

BG972V

PRODUCT SPECIFICATIONS

TWO STAGE VARIABLE SPEED GAS FURNACE

FORM NO. BG 972V-100 (02/2024)



CONFIGURATIONS

- Upflow / Horizontal
- Downflow

VENTING

- 2-speed induced draft motor with stainless steel shaft, steel ball bearings, and fan cooled for long life
- Vent materials for Canadian applications must comply with ULC S636
- Certified for direct vent (2-pipe) or non-direct (1-pipe) applications
- Direct vent refers to a combustion air supply intake pipe installed in conjunction with flue gas vent pipe.

INSTALLATION FEATURES

- Left or right gas and electric entry
- Zero step horizontal conversion
- Removable floor base (upflow/horizontal units) for bottom return air
- All models comply with California's South Coast Air Quality Management district Low NOx requirements

HEAT EXCHANGER DESIGN

- Aluminized steel primary heat exchanger with crimped non-welded construction
- AL29-4C Stainless steel secondary heat exchanger
- Non-welded crimped S-curve primary heat exchanger design for maximum durability

BURNERS

- Aluminized steel in shot burners for smooth ignition
- Isolated burner enclosure for quiet operation

CABINET CONSTRUCTION

- Compact 33" height
- Standardized widths for easy coil fit
- Unitized construction for cabinet integrity
- Heat exchanger compartment is insulated to increase efficiency and reduce sound levels
- Baked on pre painted steel cabinet finish

AIR DELIVERY SYSTEM

- Efficient ECM variable speed blower motor
- Motor features "soft start" and "soft stop" for quiet operation
- Active and passive dehumidification feature
- Easily removable slide-out blower design
- Dynamically balanced blower wheel with resilient motor mounts for smooth and quiet operation

CONTROLS

- Two stage gas valve
- Integrated ignition and fan control
- System Sentry™ control retains last five (5) fault codes with push button memory recall, regardless of power interruption
- Hot surface ignition system uses silicon nitride ignitor
- Control features 120 volt electronic air cleaner and humidifier terminals
- Control circuit is fuse protected
- Color coded control wiring
- Compatible with single or two stage thermostats for heating.
- Two stage thermostat is recommended when installed with two stage cooling unit.

WARRANTY

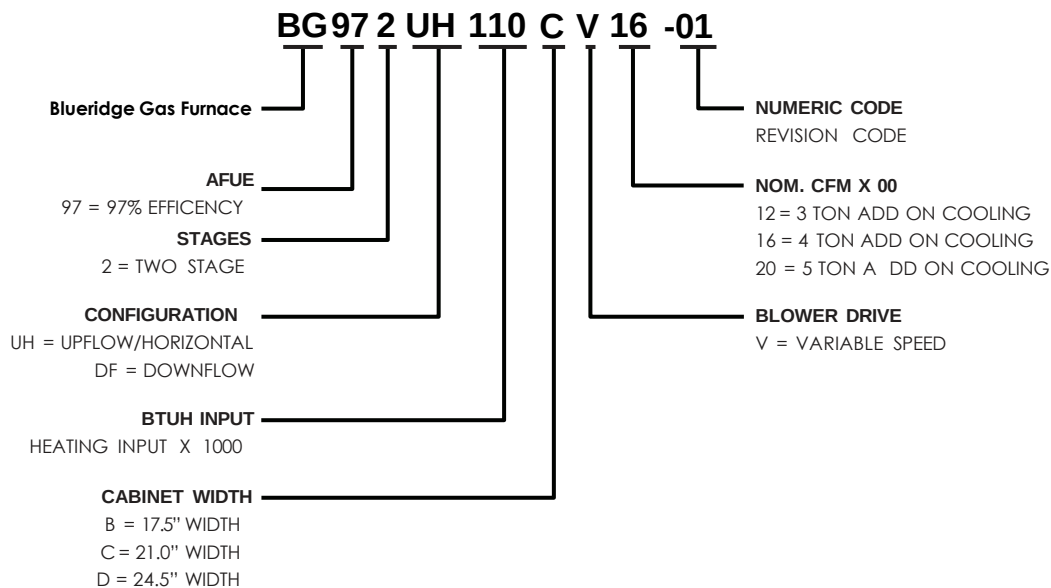
10 year limited parts warranty / lifetime heat exchanger warranty available. See limited warranty document for details.

California Only

If installed in South Coast Air Quality Management District (SCAQMD) only: This furnace does not meet the SCAQMD Rule 1111 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com. If installed in San Joaquin Valley Air Pollution Control District (SJVAPCD) only: This furnace does not meet the SJVAPCD Rule 4905 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450.



