



# Product Data

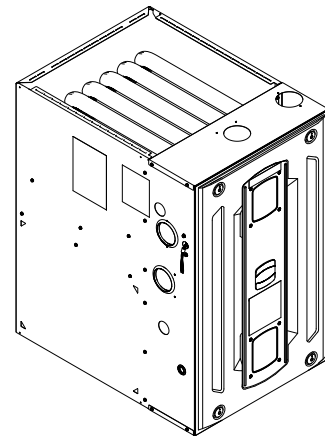
## Upflow/ Horizontal Left/Right, Downflow Two Stage Condensing Gas Fired Furnace

### Upflow, Convertible to Horizontal Right or Horizontal Left

S9V2B040U3PSBB  
S9V2B060U3PSBB  
S9V2B060U4PSBB  
S9V2B080U3PSBB  
S9V2B080U4PSBB  
S9V2C080U5PSBB  
S9V2C100U4PSBB  
S9V2C100U5PSBB  
S9V2D120U5PSBB

### Downflow Only

S9V2B040D3PSBB  
S9V2B060D3PSBB  
S9V2B080D3PSBB  
S9V2B080D4PSBB  
S9V2C100D4PSBB  
S9V2C100D5PSBB  
S9V2D120D5PSBB



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



# 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

Multiport 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% 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 S-Series 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 in the cabinet with baked-on enamel finish for strength and beauty. Every orientation has at least two venting options. There are no knockouts on cabinet.

## FEATURES AND GENERAL OPERATION

The S-Series 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**

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

7 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% 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

### **VORTICA II BLOWER, DESIGNED EXCLUSIVELY FOR THE S-SERIES FURNACE**

Improved airflow efficiency

Durable, easy to clean, two piece housing

Single piece belly band/ motor arm assembly

Blower deck has full-length rails for easy removal and replacement, regardless of poise



## Features and Benefits

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### **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



# Accessories

**Table 1. Accessories**

Model Number	Description	Use with
BAYHANG	Horizontal Hanging Kit	All Upflow Furnaces
BAYVENT200B	Sidewall Vent Termination Kit	All Furnaces
BAYVENTCN200B	Sidewall Vent Termination Kit (Canada – CPVC)	All Furnaces
BAYAIR30AVENTA	Concentric Vent Kit	All Furnaces
BAYAIR30CNVENT	Concentric Vent Kit (Canada – CPVC)	All Furnaces
BAYREDUCE	Reducing Coupling (CPVC)	All Furnaces
BAYLIFTB	Dual Return Kit (B size extension)	B Cabinet Upflow Furnaces
BAYLIFTC	Dual Return Kit (C size extension)	C Cabinet Upflow Furnaces
BAYLIFTD	Dual Return Kit (D size extension)	D Cabinet Upflow Furnaces
BAYBASE205	Downflow Subbase	All Downflow Furnaces
BAYFLTR206	Filter Access Door Kit (Downflow only)	All Downflow Furnaces
BAYSF1165AA <sup>(a)</sup>	1" SlimFit Box with MERV 4 Filter	All Upflow Furnaces
BAYFLTR203	Horizontal Filter Kit	B Cabinet Furnaces in Downflow/Horizontal
BAYFLTR204	Horizontal Filter Kit	C Cabinet Furnaces in Downflow/Horizontal
BAYFLTR205	Horizontal Filter Kit	D Cabinet Furnaces in Downflow/Horizontal
BAYLPSS400B	Propane Conversion Kit with Stainless Steel Burners	All Furnaces
BAYMFGH200B	Manufactured/Mobile Housing Kit	All Furnaces
BAYCNDTRAP2A	Inline Condensate Trap Kit used with Special Venting on 2" Vent Pipe	All Furnaces
BAYCNDTRAP3A	Inline Condensate Trap Kit used with Special Venting on 3" Vent Pipe	All Furnaces

<sup>(a)</sup> Airflow greater than 1600 CFM requires dual returns



# Product Specification

MODEL	S9V2B040U3PSBB (a)	S9V2B060U3PSBB (a)	S9V2B060U4PSBB (a)	S9V2B080U3PSBB(a)
<b>TYPE</b>	Upflow/Horizontal	Upflow/Horizontal	Upflow/Horizontal	Upflow / Horizontal
<b>RATINGS (b)</b>				
1st Stage Input BTUH (ICS)	26,000	39,000	39,000	52,000
1st Stage Capacity BTUH	25,220	37,830	37,830	50,440
2nd Stage Input BTUH	40,000	60,000	60,000	80,000
2nd Stage Capacity BTUH (ICS) (c)(d)	38,800	58,200	58,200	77,600
1st Stage Temp. Rise (Min.-Max.)	25 - 55	25 - 55	25 - 55	30 - 60
2nd Stage Temp. Rise (Min.-Max.)	30 - 60	35 - 65	35 - 65	40 - 70
AFUE (%) (c)(d)	96.0	96.0	96.0	96.0
<b>BLOWER DRIVE</b>	DIRECT	DIRECT	DIRECT	DIRECT
Diameter — Width (In.)	11 X 8	11 X 8	11 X 8	11 X 8
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	3/4	1/2
RPM	Variable	Variable	Variable	Variable
Volts/Ph/Hz	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
FLA	5.7	5.7	8.0	5.7
<b>COMBUSTION FAN — Type</b>	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Drive — No. Speeds	Direct - 2	Direct - 2	Direct - 2	Direct - 2
Motor HP — RPM	3300/2600	3300/2600	3300/2600	3300/2600
Volts/Ph/Hz	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
FLA	0.66	0.66	0.66	0.66
<b>FILTER — Furnished?</b>	No	No	No	No
Type recommended	High Velocity	High Velocity	High Velocity	High Velocity
Hi Vel. (No.-Size-Thk.)	1 — 16x25 — 1 in.	1 — 16x25 — 1 in.	1 — 16x25 — 1 in.	1 — 16x25 — 1 in.
<b>VENT PIPE DIAMETER — Min (in.)</b> (e) (f)	2 Round	2 Round	2 Round	2 Round
<b>HEAT EXCHANGER</b>				
Type — Fired	409 Stainless Steel	409 Stainless Steel	409 Stainless Steel	409 Stainless Steel
— Unfired	29-4C Stainless Steel	29-4C Stainless Steel	29-4C Stainless Steel	29-4C Stainless Steel
Gauge (Fired)	20	20	20	20
<b>ORIFICES — Main</b>				
Nat. Gas Qty. — Drill Size	2- 45	3 - 45	3 - 45	4 - 45
LP Gas Qty. — Drill Size	2- 56	3 - 56	3 - 56	4 - 56
<b>GAS VALVE</b>	Redundant - Two Stage	Redundant - Two Stage	Redundant - Two Stage	Redundant - Two Stage
<b>PILOT SAFETY DEVICE</b>				
Type	120 V SiNi Igniter	120 V SiNi Igniter	120 V SiNi Igniter	120 V SiNi Igniter
<b>BURNERS — Type</b>	Multiport Inshot	Multiport Inshot	Multiport Inshot	Multiport Inshot
Number	2	3	3	4
<b>POWER CONN. — V/Ph/Hz (g)</b>	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
Ampacity (In Amps)	7.9	7.9	10.8	7.9



## Product Specification

MODEL	S9V2B040U3PSBB (a)	S9V2B060U3PSBB (a)	S9V2B060U4PSBB (a)	S9V2B080U3PSBB(a)
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
Uncrated (In.)	34 x 17-1/2 x 28-3/4	34 x 17-1/2 x 28-3/4	34 x 17-1/2 x 28-3/4	34 x 17-1/2 x 28-3/4
Crated (In.)	35-1/2 x 19-1/2 x 30-7/8	35-1/2 x 19-1/2 x 30-7/8	35-1/2 x 19-1/2 x 30-7/8	35-1/2 x 19-1/2 x 30-7/8
<b>WEIGHT</b>				
Shipping (Lbs.)/Net (Lbs.)	122/114	127/119	130/122	132/124

- (a) Meets Energy Star  
 (b) 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.  
 (c) Central Furnace heating designs are certified to ANSI Z21.47 / CSA 2.3 — latest edition.  
 (d) Based on U.S. government standard tests.  
 (e) Refer to the Vent Length Table in the Installer's Guide.  
 (f) All S9V2 furnace models have a vent outlet diameter that equals 2 in.  
 (g) The above wiring specifications are in accordance with National Electrical Code; however, installations must comply with local codes.

MODEL	S9V2B080U4PSBB (a)	S9V2C080U5PSBB (a)	S9V2C100U4PSBB (a)	S9V2C100U5PSBB(a)
<b>TYPE</b>	Upflow/Horizontal	Upflow/Horizontal	Upflow/Horizontal	Upflow / Horizontal
<b>RATINGS (b)</b>				
1st Stage Input BTUH (ICS)	52,000	52,000	65,000	65,000
1st Stage Capacity BTUH	50,440	50,440	63,050	63,050
2nd Stage Input BTUH	80,000	80,000	100,000	100,000
2nd Stage Capacity BTUH (ICS) (c) (d)	77,600	77,600	97,000	97,000
1st Stage Temp. Rise (Min.-Max.)	30 - 60	30 - 60	25 - 55	25 - 55
2nd Stage Temp. Rise (Min.-Max.)	35 - 65	35 - 65	35 - 65	30 - 60
AFUE (%) (c)(d)	96.0	96.0	96.0	96.0
<b>BLOWER DRIVE</b>	DIRECT	DIRECT	DIRECT	DIRECT
Diameter — Width (In.)	11 X 8	11 X 10	11 X 10	11 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	3/4	1	3/4	1
RPM	Variable	Variable	Variable	Variable
Volts/Ph/Hz	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
FLA	8.0	10.5	8.0	10.5
<b>COMBUSTION FAN — Type</b>	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Drive — No. Speeds	Direct - 2	Direct - 2	Direct - 2	Direct - 2
Motor HP — RPM	3300/2600	3300/2600	3300/2600	3300/2600
Volts/Ph/Hz	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
FLA	0.66	0.66	0.66	0.66
<b>FILTER — Furnished?</b>	No	No	No	No
Type recommended	High Velocity	High Velocity	High Velocity	High Velocity
Hi Vel. (No.-Size-Thk.)	1 — 16x25 — 1 in.	1 — 20x25 — 1 in.	1 — 20x25 — 1 in.	1 — 20x25 — 1 in.
<b>VENT PIPE DIAMETER — Min (in.)</b> (e) (f)	2 Round	2 Round	2 Round	2 Round
<b>HEAT EXCHANGER</b>				
Type — Fired	409 Stainless Steel	409 Stainless Steel	409 Stainless Steel	409 Stainless Steel
— Unfired	29-4C Stainless Steel	29-4C Stainless Steel	29-4C Stainless Steel	29-4C Stainless Steel



## Product Specification

MODEL	S9V2B080U4PSBB (a)	S9V2C080U5PSBB (a)	S9V2C100U4PSBB (a)	S9V2C100U5PSBB(a)
Gauge (Fired)	20	20	20	20
<b>ORIFICES — Main</b>				
Nat. Gas Qty. — Drill Size	4 - 45	4 - 45	5 - 45	5 - 45
LP Gas Qty. — Drill Size	4- 56	4- 56	5- 56	5- 56
<b>GAS VALVE</b>	Redundant - Two Stage	Redundant - Two Stage	Redundant - Two Stage	Redundant - Two Stage
<b>PILOT SAFETY DEVICE</b>				
Type	120 V SiNi Igniter	120 V SiNi Igniter	120 V SiNi Igniter	120 V SiNi Igniter
<b>BURNERS — Type</b>	Multiport Inshot	Multiport Inshot	Multiport Inshot	Multiport Inshot
Number	4	4	5	5
<b>POWER CONN. — V/Ph/Hz (g)</b>	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
Ampacity (In Amps)	10.8	13.9	10.8	13.9
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
Uncrated (In.)	34 x 17-1/2 x 28-3/4	34 x 21 x 28-3/4	34 x 21 x 28-3/4	34 x 21 x 28-3/4
Crated (In.)	35-1/2 x 19-1/2 x 30-7/8	35-1/2 x 23 x 30-7/8	35-1/2 x 23 x 30-7/8	35-1/2 x 23 x 30-7/8
<b>WEIGHT</b>				
Shipping (Lbs.)/Net (Lbs.)	135/127	149/139	154/144	155/145

(a) Meets Energy Star

(b) 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.

(c) Central Furnace heating designs are certified to ANSI Z21.47 / CSA 2.3 — latest edition.

(d) Based on U.S. government standard tests.

(e) Refer to the Vent Length Table in the Installer's Guide.

(f) All S9V2 furnace models have a vent outlet diameter that equals 2 in.

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

MODEL	S9V2D120U5PSBB (a)	S9V2B040D3PSBB (a)	S9V2B060D3PSBB (a)	S9V2B080D3PSBB(a)
<b>TYPE</b>	Upflow/Horizontal	Downflow	Downflow	Downflow
<b>RATINGS (b)</b>				
1st Stage Input BTUH (ICS)	78,000	26,000	39,000	52,000
1st Stage Capacity BTUH	75,660	25,220	37,830	50,440
2nd Stage Input BTUH	120,000	40,000	60,000	80,000
2nd Stage Capacity BTUH (ICS) (c) (d)	116,400	38,800	58,200	77,600
1st Stage Temp. Rise (Min.-Max.)	35-65	25 - 55	25 - 55	30 - 60
2nd Stage Temp. Rise (Min.-Max.)	40-70	30 - 60	35 - 65	40 - 70
AFUE (%) (c)(d)	96.0	96.0	96.0	96.0
<b>BLOWER DRIVE</b>	DIRECT	DIRECT	DIRECT	DIRECT
Diameter — Width (In.)	11 X 10	11 X 8	11 X 8	11 X 8
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	1/2	1/2	1/2
RPM	Variable	Variable	Variable	Variable
Volts/Ph/Hz	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
FLA	10.5	5.7	5.7	5.7
<b>COMBUSTION FAN — Type</b>	Centrifugal	Centrifugal	Centrifugal	Centrifugal





## Product Specification

MODEL	S9V2D120U5PSBB (a)	S9V2B040D3PSBB (a)	S9V2B060D3PSBB (a)	S9V2B080D3PSBB(a)
Drive — No. Speeds	Direct - 2	Direct - 2	Direct - 2	Direct - 2
Motor HP — RPM	3300/2600	3300/2600	3300/2600	3300/2600
Volts/Ph/Hz	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
FLA	0.66	0.66	0.66	0.66
<b>FILTER — Furnished?</b>	No	No	No	No
Type recommended	High Velocity	High Velocity	High Velocity	High Velocity
Hi Vel. (No.-Size-Thk.)	1 — 24x25 — 1 in.	2 — 14x20 — 1 in.	2 — 14x20 — 1 in.	2 — 14x20 — 1 in.
<b>VENT PIPE DIAMETER — Min (in.)</b> (e) (f)	3 Round	2 Round	2 Round	2 Round
<b>HEAT EXCHANGER</b>				
Type — Fired	409 Stainless Steel	409 Stainless Steel	409 Stainless Steel	409 Stainless Steel
— Unfired	29-4C Stainless Steel	29-4C Stainless Steel	29-4C Stainless Steel	29-4C Stainless Steel
Gauge (Fired)	20	20	20	20
<b>ORIFICES — Main</b>				
Nat. Gas Qty. — Drill Size	6 - 45	2- 45	3 - 45	4 - 45
LP Gas Qty. — Drill Size	6- 56	2- 56	3 - 56	4 - 56
<b>GAS VALVE</b>	Redundant - Two Stage	Redundant - Two Stage	Redundant - Two Stage	Redundant - Two Stage
<b>PILOT SAFETY DEVICE</b>				
Type	120 V SiNi Igniter	120 V SiNi Igniter	120 V SiNi Igniter	120 V SiNi Igniter
<b>BURNERS — Type</b>	Multiport Inshot	Multiport Inshot	Multiport Inshot	Multiport Inshot
Number	6	2	3	4
<b>POWER CONN. — V/Ph/Hz (g)</b>	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
Ampacity (In Amps)	13.9	7.9	7.9	7.9
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
Uncrated (In.)	34 x 24-1/2 x 28-3/4	34 x 17-1/2 x 28-3/4	34 x 17-1/2 x 28-3/4	34 x 17-1/2 x 28-3/4
Crated (In.)	35-1/2 x 26-1/2 x 30-7/8	35-1/2 x 19-1/2 x 30-7/8	35-1/2 x 19-1/2 x 30-7/8	35-1/2 x 19-1/2 x 30-7/8
<b>WEIGHT</b>				
Shipping (Lbs.)/Net (Lbs.)	167/156	122/114	127/119	132/124

(a) Meets Energy Star

(b) 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.

