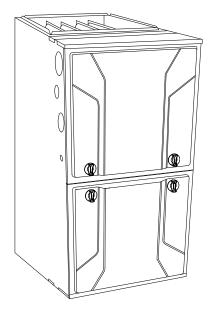


## **Product Data**



The 925SA Multipoise SEER Boost Condensing Gas Furnace features the single-stage Preferred™ System. The Boost ECM multiple-speed blower motor is at the heart of the electrical efficiency provided by this furnace. With an Annual Fuel Utilization Efficiency (AFUE) of 96.2%, the Preferred single-stage gas furnace provides added savings over standard gas furnaces. This Preferred Gas Furnace features 4-way multipoise installation flexibility, and is available in nine model sizes. All sizes except the 26,000 BTUH model can be vented for direct vent/two-pipe, ventilated combustion air, or single-pipe applications. The 26,000 BTUH model can use the same 2-pipe venting system using outside air for combustion, but is not considered direct-vent. A Bryant Preferred Control and Preferred Air Conditioner or Heat Pump, can be used to form a complete Preferred Series System. All units meet California Air Quality Management District emission requirements. All sizes are design certified in Canada. All sizes are design certified for use in Manufactured Housing (Mobile Home) applications when used with factory-approved MH accessory kit.

#### STANDARD FEATURES

- Quiet operation. Compare for yourself at HVACpartners.com.
- All sizes meet ENERGY STAR® Version 4.1 criteria for gas furnaces: 95+ AFUE; ECM blower motor; 2% or less cabinet

airflow leakage.

- Ideal height 35" (889 mm) cabinet: short enough for taller coils, but still allows enough room for service.
- Preferred Features—match with the Preferred Control for Preferred System benefits.
- Silicon Nitride Perfect Light™ Hot Surface Igniter.
- SmartEvap<sup>™</sup> technology helps control humidity levels in the home when used with a compatible humidity control system.
- Fan On Plus™ technology allows control of continuous fan speed from a compatible thermostat.
- External Media Filter Cabinet included.
- 4-way multipoise design for upflow, downflow or horizontal installation, with unique vent elbow and optional throughthe-cabinet downflow venting capability.
- · Boost ECM multiple-speed blower motor, single-speed inducer motor, and single-stage gas valve.
- · Self-diagnostics.
- Adjustable blower speed for cooling, continuous fan, and dehumidification.
- Approved for Twinning applications with accessory kit (36060 through 66120 models, only).
- Approved for Manufactured Housing/Mobile Home applications with MH accessory kit. (30040 through 66120 only)
- · Aluminized-steel primary heat exchanger.
- Stainless-steel condensing secondary heat exchanger.
- Propane convertible (See Accessory list).
- Factory-configured ready for upflow applications.
- Fully-insulated casing including blower section.
- Convenient Air Purifier and Humidifier connections.
- Direct-vent/sealed combustion, single-pipe venting or ventilated combustion air.
- Installation flexibility: sidewall or vertical vent.
- Residential installations may be eligible for consumer financing through the Retail Credit Program.
- Certified to leak 2% or less of nominal air conditioning CFM delivered when pressurized to 1-in. water column with all present air inlets, air outlets, and condensate drain port(s) sealed.









CERTIFIED. Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For





go to www.ahridirectorv.org.

	D	CASING IMENSION:		RATED HEATING	AF	UE	ENERGY	HEATING	AIRFLOW	COOLING CFM @ 0.5	MOTOR	MEDIA CABINET
SAP ORDERING NO.	Н	D	w	OUTPUT† BTUH	UPFLOW/ HORIZON- TAL	DOWN- FLOW	STAR®	HEATING CFM	HEATING ESP (in. W.C.)	ESP (in. W.C.)	HP SPEED	SUPPLIED (IN.)
925SA30026E14	35	29.5	14.2	25,000	96.0%	95.0%	YES	605	0.1	895	1/3 - 5	16
925SA30040E14	35	29.5	14.2	39,000	96.2%	95.0%	YES	695	0.1	925	1/2 - 5	16
925SA36040E17	35	29.5	17.5	39,000	96.2%	95.0%	YES	705	0.1	1085	1/2 - 5	16
925SA36060E14	35	29.5	14.2	58,000	95.5%	95.0%	YES	940	0.12	1090	1/2 - 5	16
925SA42060E17	35	29.5	17.5	58,000	96.2%	95.0%	YES	1000	0.12	1505	3/4 - 5	16
925SA48080E17	35	29.5	17.5	78,000	96.2%	95.0%	YES	1360	0.15	1610	3/4 - 5	16
925SA60080E21	35	29.5	21.0	78,000	96.2%	95.0%	YES	1360	0.15	2015	1 - 5	20
925SA60100E21	35	29.5	21.0	97,000	96.2%	95.0%	YES	1700	0.2	2110	1 - 5	20
925SA66120E24	35	29.5	24.0	117,000	96.2%	95.0%	YES	2125	0.2	2055	1 - 5	24

<sup>†</sup> Capacity in accordance with DOE test procedures. Ratings are position dependent. See rating plate.

## **FEATURES AND BENEFITS**

SmartEvap™ Technology — When paired with a compatible thermostat, this dehumidification feature overrides the cooling blower off-delay when there is a call for dehumidification. By deactivating the blower off-delay, SmartEvap technology prevents condensate that remains on the coil after a dehumidification cycle from re-humidifying throughout the home. This results in reduced humidity and a more comfortable indoor environment for the homeowner.

Unlike competitive systems, SmartEvap technology only overrides the cooling blower off delay. when humidity control is needed. Once humidity is back in control, SmartEvap re-enables the energy-saving cooling blower off-delay.

Fan On Plus™ Technology — Sometimes the constant fan setting on a standard furnace system can actually reduce homeowner comfort by providing too much or too little air! Fan On Plus technology improves comfort all year long by allowing the homeowner to select the continuous fan speed of their choice using a compatible thermostat.

HYBRID HEAT® Dual Fuel system — This system can provide more control over your monthly energy bills by automatically selecting the most economical method of heating. With HYBRID HEAT, our system automatically switches between the gas furnace and the electric heat pump as outside temperatures change to maintain greater efficiency and comfort than with any traditional single-source heating system. The heat pump also delivers high-efficiency cooling in the summer.

Power Heat Migniter — Bryant's unique SiN igniter is not only physically robust but it is also electrically robust. It is capable of running at line voltage and does not require complex voltage regulators as do other brands. This unique feature further enhances the gas furnace reliability and continues Bryant's tradition of technology leadership and innovation in providing a reliable and durable product.

**Boost ECM Blower Motor** — This basic ECM, or electronically commutated motor, can provide an efficiency enhancement for select Bryant air conditioner or heat pump systems. It uses less electrical power than its PSC counterpart and also has a wider range of speeds

Reliable Heat Exchanger Design — The aluminized steel, clam shell primary heat exchanger was re-engineered to achieve greater efficiency out of a smaller size. The first two passes of the heat exchanger are based on the current 80% product, a design with more than ten years of field-proven performance and success. These innovations, paired with the continuation of a crimped, no-weld seam create an efficient, robust design for this essential component.

The condensing heat exchanger, a stainless steel fin and tube design, is positioned in the furnace to extract additional heat.

Stainless steel coupling box componentry between heat exchangers has exceptional corrosion resistance in both natural gas and propane applications.

Media Filter Cabinet — Enhanced indoor air quality in the home is made easier with our media filter cabinet—a standard accessory on all deluxe furnaces. When installed as a part of the system, this cabinet allows for easy and convenient addition of a Bryant high efficiency air filter.

**4-Way Multipoise Design** — One model for all applications – there is no need to stock special downflow or horizontal models when one unit will do it all. The new heat exchanger design allows these units to achieve the certified AFUE in all positions.

Direct or Single-pipe Venting, or Optional Ventilated Combustion Air — All sizes except the 26,000 BTUH model can be vented for direct vent/two-pipe, ventilated combustion air, or single-pipe applications. The 26,000 BTUH model can use the same 2-pipe venting system using outside air for combustion, but is not considered direct-vent. This provides added flexibility to meet diverse installation needs.

**Sealed Combustion System** — This furnace brings in combustion air from outside the furnace, which results in especially quiet operation. By sealing the entire combustion vestibule, the entire furnace can be made quieter, not just the burners.

**Insulated Casing** — Foil-faced insulation in heat exchanger section of the casing minimizes heat loss. The acoustical insulation in the blower compartment reduces air and motor noise for quiet operation.

**Monoport Burners** — The burners are specially designed and finely tuned for smooth, quiet combustion and economical operation.

**Bottom Closure** — Factory-installed for side return; easily removable for bottom return. The multi-use bottom closure can also serve for roll-out protection in horizontal applications, and act as the bottom closure for the optional return air base accessory.

