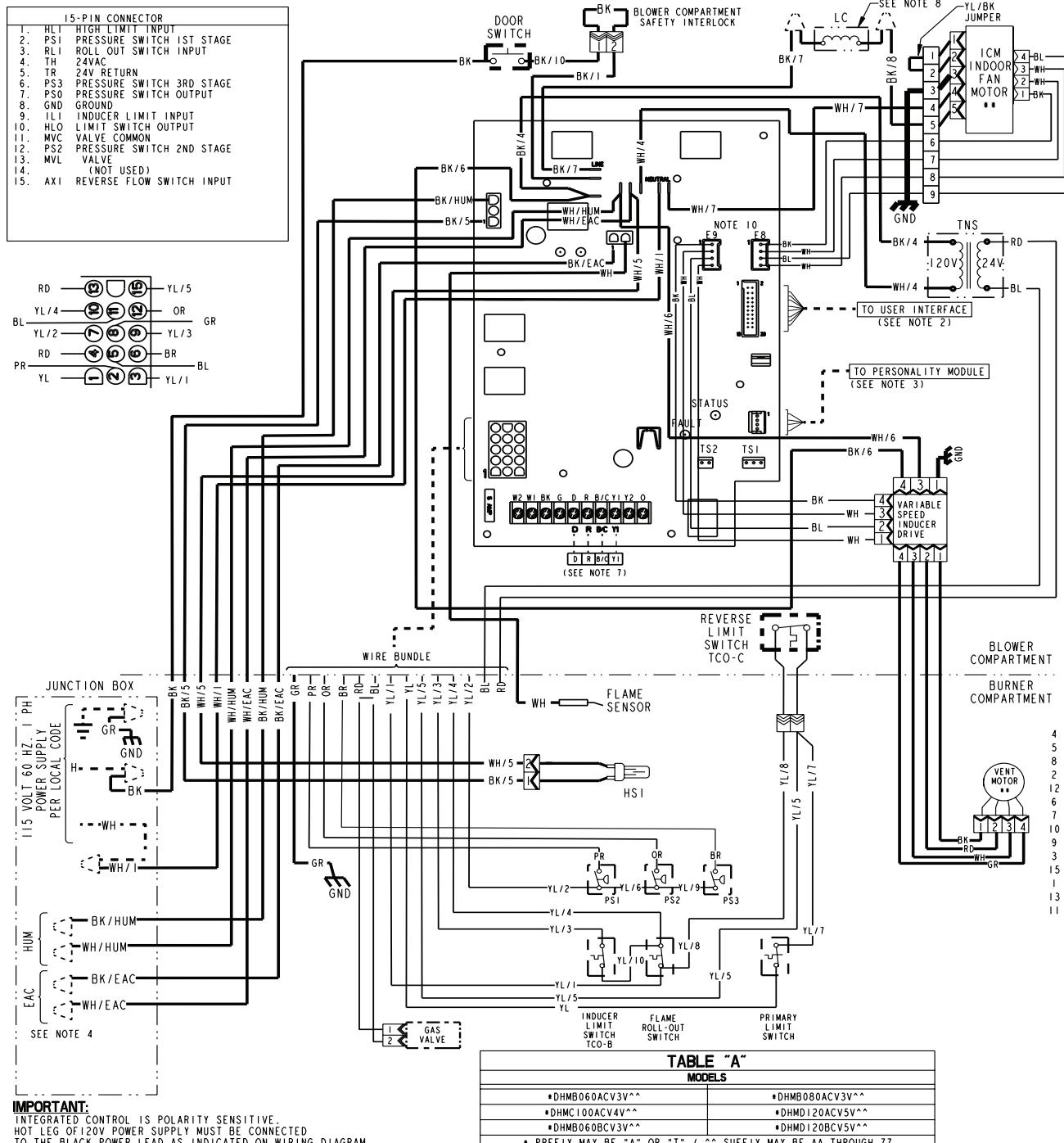
### CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

