Heating & Air Conditioning
Amana®

AMVS80-U

HEATING INPUT : 60,000 – 80,000 BTU/H

SINGLE-STAGE, VARIABLE-SPEED ECM, MULTI-POSITION, ULTRA-LOW NOx GAS FURNACE 80% AFUE

ComfortBridge™ technology

CoolCloud™

Contents

Standard Features

- Integrated communicating ComfortBridge™ Technology
- Commissioning and diagnostics via indoor board Bluetooth with the CoolCloud™ phone and tablet application
- Heavy-duty stainless-steel, dual-diameter tubular heat exchanger
- Single-stage gas valve
- Durable Hot-surface igniter
- Quiet, modulating draft inducer
- Self-diagnostic control board
- Variable-speed ECM blower motor
- Eligible for installation in California's South Coast Air Quality Management District (SCAQMD) and San Joaquin Valley Air Pollution Control District (SJVUAPCD). This furnace complies with the 14 ng/J NOx emission limit in SCAQMD Rule 1111 and SJVUAPCD Rule 4905.
- EMI line filter kit must be installed. (It is intended for field installation only on "VS" model, Bluetooth® capable Ultra Low NOx Gas Furnaces. The purpose of the EMI Filter is to reduce electromagnetic interference between the furnace and other electrical devices)
- AHRI Certified; ETL Listed

Cabinet Features

- Installation: upflow, horizontal left or right
- Convenient left or right connection for gas and electrical service
- Heavy-gauge steel cabinet with durable baked-enamel finish
- Foil faced insulated heat exchanger

LIFE TIME HEAT EXCHANGER LIMITED WARRANTY*

10 YEAR PARTS LIMITED WARRANTY*

LIFE TIME UNIT REPLACEMENT LIMITED WARRANTY*

ETL LISTED c US Intertek

AHRI CERTIFIED

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 =

COMPANY WITH ENVIRONMENTAL SYSTEM CERTIFIED BY DNV GL = ISO 14001 =

* Complete warranty details available from your local dealer or at www.amana-hac.com. To receive the Lifetime Unit Replacement Limited Warranty, Lifetime Heat Exchanger Limited Warranty (in each case, good for as long as you own your home), and 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Quebec.

A	M	V	S	80	040	4	C	*	**
1	2	3	4	5,6	7,8,9	10	11	12	13,14

BRAND

A- Amana® Brand

CONFIGURATION

M- Upflow/Horizontal

C- Downflow/Horizontal

MOTOR

V- Variable Speed ECM / ComfortBridge™

E- Multi-Speed ECM S- Single Speed

GAS VALVE

M- Modulating S- Single Stage

C- Two Stage

AFUE

80- 80% AFUE

MBTU/H

040- 40,000 BTU/h 100- 100,000 BTU/h

060- 60,000 BTU/h

080- 80,000 BTU/h

MAXIMUM CFM

2- 800 CFM 4- 1600 CFM

3- 1200 CFM 5- 2000 CFM

CABINET WIDTH

A- 14" C- 21"

B- 17½" D- 24½"

NOX

N- Natural Gas

X- Low NOx

U- Ultra-Low NOx

ENGINEERING

Major /Minor Revisions

* Not used for inventory control.

	AMVS80 0604BU*	AMVS80 0805CU*
Heating Capacity		
Input	60,000	80,000
Natural Gas Output	48,000	64,000
AFUE [1]	80	80
Available AC @ 0.5" ESP	1.5 - 4.0	2.0 - 5.0
Temperature Rise Range (°F)	20 - 50	35 - 65
Circulator Blower		
Size (D x W)	10" x 8"	10" x 10"
Horsepower	3/4	3/4
Speed	Variable	Variable
Vent Diameter [2]	4"	4"
No. of Burners	1 Burner, 3 tubes	1 Burner, 4 tubes
Minimum Filter Size	(1) 16 x 25 (side or bottom)	(1) 20 x 25 (bottom) or (2) 16 x 25 (side)
Electrical Data		
Min. Circuit Ampacity [3]	11.6	11.6
Max. Overcurrent Device (amps) [4]	15	15
Ship Weight (lbs)	112	127

[1] For Use With Natural Gas Only. For altitudes + 4500' above sea level, see installation manual.