**Blower Access Panel Switch** — Automatically shuts off 115-v power to furnace whenever blower access panel is opened.

Certifications — This furnace is CSA (AGA and CGA) design certified for use with natural and propane gases. The furnace is factory-shipped for use with natural gas. A CSA listed gas conversion kit is required to convert furnace for use with propane gas. The efficiency is AHRI efficiency rating certified. This furnace meets California Air Quality Management District emission requirements.

<sup>‡</sup> Heating CFM at factory default blower motor heating tap settings.

ESP - External Static Pressure

## **SPECIFICATIONS**

The furnace should be sized to provide 100 percent of the design heating load requirement plus any margin that occurs because of furnace model size capacity increments. None of the furnace model sizes can be used if the heating load is 12,000 BTUH or lower. Use Air Conditioning Contractors of America (Manual J and S); American Society of Heating, Refrigerating, and Air-Conditioning Engineers; or other approved engineering

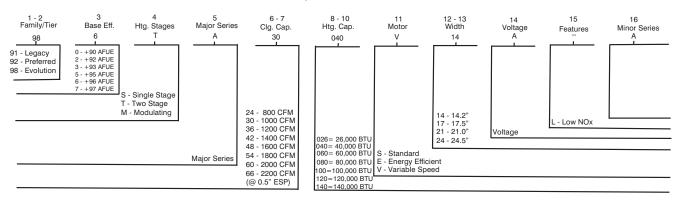
method to calculate heating load estimates and select the furnace. Excessive oversizing of the furnace may cause the furnace and/or vent to fail prematurely, customer discomfort and/or vent freezing. Failure to follow these guidelines is considered faulty installation and/or misapplication of the furnace; and resulting failure, damage, or repairs may impact warranty coverage.

Heating Capacity and Efficiency			30026	30040	36040	36060	42060	48080	60080	60100	66120
Input	High	Heat (BTUH)	26,000	40,000	40,000	60,000	60,000	80,000	80,000	100,000	120,000
Output	High	Heat (BTUH)	25,000	39,000	39,000	58,000	58,000	78,000	78,000	97,000	117,000
Certified Temperature		High Heat	25 - 55	40 - 70	40 - 70	45 - 75	40 - 70	40 - 70	40 - 70	40 - 70	40 - 70
Rise Range °F (°C)		Tilgittleat	(14 - 31)	(22 - 39)	(22 - 39)	(25 - 42)	(22 - 39)	(22 - 39)	(22 - 39)	(22 - 39)	(22 - 39)
Airflow Capacity and Blower Data			30026	30040	36040	36060	42060	48080	60080	60100	66120
Rated External Static		Heating	0.10	0.10	0.10	0.12	0.12	0.15	0.15	0.20	0.20
Pressure (in. w.c.)		Cooling	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Airflow Delivery		High Heat	605	695	705	940	1000	1360	1360	1700	2125
@ Rated ESP (CFM)		Cooling	895	925	1085	1090	1505	1610	2015	2110	2055
Cooling Capacity (tons)		CFM/ton	2	2	2.5	2.5	3.5	4	5	5	5
@ 400, 350 CFM/ton		CFM/ton	2.5	2.5	3	3	4	4.5	5.5	6	6
Direct-Drive Motor Type					Electro	onically C	ommutate	ed Motor	(ECM)		
Direct-Drive Motor HP			1/3	1/2	1/2	1/2	3/4	3/4	1	1	1
Motor Full Load Amps			4.4	6.8	6.8	6.8	9.9	9.3	12.3	12.6	11.1
RPM Range			400 -				600 -	1200	•		
Til Willange			1200					1200			
Speed Selections							5				
Blower Wheel Dia x Width		in.	11 x 7	11 x 7	11 x 8	11 x 7	11 x 8	11 x 8	11 x 10	11 x 10	11 x 11
Air Filtration System					Fa	ctory Sup			net		
, and the second							Supplied				
Filter Used for Certified Watt Data						KGA	WF1506	JFR			
Electrical Data			30026	30040	36040	36060	42060	48080	60080	60100	66120
Input Voltage	Volts	s-Hertz-Phase					115-60-1				
Operating Voltage Range		Min-Max					104-127				
Maximum Input Amps		Amps	5.1	7.4	7.4	7.5	10.6	10.0	13.0	13.4	11.9
Unit Ampacity		Amps	7.3	10.3	10.3	10.4	14.2	13.5	17.2	17.7	15.8
Minimum Wire Size		AWG	14	14	14	14	14	14	12	12	12
Maximum Wire Length		Feet	51	36	36	35	26	27	33	32	36
@ Minimum Wire Size		(M)	(15.5)	(11.0)	(11.0)	(10.7)	(7.9)	(8.2)	(10.1)	(9.8)	(11.0)
INA - 1											
Maximum Fuse/Ckt Bkr		Amps	15	15	15	15	15	15	20	20	20
(Time-Delay Type Recommended)		Amps	15	15	15	15	15	15	20	20	20
(Time-Delay Type Recommended) Transformer Capacity (24vac output)			15	15	15	15	40 VA	15	20	20	20
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power		Heating	15	15	15	15	40 VA 27.9 VA	15	20	20	20
(Time-Delay Type Recommended) Transformer Capacity (24vac output)			15	15	15	15	40 VA	15	20	20	20
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available		Heating					40 VA 27.9 VA 34.6 VA				
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls		Heating	30026	30040	15 36040	36060	40 VA 27.9 VA 34.6 VA	48080	20	20	66120
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size		Heating	30026	30040	36040	36060	40 VA 27.9 VA 34.6 VA 42060 1/2" - NP1	48080	60080	60100	66120
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size Burners (Monoport)		Heating Cooling				<b>36060</b>	40 VA 27.9 VA 34.6 VA 42060 1/2" - NPT	48080			
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size Burners (Monoport) Gas Valve (Redundant)		Heating Cooling Manufacturer	30026	30040	36040	<b>36060</b>	40 VA 27.9 VA 34.6 VA 42060 1/2" - NPT 3 nite Rodge	48080	60080	60100	66120
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size Burners (Monoport) Gas Valve (Redundant)  Minimum Inl	et Gas pre	Heating Cooling Manufacturer essure (in. wc)	30026	30040	36040	<b>36060</b>	40 VA 27.9 VA 34.6 VA 42060 1/2" - NPT 3 iite Rodge 4.5	48080	60080	60100	66120
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size Burners (Monoport) Gas Valve (Redundant)  Minimum Inl Maximum Inl	et Gas pre	Heating Cooling Manufacturer	30026	30040	36040	36060 3 Wh	40 VA 27.9 VA 34.6 VA 42060 1/2" - NPT 3 nite Rodg 4.5 13.6	48080 4 ers	60080	60100	66120
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size Burners (Monoport) Gas Valve (Redundant)  Minimum Inl Maximum Inl Manufactured (Mobile) Home Kit	et Gas pre	Heating Cooling Manufacturer essure (in. wc)	30026	30040	36040	3 Wh	40 VA 27.9 VA 34.6 VA 42060 1/2" - NPT 3 nite Rodge 4.5 13.6 ccessory	48080 4 ers	60080	60100	66120
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size Burners (Monoport) Gas Valve (Redundant)  Minimum Inl Maximum Inl Manufactured (Mobile) Home Kit Ignition Device	et Gas pre	Heating Cooling Manufacturer essure (in. wc)	30026	30040	<b>36040</b>	36060 3 Wh See Ad	40 VA 27.9 VA 34.6 VA 42060 //2" - NPT 3 hite Rodge 4.5 13.6 ccessory icon Nitrie	48080 7 4 ers Listing	60080	60100	66120
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size Burners (Monoport) Gas Valve (Redundant)  Maximum Inl Manufactured (Mobile) Home Kit Ignition Device Limit Control	et Gas pre et Gas pre	Heating Cooling Manufacturer essure (in. wc)	30026	30040	<b>36040</b> 2 180	3 Wh See Ad Sil 165	40 VA 27.9 VA 34.6 VA 42060 //2" - NPT 3 hite Rodge 4.5 13.6 ccessory icon Nitrie	48080 4 ers Listing de 170	60080	60100	66120
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size Burners (Monoport) Gas Valve (Redundant)  Maximum Inl Manufactured (Mobile) Home Kit Ignition Device Limit Control Heating Blower Control (Heating Off-	et Gas pre et Gas pre Delay)	Heating Cooling Manufacturer essure (in. wc)	30026	30040	<b>36040</b> 2 180	36060 3 Wh See Ad Sii 165 stable: 90	40 VA 27.9 VA 34.6 VA  42060  //2" - NPT 3 hite Rodge 4.5 13.6 ccessory icon Nitrie 180 , 120, 150	48080 4 ers Listing de 170 0, 180 sec	60080	60100	66120
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size Burners (Monoport) Gas Valve (Redundant)  Maximum Inl Manufactured (Mobile) Home Kit Ignition Device Limit Control Heating Blower Control (Heating Off-Cooling Blower Control (Time Delay)	et Gas pre et Gas pre Delay)	Heating Cooling Manufacturer essure (in. wc)	30026	30040	<b>36040</b> 2 180	36060 3 Wh See Ad Sii 165 stable: 90	40 VA 27.9 VA 34.6 VA  42060  1/2" - NPT 3  iite Rodge 4.5 13.6 ccessory icon Nitrie 180 , 120, 150 0 second	48080 4 ers Listing de 170 0, 180 sec	60080	60100	66120
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size Burners (Monoport) Gas Valve (Redundant)  Maximum Inl Manufactured (Mobile) Home Kit Ignition Device Limit Control Heating Blower Control (Heating Off-Cooling Blower Control (Time Delay Communication System	et Gas pre et Gas pre Delay)	Heating Cooling Manufacturer essure (in. wc)	30026	30040	2 180 Adjus	36060 3 Wh See Ad Sii 165 stable: 90	40 VA 27.9 VA 34.6 VA  42060  1/2" - NP1 3 hite Rodge 4.5 13.6 ccessory licon Nitrie 180 120, 150 0 second none	48080 4 ers Listing de 170 0, 180 sec s	60080 4 200 conds	60100	66120
(Time-Delay Type Recommended) Transformer Capacity (24vac output) External Control Power Available  Controls Gas Connection Size Burners (Monoport) Gas Valve (Redundant)  Maximum Inl Manufactured (Mobile) Home Kit Ignition Device Limit Control Heating Blower Control (Heating Off-Cooling Blower Control (Time Delay)	et Gas pre et Gas pre Delay)	Heating Cooling Manufacturer essure (in. wc)	30026	2 165	2 180 Adjus	3 Wh See Ad Sil 165 Stable: 90	40 VA 27.9 VA 34.6 VA  42060  1/2" - NP1 3 nite Rodge 4.5 13.6 ccessory icon Nitrie 180 , 120, 150 0 second none W, G, Y/Y	48080 4 ers Listing de 170 0, 180 sec s	60080 4 200 conds	5	66120