# Electrical

## Data

### TDHM Wiring Diagram



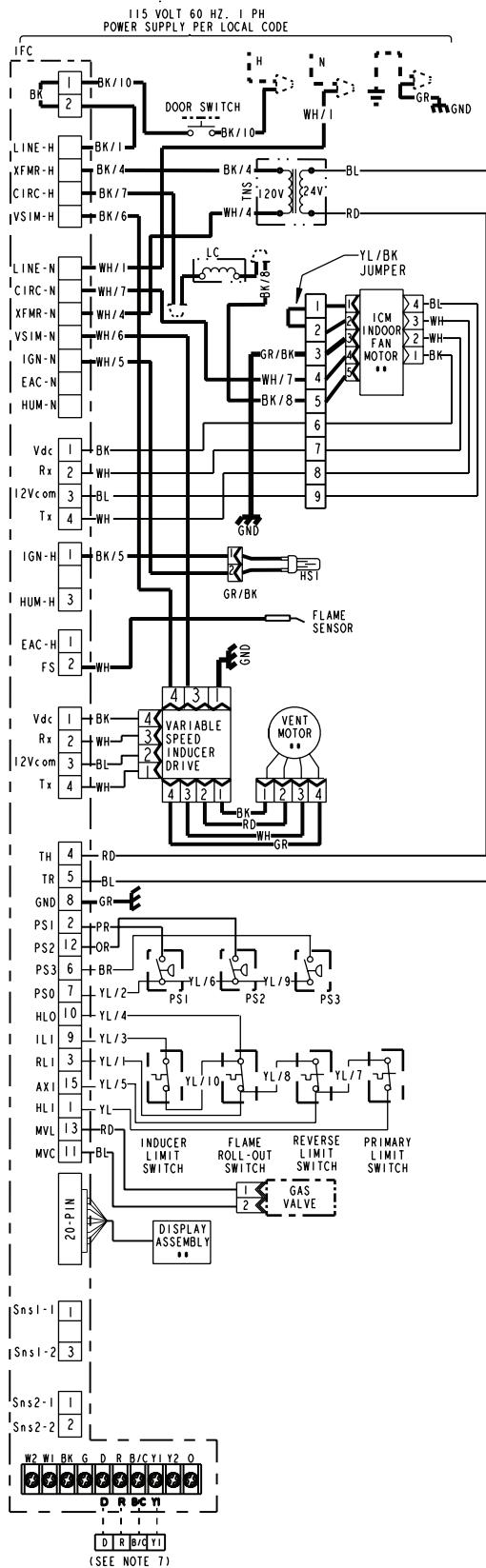
### CAUTION

Label all wires prior to disconnection when servicing controls.  
Wiring errors can cause improper and dangerous operation.  
Verify proper operation after servicing.

# Electrical

## Data

### TDHM Schematic Diagram



DIAGNOSTIC CODES	
RED LED - FAULT Data - 1 Flash every 20 seconds	
2 FLASHES - SYSTEM LOCKOUT RETRIES OR RECYCLES EXCEEDED	6 FLASHES - 115 VOLT AC POWER REVERSED OR IGNITER FAULT
3 FLASHES - PRESSURE SWITCH FAULT	7 FLASHES - GAS VALVE CIRCUIT ERROR
4 FLASHES - OPEN LIMIT SWITCH	8 FLASHES - LOW FLAME SENSE SIGNAL
5 FLASHES - FLAME SENSED WHEN NO FLAME SHOULD BE PRESENT	9 FLASHES - OPEN INDUCER LIMIT
	10 FLASHES - COMMUNICATION FAULT
	CONTINUOUS ON - INTERNAL CONTROL FAILURE
GREEN LED - STATUS	
SLOW FLASH - NORMAL, NO CALL FOR HEAT	
FAST FLASH - NORMAL, CALL FOR HEAT PRESENT	
GREEN AND RED LED'S ON CONTINUOUS - INTERNAL CONTROL FAILURE	
GREEN AND RED LED'S OFF CONTINUOUS - FUSE OPEN	

WARNING	CAUTION
HAZARDOUS VOLTAGE DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.	USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

#### INTEGRATED FURNACE CONTROL

REPLACE WITH PART CNT 04829 OR EQUIVALENT  
ELECTRICAL RATING  
INPUT: 25 V.A.C., 60 HZ.  
XFMR SEC. CURRENT: 450 MA. + MV LOAD  
MV OUTPUT: 1.5 A @ 24 V.A.C.  
IND OUTPUT: 3 PHASE OUTPUT  
IGN OUTPUT: 2.0 A @ 120V.A.C.  
CIRC. BLOWER OUTPUT: 14.5 FLA,  
25 LRA @ 120 VAC  
HUMIDIFIER & AIR CLEANER  
MAX. LOAD: 1.0 A @ 120 VAC

TIMINGS  
PREPURGE: 0 SEC.; INTERPURGE: 60 SEC.  
POST PURGE: 5 SECONDS  
IGNITOR WARMUP: 20 SECONDS  
(AP: 3; TFI: 5 SECONDS)  
RETRIES: 2; RECYCLES: 10  
HEAT ON DELAY: 45 SECONDS  
COOL ON DELAY: 0 SECONDS  
AUTO RESTART: 60 MINUTES  
AUTO RESTART PURGE: 15 SECONDS

TCO THERMAL CUT OUT	LINE } FACTORY WIRING
PS PRESSURE SWITCH	--- LINE } FIELD WIRING
FRS FLAME ROLLOUT SWITCH	- - - 24 V } WIRING
FP FLAME SENSOR	** INTERNAL THERMAL PROTECTION
CHASSIS GROUND	CF CAPACITOR
HSI HOT SURFACE IGNITER	L LINE N NEUTRAL GND GROUND B/C COMMON HLO HIGH LIMIT OUTPUT HLI HIGH LIMIT INPUT
DOOR SWITCH	TH 24 VAC (HOT) TR 24 VAC (COMMON) MV MAIN GAS VALVE TNS TRANSFORMER ILI INDUCER LIMIT INPUT
FUSE	
LC LINE CHOKES	
	WIRE COLOR BK/BK NUMBER ID (IF ANY)

