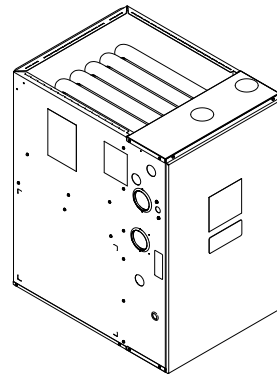


# Submittal

## Upflow/ Horizontal Left/Right Two Stage Condensing Gas Fired Furnace 60,000 BTUH

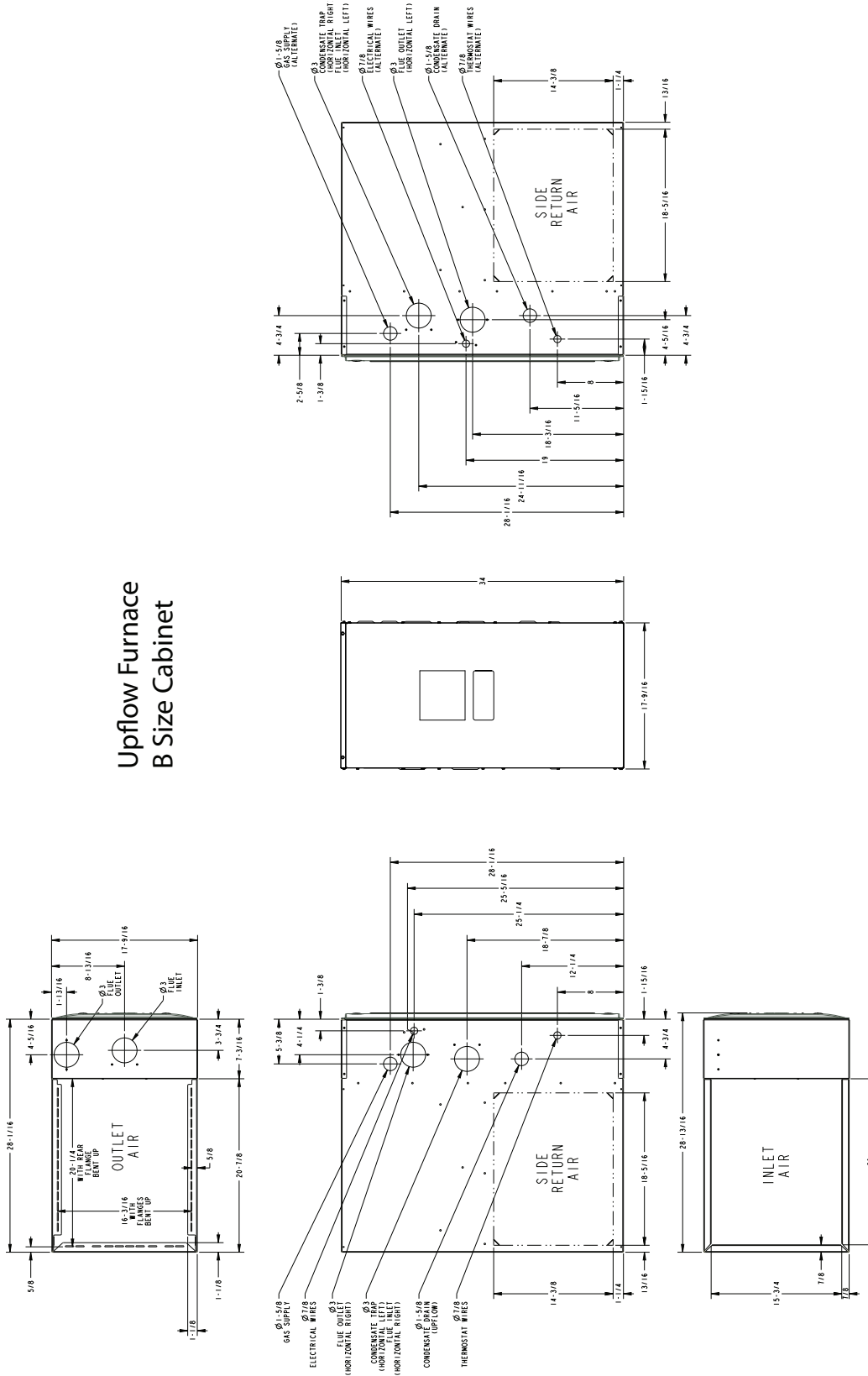
Upflow, Convertible to  
Horizontal Right or  
Horizontal Left  
A952V060BU3SAB