<sup>\*</sup> See Accessory List for part numbers available.

## MODEL NUMBER NOMENCLATURE

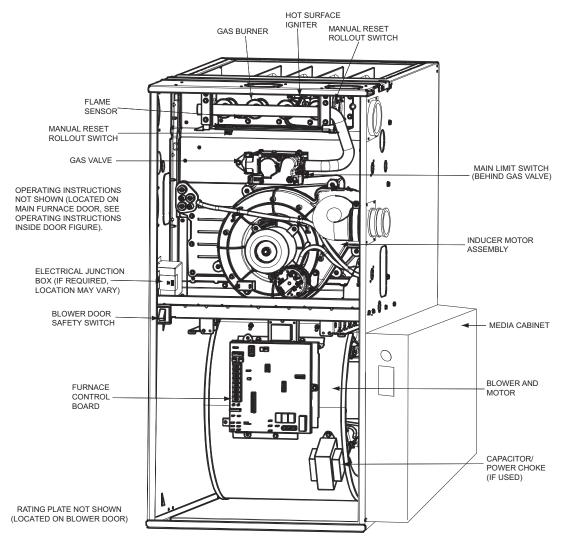
## Example of a Model Number



Not all familes have these models.

A150611

## **FURNACE COMPONENTS**



REPRESENTATIVE DRAWING ONLY, SOME MODELS MAY VARY IN APPEARANCE.

A11408

## **ACCESSORIES**

	ACCESS	OMI	20							
DESCRIPTION	PART NUMBER	30026	30040	36060	36040	42060	48080	60080	60100	66120
Venting Accessories			•	•	•	•	•			•
Vent Kit - Through the Cabinet	KGADC0101BVC	•	•	•	•	•	•	•	•	•
Vent Terminal - Concentric - 2" (51 mm)	KGAVT0701CVT			•						•
Vent Terminal - Concentric - 3" (76 mm)	KGAVT0801CVT				01	( ti T				
Vent Terminal Bracket - 2" (51 mm)	KGAVT0101BRA				See \	enting T	ables			
Vent Terminal Bracket - 3" (76 mm)	KGAVT0201BRA									
Vent Kit – Rubber Coupling	KGAAC0101RVC				See \	/enting T	ables			
Condensate Drainage Accessories		ļ								
Freeze Protect Kit - Heat Tape	KGAHT0101CFP	•	•	•	•	•	•	•	•	•
CPVC to PVC Drain Adapters - 1/2" CPVC to 3/4" PVC	KGAAD0110PVC	•	•	•	•	•	•	•	•	•
Horizontal Trap Grommet - Direct Vent	KGACK0101HCK			1	All 2-	Pipe Hor	izontal			
Condensate Neutralizer Kit	P908-0001	•	•	•	•	•	•	•	•	•
External Trap Kit	KGAET0201ETK	•	•	•	•	•	•	•	•	•
Ductwork Adapter Accessories		1								
Furnace Base Kit for Combustible Floors	KGASB0201ALL	•	•	•	•	•	•	•	•	•
Coil Adapter Kits - No Offset	KGADA0101ALL	•	•	•	•	•	•	•	•	•
Coil Adapter Kits - Single Offset	KGADA0201ALL	•	•	•	•	•	•	•	•	•
Coil Adapter Kits - Double Offset	KGADA0301ALL	•	•	•	•	•	•	•	•	•
Return Air Base (Upflow Applications) 14.0-in. wide	KGARP0301B14	•	•	•						
Return Air Base (Upflow Applications) 17.5-in. wide	KGARP0301B17		1		•	•	•			
Return Air Base (Upflow Applications) 21.0-in. wide	KGARP0301B21							•	•	
Return Air Base (Upflow Applications) 24.5-in. wide	KGARP0301B24									•
IAQ Device Duct Adapters 20.0-in. IAQ to 16 in. Side	VCAAD0404A4E0		1		00"0	E" IA O D	ovios -	1	1	
Return	KGAAD0101MEC				20″x2	5" IAQ D	evices			
IAQ Device Duct Adapters 24.0-in. IAQ to 16 in. Side	KGAAD0201MEC				24"v2	5" IAQ D	ovices			
Return	RGAADOZOTIVILO				24 12	JIAQD	evices			
Gas Conversion Accessories										
Mobile Home Kit	KGBMH0601KIT		•	•	•	•	•	•	•	•
Gas Conversion Kit - Nat to LP	KGBNP54011SP	•								
Gas Conversion Kit - LP to Nat	KGBPN46011SP	•								
Gas Conversion Kit - Nat to LP	KGBNP50011SP		•	•	•	•	•	•	•	•
Gas Conversion Kit - LP to Nat	KGBPN42011SP		•	•	•	•	•	•	•	•
Gas Orifice Kit - #42 (Nat Gas)	LH32DB207	•	•	•	•	•	•	•	•	•
Gas Orifice Kit - #43 (Nat Gas)	LH32DB202	•	•	•	•	•	•	•	•	•
Gas Orifice Kit - #44 (Nat Gas)	LH32DB200	•	•	•	•	•	•	•	•	•
Gas Orifice Kit - #45 (Nat Gas)	LH32DB205		•	•	•	•	•	•	•	•
Gas Orifice Kit - #46 (Nat Gas)	LH32DB208		•	•	•	•	•	•	•	•
Gas Orifice Kit - #47 (Nat Gas)	LH32DB078		•	•	•	•	•	•	•	•
Gas Orifice Kit - #48 (Nat Gas)	LH32DB076		•	•	•	•	•	•	•	•
Gas Orifice Kit - #54 (LP)	LH32DB203		•	•	•	•	•	•	•	•
Gas Orifice Kit - #55 (LP)	LH32DB201		•	•	•	•	•	•	•	•
Gas Orifice Kit - #56 (LP)	LH32DB206		•	•	•	•	•	•	•	•
Gas Orifice Kit - 1.25mm (LP)	LH32DB209	•	•	•	•	•	•	•	•	•
Gas Orifice Kit - 1.30mm (LP)	LH32DB210		•	•	•	•	•	•	•	•
Control Accessories			•						,	
Twinning Kit	KGATW0701HSI					•	•	•	•	•
IAQ Accessories	1		•							•
Filter Pack (6 pack) — Washable - 16x25x1 (406x635x25 mm)	KGAWF1306UFR	•	•	•	•	•	•	•	•	•
Filter Pack (6 pack) – Washable - 24x25x1 (610x635x25 mm)	KGAWF1506UFR	•	•	•	•	•	•	•	•	•
EZ-Flex Filter - 16" (406 mm)	EXPXXFIL0016		ı	1	Use with	EZXCA	B-1016	l .	1	1
EZ-Flex Filter - 20" (508 mm)	EXPXXFIL0020					EZXCA				
EZ-Flex Filter - 24" (610 mm)	EXPXXFIL0024					EZXCA				
EZ-Flex Filter with End Caps - 16" (406 mm)	EXPXXUNV0016						B-1016			
EZ-Flex Filter with End Caps - 20" (508 mm)	EXPXXUNV0020				Use with					
EZ-Flex Filter with End Caps - 24" (610 mm)	EXPXXUNV0024				Use with					
Cartridge Media Filter - 16" (406 mm)	FILXXCAR0016						XL-1016	3		
Cartridge Media Filter - 20" (508 mm)	FILXXCAR0020	1					XL-1020			
Cartridge Media Filter - 24" (610 mm)	FILXXCAR0024	1					XL-1024			
Bryant Preferred Air Purifier - 16x25 (508x635 mm)	PGAPXX1625	1				to 1600 (		-		
Bryant Preferred Air Purifier - 20x25 (508x635 mm)	PGAPXX2025	1			•	to 2000 (				
Bryant Preferred Air Purifier Repl Filter - 16x25 (406x635 mm)	PGAPAXXCAR1625					h PGAP				
Bryant Preferred Air Purifier Repl. Filter - 20x25	PGAPAXXCAR2025				Use wit	h PGAP	XX2025			
(508x635 mm)  • = Used with the model furnace										