#### NOTES:

1. IF ANY OF THE ORIGINAL WIRING AS SUPPLIED WITH THIS FURNACE MUST BE REPLACED, IT MUST BE WITH WIRE HAVING A TEMPERATURE RATING OF AT LEAST 105 C.
2. USER INTERFACE MUST BE INSTALLED FOR PROPER FURNACE INSTALLATION & SET-UP.
3. CORRECT PERSONALITY MODULE IS REQUIRED FOR PROPER FURNACE OPERATION. PERSONALITY MODULE IS SPECIFIC TO EACH MODEL & SERIAL NUMBER, AND IS TO REMAIN WITHIN IT'S ORIGINAL UNIT.
4. THESE LEADS PROVIDE 120V POWER CONNECTIONS FOR ELECTRONIC AIR CLEANER (EAC) AND HUMIDIFIER (HUM). MAX. LOAD: 1.0 AMPS EACH.
5. USED FOR DHM/DXM.
6. ON POWER-UP, LAST FOUR FAULTS, IF ANY, WILL BE FLASHED ON RED LED. GREEN LED WILL BE SOLID ON DURING LAST FAULT RECOVERY.
7. Y1 IS OUTPUT TO NON-COMMUNICATING OUTDOOR UNIT.
8. LINE CHOKE (LC) NOT USED ON ALL MODELS.
9. IN 24 VOLT MODE, AN OPTIONAL HUMIDISTAT CAN BE CONNECTED BETWEEN THE "R" AND "BK" TERMINALS. FACTORY INSTALLED "BK JUMPER" ON THE CIRCUIT BOARD MUST BE CUT. SEE FURNACE INSTALLERS GUIDE FOR DETAILS.
10. THESE TWO MOTOR CONNECTIONS (E9 INDOOR FAN MOTOR AND E8 INDUCER MOTOR) ARE INTERCHANGEABLE.

#### ! CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

(SEE NOTE 7)

**NOTE:**

The maximum total cable length for the entire Comfort Control communicating system is 500 ft. 18 AWG. The maximum distance of any single cable from a transformer is 250 ft. 18 AWG.

**NOTE:**

When connecting an TFD whole house air cleaner with this furnace, order BAYACCECOMM101.

**NOTE:**

The B/C terminal will require three wires to be connected. Rather than connecting the three wires to the low voltage terminal strip, create a pigtail using a short length of thermostat wire and a wire nut (field supplied) to attach to the B/C terminal.

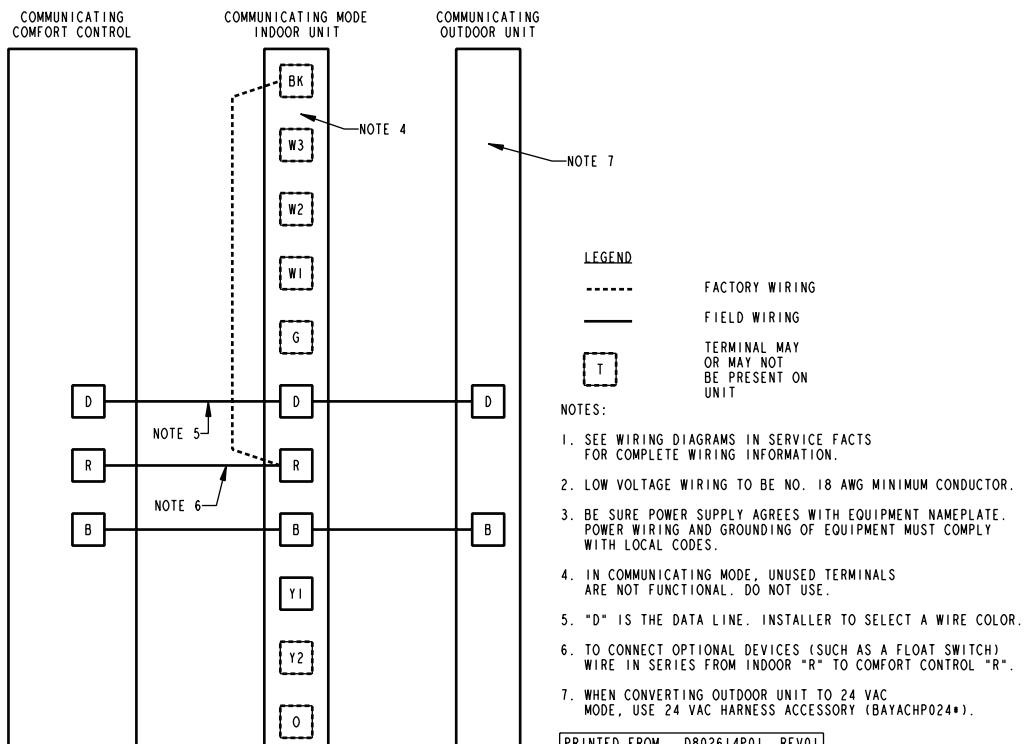
**NOTE:**

The BAYACCECOMM101 must be used when connecting an TFD whole house air cleaner to a furnace in communicating mode. For 24 volt mode, see the installation in the whole house air cleaner Installer's Guide.