MODEL NUMBER GUIDE



PHYSICAL AND ELECTRICAL DATA

	MODEL	1ST STAGE		2ND STAGE		AFUE (ICUS)	NOM. COOLING CAPACITY (TONS)	GAS INLET (IN.)	VOLTS/ HZ/ PHASE	MIN. TIME DELAY BREAKER OR FUSE	NOMINAL F.L.A.	TRANS. (V.A.)	APPROX. WEIGHT (LBS.)
		INPUT (BTUH)	OUTPUT (BTUH)	INPUT (BTUH)	OUTPUT (BTUH)								
UPFLOW/HORIZONTAL	BG972UH070BV12	43,000	42,000	66,000	64,000	97.0	3	1/2	120-60-1	15	7.7	40	124
	BG972UH090CV12	57,000	56,000	88,000	85,000	97.0	3	1/2	120-60-1	15	7.7	40	144
	BG972UH090CV20	57,000	56,000	88,000	86,000	97.0	5	1/2	120-60-1	20	12.8	40	153
	BG972UH110CV20	72,000	70,000	110,000	107,000	97.0	4	1/2	120-60-1	15	12.8	40	159

Note: For vent length and clearances to combustibles, please reference installation instructions.

FILTER REQUIREMENT DATA

Airflow Descriptor	Disposable Filters	Cleanable Filters
	Minimum Area (sq. in.)	Minimum Area (sq.in.)
12	576	288
16	768	384
20	960	480

1. The Airflow Descriptor is the two digits following the "B", "C", or "D" in the model number; e.g. "20" is the Airflow Descriptor.
2. Areas shown for permanent filters are based on filters rated at 600 feet per minute face velocity.

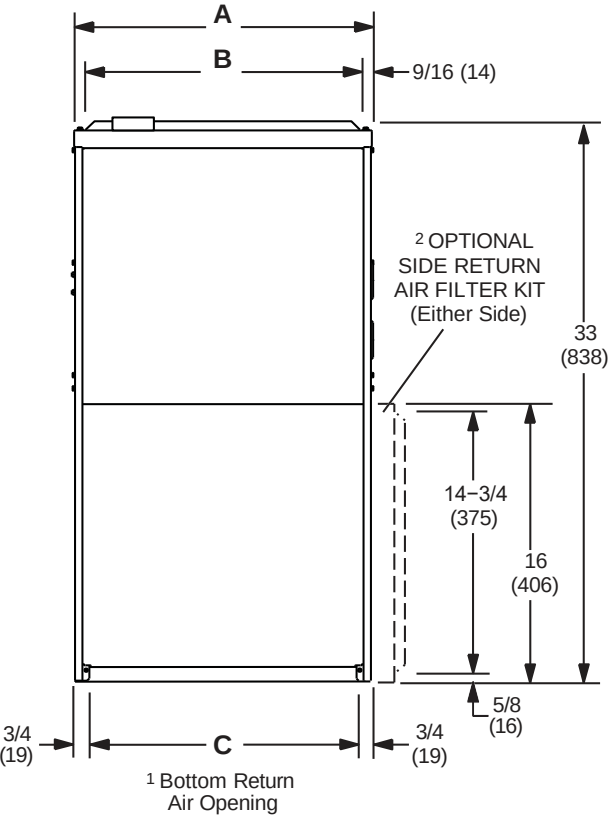
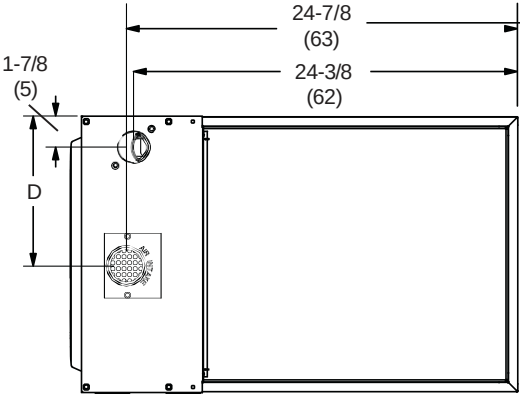
BLOWER PERFORMANCE DATA - UPFLOW / HORIZONTAL