<sup>● =</sup> Used with the model furnace

## AIR DELIVERY - CFM (BOTTOM RETURN WITH FILTER)

UNIT	RETURN-AIR	SPEED			EX	TERNAL	STATIC F	PRESSUF	RE (IN.W.	C.)		
SIZE	CONNECTION	TAPS 2, 3	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
		Black	1045	1010	975	935	895	855	810	760	715	670
		Yellow	820	770	730	680	630	585	530	480	435	385
030026	SIDE/BOTTOM	Orange	655	600	550	495	435	385	335	265	<sub>-</sub> 6	<sub>-</sub> 6
		Blue	605	545	490	435	375	335	255	_ 6	_ 6	_ 6
		Red <sup>3</sup>	480	415	360	305	235	_ 6	_ 6	_ 6	_ 6	_ 6
		Gray	1120	1080	1030	980	925	875	820	760	690	630
		Yellow	880	845	810	780	740	710	680	640	615	570
030040	SIDE/BOTTOM	Blue	695	665	620	575	535	495	455	420	370	280
		Orange	640	595	540	495	460	420	370	310	260	230
		Red	570	525	475	425	385	330	255	220	_ 6	_ 6
		Gray	1255	1220	1175	1130	1085	1040	990	940	880	825
		Yellow	940	905	870	840	805	770	735	695	665	630
036040	SIDE/BOTTOM	Blue	705	670	630	575	540	500	455	410	380	325
		Orange	580	535	480	425	380	335	290	235	_ 6	_ 6
		Red	555	485	425	375	330	280	215	_ 6	<sub>-</sub> 6	<sub>-</sub> 6
		Gray	1265	1225	1185	1140	1090	1030	975	920	850	760
		Yellow	1115	1085	1060	1030	1000	970	930	880	810	715
036060	SIDE/BOTTOM	Orange	1000	970	940	910	880	845	815	770	735	695
		Blue	945	915	885	855	820	785	745	705	675	635
		Red	770	740	700	660	620	575	540	500	455	415
		Gray	1720	1670	1620	1565	1505	1440	1375	1295	1220	1135
		Yellow	1325	1285	1255	1220	1185	1145	1115	1075	1040	1000
042060	SIDE/BOTTOM	Blue	1010	970	925	875	835	785	745	690	660	620
		Orange	1160	1115	1080	1045	1000	960	920	875	840	785
		Red	785	715	655	595	530	490	435	385	340	285
		Gray	1810	1770	1720	1665	1610	1540	1475	1400	1315	1235
		Yellow	1535	1500	1475	1435	1405	1370	1340	1310	1245	1160
048080	SIDE/BOTTOM	Blue	1380	1340	1305	1270	1240	1200	1165	1130	1090	1050
		Orange	1180	1130	1095	1060	1015	975	935	895	850	800
		Red	1100	1045	1010	970	920	885	845	790	745	690
		Gray	2290	2225	2155	2090	2015	1930	1845	1750	1640	1515
	BOTTOM or	Yellow	1810	1760	1725	1685	1640	1600	1555	1520	1480	1415
060080	TWO-SIDES 4, 5	Blue	1385	1340	1285	1240	1200	1140	1090	1050	995	950
	TWO GIBLO	Orange	1560	1520	1475	1430	1385	1335	1295	1240	1200	1150
		Red	1055	985	910	860	795	750	680	615	565	495
		Gray	2340	2295	2250	2195	2110	2030	1935	1835	1725	1605
	BOTTOM or	Yellow	1950	1900	1855	1800	1755	1705	1655	1605	1560	1485
060100	TWO-SIDES 4, 5	Blue	1750	1700	1650	1605	1555	1500	1455	1395	1350	1300
	TWO GIBLO	Orange	1570	1520	1460	1410	1350	1300	1240	1195	1140	1095
		Red	1350	1280	1225	1155	1105	1045	1000	950	895	830
		Gray	2275	2230	2185	2130	2055	1950	1825	1710	1610	1500
	BOTTOM or	Yellow	1875	1820	1770	1720	1660	1600	1550	1505	1450	1390
066120	TWO-SIDES 4, 5	Blue	2170	2125	2075	2025	1975	1900	1790	1695	1590	1470
	, TTO SIDEO	Orange <sup>3</sup>	1475	1420	1350	1280	1215	1165	1105	1050	995	930
1		Red <sup>3</sup>	1625	1565	1505	1445	1385	1325	1275	1225	1170	1130

## NOTE:

- 1. A filter is required for each return—air inlet. Airflow performance includes a 3/4—in. (19 mm) washable filter media such as contained in a factory—authorized accessory filter rack. See accessory list. To determine airflow performance without this filter, assume an additional 0.1 in. w.c. available external static pressure.
- 2. ADJUST THE BLOWER SPEED TAPS AS NECESSARY FOR THE PROPER AIR TEMPERATURE RISE FOR EACH INSTALLATION.
- 3. Shaded areas indicate that this airflow range is **BELOW THE RANGE ALLOWED FOR HEATING OPERATION. THESE AIRFLOW RANGES MAY ONLY BE USED FOR COOLING.**
- 4. Airflows over 1800 CFM require bottom return, two-side return, or bottom and side return. A minimum filter size of 20" x 25" (508 x 635 mm) is required.
- 5. For upflow applications, air entering from one side into both the side of the furnace and a return air base counts as a side and bottom return.
- 6. The "-" entry indicates an unstable operating condition.

## MAXIMUM ALLOWABLE EXPOSED VENT LENGTHS INSULATION TABLE - FT.

	Unit Size			26,000*	BTUH		
	Offic Size	0" Insu	ılation	3/8" Ins	ulation	1/2" Ins	ulation
Winter	Pipe Dia.	11/2	2	11/2	2	11/2	2
Design	ln.	1 /2		1 /2		1 /2	
Temp	20	20	20	50	45	60	50
°F	0	5	5	25	20	30	25
	-20			15	10	20	15
	-40			10	5	15	10

	Unit Size				40,0	00* B	TUH									(	60,000	BTUH					
	Offic Size	Uni	insula	ted	3/8-in	. Insul	lation	1/2-in	. Insul	ation	1		Unins	ulated		3/8	3-in. In	sulatio	on	1/2	?-in. In	sulatio	n
Winter Design	Pipe Dia. in.	1 ½	2	2 1/2	1 ½	2	2 1/2	1 ½	2	2 1/2		1 1/2	2	2 ½	3	1 ½	2	2 ½	3	1 ½	2	2 ½	3
Temp	20	20	20	20	20	50	45	20	60	50		20	30	30	25	20	75	65	60	20	85	75	65
°F	0	10	5	5	20	25	20	20	30	25		15	15	10	10	20	40	30	25	20	45	40	30
	-20	5			20	15	10	20	20	15		10	5			20	25	20	15	20	30	25	20
	-40				15	10	5	15	15	10		5				20	15	15	10	20	20	15	10