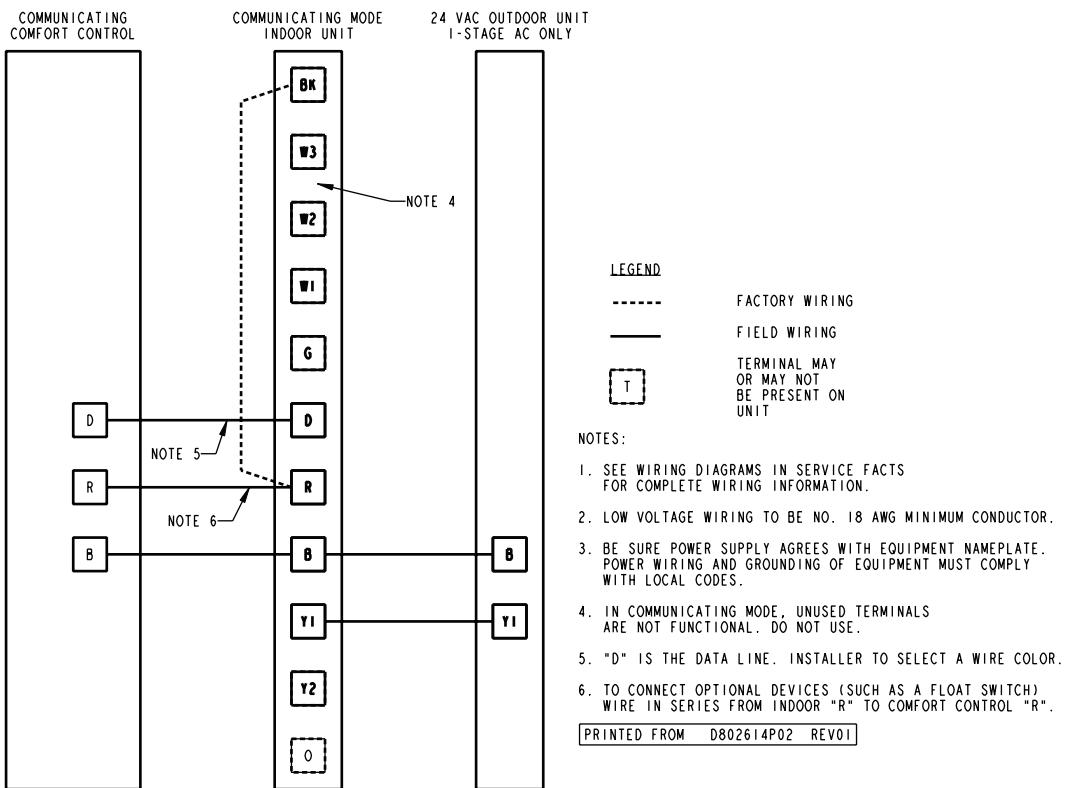
**NOTE:**

The BAYACCECOMM101 can be ordered through the sales channels.

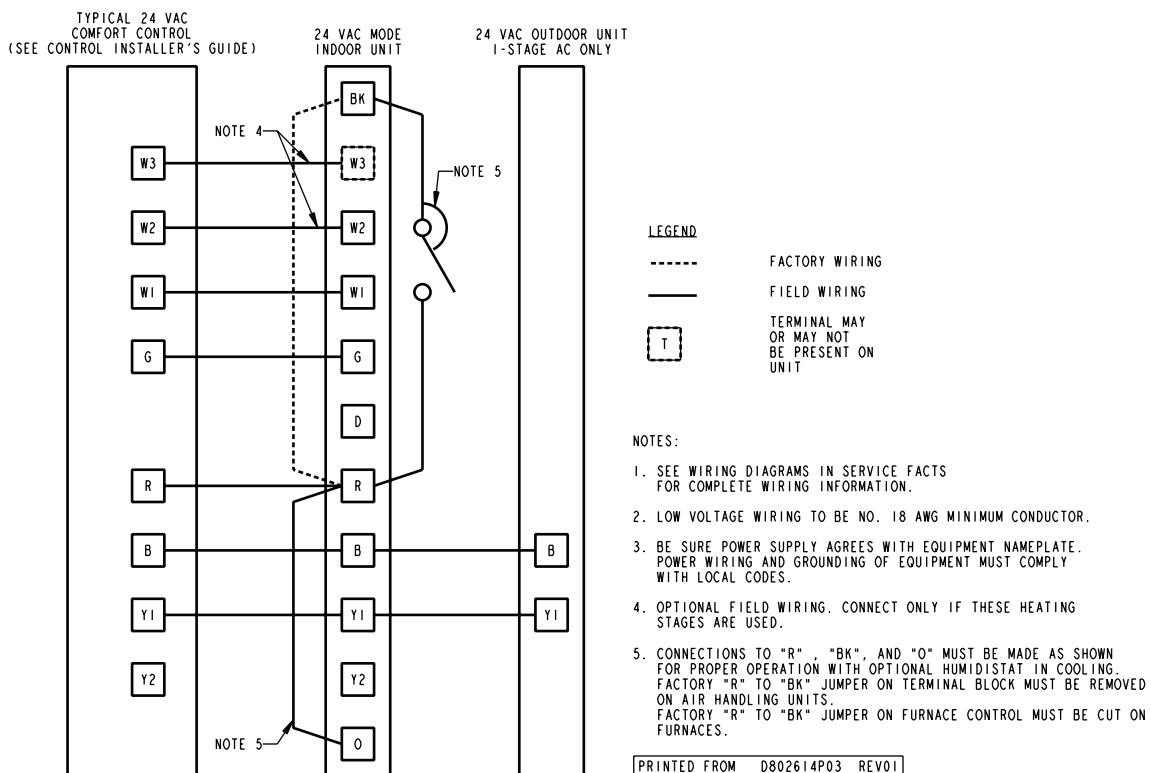
**Communicating Indoor Unit with Communicating Comfort Control and Communicating Outdoor Unit**