(c) Central Furnace heating designs are certified to ANSI Z21.47 / CSA 2.3.

(d) Based on U.S. government standard tests.

(e) Refer to the Vent Length Table in the Installer's Guide.

(f) All S9V2 furnace models have a vent outlet diameter that equals 2 in.

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



## Product Specification

MODEL	S9V2B080D4PSBB (a)	S9V2C100D4PSBB (a)	S9V2C100D5PSBB (a)	S9V2D120D5PSBB(a)
<b>TYPE</b>	Downflow	Downflow	Downflow	Downflow
<b>RATINGS (b)</b>				
1st Stage Input BTUH (ICS)	52,000	65,000	65,000	78,000
1st Stage Capacity BTUH	50,440	63,050	63,050	75,660
2nd Stage Input BTUH	80,000	100,000	100,000	120,000
2nd Stage Capacity BTUH (ICS) (c) (d)	77,600	97,000	97,000	116,400
1st Stage Temp. Rise (Min.-Max.)	30 - 60	25 - 55	25 - 55	35-65
2nd Stage Temp. Rise (Min.-Max.)	35 - 65	35 - 65	30 - 60	40-70
AFUE (%) (c)(d)	96.0	96.0	96.0	96.0
<b>BLOWER DRIVE</b>	DIRECT	DIRECT	DIRECT	DIRECT
Diameter — Width (In.)	11 X 8	11 X 10	11 X 10	11 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	3/4	3/4	1	1
RPM	Variable	Variable	Variable	Variable
Volts/Ph/Hz	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
FLA	8.0	8.0	10.5	10.5
<b>COMBUSTION FAN — Type</b>	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Drive — No. Speeds	Direct - 2	Direct - 2	Direct - 2	Direct - 2
Motor HP — RPM	3300/2600	3300/2600	3300/2600	3300/2600
Volts/Ph/Hz	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
FLA	0.66	0.66	0.66	0.66
<b>FILTER — Furnished?</b>	No	No	No	No
Type recommended	High Velocity	High Velocity	High Velocity	High Velocity
Hi Vel. (No.-Size-Thk.)	2 — 14x20 — 1 in.	2 — 16x20 — 1 in.	2 — 16x20 — 1 in.	2 — 16x20 — 1 in.
<b>VENT PIPE DIAMETER — Min (in.)</b> (e) (f)	2 Round	2 Round	2 Round	3 Round
<b>HEAT EXCHANGER</b>				
Type — Fired	409 Stainless Steel	409 Stainless Steel	409 Stainless Steel	409 Stainless Steel
— Unfired	29-4C Stainless Steel	29-4C Stainless Steel	29-4C Stainless Steel	29-4C Stainless Steel
Gauge (Fired)	20	20	20	20
<b>ORIFICES — Main</b>				
Nat. Gas Qty. — Drill Size	4 - 45	5 - 45	5 - 45	6 - 45
LP Gas Qty. — Drill Size	4- 56	5- 56	5- 56	6- 56
<b>GAS VALVE</b>	Redundant - Two Stage	Redundant - Two Stage	Redundant - Two Stage	Redundant - Two Stage
<b>PILOT SAFETY DEVICE</b>				
Type	120 V SiNi Igniter	120 V SiNi Igniter	120 V SiNi Igniter	120 V SiNi Igniter
<b>BURNERS — Type</b>	Multiport Inshot	Multiport Inshot	Multiport Inshot	Multiport Inshot
Number	4	5	5	6
<b>POWER CONN. — V/Ph/Hz (g)</b>	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60	120 / 1 / 60
Ampacity (In Amps)	10.8	10.8	13.9	13.9
Max. Overcurrent Protection (Amps)	15	15	15	15
<b>PIPE CONN. SIZE (in.)</b>	1/2	1/2	1/2	1/2



## Product Specification

MODEL	S9V2B080D4PSBB (a)	S9V2C100D4PSBB (a)	S9V2C100D5PSBB (a)	S9V2D120D5PSBB(a)
<b>DIMENSIONS</b>	H x W x D	H x W x D	H x W x D	H x W x D
Uncrated (In.)	34 x 17-1/2 x 28-3/4	34 x 21 x 28-3/4	34 x 21 x 28-3/4	34 x 24-1/2 x 28-3/4
Crated (In.)	35-1/2 x 19-1/2 x 30-7/8	35-1/2 x 23 x 30-7/8	35-1/2 x 23 x 30-7/8	35-1/2 x 26-1/2 x 30-7/8
<b>WEIGHT</b>				
Shipping (Lbs.)/Net (Lbs.)	135/127	154/144	155/145	167/156

- (a) Meets Energy Star
- (b) 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.
- (c) Central Furnace heating designs are certified to ANSI Z21.47 / CSA 2.3.
- (d) Based on U.S. government standard tests.
- (e) Refer to the Vent Length Table in the Installer's Guide.
- (f) All S9V2 furnace models have a vent outlet diameter that equals 2 in.
- (g) The above wiring specifications are in accordance with National Electrical Code; however, installations must comply with local codes.



# Heating and Cooling Airflow Tables

**Table 2. S9V2B040U3PSBB Heating Airflow**

<b>S9V2B040U3PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>								
<b>1st Stage Capacity = 25,220</b>								
<b>2nd Stage Capacity = 38,800</b>								
<b>Heating</b>	<b>Airflow Setting</b>	<b>Target Airflow</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
Heating 1st Stage	Low	468	CFM	468	452	437	421	406
			Temp. Rise	49	51	54	56	58
			Watts	27	58	90	121	152
	Medium Low	598	CFM	552	600	647	694	741
			Temp. Rise	43	39	36	32	28
			Watts	41	76	112	147	183
	Medium (a)	634	CFM	583	635	687	739	791
			Temp. Rise	39	36	33	30	27
			Watts	48	83	118	153	189
	High	1008	CFM	930	905	879	853	828
			Temp. Rise	25	25	26	27	27
			Watts	125	178	232	285	339
Heating 2nd Stage	Low	650	CFM	633	636	639	643	646
			Temp. Rise	57	57	57	56	56
			Watts	48	92	135	179	223
	Medium Low	830	CFM	760	786	813	840	866
			Temp. Rise	48	46	45	43	41
			Watts	82	132	182	232	282
	Medium (a)	880	CFM	792	817	842	867	892
			Temp. Rise	44	44	43	43	42
			Watts	94	142	189	237	284
	High	1400	CFM	1337	1269	1200	1132	1063
			Temp. Rise	27	29	31	32	34
			Watts	335	376	417	458	499

(a) Factory Setting.

**Table 3. S9V2B040D3PSBB Heating Airflow**

<b>S9V2B040D3PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>								
<b>1st Stage Capacity = 25,220</b>								
<b>2nd Stage Capacity = 38,800</b>								
<b>Heating</b>	<b>Airflow Setting</b>	<b>Target Airflow</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
Heating 1st Stage	Low	468	CFM	426	430	435	439	444
			Temp. Rise	54	54	53	53	52
			Watts	38	79	120	161	202
	Medium Low	598	CFM	543	569	595	621	647
			Temp. Rise	43	41	39	37	35
			Watts	66	125	184	243	303
	Medium (a)	634	CFM	611	612	614	616	618
			Temp. Rise	38	38	38	37	37
			Watts	81	139	198	256	314
	High	1008	CFM	923	918	914	909	904
			Temp. Rise	25	25	25	25	26
			Watts	198	284	369	455	540
Heating 2nd Stage	Low	650	CFM	607	612	617	622	626
			Temp. Rise	60	60	59	59	59
			Watts	78	124	170	216	261
	Medium Low	830	CFM	807	807	808	808	809
			Temp. Rise	45	45	45	45	45
			Watts	146	218	290	362	434
	Medium (a)	880	CFM	871	874	878	881	885
			Temp. Rise	42	42	42	41	41
			Watts	182	259	336	413	489
	High	1400	CFM	1307	1237	1167	1097	1028
			Temp. Rise	28	30	32	33	35
			Watts	492	526	560	593	627

(a) Factory Setting.

Table 4. S9V2B040U3PSBB / S9V2B040D3PSBB Cooling Airflow

S9V2B040U3PSBB / S9V2B040D3PSBB 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	47	81	121	166	215
		Cooling 420	CFM	630	630	630	630	630
		CFM/Ton	Watts	40	72	111	154	202
		Cooling 400	CFM	600	600	600	600	600
		CFM/Ton	Watts	36	67	105	147	193
		Cooling 370	CFM	555	555	555	555	555
		CFM/Ton	Watts	30	60	96	136	181
		Cooling 350	CFM	525	525	525	525	525
		CFM/Ton	Watts	27	56	90	130	174
		Cooling 330	CFM	495	495	495	495	495
		CFM/Ton	Watts	24	51	85	124	167
Cooling 310	CFM	465	465	465	465	465		
CFM/Ton	Watts	21	48	80	118	161		
Cooling 290	CFM	435	435	435	435	435		
CFM/Ton	Watts	19	44	76	113	155		
Cooling	2.0 Ton	Cooling 450	CFM	900	900	900	900	900
		CFM/Ton	Watts	94	137	186	240	298
		Cooling 420	CFM	840	840	840	840	840
		CFM/Ton	Watts	79	120	166	218	273
		Cooling 400	CFM	800	800	800	800	800
		CFM/Ton	Watts	70	109	154	204	258
		Cooling 370	CFM	740	740	740	740	740
		CFM/Ton	Watts	58	95	138	185	236
		Cooling 350	CFM	700	700	700	700	700
		CFM/Ton	Watts	51	86	127	173	223
		Cooling 330	CFM	660	660	660	660	660
		CFM/Ton	Watts	44	78	118	162	211
Cooling 310	CFM	620	620	620	620	620		
CFM/Ton	Watts	38	71	109	152	199		
Cooling 290	CFM	580	580	580	580	580		
CFM/Ton	Watts	33	64	101	142	188		
Cooling	2.5 Ton	Cooling 450	CFM	1125	1125	1125	1125	1125
		CFM/Ton	Watts	167	219	278	341	408
		Cooling 420	CFM	1050	1050	1050	1050	1050
		CFM/Ton	Watts	139	188	244	304	368
		Cooling 400	CFM	1000	1000	1000	1000	1000
		CFM/Ton	Watts	123	170	223	281	343
		Cooling 370	CFM	925	925	925	925	925
		CFM/Ton	Watts	100	145	195	250	308
		Cooling 350	CFM	875	875	875	875	875
		CFM/Ton	Watts	87	129	178	230	287
		Cooling 330	CFM	825	825	825	825	825
		CFM/Ton	Watts	121	160	205	254	308
Cooling 310	CFM	775	775	775	775	775		
CFM/Ton	Watts	101	139	182	229	281		
Cooling 290	CFM	725	725	725	725	725		
CFM/Ton	Watts	88	123	164	210	260		
Cooling	3.0 Ton <sup>(a)</sup>	Cooling 450	CFM	1350	1350	1350	1298	1198
		CFM/Ton	Watts	272	334	402	440	450
		Cooling 420	CFM	1260	1260	1260	1260	1198
		CFM/Ton	Watts	226	284	348	417	450
		Cooling 400	CFM	1200	1200	1200	1200	1198
		CFM/Ton	Watts	198	254	315	381	450
		Cooling 370	CFM	1110	1110	1110	1110	1110
		CFM/Ton	Watts	161	213	271	333	399
		Cooling 350	CFM	1050	1050	1050	1050	1050
		CFM/Ton <sup>(a)</sup>	Watts	139	188	244	304	368
		Cooling 330	CFM	990	990	990	990	990
		CFM/Ton	Watts	119	166	219	277	338
Cooling 310	CFM	930	930	930	930	930		
CFM/Ton	Watts	102	146	197	252	311		
Cooling 290	CFM	870	870	870	870	870		
CFM/Ton	Watts	86	128	176	229	285		

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



## Heating and Cooling Airflow Tables

**Table 5. S9V2B060U3PSBB Heating Airflow**

S9V2B060U3PSBB 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	673	675	677	679	681
			Temp. Rise	52	52	52	52	52
			Watts	47	83	120	156	193
	Medium Low <sup>(a)</sup>	814	CFM	850	827	804	780	757
			Temp. Rise	41	42	43	44	45
			Watts	82	120	157	195	232
	Medium	893	CFM	901	903	905	907	909
			Temp. Rise	39	39	39	39	39
			Watts	106	144	181	219	256
	High	1153	CFM	1131	1121	1112	1102	1093
			Temp. Rise	32	31	31	31	31
			Watts	209	250	291	332	373
Heating 2nd Stage	Low	800	CFM	850	844	838	833	827
			Temp. Rise	63	63	64	64	65
			Watts	75	120	165	210	255
	Medium Low <sup>(a)</sup>	1030	CFM	1072	1061	1049	1038	1027
			Temp. Rise	50	50	51	52	52
			Watts	147	196	244	293	341
	Medium	1130	CFM	1115	1127	1138	1149	1160
			Temp. Rise	48	48	48	47	47
			Watts	193	246	300	354	408
	High	1460	CFM	1382	1336	1289	1243	1196
			Temp. Rise	39	40	42	43	45
			Watts	382	400	418	435	453

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

**Table 6. S9V2B060D3PSBB Heating Airflow**

S9V2B060D3PSBB 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	701	683	664	646	627
			Temp. Rise	51	52	54	55	57
			Watts	33	79	125	171	217
	Medium Low <sup>(a)</sup>	814	CFM	799	812	825	838	851
			Temp. Rise	45	44	43	42	42
			Watts	56	109	163	217	270
	Medium	893	CFM	887	895	903	910	918
			Temp. Rise	40	40	40	39	39
			Watts	77	128	180	231	283
	High	1153	CFM	1075	1087	1099	1111	1122
			Temp. Rise	33	33	33	32	32
			Watts	163	227	291	355	419
Heating 2nd Stage	Low	800	CFM	833	825	816	808	800
			Temp. Rise	64	65	66	67	67
			Watts	48	109	170	231	292
	Medium Low <sup>(a)</sup>	1030	CFM	987	991	995	1000	1004
			Temp. Rise	55	55	55	54	54
			Watts	117	109	237	298	358
	Medium	1130	CFM	1054	1071	1088	1105	1122
			Temp. Rise	51	50	49	48	48
			Watts	165	211	256	302	348
	High	1460	CFM	1336	1337	1338	1339	1340
			Temp. Rise	40	40	40	40	40
			Watts	375	402	429	456	483

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

## Heating and Cooling Airflow Tables

**Table 7. S9V2B060U3PSBB / S9V2B060D3PSBB Cooling Airflow**

<b>S9V2B060U3PSBB / S9V2B060D3PSBB Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>								
<b>Cooling</b>	<b>Unit Outdoor</b>	<b>Airflow Setting (CFM/ton)</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
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 <sup>(a)</sup>	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



## Heating and Cooling Airflow Tables

**Table 8. S9V2B060U4PSBB Heating Airflow**

S9V2B060U4PSBB 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	782	CFM	765	755	745	736	726
			Temp. Rise	46	47	47	48	49
			Watts	75	120	166	212	258
	Medium Low	861	CFM	817	812	807	802	797
			Temp. Rise	43	43	44	44	44
			Watts	91	140	188	237	286
	Medium (a)	916	CFM	860	856	852	848	844
			Temp. Rise	41	41	41	41	42
			Watts	102	153	204	256	307
	High	1256	CFM	1111	1109	1107	1105	1103
			Temp. Rise	32	32	32	32	32
			Watts	227	291	355	419	484
Heating 2nd Stage	Low	990	CFM	950	945	941	936	932
			Temp. Rise	56	56	57	57	58
			Watts	119	171	224	277	330
	Medium Low	1090	CFM	1022	1021	1020	1018	1017
			Temp. Rise	52	52	52	53	53
			Watts	147	202	257	312	367
	Medium (a)	1160	CFM	1086	1084	1081	1079	1077
			Temp. Rise	49	49	49	50	50
			Watts	181	239	297	356	414
	High	1590	CFM	1478	1459	1441	1422	1404
			Temp. Rise	36	37	37	38	38
			Watts	434	496	558	620	682

(a) Factory Setting.