**Note:** Graphics in this document are for representation only. Actual model may differ in appearance.

# Outline Drawings

## Upflow Furnace B Size Cabinet



# Product Specification

MODEL	A952V060BU3SAB <sup>(a)</sup>
<b>TYPE</b>	Upflow/Horizontal
<b>RATINGS</b> <sup>(b)</sup>	
1st Stage Input BTUH (ICS)	39,000
1st Stage Capacity BTUH	37,830
2nd Stage Input BTUH	60,000
2nd Stage Capacity BTUH (ICS) <sup>(c)(d)</sup>	58,200
1st Stage Temp. Rise (Min.-Max.)	25 - 55
2nd Stage Temp. Rise (Min.-Max.)	35 - 65
AFUE (%)	96.0
<b>BLOWER DRIVE</b>	DIRECT
Diameter — Width (In.)	11 X 8
No. Used	1
Speeds (No.)	Variable
CFM vs. in. w.g.	See Fan Performance Table
Motor HP	1/2
RPM	Variable
Volts/Ph/Hz	120 / 1 / 60
FLA	5.7
<b>COMBUSTION FAN — Type</b>	Centrifugal
Drive — No. Speeds	Direct - 2
Motor HP — RPM	3300/2600
Volts/Ph/Hz	120 / 1 / 60
FLA	0.66
<b>FILTER — Furnished?</b>	No
Type recommended	High Velocity
Hi Vel. (No.-Size-Thk.)	1 — 16x25 — 1 in.
<b>VENT PIPE DIAMETER — Min (in.)</b> <sup>(e) (f)</sup>	2 Round
<b>HEAT EXCHANGER</b>	
Type — Fired	409 Stainless Steel

MODEL	A952V060BU3SAB <sup>(a)</sup>
— Unfired	29-4C Stainless Steel
Gauge (Fired)	20
<b>ORIFICES — Main</b>	
Nat. Gas Qty. — Drill Size	3 - 45
LP Gas Qty. — Drill Size	3 - 56
<b>GAS VALVE</b>	Redundant - Two Stage
<b>PILOT SAFETY DEVICE</b>	
Type	120 V SiNi Igniter
<b>BURNERS — Type</b>	Multiport Inshot
Number	3
<b>POWER CONN. — V/Ph/Hz</b> <sup>(g)</sup>	120 / 1 / 60
Ampacity (In Amps)	7.9
Max. Overcurrent Protection (Amps)	15
<b>PIPE CONN. SIZE (in.)</b>	1/2
<b>DIMENSIONS</b>	H x W x D
Uncrated (In.)	34 x 17-1/2 x 28-3/4
Crated (In.)	35-1/2 x 19-1/2 x 30-7/8
<b>WEIGHT</b>	
Shipping (Lbs.)/Net (Lbs.)	127/119

- <sup>(a)</sup> Meets Energy Star
- <sup>(b)</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>(c)</sup> Central Furnace heating designs are certified to ANSI Z21.47 / CSA 2.3 — latest edition.
- <sup>(d)</sup> Based on U.S. government standard tests.
- <sup>(e)</sup> Refer to the Vent Length Table in the Installer's Guide.
- <sup>(f)</sup> All A952V furnace models have a vent outlet diameter that equals 2 in.
- <sup>(g)</sup> The above wiring specifications are in accordance with National Electrical Code; however, installations must comply with local codes.