	Unit Size							80,0	00 BTUH							
	Offic Size		Ĺ	Ininsulated	d			3/8-i	n. Insulati	on			1/2-	in. Insulat	ion	
Winter Design	Pipe Dia. in.	1 ½	2	2 ½	3	4	1 ½	2	2 ½	3	4	1 ½	2	2 ½	3	4
Temp	20	15	40	40	35	30	15	50	90	75	65	15	50	70	70	70
°F	0	15	20	15	10	5	15	50	45	35	30	15	50	50	40	35
	-20	15	10	5			15	35	30	20	15	15	40	30	25	15
	-40	10	5				15	25	20	15	5	15	30	25	20	10

	Unit Size						100,0	00 BTUH					
	Offic Size		Uninsul	ated			3/8-in. Ins	sulation			1/2-in. In:	sulation	
Winter Design	Pipe Dia. in.	2	2 ½	3	4	2	2 ½	3	4	2	2 ½	3	4
Temp	20	20	50	40	35	20	80	95	80	20	80	105	90
°F	0	20	20	15	10	20	55	45	35	20	65	55	45
	-20	15	10	5		20	35	30	20	20	45	35	25
	-40	10	5			20	25	20	10	20	30	25	15

	Unit Size				120	,000 BT	UH							140	,000 B	ГИН			
	Offic Size	Un	insulat	ed	3/8-i	n. Insula	ition	1/2-i	n. Insula	tion	Un	insulat	ed	3/8-ir	n. Insula	ation	1/2-ir	n. Insula	ation
Winter Design	Pipe Dia. in.	2 ½	3	4	2 ½	3	4	2 ½	3	4	2 1/2	3	4	2 ½	3	4	2 1/2	3	4
Temp	20	10	50	40	10	75	95	10	75	105	5	55	50	5	65	105	5	65	125
°F	0	10	20	15	10	55	45	10	65	50	5	25	15	5	65	50	5	65	60
	-20	10	10		10	35	25	10	45	30	5	10	5	5	45	30	5	50	40
	-40	10	5		10	25	15	10	30	20	5	5		5	30	20	5	35	25

## $\begin{array}{c} \textbf{MAXIMUM ALLOWABLE EXPOSED VENT LENGTH IN UNCONDITIONED SPACE-} \\ \textbf{METERS} \end{array}$

	Unit Size			26,000*	BTUH		
		0" Inst	ılation	3/8" Ins	ulation	1/2" Ins	ulation
	Pipe Dia.	38	51	38	51	38	51
	mm						
Winter	-7	6.1	6.1	15.2	13.7	18.3	15.2
Design	-18	1.5	1.5	7.6	6.1	9.1	7.6
Temp	-29			4.6	3.0	6.1	4.6
°C	-40			3.0	1.5	4.6	3.0

	Unit Size				40,0								(	60,000	BTUH							
		Uni	nsula	ted	3/8-iı	n. Insula	ation	1/2-iı	n. Insul	ation		Unins	ulated		3/8	3-in. In	sulation	on	1/2	2-in. In	sulatio	on
	Pipe Dia.	38	51	64	38	51	64	38	51	64	38	51	64	76	38	51	64	76	38	51	64	76
	mm																					
Winter	-7	6.1	6.1	6.1	6.1	15.2	13.7	6.1	18.3	15.2	6.1	9.1	9.1	7.6	6.1	22.9	19.8	18.3	6.1	25.9	22.9	19.8
Design	-18	3.0	1.5	1.5	6.1	7.6	6.1	6.1	9.1	7.6	4.6	4.6	3.0	3.0	6.1	12.2	9.1	7.6	6.1	13.7	12.2	9.1
Temp	-29	1.5			6.1	4.6	3.0	6.1	6.1	4.6	3.0	1.5			6.1	7.6	6.1	4.6	6.1	9.1	7.6	6.1
°C	-40				4.6	3.0	1.5	4.6	4.6	3.0	1.5				6.1	4.6	4.6	3.0	6.1	6.1	4.6	3.0

	Unit Size							80,0	00 BTUH							
			U	ninsulated	t			3/8-i	n. Insulati	on			1/2-	in. Insula	tion	
	Pipe Dia.	38	51	64	76	102	38	51	64	76	102	38	51	64	76	102
	mm															
Winter	-7	4.6	12.2	12.2	10.7	9.1	4.6	15.2	27.4	22.9	19.8	4.6	15.2	21.3	21.3	21.3
Design	-18	4.6	6.1	4.6	3.0	1.5	4.6	15.2	13.7	10.7	9.1	4.6	15.2	15.2	12.2	10.7
Temp	-29	4.6	3.0	1.5			4.6	10.7	9.1	6.1	4.6	4.6	12.2	9.1	7.6	4.6
°C	-40	3.0	1.5				4.6	7.6	6.1	4.6	1.5	4.6	9.1	7.6	6.1	3.0

	Unit Size						100,0	000 BTUH						
			Uninsul	ated			3/8-in. In:	sulation		1/2-in. Insulation				
	Pipe Dia. mm	51	64	76	102	51	64	76	102	51	64	76	102	
Winter	-7	6.1	15.2	12.2	10.7	6.1	24.4	28.9	24.4	6.1	24.4	32.0	27.4	
Design	-18	6.1	6.1	4.6	3.0	6.1	16.8	13.7	10.7	6.1	19.8	16.7	13.7	
Temp	-29	4.6	3.0	1.5		6.1	10.7	9.1	6.1	6.1	13.7	10.7	7.6	
°C	-40	3.0	1.5			6.1	7.6	6.1	3.0	6.1	9.1	7.6	4.6	

	Unit Size				120	,000 BT	UH				140,000 BTUH								
		Un	insulat	ed	3/8-i	n. Insula	ition	1/2-i	n. Insula	ition	Un	insulat	ed	3/8-ir	n. Insula	ation	1/2-iı	n. Insula	ation
	Pipe Dia.	64	76	102	64	76	102	64	76	102	64	76	102	64	76	102	64	76	102
	mm																		
Winter	-7	3.0	15.2	12.2	3.0	22.9	28.9	3.0	22.9	32.0	1.5	16.7	15.2	1.5	19.8	32.0	1.5	19.8	38.1
Design	-18	3.0	6.1	4.6	3.0	16.8	13.7	3.0	19.8	15.2	1.5	7.6	4.6	1.5	19.8	15.2	1.5	19.8	18.3
Temp	-29	3.0	3.0		3.0	10.7	7.6	3.0	13.7	9.1	1.5	3.0	1.5	1.5	13.7	9.1	1.5	15.2	12.2
°C	-40	3.0	1.5		3.0	7.6	4.6	3.0	9.1	6.1	1.5	1.5		1.5	9.1	6.1	1.5	35	7.6

## MAXIMUM EQUIVALENT VENT LENGTH - FT. (M)

NOTE: Maximum Equivalent Vent Length (MEVL) includes standard and concentric vent termination and does NOT include elbows.

Use Table 1 - Deductions from Maximum Equivalent Vent Length to determine allowable vent length for each application.