	MODEL	MOTOR SIZE (HP)	BLOWER R SIZE	HEATING TEMP. RISE (°F)	HEATING CFM @ .10" - .80" W.C.				COOLING STAGE	COOLING CFM @ .10" - .80" W.C.				SPEED ADJUST.
					SETTING "D"	SETTING "C"	SETTING "B"	SETTING "A"		SETTING "D"	SETTING "C"	SETTING "B"	SETTING "A"	
	BG972UH070BV12	1/2	10x9	50-80 High Fire	965	1060	1130	1255	2nd Stage	860	1060	1215	1365	+
					880	960	990	1140		810	960	1130	1265	Norm
					810	840	890	1030		705	840	1005	1140	-
				25-55 Low Fire	940	990	1070	1195	1st Stage	600	740	840	970	+
					830	895	965	1100		555	665	770	855	Norm
					755	825	840	975		500	600	680	790	-
	BG972UH090CV12	1/2	10x9	60-90 High Fire	1060	1135	1240	1315	2nd Stage	875	1040	1210	1360	+
					960	1040	1120	1199		800	945	1100	1245	Norm
					830	935	980	1084		720	840	970	1115	-
				30-60 Low Fire	960	1040	1120	1206	1st Stage	625	710	830	950	+
					875	945	995	1100		565	670	760	860	Norm
					790	840	920	950		520	610	685	785	-
	BG972UH090CV20	1	11x11	40-70 High Fire	1450	1565	1725	1865	2nd Stage	1385	1595	1820	2020	+
					1310	1450	1585	1690		1225	1465	1645	1885	Norm
					1155	1305	1450	1545		1065	1320	1504	1675	-
				25-55 Low Fire	1120	1265	1420	1520	1st Stage	935	1055	1275	1465	+
					965	1120	1285	1395		835	980	1120	1335	Norm
					865	950	1120	1235		740	870	1010	1150	-
	BG972UH110CV20	1	11x11	45-75 High Fire	1560	1760	1905	1955	2nd Stage	1310	1560	1745	1955	+
					1415	1610	1740	1795		1220	1405	1570	1795	Norm
					1285	1485	1560	1635		1075	1270	1430	1635	-
				35-65 Low Fire	1155	1325	1420	1500	1st Stage	935	1065	1245	1405	+
					1055	1200	1310	1360		865	970	1145	1280	Norm
					935	1075	1170	1245		790	890	1025	1165	-

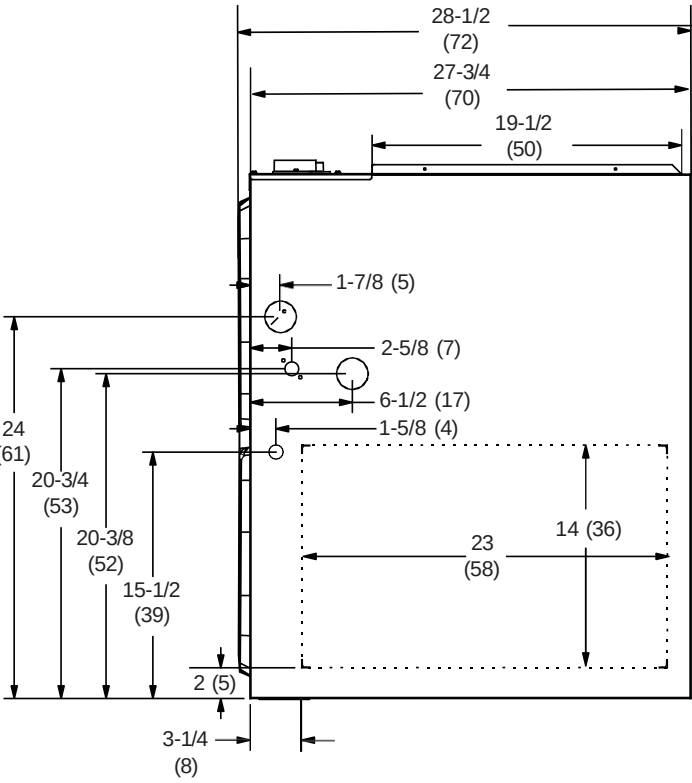
DIMENSIONS (IN.) - UPFLOW / HORIZONTAL

	MODEL	A	B	C	D
UPFLOW/HORIZONTAL	BG972UH070BV12	17-1/2	16-3/8	16	7-5/8
	BG972UH090CV12	21	19-7/8	19-1/2	9-3/8
	BG972UH090CV20	21	19-7/8	19-1/2	9-3/8
	BG972UH110CV20	21	19-7/8	19-1/2	9-3/8

TOP VIEW



FRONT VIEW



SIDE VIEW

ACCESSORY LIST

CATALOG NUMBER	DESCRIPTION
EXTERNAL FILTER RACK KITS	
1.841018	1 PACK (16 X 25)
1.841039	10 PACK (16 X 25)
NATURAL TO LP KITS	
11K48	2-STAGE - 90
11K47	HIGH ALTITUDE 2-STAGE (>4500FT.)
RETURN AIR BASE	
68W62	17.5" B WIDTH
68W63	21.0" C WIDTH
68 W 64	24.5" D WIDTH
DOWNFLOW COMBUSTIBLE FLOORING BASE	
11M60	17.5" B WIDTH
11M61	21.0" C WIDTH
NIGHT SERVICE KITS	
84W50	TWO STAGE
HORIZONTAL SUSPENSION KIT	
51W10	80% & 90% KIT
FLUSH MOUNT TERMINATION (90% FURNACES ONLY) US ONLY	
51W11	2" & 3" VENT VERSION
CONCENTRIC VENT KIT (90% FURNACES ONLY) US ONLY	
71M80	1-1/2" VENT VERSION
69M29	2" VENT VERSION
60L46	3" VENT VERSION
CONCENTRIC VENT KIT (90% FURNACES ONLY) CANADA	
44 W 92	1-1/2" AND 2" VENT VERSION
44 W 93	3" VENT VERSION

For vent length and clearances to combustibles, please reference installation instructions.

All specifications and illustrations
subject to change without notice and
without incurring obligations.



1-800-448-5872