# Heating and Cooling Airflow Tables

Table 1. A952V060BU3SAB Heating Airflow

A952V060BU3SAB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter								
				1st Stage Capacity = 37,830				
				2nd Stage Capacity = 58,200				
Heating	Airflow Setting	Target Airflow		External Static Pressure				
				0.1	0.3	0.5	0.7	0.9
Heating 1st Stage	Low	632	CFM	660	658	656	654	652
			Temp. Rise	53	53	53	53	54
			Watts	48	85	121	157	193
	Medium Low <sup>(a)</sup>	814	CFM	860	856	852	848	844
			Temp. Rise	41	41	42	42	43
			Watts	91	128	164	200	236
	Medium	893	CFM	900	899	898	897	896
			Temp. Rise	39	39	39	39	39
			Watts	110	147	183	219	255
	High	1027	CFM	1068	1061	1054	1047	1041
			Temp. Rise	33	33	33	33	33
			Watts	165	202	239	276	313
Heating 2nd Stage	Low	800	CFM	838	838	837	837	837
			Temp. Rise	64	64	64	64	64
			Watts	81	127	172	218	264
	Medium Low <sup>(a)</sup>	1030	CFM	1097	1084	1071	1058	1045
			Temp. Rise	49	50	50	51	52
			Watts	157	209	262	314	366
	Medium	1130	CFM	1140	1135	1130	1124	1119
			Temp. Rise	47	47	48	48	48
			Watts	201	255	308	362	416
	High	1300	CFM	1289	1288	1288	1287	1287
			Temp. Rise	42	42	42	42	42
			Watts	319	365	410	456	502

<sup>(a)</sup> Factory Setting.

Table 2. A952V060BU3SAB / A952V060BD3SAB Cooling Airflow

A952V060BU3SAB / A952V060BD3SAB Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter								
Cooling	Unit Outdoor	Airflow Setting (CFM/ton)		External Static Pressure				
				0.1	0.3	0.5	0.7	0.9
Cooling	1.5 Ton	Cooling 450	CFM	675	675	675	675	675
		CFM/Ton	Watts	46	81	121	165	212
		Cooling 420	CFM	630	630	630	630	630
		CFM/Ton	Watts	40	72	111	153	200
		Cooling 400	CFM	600	600	600	600	600
		CFM/Ton	Watts	36	67	105	146	192
		Cooling 370	CFM	555	555	555	555	555
		CFM/Ton	Watts	30	60	96	137	182
		Cooling 350	CFM	525	525	525	525	525
		CFM/Ton	Watts	27	56	91	131	175
		Cooling 330	CFM	495	495	495	495	495
		CFM/Ton	Watts	24	52	86	126	170
		Cooling 310	CFM	465	465	465	465	465
		CFM/Ton	Watts	21	48	82	121	164
Cooling 290	CFM	435	435	435	435	435		
CFM/Ton	Watts	19	45	78	116	160		
Cooling	2.0 Ton	Cooling 450	CFM	900	900	900	900	900
		CFM/Ton	Watts	92	135	184	236	291
		Cooling 420	CFM	840	840	840	840	840
		CFM/Ton	Watts	78	118	164	214	267
		Cooling 400	CFM	800	800	800	800	800
		CFM/Ton	Watts	69	108	153	201	253
		Cooling 370	CFM	740	740	740	740	740
		CFM/Ton	Watts	57	94	136	183	232
		Cooling 350	CFM	700	700	700	700	700
		CFM/Ton	Watts	50	86	126	171	220
		Cooling 330	CFM	660	660	660	660	660
		CFM/Ton	Watts	44	78	117	161	208
		Cooling 310	CFM	620	620	620	620	620
		CFM/Ton	Watts	38	71	109	151	197
Cooling 290	CFM	580	580	580	580	580		
CFM/Ton	Watts	33	64	101	142	187		
Cooling	2.5 Ton	Cooling 450	CFM	1125	1125	1125	1125	1125
		CFM/Ton	Watts	164	216	273	334	399
		Cooling 420	CFM	1050	1050	1050	1050	1050
		CFM/Ton	Watts	137	186	240	298	359
		Cooling 400	CFM	1000	1000	1000	1000	1000
		CFM/Ton	Watts	121	168	220	276	335
		Cooling 370	CFM	925	925	925	925	925
		CFM/Ton	Watts	99	143	192	245	302
		Cooling 350	CFM	875	875	875	875	875
		CFM/Ton	Watts	86	128	175	227	281
		Cooling 330	CFM	825	825	825	825	825
		CFM/Ton	Watts	74	115	160	209	262
		Cooling 310	CFM	775	775	775	775	775
		CFM/Ton	Watts	64	102	146	193	244
Cooling 290	CFM	725	725	725	725	725		
CFM/Ton	Watts	54	91	133	178	228		
Cooling	3.0 Ton <sup>(a)</sup>	Cooling 450	CFM	1350	1350	1350	1296	1218
		CFM/Ton	Watts	267	329	395	431	452
		Cooling 420	CFM	1260	1260	1260	1260	1218
		CFM/Ton	Watts	222	279	342	409	452
		Cooling 400	CFM	1200	1200	1200	1200	1200
		CFM/Ton	Watts	195	250	310	374	441
		Cooling 370	CFM	1110	1110	1110	1110	1110
		CFM/Ton	Watts	158	210	266	327	390
		Cooling 350	CFM	1050	1050	1050	1050	1050
		CFM/Ton	Watts	137	186	240	298	359
		Cooling 330	CFM	990	990	990	990	990
		CFM/Ton	Watts	118	164	216	272	330
		Cooling 310	CFM	930	930	930	930	930
		CFM/Ton	Watts	100	145	194	247	304
Cooling 290	CFM	870	870	870	870	870		
CFM/Ton	Watts	85	127	174	225	279		