Table 9. S9V2B060U4PSBB Cooling Airflow

S9V2B060U4PSBB 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	2.5 Ton	Cooling 450	CFM	1125	1125	1125	1125	1125
		CFM/Ton	Watts	154	205	261	319	381
		Cooling 420	CFM	1050	1050	1050	1050	1050
		CFM/Ton	Watts	128	177	229	285	343
		Cooling 400	CFM	1000	1000	1000	1000	1000
		CFM/Ton	Watts	113	159	210	264	320
		Cooling 370	CFM	925	925	925	925	925
		CFM/Ton	Watts	93	136	184	234	288
		Cooling 350	CFM	875	875	875	875	875
		CFM/Ton	Watts	81	122	168	217	269
		Cooling 330	CFM	825	825	825	825	825
		CFM/Ton	Watts	70	109	153	200	251
		Cooling 310	CFM	775	775	775	775	775
		CFM/Ton	Watts	60	97	139	185	234
		Cooling 290	CFM	725	725	725	725	725
		CFM/Ton	Watts	51	87	127	171	219
Cooling	3.0 Ton	Cooling 450	CFM	1350	1350	1350	1350	1350
		CFM/Ton	Watts	250	312	377	445	515
		Cooling 420	CFM	1260	1260	1260	1260	1260
		CFM/Ton	Watts	208	265	326	390	457
		Cooling 400	CFM	1200	1200	1200	1200	1200
		CFM/Ton	Watts	182	237	296	357	422
		Cooling 370	CFM	1110	1110	1110	1110	1110
		CFM/Ton	Watts	148	199	254	312	373
		Cooling 350	CFM	1050	1050	1050	1050	1050
		CFM/Ton	Watts	128	177	229	285	343
		Cooling 330	CFM	990	990	990	990	990
		CFM/Ton	Watts	110	156	206	260	316
		Cooling 310	CFM	930	930	930	930	930
		CFM/Ton	Watts	94	138	185	236	290
		Cooling 290	CFM	870	870	870	870	870
		CFM/Ton	Watts	80	121	166	215	267
Cooling	3.5 Ton	Cooling 450	CFM	1575	1575	1575	1575	1575
		CFM/Ton	Watts	382	453	528	606	686
		Cooling 420	CFM	1470	1470	1470	1470	1470
		CFM/Ton	Watts	316	382	453	526	602
		Cooling 400	CFM	1400	1400	1400	1400	1400
		CFM/Ton	Watts	276	340	407	477	550
		Cooling 370	CFM	1295	1295	1295	1295	1295
		CFM/Ton	Watts	224	283	345	411	479
		Cooling 350	CFM	1225	1225	1225	1225	1225
		CFM/Ton	Watts	193	249	308	371	436
		Cooling 330	CFM	1155	1155	1155	1155	1155
		CFM/Ton	Watts	165	218	274	334	397
		Cooling 310	CFM	1085	1085	1085	1085	1085
		CFM/Ton	Watts	140	190	243	301	360
		Cooling 290	CFM	1015	1015	1015	1015	1015
		CFM/Ton	Watts	118	165	216	270	327
Cooling	4.0 Ton <sup>(a)</sup>	Cooling 450	CFM	1800	1800	1730	1670	1600
		CFM/Ton	Watts	554	636	656	686	708
		Cooling 420	CFM	1680	1680	1680	1670	1600
		CFM/Ton	Watts	457	533	613	686	708
		Cooling 400	CFM	1600	1600	1600	1600	1600
		CFM/Ton	Watts	399	472	548	626	708
		Cooling 370	CFM	1480	1480	1480	1480	1480
		CFM/Ton	Watts	322	389	459	533	609
		Cooling 350	CFM	1400	1400	1400	1400	1400
		CFM/Ton <sup>(a)</sup>	Watts	276	340	407	477	550
		Cooling 330	CFM	1320	1320	1320	1320	1320
		CFM/Ton	Watts	236	296	359	426	495
		Cooling 310	CFM	1240	1240	1240	1240	1240
		CFM/Ton	Watts	199	256	316	379	445
		Cooling 290	CFM	1160	1160	1160	1160	1160
		CFM/Ton	Watts	167	220	277	337	399

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



## Heating and Cooling Airflow Tables

**Table 10. S9V2B080U3PSBB Heating Airflow**

<b>S9V2B080U3PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>				<b>1st Stage Capacity = 50,440 2nd Stage Capacity = 77,600</b>				
<b>Heating</b>	<b>Airflow Setting</b>	<b>Target Airflow</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
Heating 1st Stage	Low	948	CFM	1070	1030	990	950	910
			Temp. Rise	45	45	46	46	46
			Watts	120	162	203	245	286
	Medium Low	1051	CFM	1109	1061	1013	965	917
			Temp. Rise	42	44	46	47	49
			Watts	143	197	252	307	361
	Medium <sup>(a)</sup>	1090	CFM	1188	1125	1062	998	935
			Temp. Rise	40	42	43	45	47
			Watts	154	215	276	336	397
	High	1168	CFM	1230	1212	1193	1174	1156
			Temp. Rise	38	39	39	40	41
			Watts	194	246	297	349	401
Heating 2nd Stage	Low	1200	CFM	1331	1293	1256	1218	1172
			Temp. Rise	55	56	57	58	61
			Watts	221	277	333	388	436
	Medium Low	1330	CFM	1436	1388	1340	1263	1172
			Temp. Rise	50	52	54	56	61
			Watts	287	347	407	421	436
	Medium <sup>(a)</sup>	1380	CFM	1380	1380	1338	1263	1172
			Temp. Rise	52	52	53	56	61
			Watts	283	351	396	421	436
	High	1480	CFM	1460	1400	1338	1263	1172
			Temp. Rise	49	51	53	56	61
			Watts	329	363	396	421	436

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

**Table 11. S9V2B080D3PSBB Heating Airflow**

<b>S9V2B080D3PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>				<b>1st Stage Capacity = 50,440 2nd Stage Capacity = 77,600</b>				
<b>Heating</b>	<b>Airflow Setting</b>	<b>Target Airflow</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
Heating 1st Stage	Low	948	CFM	843	836	830	823	816
			Temp. Rise	56	56	57	57	58
			Watts	106	158	209	260	312
	Medium Low	1051	CFM	949	936	924	911	898
			Temp. Rise	50	51	51	52	53
			Watts	138	195	252	309	366
	Medium <sup>(a)</sup>	1090	CFM	981	952	922	893	864
			Temp. Rise	48	49	51	52	54
			Watts	151	210	269	328	387
	High	1168	CFM	1043	1031	1018	1006	993
			Temp. Rise	45	45	46	47	47
			Watts	181	244	307	371	434
Heating 2nd Stage	Low	1200	CFM	1087	1076	1065	1055	1044
			Temp. Rise	66	67	68	68	68
			Watts	195	255	315	376	367
	Medium Low	1330	CFM	1211	1168	1124	1080	1036
			Temp. Rise	59	61	64	66	69
			Watts	268	310	352	322	363
	Medium <sup>(a)</sup>	1380	CFM	1242	1242	1204	1137	1055
			Temp. Rise	57	57	59	63	67
			Watts	214	276	321	351	373
	High	1480	CFM	1314	1260	1204	1137	1055
			Temp. Rise	54	56	59	63	67
			Watts	249	285	321	351	373

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

Table 12. S9V2B080U3PSBB / S9V2B080D3PSBB Cooling Airflow

S9V2B080U3PSBB / S9V2B080D3PSBB 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	2.0 Ton	Cooling 450	CFM	900	900	900	900	900
		CFM/Ton	Watts	95	141	191	245	301
		Cooling 420	CFM	840	840	840	840	840
		CFM/Ton	Watts	80	124	172	223	277
		Cooling 400	CFM	800	800	800	800	800
		CFM/Ton	Watts	71	114	160	210	262
		Cooling 370	CFM	740	740	740	740	740
		CFM/Ton	Watts	59	99	143	191	242
		Cooling 350	CFM	700	700	700	700	700
		CFM/Ton	Watts	52	91	133	180	229
		Cooling 330	CFM	660	660	660	660	660
		CFM/Ton	Watts	46	83	124	169	218
		Cooling 310	CFM	620	620	620	620	620
		CFM/Ton	Watts	40	75	115	159	207
Cooling 290	CFM	580	580	580	580	580		
CFM/Ton	Watts	35	68	107	150	197		
Cooling	2.5 Ton	Cooling 450	CFM	1125	1125	1125	1125	1125
		CFM/Ton	Watts	166	222	282	345	410
		Cooling 420	CFM	1050	1050	1050	1050	1050
		CFM/Ton	Watts	139	192	248	308	370
		Cooling 400	CFM	1000	1000	1000	1000	1000
		CFM/Ton	Watts	123	173	228	286	346
		Cooling 370	CFM	925	925	925	925	925
		CFM/Ton	Watts	101	149	200	255	312
		Cooling 350	CFM	875	875	875	875	875
		CFM/Ton	Watts	88	134	183	236	291
		Cooling 330	CFM	825	825	825	825	825
		CFM/Ton	Watts	77	120	167	218	272
		Cooling 310	CFM	775	775	775	775	775
		CFM/Ton	Watts	66	107	153	202	254
Cooling 290	CFM	725	725	725	725	725		
CFM/Ton	Watts	57	96	139	187	237		
Cooling	3.0 Ton (a)	Cooling 450	CFM	1350	1350	1338	1263	1172
		CFM/Ton	Watts	267	333	396	421	436
		Cooling 420	CFM	1260	1260	1260	1260	1172
		CFM/Ton	Watts	223	285	350	419	436
		Cooling 400	CFM	1200	1200	1200	1200	1172
		CFM/Ton	Watts	196	255	318	385	436
		Cooling 370	CFM	1110	1110	1110	1110	1110
		CFM/Ton	Watts	160	216	275	337	402
		Cooling 350	CFM	1050	1050	1050	1050	1050
		CFM/Ton (a)	Watts	139	192	248	308	370
		Cooling 330	CFM	990	990	990	990	990
		CFM/Ton	Watts	120	170	224	281	341
		Cooling 310	CFM	930	930	930	930	930
		CFM/Ton	Watts	103	150	202	257	314
Cooling 290	CFM	870	870	870	870	870		
CFM/Ton	Watts	87	132	181	234	289		
Cooling	3.5 Ton	Cooling 450	CFM	1460	1400	1338	1263	1172
		CFM/Ton	Watts	329	363	396	421	436
		Cooling 420	CFM	1460	1400	1338	1263	1172
		CFM/Ton	Watts	329	363	396	421	436
		Cooling 400	CFM	1400	1400	1338	1263	1172
		CFM/Ton	Watts	294	363	396	421	436
		Cooling 370	CFM	1295	1295	1295	1263	1172
		CFM/Ton	Watts	239	303	370	421	436
		Cooling 350	CFM	1225	1225	1225	1225	1172
		CFM/Ton	Watts	207	267	332	399	436
		Cooling 330	CFM	1155	1155	1155	1155	1155
		CFM/Ton	Watts	177	235	296	360	427
		Cooling 310	CFM	1085	1085	1085	1085	1085
		CFM/Ton	Watts	151	205	264	325	388
Cooling 290	CFM	1015	1015	1015	1015	1015		
CFM/Ton	Watts	128	179	234	292	353		

(a) Factory Setting



## Heating and Cooling Airflow Tables

**Table 13. S9V2B080U4PSBB Heating Airflow**

<b>S9V2B080U4PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>				<b>1st Stage Capacity = 50,440 2nd Stage Capacity = 77,600</b>				
<b>Heating</b>	<b>Airflow Setting</b>	<b>Target Airflow</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
Heating 1st Stage	Low	864	CFM	914	882	849	816	783
			Temp. Rise	51	53	55	57	59
			Watts	90	131	172	213	255
	Medium Low <sup>(a)</sup>	907	CFM	940	912	885	858	831
			Temp. Rise	50	51	53	54	56
			Watts	104	141	178	215	253
	Medium	958	CFM	983	932	881	830	779
			Temp. Rise	47	50	53	55	58
			Watts	118	151	184	218	251
	High	1051	CFM	1029	1068	1107	1146	1185
			Temp. Rise	45	44	42	40	39
			Watts	155	195	235	275	314
Heating 2nd Stage	Low	1200	CFM	1207	1206	1205	1204	1203
			Temp. Rise	60	60	60	60	60
			Watts	206	258	309	361	412
	Medium Low <sup>(a)</sup>	1260	CFM	1260	1261	1262	1263	1264
			Temp. Rise	57	57	57	57	57
			Watts	232	287	342	397	452
	Medium	1330	CFM	1360	1347	1333	1320	1306
			Temp. Rise	53	53	54	54	55
			Watts	263	322	380	439	497
	High	1460	CFM	1420	1439	1458	1477	1496
			Temp. Rise	51	50	49	49	48
			Watts	377	433	489	546	602

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

**Table 14. S9V2B080D4PSBB Heating Airflow**

<b>S9V2B080D4PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>				<b>1st Stage Capacity = 50,440 2nd Stage Capacity = 77,600</b>				
<b>Heating</b>	<b>Airflow Setting</b>	<b>Target Airflow</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
Heating 1st Stage	Low	864	CFM	770	770	770	770	770
			Temp. Rise	61	61	61	61	61
			Watts	72	118	164	210	256
	Medium Low <sup>(a)</sup>	907	CFM	809	809	809	809	809
			Temp. Rise	58	58	58	58	58
			Watts	88	134	180	227	273
	Medium	958	CFM	854	854	854	854	854
			Temp. Rise	54	54	54	54	54
			Watts	101	150	198	247	296
	High	1051	CFM	993	993	993	993	993
			Temp. Rise	47	47	47	47	47
			Watts	133	186	239	292	346
Heating 2nd Stage	Low	1200	CFM	1082	1082	1082	1082	1082
			Temp. Rise	66	66	66	66	66
			Watts	181	239	298	357	416
	Medium Low <sup>(a)</sup>	1260	CFM	1190	1190	1190	1190	1190
			Temp. Rise	59	59	59	59	59
			Watts	206	268	329	390	451
	Medium	1330	CFM	1225	1225	1225	1225	1225
			Temp. Rise	58	58	58	58	58
			Watts	239	303	367	431	495
	High	1460	CFM	1227	1227	1227	1227	1227
			Temp. Rise	57	57	57	57	57
			Watts	320	390	460	530	600