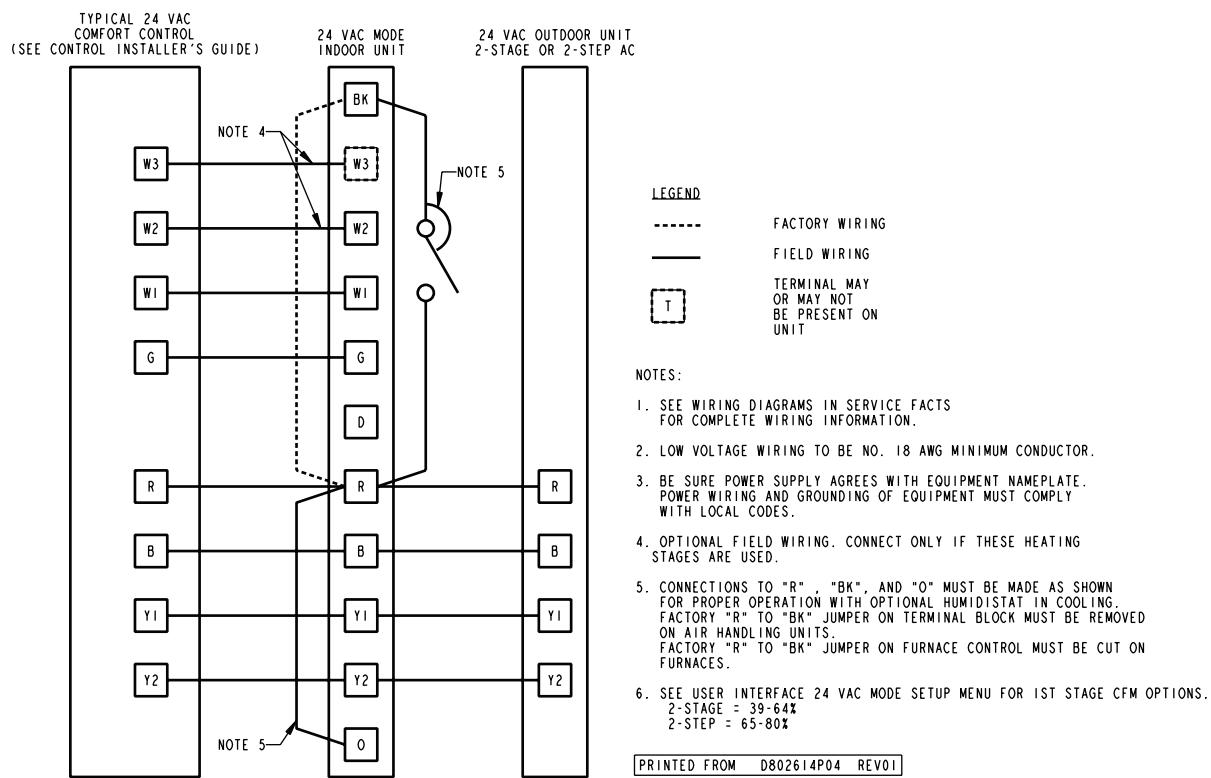
## Communicating Indoor Unit with Communicating Comfort Control and 24VAC Single Stage Cooling



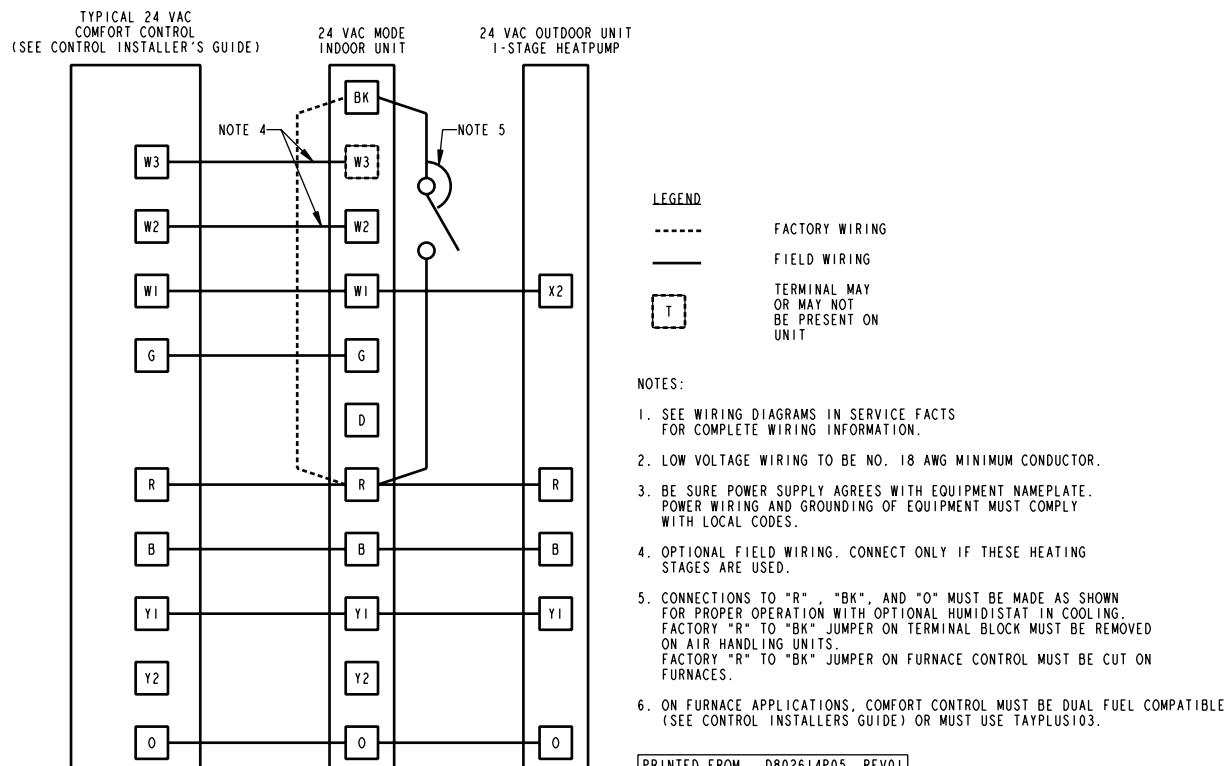
## 24 VAC Mode Indoor Unit with 24 VAC Comfort Control and 24VAC Single Stage Cooling