Ur	nit Size	26,0	00 2	4	0,000			60,0	000 2				80,000				100	,000		1	120,000	)	1	140,000	O .		
	Pipe Dia. (in)	1 ½	2	1 1/2	2	2 ½	1 1/2	2	2 ½	3	1 ½	2	2 ½	3	4	2	2 ½	3	4	2 ½	3	4	2 ½	3	4		
	0-2000	70	200	40	155	185	20	100	175	200	15	55	130	175	200	20	80	175	200	10	75	185	5	65	155		
	2001-3000	65	190	35	150	175	20	95	165	185		49	125	165	185	15	75	165	185	10	70	175		60	140		
	3001 – 4000	60	175	30	135	160	16	90	155	175		49	115	155	175	15	/5	155	175	5	65	165		60	120		
A late l -	4001 – 4500	55	160	25	130	155		85	85 150 170 10 44 11	110	150	165		70	100	170			160		50	110					
Altitude (feet)	4501 – 5000	55	160	25	125	145	15	80	145	165		44	110	145	160	10	65 150	165		60	100		45	100			
(ICCI)	5001-6000	50	145	20	120	130		75	140	155		41	100	135	150	10	05	140	155			155	N/A	35	80		
	6001 – 7000	45	135	15	110	120	13	70	130	145		38	90	125	140	1	60	135	145	N/A	50	140		30	65		
	7001 – 8000	40	120	10	100	110	10	65	120	135	N/A	36	90	120	125		55	125 13	135		46	130		25	45		
	8001-9000	35	110	10	90	95	5	60	115	125	N/A	33	80	110	115	N/A	50	115	125		43	120		15	30		
	9001-10000	30	95	5	80	85	N/A	55	105	115		30	75	100	105		45	100	115		39	115		10	15		
								٨	/laximu	m Equi	valent	Vent Le	ength -	- Mete	rs												
Ur	Unit Size		26,000 <sup>2</sup> 40,000 <sup>1</sup>				60,000 <sup>2</sup> 80,000							100	,000		-	120,000	)	1	140,000	3					
	Pipe Dia. (mm)	38	51	38	51	64	38	51	64	76	38	51	64	76	102	51	64	76	102	64	76	102	64	76	102		
	0-610	21.3	60.9	12.1	47.2	56.3	6.0	30.4	53.3	60.9	4.5	16.7	39.6	53.3	60.9	6.0	24.3	53.3	60.9	3.0	22.8	56.3	1.5	19.8	47.2		
	611-914	19.8	57.9	10.6	45.7	53.3	0.0	28.9	50.2	56.3		14.9	38.1	50.2	56.3	4.5	22.8	50.2	56.3	3.0	21.3	53.3		18.2	42.6		
	915-1219	18.2	53.3	9.1	41.1	48.7	4.8	27.4	47.2	53.3		14.9	35.0	47.2	53.3	4.5	22.0	47.2	53.3	1.5	19.8	50.2		10.2	36.5		
Altitude	1220-1370	16.7	48.7	7.6	39.6	47.2		25.9	45.7	51.8	3.0	13.4	33.5	45.7	50.2		21.3	47.2	51.8			48.7		15.2	33.5		
(meters)	1371 – 1524	10.7	40.7	7.6	38.1	44.1	4.5	24.3	44.1	50.2		13.4	33.5	44.1	48.7	3.0	19.8	45.7	50.2		18.2	40.7		13.7	30.4		
	1525-1829	15.2	44.1	6.0	36.5	39.6		22.8	42.6	47.2		12.4	30.4	41.1	45.7	3.0	19.0	42.6	47.2			47.2	NA	10.6	24.3		
	1830-2134	13.7	41.1	4.5	33.5	36.5	3.9	21.3	39.6	44.1		11.5	27.4	38.1	42.6	1	18.2	41.1	44.1	NA	15.2	42.6		9.1	19.8		
	2135-2438	12.1	36.5	0.0	30.4	33.5	3.0	19.8	36.5	41.1	NA L	NΔ	NΔ	10.9	27.4	36.5	38.1		16.7	38.1	41.1		14.0	39.6		7.6	13.7
	2439-2743	10.6	33.5	3.0	27.4	28.9	1.5	18.2	35.0	38.1				10.0	24.3	33.5	35.0	NA	NA 15.2 35.0	38.1		13.1 36.	36.5		4.5	9.1	
	2744-3048	9.1	28.9	1.5	24.3	25.9	NA	16.7	32.0	35.0		9.1	22.8	30.4	32.0		13.7	30.4	35.0		11.8	35.0		3.0	4.5		

#### NOTES:

- 1. Inducer Outlet Restrictor disk (P/N 337683-401; 1.25-in. (32 mm) Dia.) shipped in the loose parts bag or available through Replacement Components required under 10-ft. (3 M) TEVL in all orientations. Required for installations from 0 2000 (0 to 610 M) above sea level. Failure to use an outlet restrictor may result in flame disturbances or flame sense lock-out.
- 2. Inducer Outlet Restrictor disk (P/N 337683 401; 1.25 in. (32 mm) Dia.) shipped in the loose parts bag or available through Replacement Components required for no greater than 5 ft. (1.5 M) TEVL in downflow and horizontal orientations only. Required for installations from 0 2000 (0 to 610 M) above sea level.

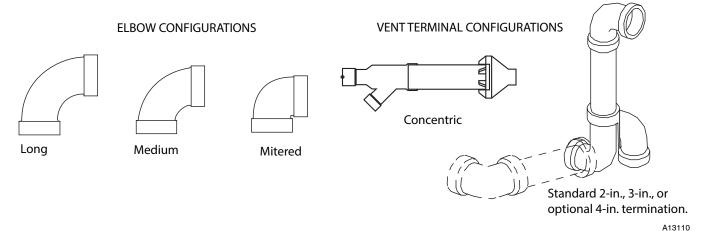


Table 1 – Deductions from Maximum Equivalent Vent Length - Ft. (M)

					0				
1-1	1/2	2	2	2-	1/2	;	3	4	
8	(2.4)	8	(2.4)	8	(2.4)	8	(2.4)	8	(2.4)
5	(1.5)	5	(1.5)	5	(1.5)	5	(1.5)	5	(1.5)
3	(0.9)	3	(0.9)	3	(0.9)	3	(0.9)	3	(0.9)
4	(1.2)	4	(1.2)	4	(1.2)	4	(1.2)	4	(1.2)
2.5	(0.8)	2.5	(0.8)	2.5	(8.0)	2.5	(8.0)	2.5	(8.0)
1.5	(0.5)	1.5	(0.5)	1.5	(0.5)	1.5	(0.5)	1.5	(0.5)
16	(4.9)	16	(4.9)	16	(4.9)	16	(4.9)	16	(4.9)
N	A	0	(0.0)	N	A	0	(0.0)	N	IA
0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
	8 5 3 4 2.5 1.5	5 (1.5) 3 (0.9) 4 (1.2) 2.5 (0.8) 1.5 (0.5) 16 (4.9)	8 (2.4) 8 5 (1.5) 5 3 (0.9) 3 4 (1.2) 4 2.5 (0.8) 2.5 1.5 (0.5) 1.5 16 (4.9) 16 NA 0	8     (2.4)     8     (2.4)       5     (1.5)     5     (1.5)       3     (0.9)     3     (0.9)       4     (1.2)     4     (1.2)       2.5     (0.8)     2.5     (0.8)       1.5     (0.5)     1.5     (0.5)       16     (4.9)     16     (4.9)       NA     0     (0.0)	8     (2.4)     8     (2.4)     8       5     (1.5)     5     (1.5)     5       3     (0.9)     3     (0.9)     3       4     (1.2)     4     (1.2)     4       2.5     (0.8)     2.5     (0.8)     2.5       1.5     (0.5)     1.5     (0.5)     1.5       16     (4.9)     16     (4.9)     16       NA     0     (0.0)     N	1-1/2         2         2-1/2           8         (2.4)         8         (2.4)         8         (2.4)           5         (1.5)         5         (1.5)         5         (1.5)           3         (0.9)         3         (0.9)         3         (0.9)           4         (1.2)         4         (1.2)         4         (1.2)           2.5         (0.8)         2.5         (0.8)         2.5         (0.8)           1.5         (0.5)         1.5         (0.5)         1.5         (0.5)           16         (4.9)         16         (4.9)         NA         NA	1-1/2         2         2-1/2         3           8         (2.4)         8         (2.4)         8         (2.4)         8           5         (1.5)         5         (1.5)         5         (1.5)         5           3         (0.9)         3         (0.9)         3         (0.9)         3           4         (1.2)         4         (1.2)         4         (1.2)         4           2.5         (0.8)         2.5         (0.8)         2.5         (0.8)         2.5           1.5         (0.5)         1.5         (0.5)         1.5         (0.5)         1.5           16         (4.9)         16         (4.9)         16         (4.9)         16           NA         0         (0.0)         NA         0	1-1/2         2         2-1/2         3           8         (2.4)         8         (2.4)         8         (2.4)           5         (1.5)         5         (1.5)         5         (1.5)         5         (1.5)           3         (0.9)         3         (0.9)         3         (0.9)         3         (0.9)           4         (1.2)         4         (1.2)         4         (1.2)         4         (1.2)           2.5         (0.8)         2.5         (0.8)         2.5         (0.8)           1.5         (0.5)         1.5         (0.5)         1.5         (0.5)           16         (4.9)         16         (4.9)         16         (4.9)           NA         0         (0.0)         NA         0         (0.0)	1-1/2         2         2-1/2         3           8         (2.4)         8         (2.4)         8         (2.4)         8           5         (1.5)         5         (1.5)         5         (1.5)         5           3         (0.9)         3         (0.9)         3         (0.9)         3           4         (1.2)         4         (1.2)         4         (1.2)         4           2.5         (0.8)         2.5         (0.8)         2.5         (0.8)         2.5           1.5         (0.5)         1.5         (0.5)         1.5         (0.5)         1.5           16         (4.9)         16         (4.9)         16         (4.9)         16           NA         0         (0.0)         NA         0         (0.0)         N

#### NOTES:

- 1. Use only the smallest diameter pipe possible for venting. Over-sizing may cause flame disturbance or excessive vent terminal icing or freeze-up.
- 2. NA Not allowed. Pressure switch will not close, or flame disturbance may result.
- 3. Vent sizing for Canadian installations over 4500 ft. (1370 M) above sea level are subject to acceptance by the local authorities having jurisdiction.
- 4. Size both the combustion air and vent pipe independently, then use the larger size for both pipes.
- 5. Assume the two 45° elbows equal one 90° elbow. Wide radius elbows are desirable and may be required in some cases.
- 6. Elbow and pipe sections within the furnace casing and at the vent termination should not be included in vent length or elbow count.
- 7. The minimum pipe length is 5 ft. (2 M) linear feet (meters) for all applications.
- 8. Use 3-in. (76 mm) diameter vent termination kit for installations requiring 4-in. (102 mm) diameter pipe.