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

## Heating and Cooling Airflow Tables

**Table 15. S9V2B080U4PSBB / S9V2B080D4PSBB Cooling Airflow**

<b>S9V2B080U4PSBB / S9V2B080D4PSBB Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>								
<b>Cooling</b>	<b>Unit Outdoor</b>	<b>Airflow Setting (CFM/ton)</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
Cooling	2.5 Ton	Cooling 450	CFM	1125	1125	1125	1125	1125
		CFM/Ton	Watts	155	205	259	316	376
		Cooling 420	CFM	1050	1050	1050	1050	1050
		CFM/Ton	Watts	130	177	228	282	340
		Cooling 400	CFM	1000	1000	1000	1000	1000
		CFM/Ton	Watts	115	160	209	262	317
		Cooling 370	CFM	925	925	925	925	925
		CFM/Ton	Watts	94	136	183	233	286
		Cooling 350	CFM	875	875	875	875	875
		CFM/Ton	Watts	82	122	167	216	267
		Cooling 330	CFM	825	825	825	825	825
		CFM/Ton	Watts	71	110	153	199	249
		Cooling 310	CFM	775	775	775	775	775
		CFM/Ton	Watts	61	98	139	184	233
Cooling 290	CFM	725	725	725	725	725		
CFM/Ton	Watts	52	87	127	171	218		
Cooling	3.0 Ton	Cooling 450	CFM	1350	1350	1350	1350	1350
		CFM/Ton	Watts	252	311	374	440	508
		Cooling 420	CFM	1260	1260	1260	1260	1260
		CFM/Ton	Watts	209	265	324	386	451
		Cooling 400	CFM	1200	1200	1200	1200	1200
		CFM/Ton	Watts	184	237	294	354	416
		Cooling 370	CFM	1110	1110	1110	1110	1110
		CFM/Ton	Watts	150	199	253	309	369
		Cooling 350	CFM	1050	1050	1050	1050	1050
		CFM/Ton	Watts	130	177	228	282	340
		Cooling 330	CFM	990	990	990	990	990
		CFM/Ton	Watts	112	156	205	258	313
		Cooling 310	CFM	930	930	930	930	930
		CFM/Ton	Watts	95	138	185	235	288
Cooling 290	CFM	870	870	870	870	870		
CFM/Ton	Watts	81	121	166	214	265		
Cooling	3.5 Ton	Cooling 450	CFM	1575	1575	1575	1575	1575
		CFM/Ton	Watts	383	452	524	599	676
		Cooling 420	CFM	1470	1470	1470	1470	1470
		CFM/Ton	Watts	317	382	449	520	593
		Cooling 400	CFM	1400	1400	1400	1400	1400
		CFM/Ton	Watts	278	339	404	472	542
		Cooling 370	CFM	1295	1295	1295	1295	1295
		CFM/Ton	Watts	225	282	343	407	473
		Cooling 350	CFM	1225	1225	1225	1225	1225
		CFM/Ton	Watts	194	248	306	367	431
		Cooling 330	CFM	1155	1155	1155	1155	1155
		CFM/Ton	Watts	166	218	273	331	392
		Cooling 310	CFM	1085	1085	1085	1085	1085
		CFM/Ton	Watts	141	190	242	298	356
Cooling 290	CFM	1015	1015	1015	1015	1015		
CFM/Ton	Watts	119	165	215	268	324		
Cooling	4.0 Ton <sup>(a)</sup>	Cooling 450	CFM	1800	1784	1746	1665	1581
		CFM/Ton	Watts	555	619	665	674	681
		Cooling 420	CFM	1680	1680	1680	1665	1581
		CFM/Ton	Watts	458	531	608	674	681
		Cooling 400	CFM	1600	1600	1600	1600	1600
		CFM/Ton	Watts	400	470	543	619	697
		Cooling 370	CFM	1480	1480	1480	1480	1480
		CFM/Ton	Watts	323	388	456	527	600
		Cooling 350	CFM	1400	1400	1400	1400	1400
		CFM/Ton <sup>(a)</sup>	Watts	278	339	404	472	542
		Cooling 330	CFM	1320	1320	1320	1320	1320
		CFM/Ton	Watts	237	295	357	421	488
		Cooling 310	CFM	1240	1240	1240	1240	1240
		CFM/Ton	Watts	201	255	314	375	439
Cooling 290	CFM	1160	1160	1160	1160	1160		
CFM/Ton	Watts	168	220	275	334	395		

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



## Heating and Cooling Airflow Tables

Table 16. S9V2C080U5PSBB Heating Airflow

S9V2C080U5PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter								
				1st Stage Capacity = 50,440				
				2nd Stage Capacity = 77,600				
Heating	Airflow Setting	Target Airflow		External Static Pressure				
				0.1	0.3	0.5	0.7	0.9
Heating 1st Stage	Low	857	CFM	837	870	902	934	967
			Temp. Rise	55	53	51	50	48
			Watts	65	112	160	208	256
	Medium Low <sup>(a)</sup>	1044	CFM	997	1015	1033	1050	1068
			Temp. Rise	46	45	45	44	43
			Watts	102	155	209	263	316
	Medium	1123	CFM	1067	1094	1121	1148	1175
			Temp. Rise	43	42	41	40	39
			Watts	123	180	236	293	350
	High	1498	CFM	1420	1416	1411	1407	1402
			Temp. Rise	32	33	33	33	34
			Watts	238	320	402	485	567
Heating 2nd Stage	Low	1190	CFM	1129	1148	1168	1188	1208
			Temp. Rise	63	62	61	60	59
			Watts	127	195	263	331	399
	Medium Low <sup>(a)</sup>	1450	CFM	1387	1395	1404	1412	1420
			Temp. Rise	52	51	51	51	51
			Watts	248	310	372	434	496
	Medium	1560	CFM	1484	1498	1512	1525	1539
			Temp. Rise	48	48	47	47	47
			Watts	281	358	435	512	589
	High	2080	CFM	1954	1956	1959	1961	1964
			Temp. Rise	37	37	37	37	37
			Watts	597	732	866	1001	1135

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

Table 17. S9V2C080U5PSBB Cooling Airflow

S9V2C080U5PSBB 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	3.5 Ton	Cooling 450 CFM/Ton	CFM	1575	1575	1575	1575	1575
			Watts	279	351	426	504	584
		Cooling 420 CFM/Ton	CFM	1470	1470	1470	1470	1470
			Watts	233	300	370	443	519
		Cooling 400 CFM/Ton	CFM	1400	1400	1400	1400	1400
			Watts	205	269	336	406	478
		Cooling 370 CFM/Ton	CFM	1295	1295	1295	1295	1295
			Watts	168	227	289	355	423
		Cooling 350 CFM/Ton	CFM	1225	1225	1225	1225	1225
			Watts	145	201	261	324	389
		Cooling 330 CFM/Ton	CFM	1155	1155	1155	1155	1155
			Watts	125	178	235	295	358
		Cooling 310 CFM/Ton	CFM	1085	1085	1085	1085	1085
			Watts	107	157	211	269	329
	Cooling 290 CFM/Ton	CFM	1015	1015	1015	1015	1015	
		Watts	91	138	189	244	302	
Cooling	4.0 Ton	Cooling 450 CFM/Ton	CFM	1800	1800	1800	1800	1800
			Watts	399	482	567	655	745
		Cooling 420 CFM/Ton	CFM	1680	1680	1680	1680	1680
			Watts	332	409	488	571	655
		Cooling 400 CFM/Ton	CFM	1600	1600	1600	1600	1600
			Watts	291	364	441	519	600
		Cooling 370 CFM/Ton	CFM	1480	1480	1480	1480	1480
			Watts	237	305	375	449	524
		Cooling 350 CFM/Ton	CFM	1400	1400	1400	1400	1400
			Watts	205	269	336	406	478
		Cooling 330 CFM/Ton	CFM	1320	1320	1320	1320	1320
			Watts	176	236	300	367	436
		Cooling 310 CFM/Ton	CFM	1240	1240	1240	1240	1240
			Watts	150	207	267	330	396
	Cooling 290 CFM/Ton	CFM	1160	1160	1160	1160	1160	
		Watts	127	180	237	297	360	
Cooling	4.5 Ton	Cooling 450 CFM/Ton	CFM	2025	2025	2025	2025	2020
			Watts	550	643	740	838	934
		Cooling 420 CFM/Ton	CFM	1890	1890	1890	1890	1890
			Watts	456	543	632	725	819
		Cooling 400 CFM/Ton	CFM	1800	1800	1800	1800	1800
			Watts	399	482	567	655	745
		Cooling 370 CFM/Ton	CFM	1665	1665	1665	1665	1665
			Watts	324	400	479	561	645
		Cooling 350 CFM/Ton	CFM	1575	1575	1575	1575	1575
			Watts	279	351	426	504	584
		Cooling 330 CFM/Ton	CFM	1485	1485	1485	1485	1485
			Watts	239	307	378	451	527
		Cooling 310 CFM/Ton	CFM	1395	1395	1395	1395	1395
			Watts	203	267	334	403	476
	Cooling 290 CFM/Ton	CFM	1305	1305	1305	1305	1305	
		Watts	171	231	294	360	428	
Cooling	5.0 Ton <sup>(a)</sup>	Cooling 450 CFM/Ton	CFM	2250	2250	2250	2150	2020
			Watts	734	839	947	955	934
		Cooling 420 CFM/Ton	CFM	2100	2100	2100	2100	2020
			Watts	607	705	805	907	934
		Cooling 400 CFM/Ton	CFM	2000	2000	2000	2000	2000
			Watts	531	624	719	816	916
		Cooling 370 CFM/Ton	CFM	1850	1850	1850	1850	1850
			Watts	430	515	603	693	785
		Cooling 350 CFM/Ton <sup>(a)</sup>	CFM	1750	1750	1750	1750	1750
			Watts	370	450	533	619	707
		Cooling 330 CFM/Ton	CFM	1650	1650	1650	1650	1650
			Watts	316	392	470	551	634
		Cooling 310 CFM/Ton	CFM	1550	1550	1550	1550	1550
			Watts	268	339	412	489	568
Cooling 290 CFM/Ton	CFM	1450	1450	1450	1450	1450		
	Watts	225	291	360	432	507		

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



## Heating and Cooling Airflow Tables

**Table 18. S9V2C100U4PSBB Heating Airflow**

<b>S9V2C100U4PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>				<b>1st Stage Capacity = 63,050 2nd Stage Capacity = 97,000</b>				
<b>Heating</b>	<b>Airflow Setting</b>	<b>Target Airflow</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
Heating 1st Stage	Low	1146	CFM	1191	1199	1208	1216	1224
			Temp. Rise	50	49	49	49	49
			Watts	133	192	251	310	369
	Medium Low	1280	CFM	1314	1304	1294	1284	1274
			Temp. Rise	45	45	45	46	46
			Watts	173	235	297	359	421
	Medium (a)	1446	CFM	1478	1466	1453	1441	1428
			Temp. Rise	40	40	40	40	40
			Watts	243	304	364	425	485
	High	1493	CFM	1498	1511	1524	1537	1550
			Temp. Rise	39	39	39	39	38
			Watts	264	330	397	464	531
Heating 2nd Stage	Low	1450	CFM	1480	1488	1496	1503	1511
			Temp. Rise	60	60	60	60	60
			Watts	244	312	380	449	517
	Medium Low	1620	CFM	1658	1656	1654	1652	1650
			Temp. Rise	54	54	54	54	55
			Watts	330	408	486	564	642
	Medium (a)	1830	CFM	1869	1857	1846	1811	1714
			Temp. Rise	48	48	49	49	52
			Watts	471	549	628	677	695
	High	1890	CFM	1959	1919	1879	1811	1714
			Temp. Rise	46	47	48	49	52
			Watts	540	600	660	677	695

(a) Factory Setting.

**Table 19. S9V2C100D4PSBB Heating Airflow**

<b>S9V2C100D4PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>				<b>1st Stage Capacity = 63,050 2nd Stage Capacity = 97,000</b>				
<b>Heating</b>	<b>Airflow Setting</b>	<b>Target Airflow</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
Heating 1st Stage	Low	1080	CFM	1068	1048	1029	1009	989
			Temp. Rise	55	57	60	63	66
			Watts	101	151	201	251	301
	Medium Low	1166	CFM	1158	1113	1068	1023	978
			Temp. Rise	51	53	55	57	59
			Watts	115	172	229	285	342
	Medium (a)	1318	CFM	1326	1272	1218	1164	1111
			Temp. Rise	46	48	50	51	53
			Watts	153	206	259	312	365
	High	1361	CFM	1312	1270	1229	1188	1147
			Temp. Rise	46	47	47	48	49
			Watts	166	221	276	331	387
Heating 2nd Stage	Low	1500	CFM	1514	1478	1441	1404	1367
			Temp. Rise	58	60	61	63	64
			Watts	223	297	370	443	516
	Medium Low	1620	CFM	1620	1588	1556	1523	1491
			Temp. Rise	55	56	57	58	59
			Watts	276	345	415	484	553
	Medium (a)	1830	CFM	1768	1746	1724	1702	1620
			Temp. Rise	50	51	52	53	53
			Watts	372	446	520	594	668
	High	1890	CFM	1810	1783	1756	1729	1702
			Temp. Rise	49	50	51	52	52
			Watts	405	476	548	677	695

(a) Factory Setting.