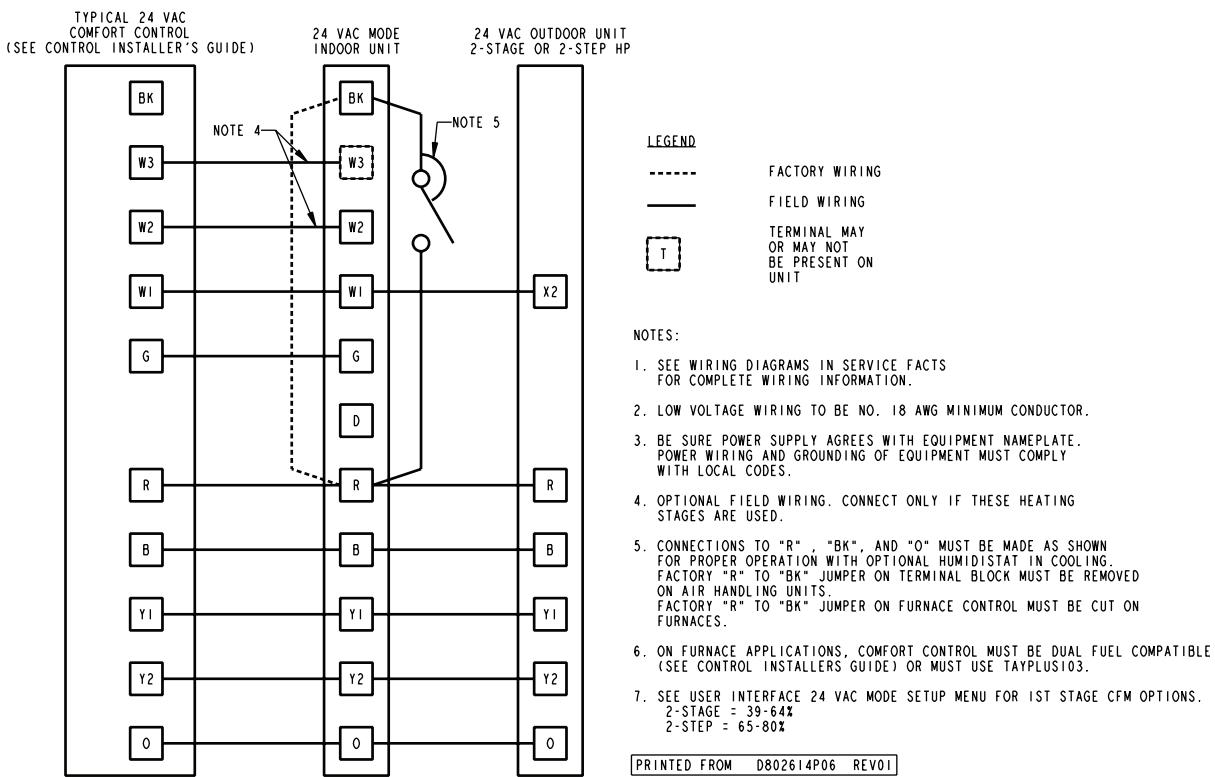
## 24 VAC Mode Indoor Unit with 24 VAC Comfort Control and 24VAC 2-Stage or 2-Step Cooling