## **Venting System Length Calculations**

The Total Equivalent Vent Length (TEVL) for **EACH** combustion air or vent pipe equals the length of the venting system, plus the equivalent length of elbows used in the venting system from Table 1.

Standard vent terminations or factory accessory concentric vent terminations count for zero deduction.

See vent system manufacturer's data for equivalent lengths of flexible vent pipe or other termination systems. **DO NOT ASSUME** that one foot of flexible vent pipe equals one foot of straight PVC/ABS DWV vent pipe.

Compare the Total Equivalent Vent Length to the Maximum Equivalent Vent Lengths in Table NO TAG.

#### Example 1

A direct-vent 60,000 BTUH furnace installed at 2100 ft. (640M). Venting system includes FOR EACH PIPE:

70 feet (22 M) of vent pipe, 65 feet (20 M) of combustion air inlet pipe, (3) 90° long-radius elbows, (2) 45° long-radius elbows, and a factory accessory concentric vent kit.

Can this application use 2" (50 mm ND) PVC/ABS DWV vent piping?

Is TEVL less than MEVL?					YES	Therefore, 2" pipe MAY be used
Maximum Equivalent Vent Length (MEVL)					95 ft. (29 M)	For 2" pipe from Table NO TAG
Total Equivalent Vent Length (TEVL)					82 ft. (25 M)	Add all of the above lines
Add correction for flexible vent pipe, if any					0 ft.	From Vent Manufacturer's instructions; zero for PVC/ABS DWV
Add equiv length of factory concentric vent term					0 ft.	From Table 1
Add equiv length of (2) 45° long-radius elbows (use the highest number of elbows for either the vent or inlet pipe)	2	х	1.5 ft. (0.5 M)	=	3 ft. (0.9 M)	From Table 1
Add equiv length of (3) 90° long-radius elbows (use the highest number of elbows for either the vent or inlet pipe)	3	х	3 ft. (0.9 M)	=	9 ft. (2.7 M)	From Table 1
Measure the required linear length of air inlet and vent pipe; insert the longest of the two here					70 ft. (22 M)	Use length of the longer of the vent or air inlet piping system

## Example 2

A direct-vent 60,000 BTUH furnace installed at 2100 ft. (640M). Venting system includes FOR EACH PIPE:

100 feet (30 M) of vent pipe, 95 feet (29 M) of combustion air inlet pipe, (3) 90° long-radius elbows, and a polypropylene concentric vent kit. Also includes 20 feet (6.1 M) of flexible polypropylene vent pipe, included within the 100 feet (30 M) of vent pipe.

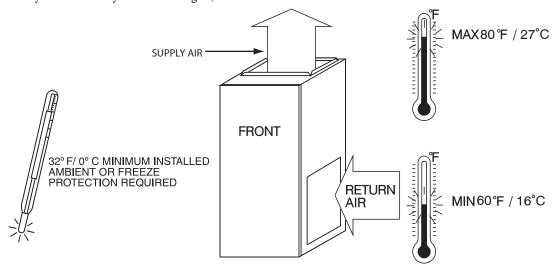
VERIFY FROM POLYPROPYLENE VENT MANUFACTURER'S INSTRUCTIONS for the multiplier correction for flexible vent pipe.

Can this application use 60mm o.d. (2") polypropylene vent piping? If not, what size piping can be used?

Measure the required linear length of <b>RIGID</b> air inlead the longest of the two here: 100 ft. Of rigid pipe – 2				=	80 ft. (24 M)	Use length of the longer of the vent or air inlet piping system
Add equiv length of (3) 90° long-radius elbows (use the highest number of elbows for either the vent or inlet pipe)	3	х	5 ft. (1.5 M)	=	15 ft. (4.6 M)	
Add equiv length of 45° long-radius elbows (use the highest number of elbows for either the vent or inlet pipe)	0	х		=	0 ft. (0 M)	Example from polypropylene vent manufacturer's instructions, Verify from vent
Add equiv length of factory concentric vent term	9	х	3.3 ft (0.9 M)		30 ft. (9 M)	manufacturer's instructions.
Add correction for flexible vent pipe, if any	2*	х	20 ft. (6.1 M)	=	36 ft. (11 M)	
* VERIFY FROM VENT MANUFACTURER'S INSTRI polypropylene pipe equals 2.0 meters (6.5 ft.) of P\				nly, a	ssume 1 me	tter of flexible 60mm (2") or 80mm (3")
Total Equivalent Vent Length (TEVL)					165 ft. (50 M)	Add all of the above lines
Maximum Equivalent Vent Length (MEVL)					95 ft. (29 M)	For 2" pipe from Table NO TAG
Is TEVL less than MEVL?					NO	Therefore, 60mm (2") pipe may NOT be used; try 80mm (3")
Maximum Equivalent Vent Length (MEVL)					185 ft. (57 M)	For 3" pipe from Table NO TAG
Is TEVL less than MEVL?					YES	Therefore, 80mm (3") pipe MAY be used

## RETURN AIR TEMPERATURE

This furnace is designed for continuous return-air minimum temperature of  $60^{\circ}F$  ( $15^{\circ}C$ ) db or intermittent operation down to  $55^{\circ}F$  ( $13^{\circ}C$ ) db such as when used with a night setback thermometer. Return-air temperature must not exceed  $80^{\circ}F$  ( $27^{\circ}C$ ) db. Failure to follow these return air limits may affect reliability of heat exchangers, motors and controls.



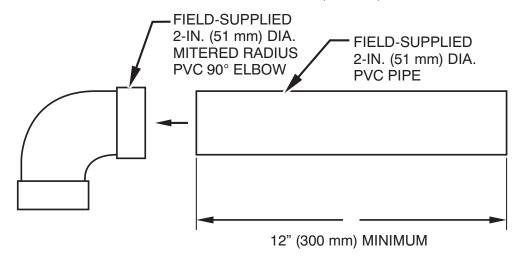
A10490

## MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

POSITION	CLEARANCE
Rear	0 (0 mm)
Front (Combustion air openings in furnace and in structure)	1 in. (25 mm)
Required for service**	24 in. (610 mm)*
All Sides of Supply Plenum**	1 in. (25 mm)
Sides	0 (0 mm)
Vent	0 (0 mm)
Top of Furnace	1 in. (25 mm)

<sup>\*</sup> Recommended

## COMBUSTION-AIR PIPE FOR NON-DIRECT (1-PIPE) VENT APPLICATION

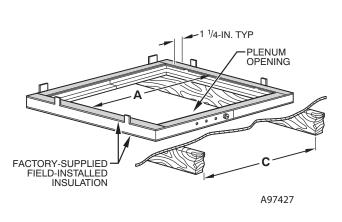


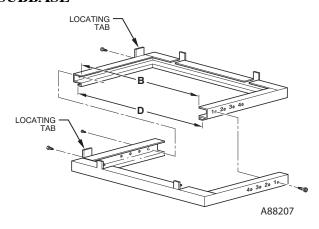
A12376

NOTE: See Installation Instructions for specific venting configurations.

<sup>\*\*</sup>Consult your local building codes

## **DOWNFLOW SUBBASE**



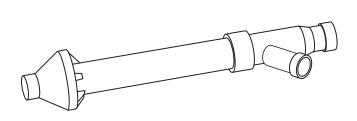


Assembled

Disassembled

	DIMENSIONS (IN. / MM)							
FURNACE	FURNACE IN DOWNFLOW	PLENUM (	OPENING*	FLOOR C	HOLE NO. FOR			
CASING WIDTH	APPLICATION	Α	В	С	D	ADJUSTMENT		
14-3/16 (360)	Furnace with or without Cased Coil Assembly or Coil Box	11-3/16 (322)	19 (483)	13-7/16 (341)	20-5/8 (600)	4		
17-1/2 (445)	Furnace with or without Cased Coil Assembly or Coil Box	15 – 1/8 (384)	19 (483)	16-3/4 (426)	20-5/8 (600)	3		
21 (533)	Furnace with or without Cased Coil Assembly or Coil Box	18-5/8 (396)	19 (483)	20-1/4 (514)	20-5/8 (600)	2		
24-1/2 (622)	Furnace with or without Cased Coil Assembly or Coil Box	22 – 1/8 (562)	19 (483)	23-3/4 (603)	20-5/8 (600)	1		

<sup>\*</sup>The plenum should be constructed 1/4-in. (6 mm) smaller in width and depth than the plenum dimensions shown above.