## Heating and Cooling Airflow Tables

**Table 20. S9V2C100U4PSBB / S9V2C100D4PSBB Cooling Airflow**

<b>S9V2C100U4PSBB / S9V2C100D4PSBB Furnace Cooling Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>								
Cooling	Unit Outdoor	Airflow Setting (CFM/ton)		External Static Pressure				
				0.1	0.3	0.5	0.7	0.9
Cooling	2.5 Ton	Cooling 450	CFM	1125	1125	1125	1125	1125
		CFM/Ton	Watts	123	178	236	296	360
		Cooling 420	CFM	1050	1050	1050	1050	1050
		CFM/Ton	Watts	104	156	210	268	329
		Cooling 400	CFM	1000	1000	1000	1000	1000
		CFM/Ton	Watts	93	142	195	251	309
		Cooling 370	CFM	925	925	925	925	925
		CFM/Ton	Watts	77	123	173	226	282
		Cooling 350	CFM	875	875	875	875	875
		CFM/Ton	Watts	68	112	160	211	265
		Cooling 330	CFM	825	825	825	825	825
		CFM/Ton	Watts	60	102	147	196	249
		Cooling 310	CFM	775	775	775	775	775
		CFM/Ton	Watts	52	92	135	183	234
Cooling 290	CFM	725	725	725	725	725		
CFM/Ton	Watts	45	83	125	170	220		
Cooling	3.0 Ton	Cooling 450	CFM	1350	1350	1350	1350	1350
		CFM/Ton	Watts	194	259	326	396	468
		Cooling 420	CFM	1260	1260	1260	1260	1260
		CFM/Ton	Watts	163	224	287	353	422
		Cooling 400	CFM	1200	1200	1200	1200	1200
		CFM/Ton	Watts	144	202	263	327	393
		Cooling 370	CFM	1110	1110	1110	1110	1110
		CFM/Ton	Watts	119	173	231	291	354
		Cooling 350	CFM	1050	1050	1050	1050	1050
		CFM/Ton	Watts	104	156	210	268	329
		Cooling 330	CFM	990	990	990	990	990
		CFM/Ton	Watts	91	140	192	247	306
		Cooling 310	CFM	930	930	930	930	930
		CFM/Ton	Watts	78	125	174	228	284
Cooling 290	CFM	870	870	870	870	870		
CFM/Ton	Watts	67	111	158	209	264		
Cooling	3.5 Ton	Cooling 450	CFM	1575	1575	1575	1575	1575
		CFM/Ton	Watts	289	363	440	519	600
		Cooling 420	CFM	1470	1470	1470	1470	1470
		CFM/Ton	Watts	241	311	383	458	535
		Cooling 400	CFM	1400	1400	1400	1400	1400
		CFM/Ton	Watts	213	280	349	421	495
		Cooling 370	CFM	1295	1295	1295	1295	1295
		CFM/Ton	Watts	175	237	302	369	439
		Cooling 350	CFM	1225	1225	1225	1225	1225
		CFM/Ton	Watts	152	211	273	338	405
		Cooling 330	CFM	1155	1155	1155	1155	1155
		CFM/Ton	Watts	131	187	247	308	373
		Cooling 310	CFM	1085	1085	1085	1085	1085
		CFM/Ton	Watts	113	166	222	281	343
Cooling 290	CFM	1015	1015	1015	1015	1015		
CFM/Ton	Watts	96	146	199	256	315		
Cooling	4.0 Ton <sup>(a)</sup>	Cooling 450	CFM	1800	1800	1800	1800	1714
		CFM/Ton	Watts	410	494	580	669	695
		Cooling 420	CFM	1680	1680	1680	1680	1680
		CFM/Ton	Watts	342	420	502	585	671
		Cooling 400	CFM	1600	1600	1600	1600	1600
		CFM/Ton	Watts	301	376	454	534	617
		Cooling 370	CFM	1480	1480	1480	1480	1480
		CFM/Ton	Watts	246	316	388	464	541
		Cooling 350	CFM	1400	1400	1400	1400	1400
		CFM/Ton <sup>(a)</sup>	Watts	213	280	349	421	495
		Cooling 330	CFM	1320	1320	1320	1320	1320
		CFM/Ton	Watts	183	247	313	381	452
		Cooling 310	CFM	1240	1240	1240	1240	1240
		CFM/Ton	Watts	157	216	279	344	412
Cooling 290	CFM	1160	1160	1160	1160	1160		
CFM/Ton	Watts	133	189	248	310	375		

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



## Heating and Cooling Airflow Tables

**Table 21. S9V2C100U5PSBB Heating Airflow**

<b>S9V2C100U5PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>				<b>1st Stage Capacity = 63,050 2nd Stage Capacity = 97,000</b>				
<b>Heating</b>	<b>Airflow Setting</b>	<b>Target Airflow</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
Heating 1st Stage	Low	1145	CFM	1129	1097	1065	1033	1000
			Temp. Rise	52	53	54	56	57
			Watts	116	169	222	275	328
	Medium Low <sup>(a)</sup>	1426	CFM	1373	1376	1378	1381	1384
			Temp. Rise	43	42	42	42	42
			Watts	195	264	332	400	468
	Medium	1548	CFM	1475	1460	1445	1430	1415
			Temp. Rise	40	40	39	39	39
			Watts	248	311	374	436	499
	High	1620	CFM	1540	1545	1551	1556	1561
			Temp. Rise	38	38	38	38	38
			Watts	301	347	393	440	486
Heating 2nd Stage	Low	1590	CFM	1570	1548	1526	1503	1481
			Temp. Rise	57	58	59	60	61
			Watts	270	342	413	485	557
	Medium Low <sup>(a)</sup>	1980	CFM	1968	1936	1903	1871	1839
			Temp. Rise	45	46	47	48	49
			Watts	526	613	700	787	875
	Medium	2150	CFM	2092	2071	2051	2030	2010
			Temp. Rise	43	43	44	44	45
			Watts	672	752	831	910	990
	High	2250	CFM	2150	2130	2110	2090	2029
			Temp. Rise	42	42	42	43	44
			Watts	743	814	886	957	905

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

**Table 22. S9V2C100D5PSBB Heating Airflow**

<b>S9V2C100D5PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter</b>				<b>1st Stage Capacity = 63,050 2nd Stage Capacity = 97,000</b>				
<b>Heating</b>	<b>Airflow Setting</b>	<b>Target Airflow</b>		<b>External Static Pressure</b>				
				<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.7</b>	<b>0.9</b>
Heating 1st Stage	Low	1094	CFM	1094	1023	952	881	809
			Temp. Rise	53	57	61	65	69
			Watts	100	153	206	258	311
	Medium Low	1296	CFM	1296	1212	1127	1043	958
			Temp. Rise	45	48	51	55	58
			Watts	156	216	276	337	397
	Medium <sup>(a)</sup>	1346	CFM	1346	1259	1171	1083	996
			Temp. Rise	43	46	49	53	56
			Watts	172	234	297	359	421
	High	1620	CFM	1620	1515	1409	1304	1198
			Temp. Rise	36	38	41	44	46
			Watts	284	358	431	504	578
Heating 2nd Stage	Low	1520	CFM	1437	1420	1403	1385	1368
			Temp. Rise	62	63	63	64	65
			Watts	236	308	380	453	525
	Medium Low	1800	CFM	1744	1712	1680	1649	1617
			Temp. Rise	51	52	53	54	55
			Watts	378	462	545	629	713
	Medium <sup>(a)</sup>	1870	CFM	1811	1779	1747	1715	1683
			Temp. Rise	49	50	51	52	53
			Watts	421	508	594	681	768
	High	2250	CFM	2211	2109	2006	1903	1800
			Temp. Rise	40	42	45	47	49
			Watts	714	817	920	1023	905

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

Table 23. S9V2C100U5PSBB / S9V2C100D5PSBB Cooling Airflow

S9V2C100U5PSBB / S9V2C100D5PSBB 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	3.5 Ton	Cooling 450	CFM	1575	1575	1575	1575	1575
			Watts	263	333	406	481	558
		Cooling 420	CFM	1470	1470	1470	1470	1470
			Watts	218	283	352	423	496
		Cooling 400	CFM	1400	1400	1400	1400	1400
			Watts	191	254	319	388	458
		Cooling 370	CFM	1295	1295	1295	1295	1295
			Watts	155	214	275	340	406
		Cooling 350	CFM	1225	1225	1225	1225	1225
			Watts	134	190	249	311	375
		Cooling 330	CFM	1155	1155	1155	1155	1155
			Watts	115	168	225	284	346
Cooling 310	CFM	1085	1085	1085	1085	1085		
	Watts	98	148	202	259	319		
Cooling 290	CFM	1015	1015	1015	1015	1015		
	Watts	83	131	182	237	294		
Cooling	4.0 Ton	Cooling 450	CFM	1800	1800	1800	1800	1800
			Watts	381	460	542	627	713
		Cooling 420	CFM	1680	1680	1680	1680	1680
			Watts	314	388	466	545	627
		Cooling 400	CFM	1600	1600	1600	1600	1600
			Watts	275	345	419	496	574
		Cooling 370	CFM	1480	1480	1480	1480	1480
			Watts	222	288	357	428	502
		Cooling 350	CFM	1400	1400	1400	1400	1400
			Watts	191	254	319	388	458
		Cooling 330	CFM	1320	1320	1320	1320	1320
			Watts	163	223	285	351	418
Cooling 310	CFM	1240	1240	1240	1240	1240		
	Watts	139	195	254	317	381		
Cooling 290	CFM	1160	1160	1160	1160	1160		
	Watts	117	170	226	286	348		
Cooling	4.5 Ton	Cooling 450	CFM	2025	2025	2025	2025	2025
			Watts	531	620	711	805	901
		Cooling 420	CFM	1890	1890	1890	1890	1890
			Watts	437	520	606	694	784
		Cooling 400	CFM	1800	1800	1800	1800	1800
			Watts	381	460	542	627	713
		Cooling 370	CFM	1665	1665	1665	1665	1665
			Watts	307	380	457	536	616
		Cooling 350	CFM	1575	1575	1575	1575	1575
			Watts	263	333	406	481	558
		Cooling 330	CFM	1485	1485	1485	1485	1485
			Watts	224	290	359	431	505
Cooling 310	CFM	1395	1395	1395	1395	1395		
	Watts	189	252	317	386	456		
Cooling 290	CFM	1305	1305	1305	1305	1305		
	Watts	158	217	279	344	411		
Cooling	5.0 Ton <sup>(a)</sup>	Cooling 450	CFM	2250	2250	2242	2137	2029
			Watts	717	816	909	908	905
		Cooling 420	CFM	2100	2100	2100	2100	2029
			Watts	589	681	776	873	905
		Cooling 400	CFM	2000	2000	2000	2000	2000
			Watts	512	600	691	784	878
		Cooling 370	CFM	1850	1850	1850	1850	1850
			Watts	411	492	577	663	752
		Cooling 350	CFM	1750	1750	1750	1750	1750
			Watts	352	429	509	592	676
		Cooling 330	CFM	1650	1650	1650	1650	1650
			Watts	299	372	448	526	606
Cooling 310	CFM	1550	1550	1550	1550	1550		
	Watts	252	320	392	467	543		
Cooling 290	CFM	1450	1450	1450	1450	1450		
	Watts	210	275	342	413	485		

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



## Heating and Cooling Airflow Tables

**Table 24. S9V2D120U5PSBB Heating Airflow**

S9V2D120U5PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter								
				1st Stage Capacity = 75,660				
				2nd Stage Capacity = 116,400				
Heating	Airflow Setting	Target Airflow		External Static Pressure				
				0.1	0.3	0.5	0.7	0.9
Heating 1st Stage	Low	1123	CFM	1138	1158	1178	1198	1218
			Temp. Rise	61	60	59	58	57
			Watts	115	176	236	297	358
	Medium Low	1332	CFM	1371	1383	1394	1406	1417
			Temp. Rise	51	50	50	49	49
			Watts	182	251	320	389	457
	Medium (a)	1404	CFM	1440	1450	1461	1471	1482
			Temp. Rise	48	48	48	47	47
			Watts	208	283	357	431	505
	High	1620	CFM	1669	1674	1680	1685	1691
			Temp. Rise	42	42	41	41	41
			Watts	315	388	460	533	605
Heating 2nd Stage	Low	1560	CFM	1654	1637	1621	1604	1587
			Temp. Rise	65	66	67	67	68
			Watts	291	360	430	499	568
	Medium Low	1850	CFM	1980	1951	1922	1893	1864
			Temp. Rise	55	56	57	58	58
			Watts	456	539	621	704	787
	Medium (a)	1950	CFM	2075	2037	1999	1961	1923
			Temp. Rise	52	53	54	55	56
			Watts	527	611	696	781	865
	High	2250	CFM	2280	2197	2114	2032	1949
			Temp. Rise	48	50	52	54	56
			Watts	795	819	842	865	888

(a) Factory Setting.

**Table 25. S9V2D120D5PSBB Heating Airflow**

S9V2D120D5PSBB Furnace Heating Airflow (CFM) and Power (Watts) vs. External Static Pressure with Filter								
				1st Stage Capacity = 75,660				
				2nd Stage Capacity = 116,400				
Heating	Airflow Setting	Target Airflow		External Static Pressure				
				0.1	0.3	0.5	0.7	0.9
Heating 1st Stage	Low	1160	CFM	1234	1240	1246	1252	1258
			Temp. Rise	56	56	56	55	55
			Watts	137	198	258	319	380
	Medium Low	1332	CFM	1305	1311	1318	1325	1332
			Temp. Rise	53	53	53	52	52
			Watts	158	221	284	347	410
	Medium	1404	CFM	1324	1510	1697	1884	2070
			Temp. Rise	53	46	39	32	25
			Watts	179	246	313	380	447
	High (a)	1620	CFM	1598	1484	1371	1257	1144
			Temp. Rise	44	47	49	52	54
			Watts	266	316	366	416	466
Heating 2nd Stage	Low	1750	CFM	1687	1673	1659	1645	1631
			Temp. Rise	63	64	64	65	65
			Watts	327	407	487	568	648
	Medium Low	1850	CFM	1788	1771	1754	1738	1721
			Temp. Rise	60	60	61	61	62
			Watts	380	464	549	633	718
	Medium	1950	CFM	1891	1862	1833	1803	1774
			Temp. Rise	56	57	58	60	61
			Watts	424	524	624	724	824
	High (a)	2250	CFM	2080	2100	2120	2140	2160
			Temp. Rise	51	51	51	51	51
			Watts	708	768	828	888	948

(a) Factory Setting.

Table 26. S9V2D120U5PSBB / S9V2D120D5PSBB Cooling Airflow

S9V2D120U5PSBB / S9V2D120D5PSBB 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	3.5 Ton	Cooling 450 CFM/Ton	CFM	1575	1575	1575	1575	1575
			Watts	248	316	387	461	537
		Cooling 420 CFM/Ton	CFM	1470	1470	1470	1470	1470
			Watts	206	270	337	407	479
		Cooling 400 CFM/Ton	CFM	1400	1400	1400	1400	1400
			Watts	181	243	307	374	443
		Cooling 370 CFM/Ton	CFM	1295	1295	1295	1295	1295
			Watts	148	205	265	328	393
		Cooling 350 CFM/Ton	CFM	1225	1225	1225	1225	1225
			Watts	128	182	240	300	363
		Cooling 330 CFM/Ton	CFM	1155	1155	1155	1155	1155
			Watts	111	162	217	274	335
Cooling 310 CFM/Ton	CFM	1085	1085	1085	1085	1085		
	Watts	95	143	195	250	309		
Cooling 290 CFM/Ton	CFM	1015	1015	1015	1015	1015		
	Watts	80	126	176	228	285		
Cooling	4.0 Ton	Cooling 450 CFM/Ton	CFM	1800	1800	1800	1800	1800
			Watts	356	433	514	597	682
		Cooling 420 CFM/Ton	CFM	1680	1680	1680	1680	1680
			Watts	295	368	443	521	601
		Cooling 400 CFM/Ton	CFM	1600	1600	1600	1600	1600
			Watts	258	328	400	475	552
		Cooling 370 CFM/Ton	CFM	1480	1480	1480	1480	1480
			Watts	210	274	342	412	484
		Cooling 350 CFM/Ton	CFM	1400	1400	1400	1400	1400
			Watts	181	243	307	374	443
		Cooling 330 CFM/Ton	CFM	1320	1320	1320	1320	1320
			Watts	155	213	274	338	405
Cooling 310 CFM/Ton	CFM	1240	1240	1240	1240	1240		
	Watts	132	187	245	306	369		
Cooling 290 CFM/Ton	CFM	1160	1160	1160	1160	1160		
	Watts	112	163	218	276	337		
Cooling	4.5 Ton	Cooling 450 CFM/Ton	CFM	2025	2025	2025	2025	2025
			Watts	492	579	669	761	855
		Cooling 420 CFM/Ton	CFM	1890	1890	1890	1890	1890
			Watts	406	488	572	659	747
		Cooling 400 CFM/Ton	CFM	1800	1800	1800	1800	1800
			Watts	356	433	514	597	682
		Cooling 370 CFM/Ton	CFM	1665	1665	1665	1665	1665
			Watts	288	360	435	512	592
		Cooling 350 CFM/Ton	CFM	1575	1575	1575	1575	1575
			Watts	248	316	387	461	537
		Cooling 330 CFM/Ton	CFM	1485	1485	1485	1485	1485
			Watts	212	277	344	414	487
Cooling 310 CFM/Ton	CFM	1395	1395	1395	1395	1395		
	Watts	180	241	305	371	440		
Cooling 290 CFM/Ton	CFM	1305	1305	1305	1305	1305		
	Watts	151	208	269	332	398		
Cooling	5.0 Ton <sup>(a)</sup>	Cooling 450 CFM/Ton	CFM	2250	2250	2250	2188	2103
			Watts	659	756	856	900	922
		Cooling 420 CFM/Ton	CFM	2100	2100	2100	2100	2100
			Watts	544	634	728	823	920
		Cooling 400 CFM/Ton	CFM	2000	2000	2000	2000	2000
			Watts	475	561	650	741	834
		Cooling 370 CFM/Ton	CFM	1850	1850	1850	1850	1850
			Watts	383	463	546	631	717
		Cooling 350 CFM/Ton <sup>(a)</sup>	CFM	1750	1750	1750	1750	1750
			Watts	329	405	484	564	647
		Cooling 330 CFM/Ton	CFM	1650	1650	1650	1650	1650
			Watts	281	352	427	503	582
Cooling 310 CFM/Ton	CFM	1550	1550	1550	1550	1550		
	Watts	237	305	375	448	523		
Cooling 290 CFM/Ton	CFM	1450	1450	1450	1450	1450		
	Watts	199	262	328	397	468		