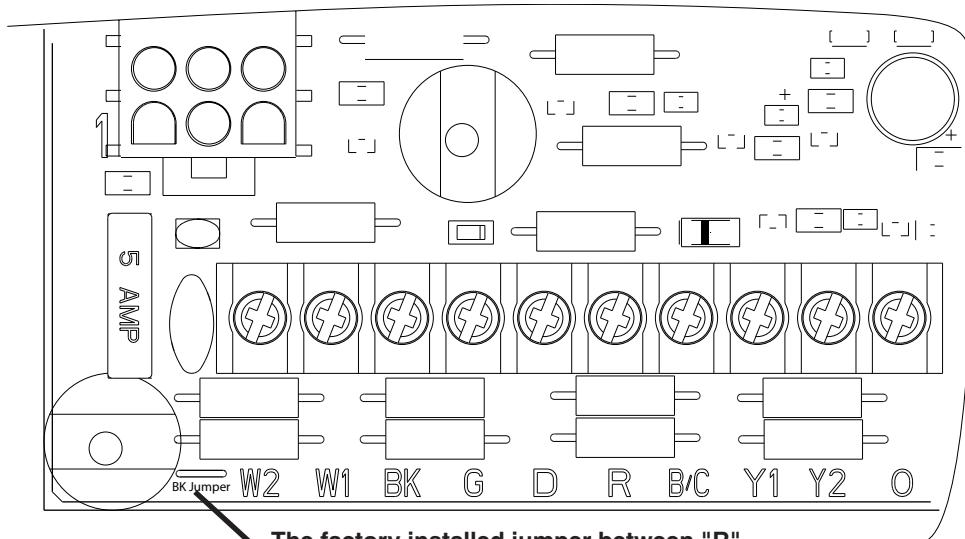
## 24 VAC Mode Indoor Unit with 24 VAC Comfort Control and 24VAC Single Stage Heat Pump



## 24 VAC Mode Indoor Unit with 24 VAC Comfort Control and 24VAC 2-Stage or 2-Step Heat Pump



### Humidistat Hookup - 24 V Mode ONLY



### HUMIDISTAT HOOKUP - 24 V ONLY

If an optional humidistat for humidity control in cooling is used, the factory installed "BK Jumper" must be cut.

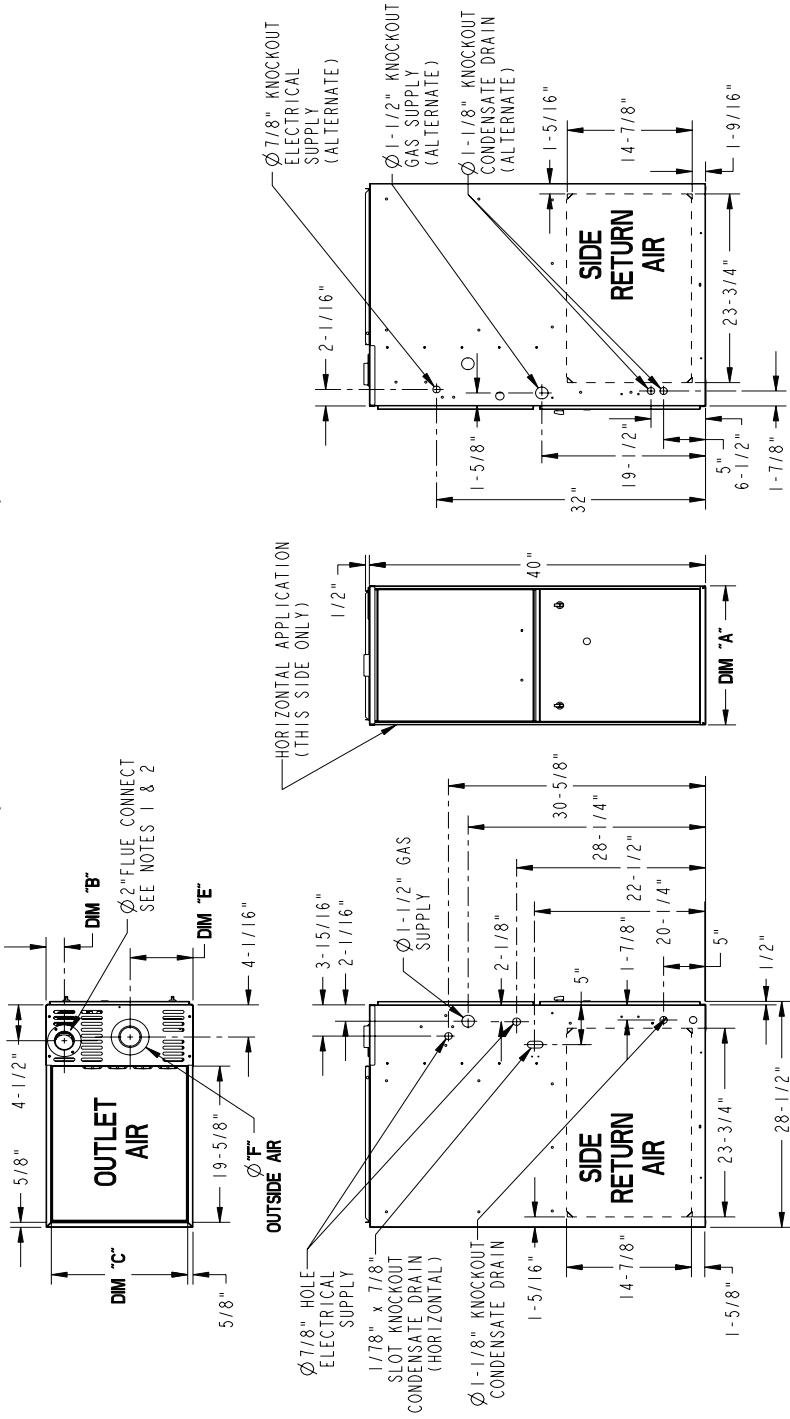
The BK Jumper must also be cut if a multi-zone control-

ler is connected to \*CONT402 is installed and using the BK enabled feature.