**Concentric Vent Kit** 

A93086

A concentric vent kit allows vent and combustion-air pipes to terminate through a single exit in a roof or side wall. One pipe runs inside the other allowing venting through the inner pipe and combustion air to be drawn in through the outer pipe.

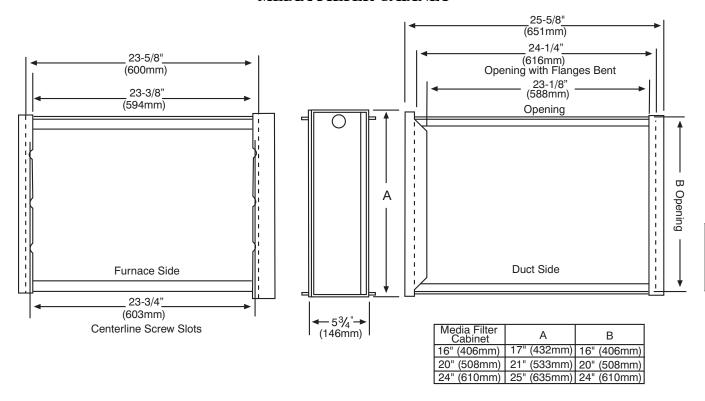


**Downflow Subbase** 

A8820

One base fits all furnace sizes. The base is designed to be installed between the furnace and a combustible floor when no coil box is used or when a coil box other than a Bryant cased coil is used. It is CSA design certified for use with Bryant branded furnaces when installed in downflow applications.

## **MEDIA FILTER CABINET**

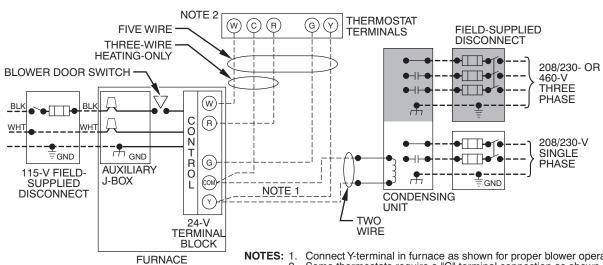


NOTE: Media cabinet is matched to the bottom opening on furnace. May also be used for side return.

A12428

## TYPICAL WIRING SCHEMATIC

---- FIELD 24-V WIRING -- FIELD 115-, 208/230-, 460-V WIRING -- FACTORY 24-V WIRING - FACTORY 115-V WIRING

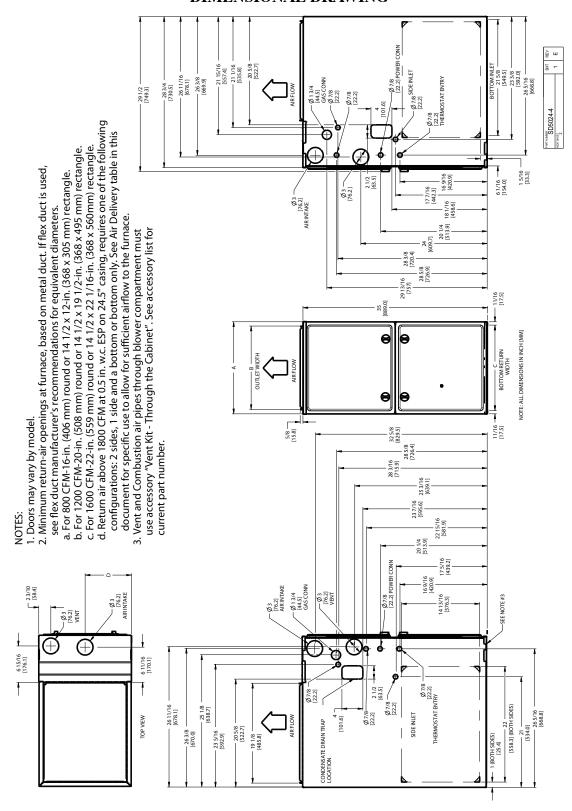


- Connect Y-terminal in furnace as shown for proper blower operation. Some thermostats require a "C" terminal connection as shown.
- If any of the original wire, as supplied, must be replaced, use

same type or equivalent wire.

A11387

## **DIMENSIONAL DRAWING**



A12267

925SA	A	В	С	D	SHIP WT.
FURNACE SIZE	CABINET WIDTH	OUTLET WIDTH	BOTTOM INLET WIDTH	AIR INTAKE	LB (KG)
30026	14-3/16 (361)	12-1/2 (319)	12-9/16 (322)	7-1/8 (181)	118.0 (53.5)
30040	14-3/16 (361)	12-1/2 (319)	12-9/16 (322)	7-1/8 (181)	120.0 (54.5)
30040	14-3/16 (361)	12-1/2 (319)	12-9/16 (322)	7-1/8 (181)	120.0 (54.5)
36060	14-3/16 (361)	12-1/2 (319)	12-9/16 (322)	7-1/8 (181)	131.0 (59.4)
36040					130.5 (59.2)
42060	17-1/2 (445)	15-7/8 (403)	16 (406)	8-3/4 (222)	141.0 (64.0)
48080					151.0 (68.6)
60080	04 (500)	40. 0/0 (400)	40 4/0 (405)	10 10 (007)	155.5 (70.7)
60100	21 (533)	19-3/8 (492)	19-1/2 (495)	10-1/2 (267)	165.5 (75.2)
66120	24-1/2 (622)	22-7/8 (581)	23 (584)	12-1/4 (311)	189.5 (86.1)

# **7**8566

#### **GUIDE SPECIFICATIONS**

#### General

## **System Description**

Furnish a \_\_\_\_\_\_\_4-way multipoise gas-fired condensing furnace for use with natural gas or propane (factory-authorized conversion kit required for propane); furnish external media cabinet for use with accessory media filter or standard filter.

#### **Quality Assurance**

Unit will be designed, tested and constructed to the current ANSI Z 21.47/CSA 2.3 design standard for gas-fired central furnaces.

Unit will be third party certified by CSA to the current ANSI Z 21.47/CSA 2.3 design standard for gas-fired central furnaces. Unit will carry the CSA Blue Star® and Blue Flame® labels. Unit efficiency testing will be performed per the current DOE test procedure as listed in the Federal Register.

Unit will be certified for capacity and efficiency and listed in the latest AHRI Consumer's Directory of Certified Efficiency Ratings. Unit will carry the current Federal Trade Commission Energy Guide efficiency label.

#### **Delivery, Storage, and Handling**

Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

#### Warranty (for inclusion by specifying engineer)

U.S. and Canada only. Warranty certificate available upon request.

## **Equipment**

#### Blower Wheel and ECM Blower Motor

Galvanized blower wheel shall be centrifugal type, statically and dynamically balanced. Blower motor of ECM type shall be permanently lubricated with sealed ball bearings, of \_\_\_\_\_hp, and have multiple speeds from 600-1200 RPM operating only when 24-VAC motor inputs are provided. Blower motor shall be direct drive and soft mounted to the blower housing to reduce vibration transmission.

#### **Filters**

Furnace shall	have reusable-type	filters. Filter shall be	in
(mm) X	in. (mm). An	accessory highly efficien	t Media
	ole as an option.	Media Filte	

#### Casino

Casing shall be of .030 in. thickness minimum, pre-painted steel.

#### **Draft Inducer Motor**

Draft inducer motor shall be single-speed PSC design.

## Primary Heat Exchangers

Primary heat exchangers shall be 3-Pass corrosion-resistant aluminized steel of fold-and-crimp sectional design and applied operating under negative pressure.

#### Secondary Heat Exchangers

Secondary heat exchangers shall be of a stainless steel flow-through of fin-and-tube design and applied operating under negative pressure.

#### Controls

Controls shall include a micro-processor-based integrated electronic control board with at least 16 service troubleshooting codes displayed via diagnostic flashing LED light on the control, a self-test feature that checks all major functions of the furnace, and a replaceable automotive-type circuit protection fuse. Multiple operational settings available, including blower speeds for high heat, low cooling, high cooling. Continuous fan speed may be adjusted from the thermostat.

#### **Operating Characteristics**

Heating capacity shall be	Btuh input
Btuh output capacity	······································
Fuel Gas Efficiency shall be	AFUE.
Air delivery shall be	cfm minimum at 0.50 in
wc. external static pressure.	
Dimensions shall be: depth in. (mm); height	in. (mm); width in. (mm) (casing only)
Height shall bein. (min. (mm) overall v	mm) with A/C coil and
Electrical Requirements	
Electrical supply shall be 115 volts, 60 Minimum wire size shall be of HACR-type designated circuit by	_AWG; maximum fuse size

#### **Special Features**

Refer to section of the product data identifying accessories and descriptions for specific features and available enhancements.