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



# Maximum Vent Length Table

Model	Maximum Total Equivalent Length in Feet for Vent and Inlet Air (See Notes)	
	2 inch or 2.5 inch Pipe	3 inch or 4 inch Pipe
Altitude 0–2,000 Feet		
S9V2B040U3PS, S9V2B040D3PS, S9V2B060U3PS, S9V2B060D3PS, S9V2B060U4PS	200	200
S9V2B080U3PS, S9V2B080D3PS, S9V2B080U4PS, S9V2B080D4PS, S9V2C080U5PS	100	200
S9V2C100U4PS, S9V2C100D4PS, S9V2C100U5PS, S9V2C100D5PS	50	200
S9V2D120U5PS, S9V2D120D5PS	Note 1	200
Altitude 2,001–5,400 Feet		
S9V2B040U3PS, S9V2B040D3PS, S9V2B060U3PS, S9V2B060D3PS, S9V2B060U4PS	200	200
S9V2B080U3PS, S9V2B080D3PS, S9V2B080U4PS, S9V2B080D4PS, S9V2C080U5PS	80	120
S9V2C100U4PS, S9V2C100D4PS, S9V2C100U5PS, S9V2C100D5PS	50	150
S9V2D120U5PS, S9V2D120D5PS	Note 1	200
Altitude 5,401–7,800 Feet		
S9V2B040U3PS, S9V2B040D3PS, S9V2B060U3PS, S9V2B060D3PS, S9V2B060U4PS	100	150
S9V2B080U3PS, S9V2B080D3PS, S9V2B080U4PS, S9V2B080D4PS, S9V2C080U5PS	50	70
S9V2C100U4PS, S9V2C100D4PS, S9V2C100U5PS, S9V2C100D5PS	Note 1	100
S9V2D120U5PS, S9V2D120D5PS	Note 1	100
Altitude 7,801–10,100 Feet		
S9V2B040U3PS, S9V2B040D3PS, S9V2B060U3PS, S9V2B060D3PS, S9V2B060U4PS	50	90
S9V2B080U3PS, S9V2B080D3PS, S9V2B080U4PS, S9V2B080D4PS, S9V2C080U5PS	Note 1	50
S9V2C100U4PS, S9V2C100D4PS, S9V2C100U5PS, S9V2C100D5PS	Note 1	50
S9V2D120U5PS, S9V2D120D5PS	Note 1	50

**Notes:**

1. Not allowed
2. **FOR DURAVENT MANUFACTURED MODULAR VENTING SYSTEMS THAT ARE IN THE APPROVED VENT PIPE MATERIAL TABLE, EQUIVALENT VENT LENGTHS MAY BE DIFFERENT FROM WHAT IS SHOWN ABOVE. REFER TO THE VENTING SYSTEM MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR APPROPRIATE VENTING DIAMETERS AND EQUIVALENT LENGTHS.**
3. Minimum vent length for all models: 15' equivalent.
4. 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 7 below for exception). The inlet pipe can be of a larger diameter, but never smaller than the vent pipe.
5. 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).
6. One SHORT radius 90° elbow is equivalent to 10' of 4" pipe, 10' of 3" pipe, or 8' of 2" pipe. One LONG radius elbow is equivalent to 6' of 4" pipe, 7' of 3" pipe, or 5' of 2" pipe. Two 45° elbows equal one 90° LONG elbow. One MITERED elbow is equivalent to 12' of 3" pipe or 12' of 2" pipe.
7. The termination tee or bend must be included in the total number of elbows. If the BAYAIR30AVENTA or BAYAIR30CNVENT termination kit is used, the equivalent length of pipe is 5 feet. For BAYVENT200B and BAYVENTCN200B the equivalent length is 0 feet.
8. For Canadian applications, venting systems must meet ULC-S636 requirements.
9. The INLET AIR of one pipe systems require the installation of a minimum of one 90° elbow (to prevent dust and debris from falling straight into the furnace).





# S9V2 Wiring Diagram

**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. WIRES 12, 48, 49, 50, AND 51 REQUIRE A TEMPERATURE RATING OF AT LEAST 250°C.
2. FOR PROPER AIRFLOW IN COOLING/HEAT PUMP MODE, "Y1" MUST BE CONNECTED TO THE THERMOSTAT FOR SINGLE STAGE UNITS. FOR TWO STAGE UNITS, "Y1" AND "Y2" MUST BE CONNECTED TO THE THERMOSTAT. VSPD OD SYSTEMS REQUIRE DIFFERENT CONNECTIONS. SEE RELAY PANEL INSTRUCTIONS.
3. FOR SINGLE STAGE THERMOSTATS, JUMPER "W1" AND "W2" TERMINALS. SECOND STAGE HEATING WILL BE ENERGIZED ONCE THE INTER-STAGE DELAY HAS EXPIRED. "HT2" WILL BE SHOWN ON SEVEN SEGMENT DISPLAY AT ALL TIMES.
4. FOR HEAT PUMP SYSTEMS, "Y1" AND "O" TERMINALS MUST BE CONNECTED TO THE ROOM THERMOSTAT.
5. FOR TWO STAGE UNITS, "Y1", "Y2", AND "O" TERMINALS MUST ALL BE CONNECTED TO THE ROOM THERMOSTAT.
6. FOR TWO STAGE SYSTEMS, USE "Y1" FOR LOW SPEED AND "Y2" FOR HIGH SPEED CONNECTION TO THE LOW-VOLTAGE TERMINAL BLOCK. SINGLE STAGE SYSTEMS USE "Y1" FOR THE CONNECTION TO THE LOW-VOLTAGE TERMINAL BLOCK.
7. THE "BK" JUMPER MUST BE CUT WHEN APPLYING AN AIRFLOW COMMAND TO THE "BK" TERMINAL SUCH AS PULSE WIDTH MODULATION.
8. SEE INDOOR MOTOR AIRFLOW SELECTION CHART, LOCATED IN THE INTEGRATED FURNACE CONTROL MENU & OPTIONS SETTINGS TO SET AIRFLOW AND COOLING OFF DELAYS.
9. FLAME SENSE TEST PADS: 1 VDC = 1 MICROAMP FLAME CURRENT CAN VARY DEPENDING ON THE VOM THAT IS USED AND THE VOLTAGE SUPPLIED TO THE FURNACE. THE ACCEPTABLE RANGE IS 0.75-3 MICROAMPS.
10. CORRECT PERSONALITY MODULE IS REQUIRED FOR PROPER FURNACE OPERATION. PERSONALITY MODULE IS SPECIFIC TO EACH MODEL & SERIAL NUMBER, AND IS TO REMAIN WITHIN ITS ORIGINAL UNIT.
11. LINE CHOKE AND WIRE BK/28 ONLY USED ON MODELS WITH 3/4 AND 1 HP MOTORS.
12. DOWNFLOW MODELS ONLY USE ONE REVERSE AIRFLOW SWITCH.
13. CONNECTION MAY OR MAY NOT BE PRESENT. IF CONNECTION IS NOT PRESENT, WIRES 33 AND 34 WILL NOT BE USED.

**S9V2**

2 Stage Inducer with ECM Blower Motor			E04	Open Thermal Limit, Rollout Switch, or Reverse Airflow Switch
Status Codes	Odu	Outdoor Unit	E05	Flame detected, should not be present
Idle	COF	Blower Constant Fan Airflow Multiplier %	E61	Voltage reversed polarity
1st Stage Heating	CPC	Cooling (CFM/Ton)	E62	Bad Grounding
2nd Stage Heating	CPH	Heat Pump Heating (CFM/Ton)	E63	(1) Igniter relay fails, (2) Igniter open
Airflow (followed by Airflow x 10)	Hod	Heat Off Delay (sec)	E71	1st stage gas valve (MVL) is energized when it should be off
Continuous Fan	ISd	Inter-Stage Delay (sec)	E08	Flame current is low, but still strong enough to allow operation.
1st Stage Cooling	9HC	Gas Heating CFM (Airflow x10)	E09	Open Inducer Limit Switch or Condensate Switch
2nd Stage Cooling	rUn	Run Test Mode	E11	(1) 1st stage gas valve not energized when it should be
1st Stage Heat Pump	Error Codes			(2) 1st stage gas valve relay stuck closed
2nd Stage Heat Pump	E01	Loss of the IRQ/other internal failures		(3) 2nd stage gas valve relay stuck closed
Defrost Mode	E21	Retry exceeded (Failed to est flame)		(4) 2nd stage gas valve energized when it should not be
Menu Options	E22	Recycles exceeded (loss of established flame) or 10X PS1 open		(5) 2nd stage gas valve not energized when it should be
Active Alarm Menu	E23	1st Stage Gas Valve not energized when it should be exceeded after 10 times	E12	Open fuse
Last 6 Faults (To Clear, Hold Option Button 5 sec)	E31	Shorted Pressure Switch, 1st Stage	E13	Blower HP/OEM ID
Code Release Number	E32	Open Pressure Switch, 1st Stage	E14	No PM and local copy bad
Cooling Off Delay (sec)	E33	Shorted Pressure Switch, 2nd Stage	E15	Both Unit Data File in PM and local Unit Data File are Corrupt
Outdoor Tonnage	E34	Open Pressure Switch, 2nd Stage	E17	Blower motor no communication response
			E18	Blower communication failure on the control