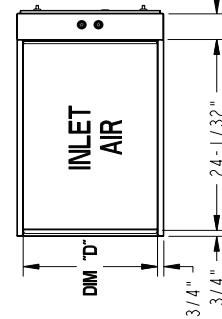
See the 24VAC field wiring diagrams for more information.

# TUHM-ACV Outline Drawing

(ALL DIMENSIONS ARE IN INCHES)



MODEL (SEE NOTE 1)	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "F"
*UHMB060ACV3VB *UHMB080ACV3VB	17-1/2"	2-1/4"	16-1/4"	16"	7-1/2"	2"
*UHMC100AC4VB	21"	2-1/2"	19-3/4"	19-1/2"	9"	3"



NOTES:

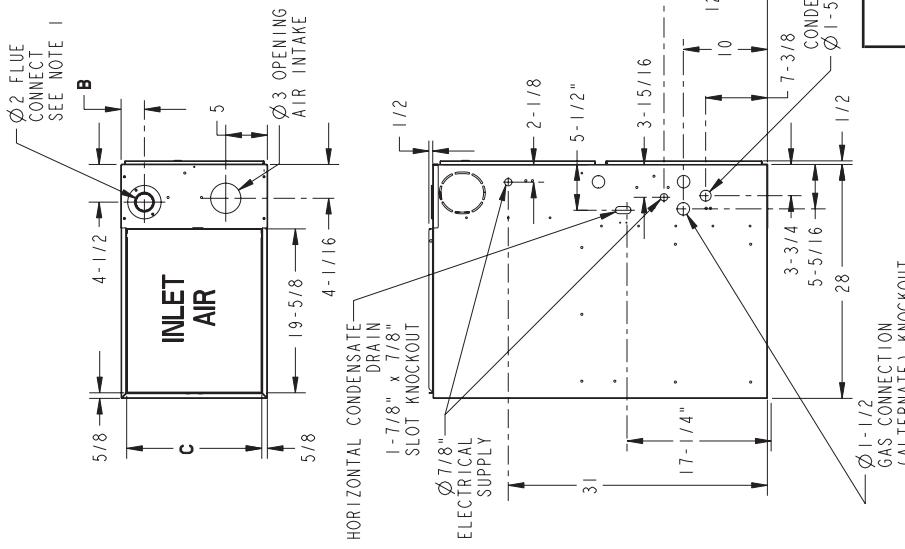
1. DIAMETER OF VENT PIPE MAY BE LIMITED TO 2-1/2" OR 3" ON SOME MODELS AT DIFFERENT ALTITUDES. REFER TO THE VENT LENGTH TABLE FOR PROPER APPLICATION.

\* PREFIX MAY BE "A" OR "T".

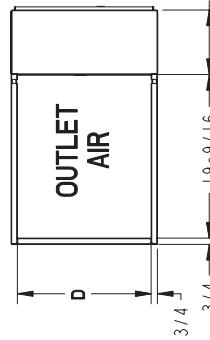
MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS	
UP BELOW	
SIDES	0 IN.
REAR	0 IN.
FRONT	3 IN.
TOP	1 IN.
FLUE	0 IN.
HORIZONTAL FLUE DISCHARGE ON THE LEFT	
SIDES	0 IN.
RIGHT	0 IN.
LEFT	0 IN.
REAR	6 IN.
FRONT	18 IN.
TOP	1 IN.
FLUE	0 IN.
CLOSET	
SIDES	1 IN.
RIGHT	1 IN.
LEFT	1 IN.
REAR	3 IN.
FRONT	3 IN.
TOP	1 IN.
FLUE	0 IN.

TDHM-ACV DOWNFLOW/HORIZONTAL OUTLINE DRAWING

(ALL DIMENSIONS ARE IN INCHES)



MODEL (SEE NOTE 1)	DIM "A"	DIM "B"	DIM "C"	DIM "D"
*DHMB060ACV3VB	17-1/2"	2-1/4"	16-1/4"	16"
*DHMB060BCV3VB				
*DHMB080ACV3VB				
*DHMC100ACV4VB	21"	2-1/2"	19-3/4"	19-1/2"
*DHMD120ACV5VB	24-1/2"	2-15/16"	23-1/4"	23"
*DHMD120BCV5VB				



**NOTES:**  
1. DIAMETER OF VENT PIPE MAY BE LIMITED  
TO 2-1/2" OR 3" ON SOME MODELS AT DIFFERENT  
ALTITUDES. REFER TO THE VENT LENGTH TABLE  
FOR PROPER APPLICATION.

\* PREFIX MAY BE "A" OR "T"

MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS	
	DOWNFLOW
SIDES	0 IN.
REAR	0 IN.
FRONT	3 IN.
TOP	1 IN.
FLUE	0 IN.
 HORIZONTAL FLUE DISCHARGE ON THE LEFT ALCOVE	
SIDES	RIGHT 0 IN. LEFT 0 IN. REAR 6 IN. FRONT 18 IN. TOP 1 IN. FLUE 0 IN.
 CLOSET	
SIDES	RIGHT 1 IN. LEFT 1 IN. REAR 3 IN. FRONT 3 IN. TOP 1 IN. FLUE 0 IN.



## Notes



Intertek



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