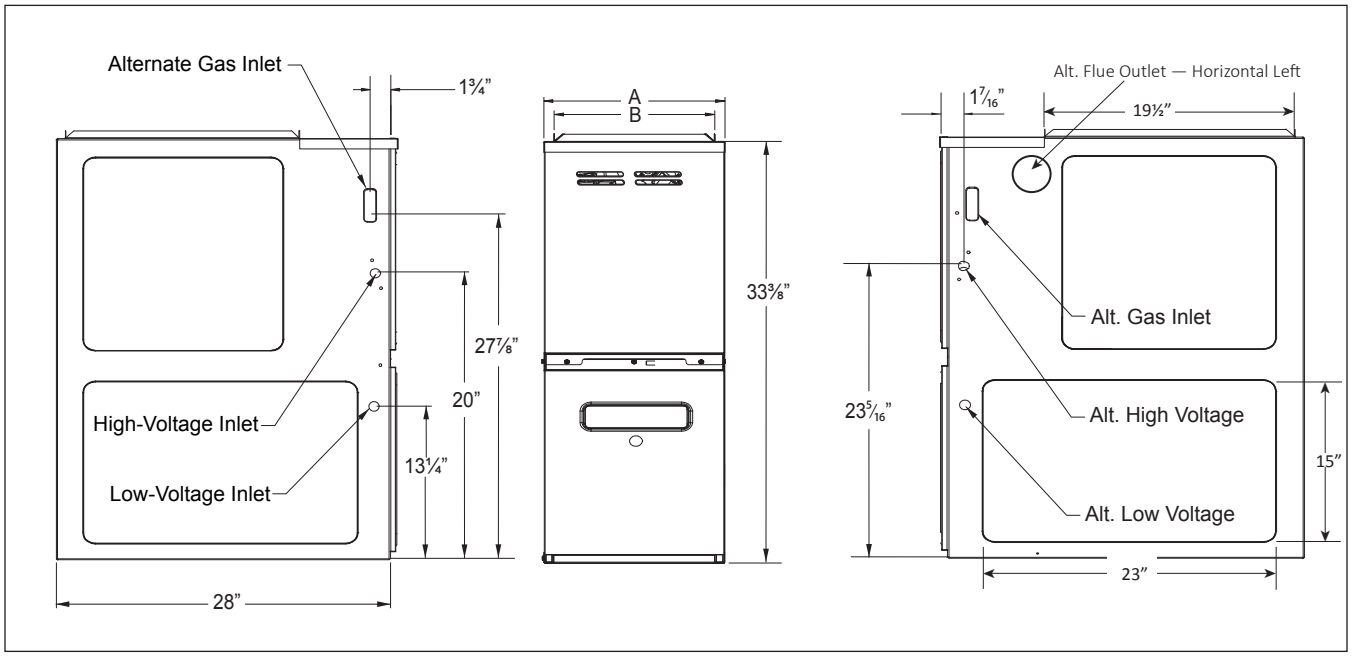
[2] DOE AFUE based upon Isolated Combustion System (ICS)

[3] Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower amps. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

[4] Maximum Overcurrent Protection Device refers to maximum recommended fuse or circuit breaker size. May use fuses or HACR-type circuit breakers of the same size as noted.

Notes

- All furnaces are manufactured for use on 115 VAC, 60 Hz, single-phase electrical supply.
- Gas Service Connection ½" FPT
- Important: Size fuses and wires properly and make electrical connections in accordance with the National Electrical Code and/or all existing local codes.



Model	A	B
AMVS800604BU*	17½"	16"
AMVS800805CU*	21"	19½"

Notes

- Line voltage wiring can enter through the right or left side of furnace. Low-voltage wiring can enter through the right or left side of furnace.

Minimum Clearances to Combustible Materials

Sides	Rear	Front[1]	Vent[2]		Top
			SW	B	
1"	0"	3"	6"	1"	1"