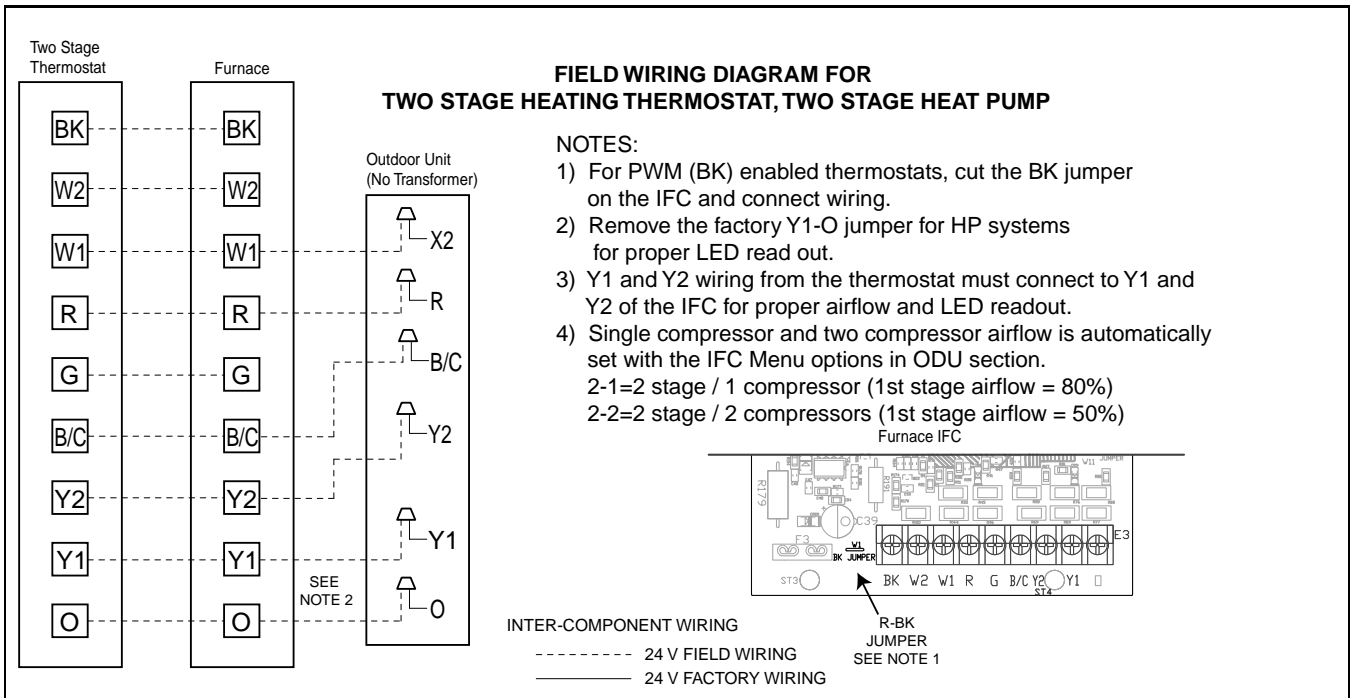
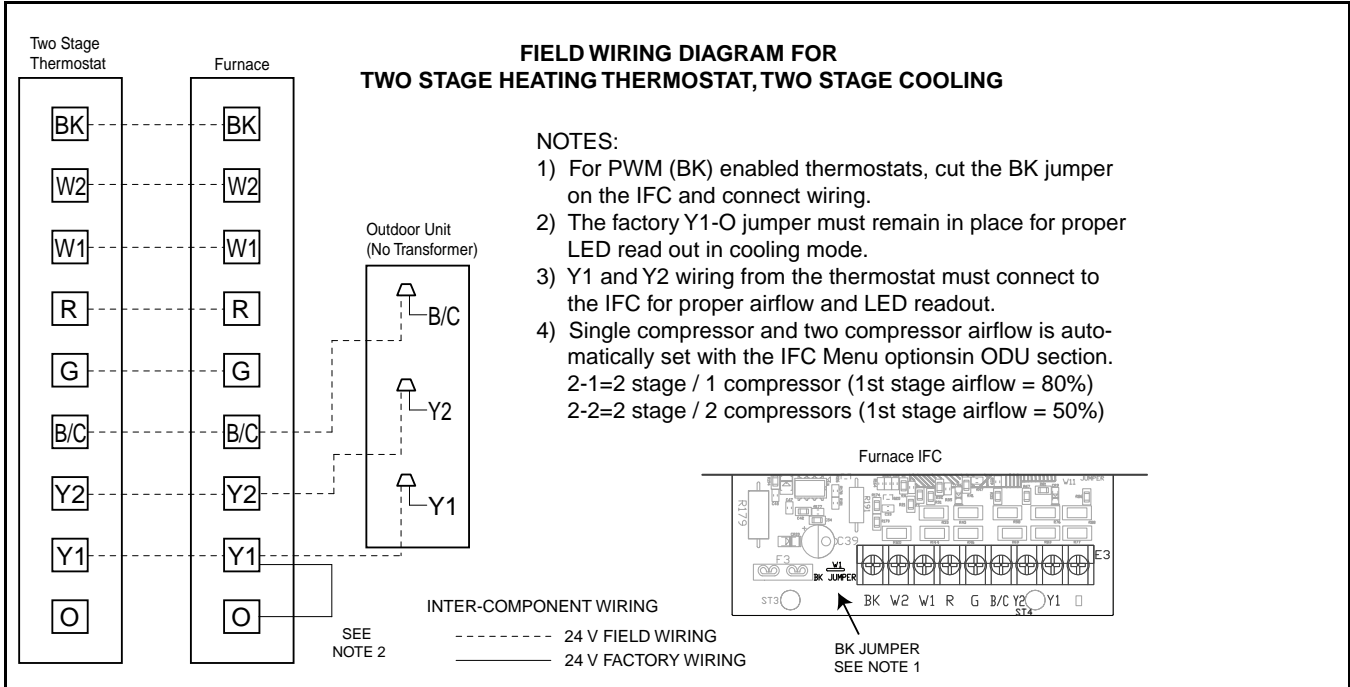
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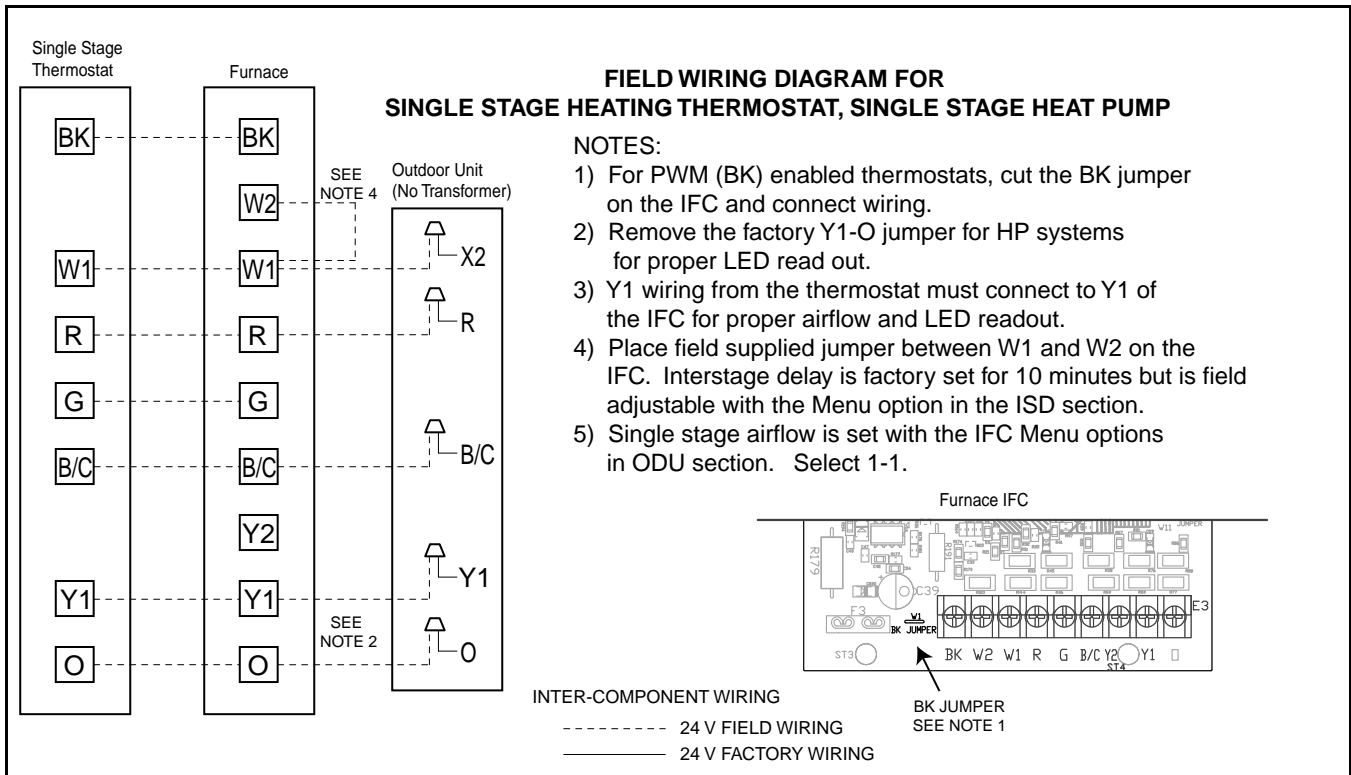
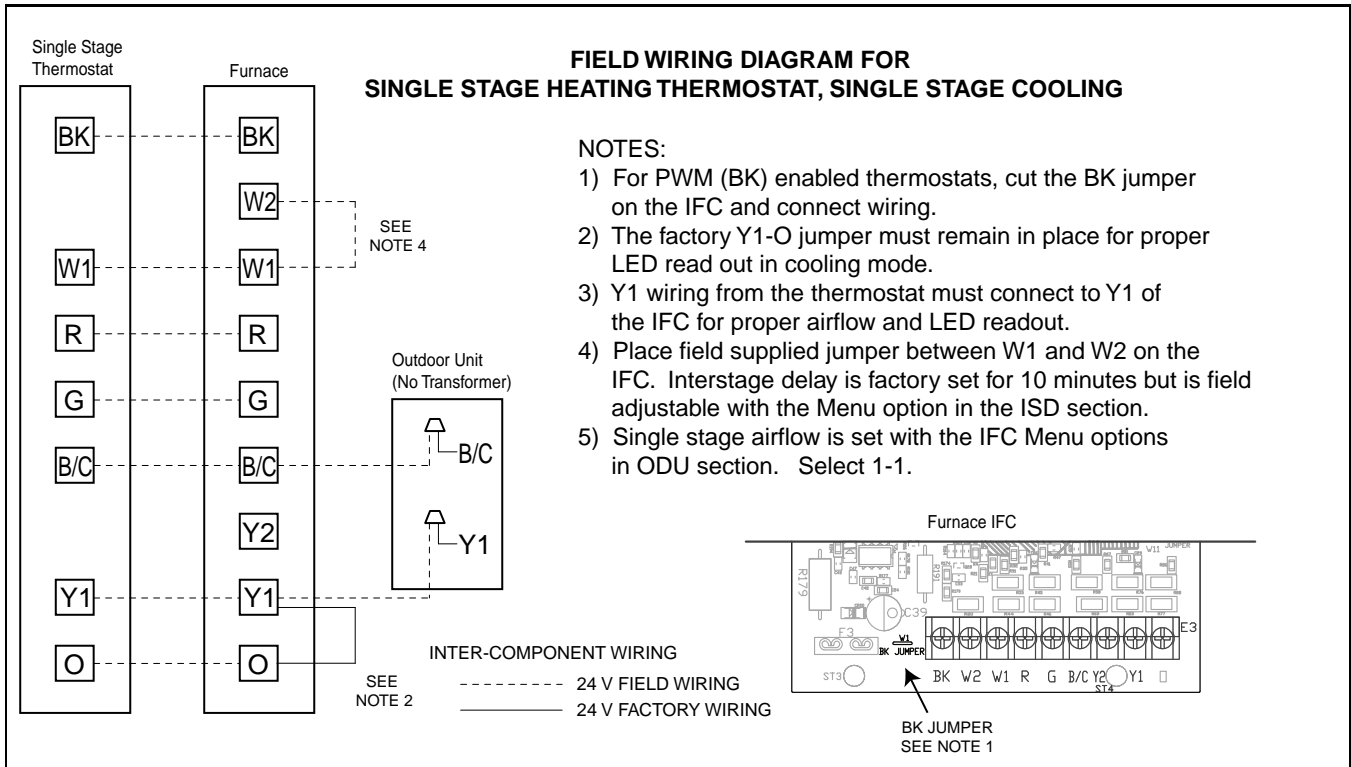
# Electrical Connections

Make wiring connections to the unit as indicated on enclosed wiring diagram. As with all gas appliances using electrical power, this furnace shall be connected into a permanently live electric circuit. It is recommended that furnace be provided with a separate "circuit protection device" electric circuit. The furnace must be electrically grounded in accordance with local codes or in the absence of local codes with the National Electrical Code, ANSI/NFPA 70 or CSA C22.1 Electrical Code, if an external electrical source is utilized. **The integrated furnace control is polarity sensitive.** The hot leg of the 120V power supply must be connected to the black power lead as indicated on the wiring diagram. Refer to the SERVICE FACTS literature and unit wiring diagram attached to furnace.

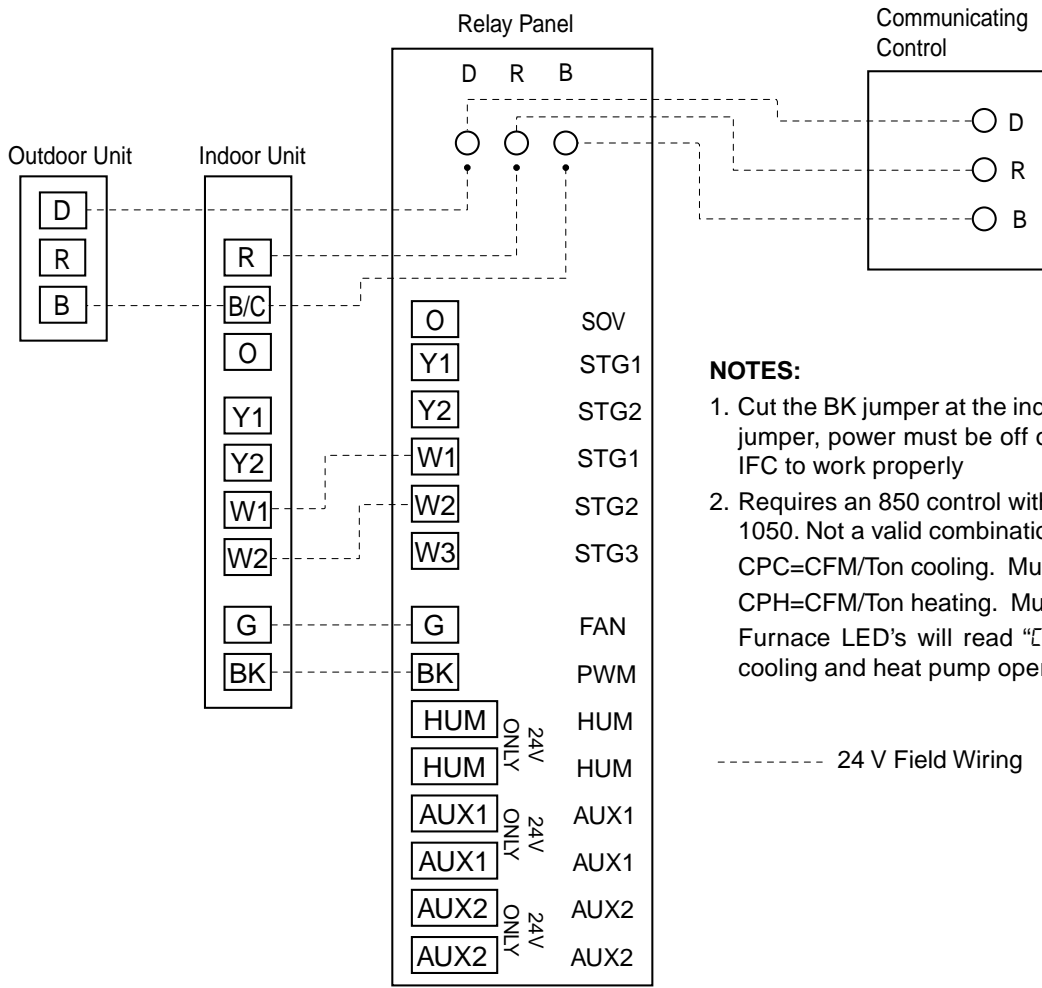
## Field Wiring



# Electrical Connections



**COMMUNICATING CONTROLS WITH NON-COMMUNICATING S9V2 FURNACE AND COMMUNICATING VS COOLING/HP**



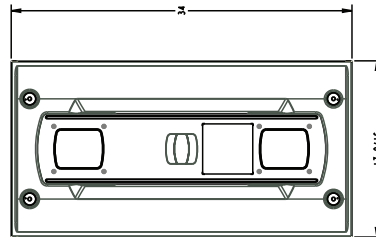
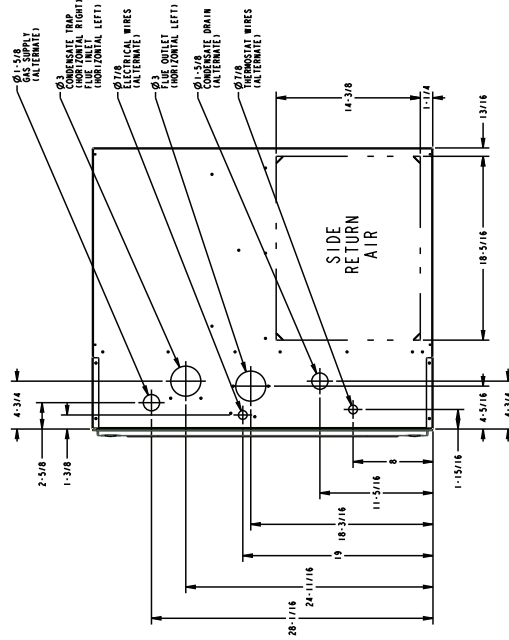
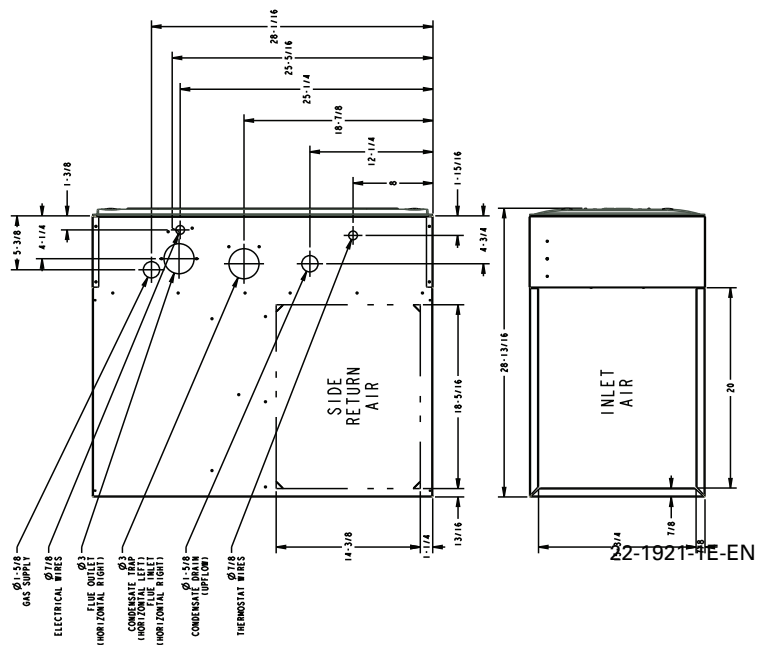
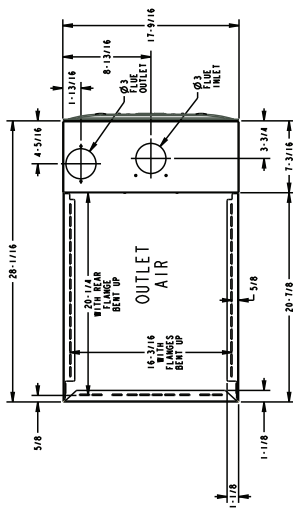
**NOTES:**

1. Cut the BK jumper at the indoor unit - After cutting the jumper, power must be off or cycled on-off-on for the IFC to work properly
2. Requires an 850 control with software version 3.0+ or 1050. Not a valid combination with 950 control  
 CPC=CFM/Ton cooling. Must be set to 400.  
 CPH=CFM/Ton heating. Must be set to 400.  
 Furnace LED's will read "EoF" continuous fan during cooling and heat pump operation.