<sup>(a)</sup> Factory Setting

# General Features

## 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 is a solid state device which continuously monitors 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 **tubular stainless steel primary 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

Multipoint Inshot burners will give years of quiet and efficient service. All models can be converted to **L.P. gas** with LP conversion kit.

## 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 dry contacts for EAC and HUM.

## ENERGY EFFICIENT OPERATION

Furnace is certified by the manufacturer to leak 1.4% or less of nominal air conditioning CFM delivered when pressurized to .5" water column with all inlets, outlets, and drains sealed.

## 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.

## SECONDARY HEAT EXCHANGER

The furnace 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 for strength. Every orientation has at least two venting options. There are no knockouts on cabinet.

## FEATURES AND GENERAL OPERATION

The furnace utilizes a 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 switches.

# Features and Benefits

## **96.0% AFUE ACROSS ALL MODELS**

Meets utility rebates

Lowers utility bills

## **ELECTRICALLY EFFICIENT**

Efficient airflow design reduces electrical energy use

## **34 INCH TALL**

Lighter, easier to move and fit into tight spaces like short basements or tight closets

Works great with larger, high-efficiency coils

No knockouts

## **3-WAY MULTI-POISE / DEDICATED DOWNFLOW**

8 SKU's — Upflow / Horizontal Left / Horizontal Right

6 SKU's — Downflow

Added application flexibility and reduction in specification errors

## **AIRFLOW**

At least 400 CFM/ton at 0.5 in. H<sub>2</sub>O external static pressure; setup airflow options down to 290 CFM/ton

## **REGULATORY**

All models are air tight; 1.4% or less air leakage as per ASHRAE 193

Open vestibule design provides a full 34" high open vestibule

## **DIMENSIONS**

Widths are industry standard: 17.5", 21", and 24.5"

Depth remains approximately 28"

Cabinet will be compatible with industry standard coils, as well as, other accessories

## **INTEGRATED FURNACE CONTROL**

Setup / Status / Diagnostics / Digital Display

No dip switches

Last six errors stored

Dry contact EAC and HUM connections

All Molex connections; no spade terminals

Low voltage labeled above and below

Rain shield over IFC keeps condensate off the control

## **TUBULAR STAINLESS STEEL PRIMARY HEAT EXCHANGER**

## **29-4C STAINLESS STEEL SECONDARY HEAT EXCHANGER**

Stainless steel is a more durable, corrosive-resistant material than aluminumized steel

Integrated rail system for easy access if required

Reduces or eliminates need for baffles

## **VARIABLE SPEED BLOWER MOTOR**

Increased efficiency

Improved home comfort

## **THREE-WAY MULTI-POISE (UPFLOW, HORIZONTAL LEFT AND RIGHT) PLUS DEDICATED DOWNFLOW**

Easier to specify

Shipped ready to install (no kits required)

Every model has at least two venting options

When in horizontal, trap extends only about 2"

Barbed fitting on trap at hose connection and on cabinet transition for hose has barbed fitting and clamps at both ends for leak resistance.

Vent table improvements including longer vent lengths; 2" pipe can be used up to 100K

## About Trane and American Standard Heating and Air Conditioning

Trane and American Standard create comfortable, energy efficient indoor environments for residential applications. For more information, please visit [www.trane.com](http://www.trane.com) or [www.americanstandardair.com](http://www.americanstandardair.com).



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