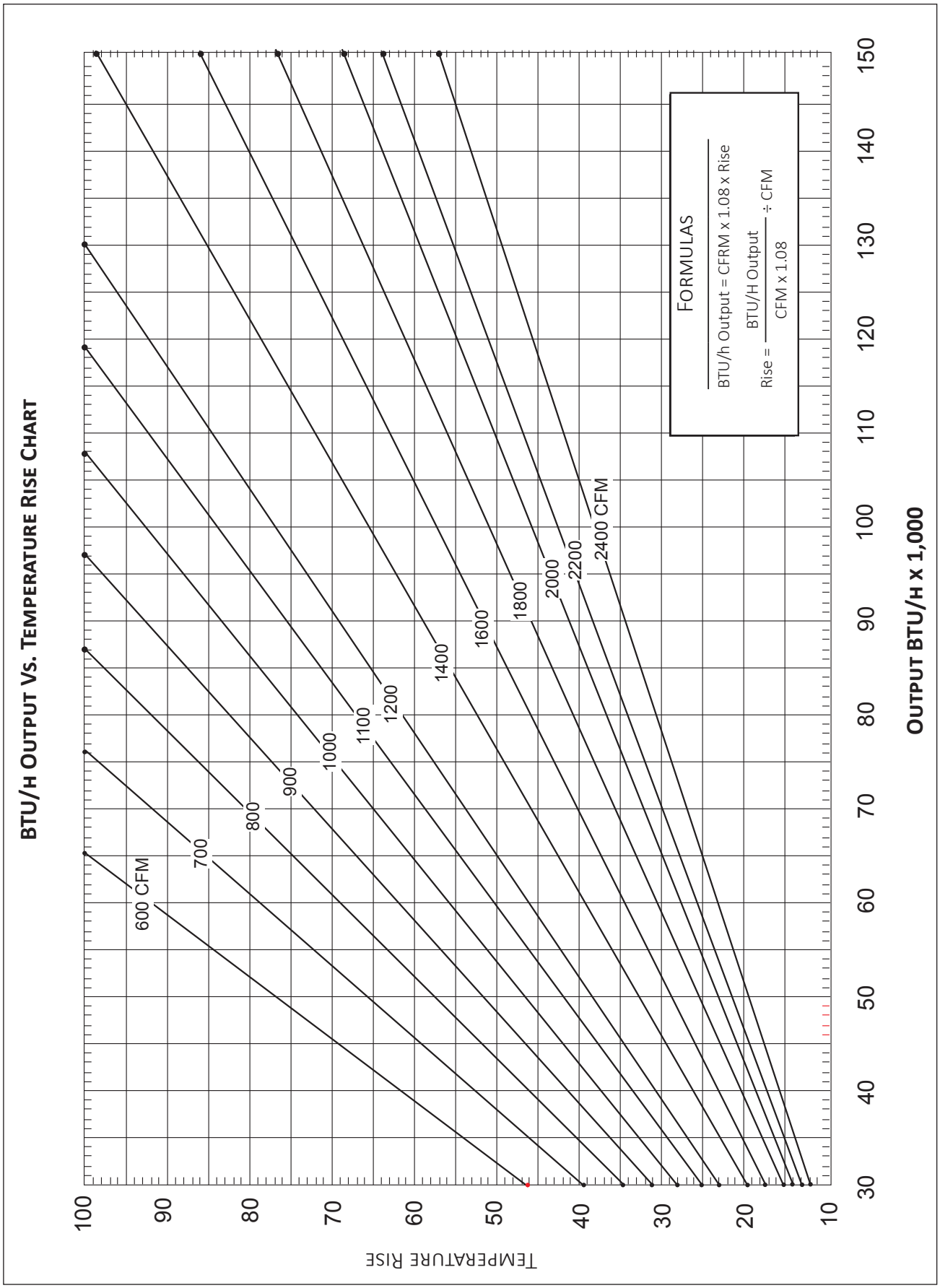
[1] 24" clearance for serviceability recommended.