----- 24 V Field Wiring

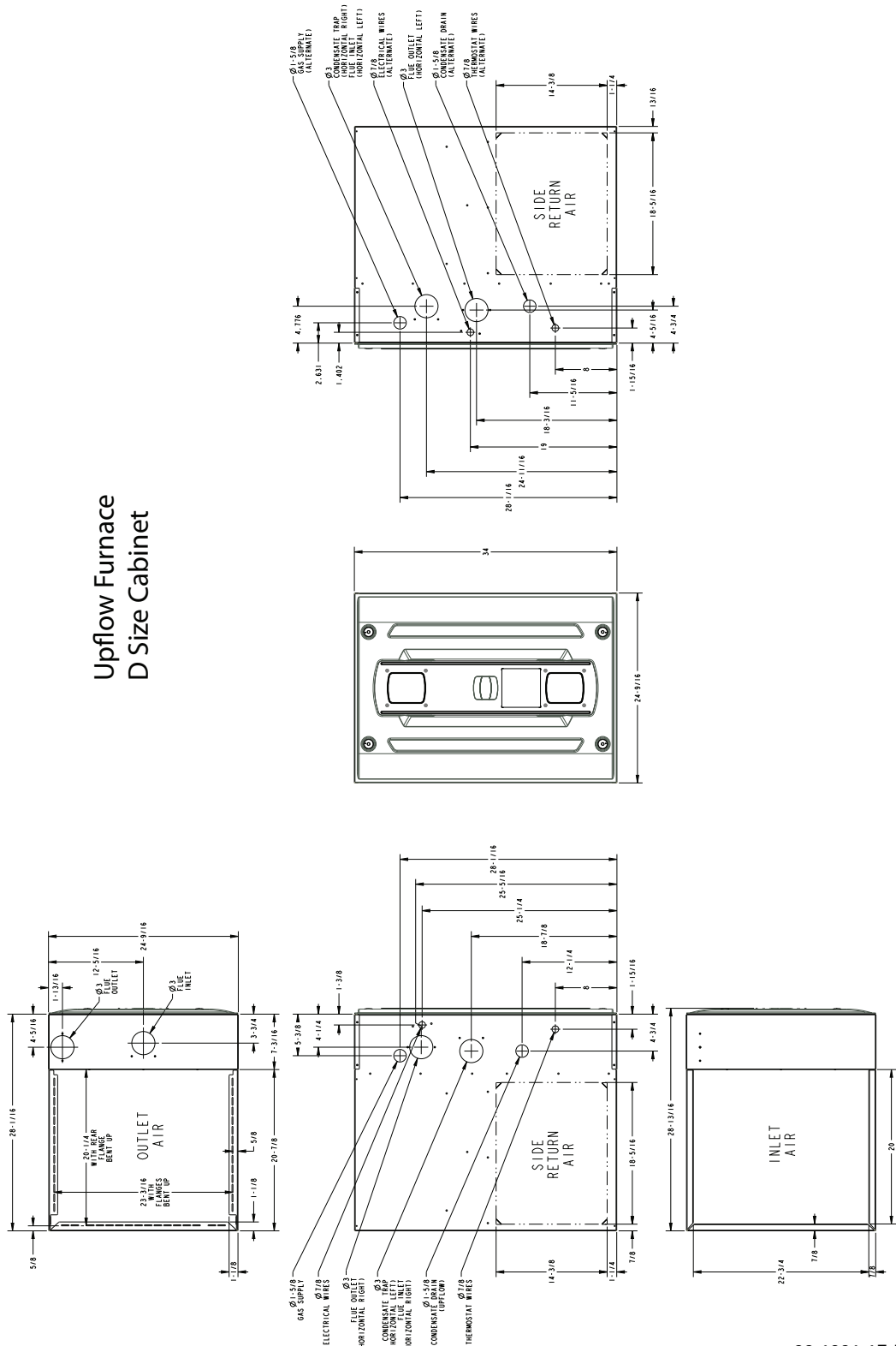
# Outline Drawings

## Upflow Furnace B Size Cabinet

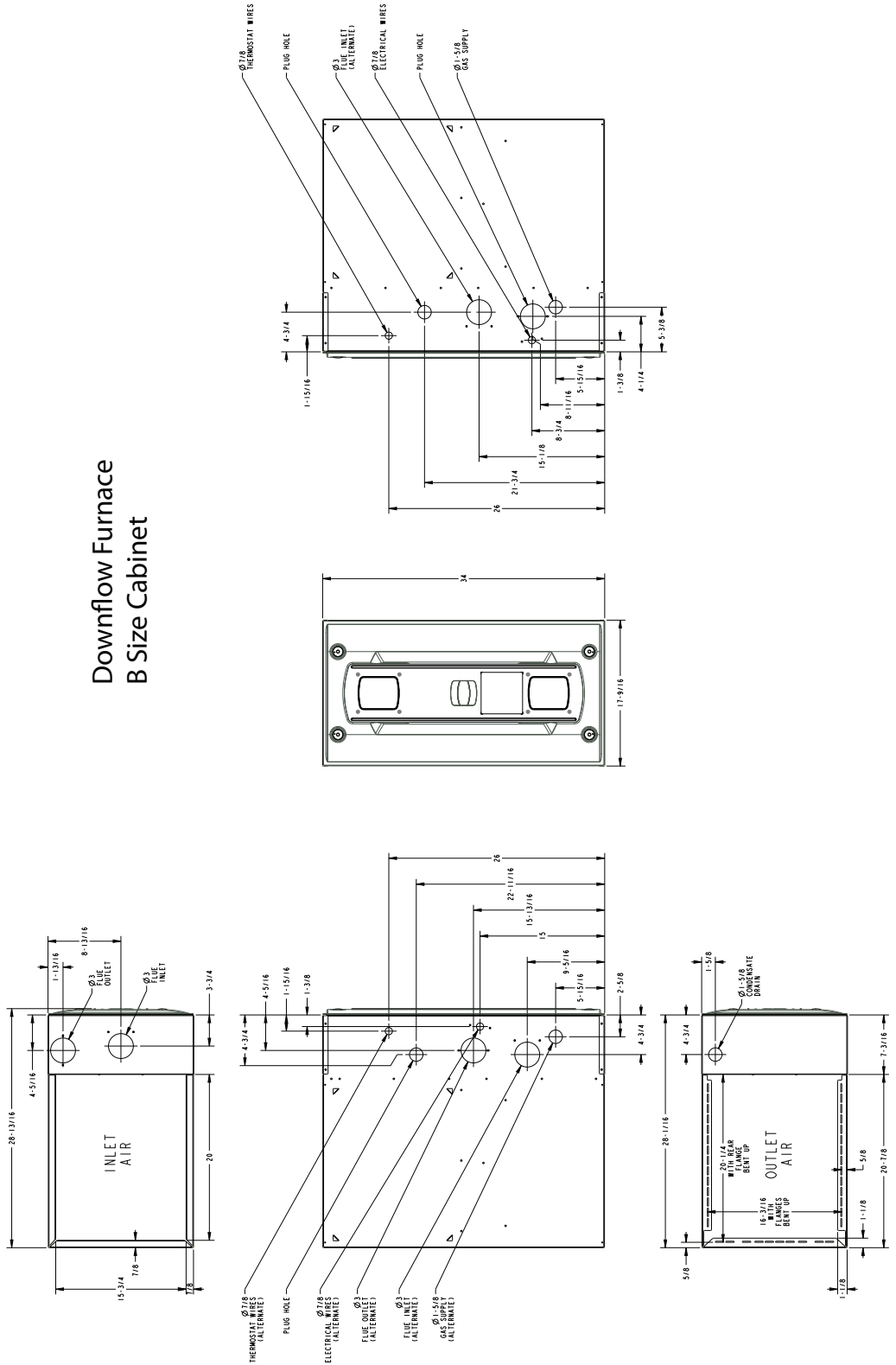




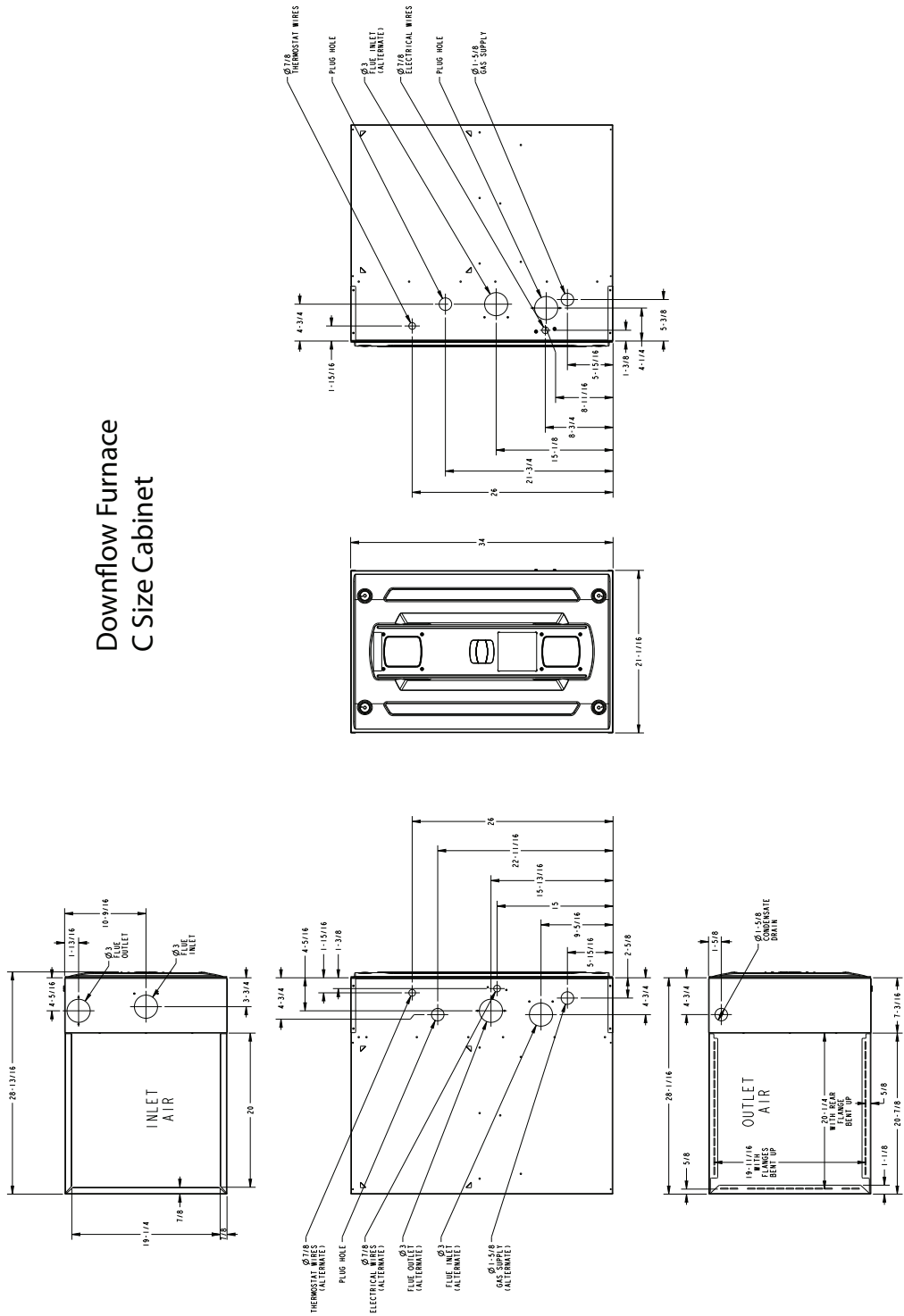
Upflow Furnace  
D Size Cabinet



### Downflow Furnace B Size Cabinet

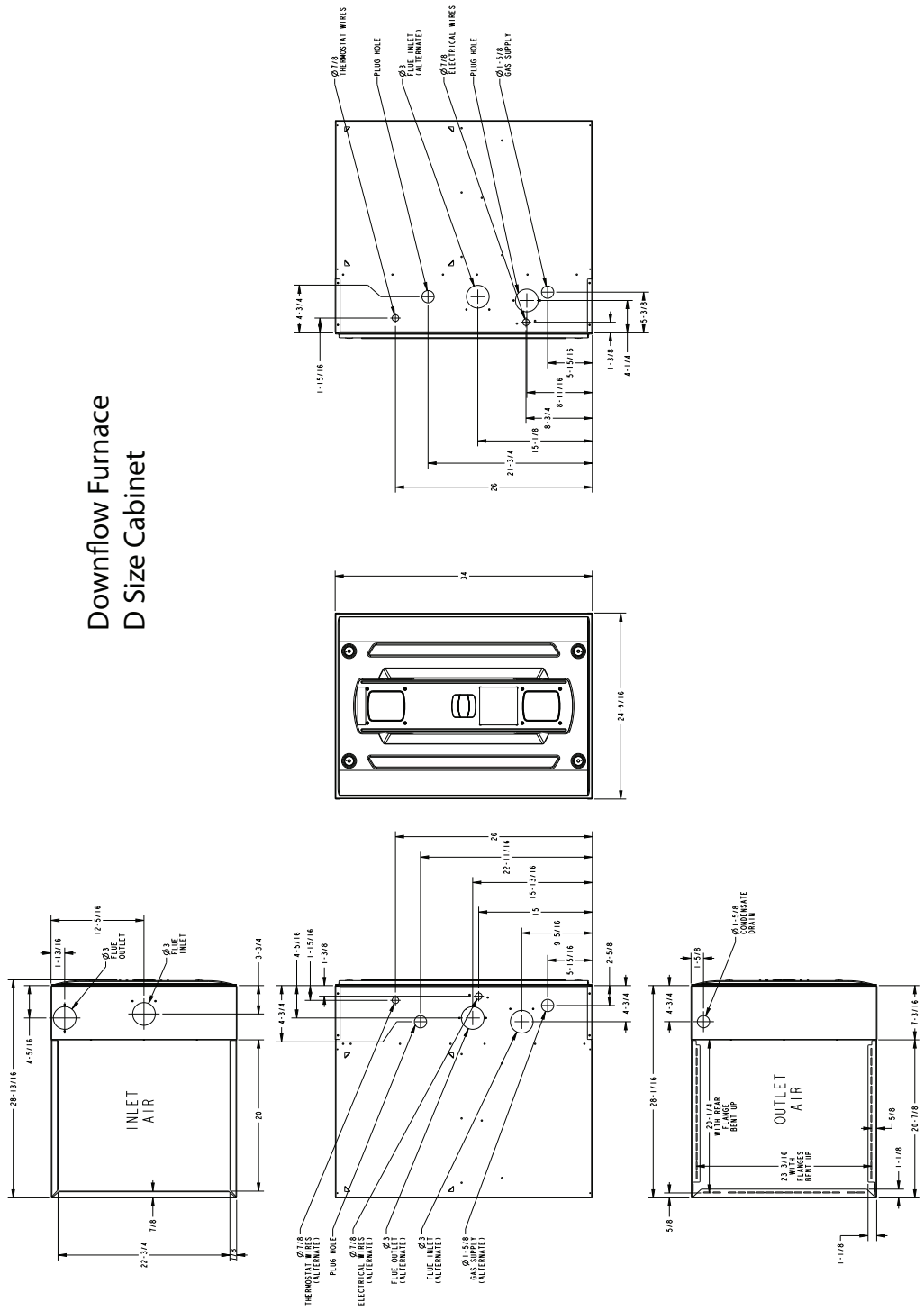


### Downflow Furnace C Size Cabinet





### Downflow Furnace D Size Cabinet









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