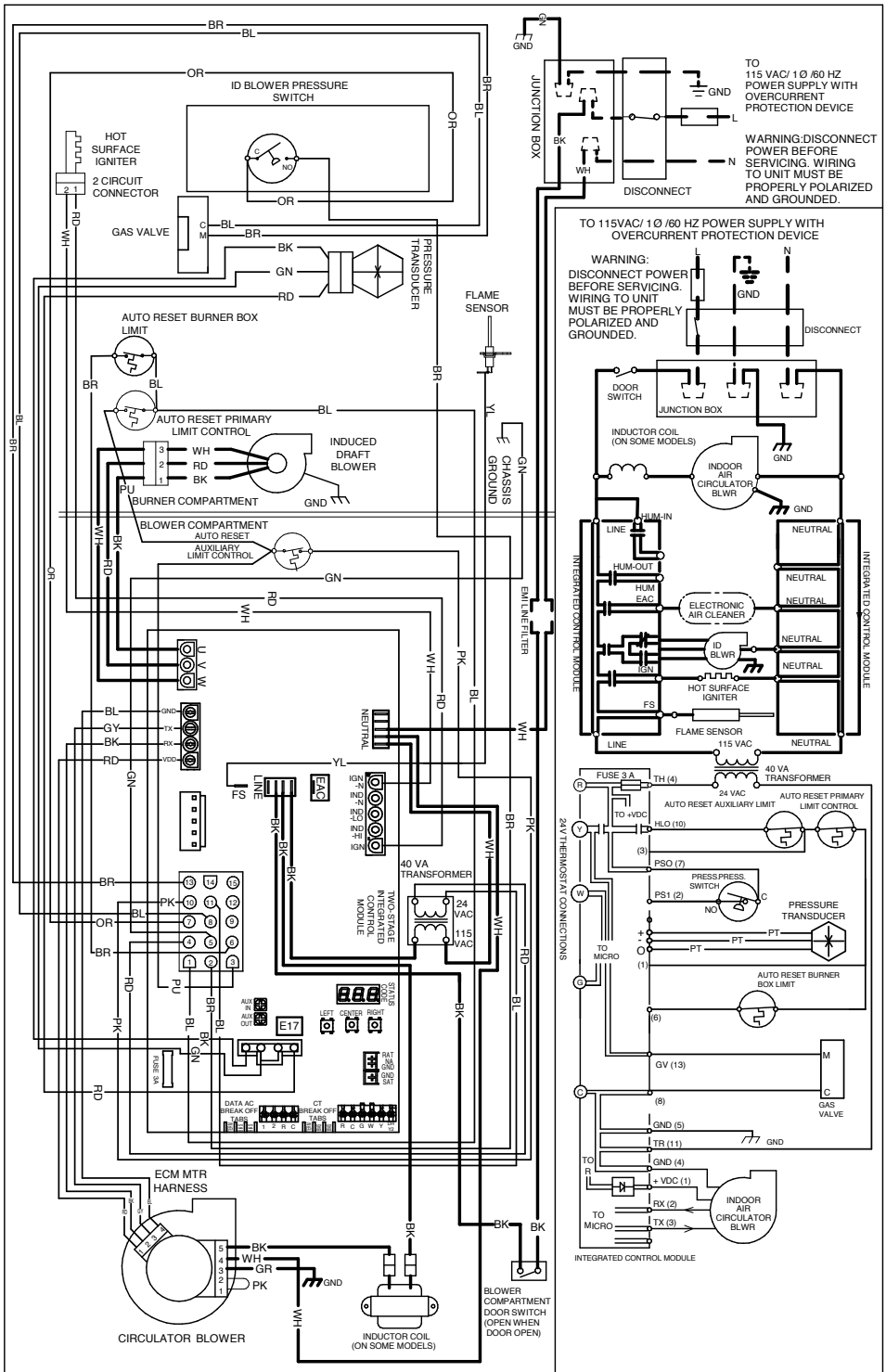
[2] Single Wall Vent (SW) to be used only as a connector. Refer to the latest editions of the National Fuel Gas Code NFPA 54/ ANSI Z223.1 (in the USA) and the Canada National Standard of Canada, CAN/CSA B149.1 and CAN/CSA B142.2 (in Canada).

Note: AMVS80 approved for line contact in the horizontal position.

MODEL / TEMP RISE RANGE (MID RISE)	AMVS800604BU 20-50 (35)		AMVS800805CU 35-65-(50)	
	CFM	RISE	CFM	RISE
Recommended CFM & Expected Temperature Rise	1524	35	1760 (MAX CAPABLE CFM)	40
Minimum Recommended Heating CFM & Expected Temperature Rise	1067	50	1422	50
Maximum Recommended Heating CFM & Expected Temperature Rise	1760 (MAX CAPABLE CFM)	25	1760 (MAX CAPABLE CFM)	40

Note: To Set Heating CFM Using Push Buttons; 1) Scroll using Left or Right push buttons until gAF appears on the 7 segment display. 2) Press & release center button & display will show current heating airflow expressed as a percentage of max CFM.3) Press & release Left or Right button until desired percentage appears. 4) Press & release center button once more to select the displayed percentage. 5) CFM may be trimmed further by using the gTF menu.


BTU/H Output Vs. Temperature Rise Chart
Temperature Rise
Output BTU/H x 1,000
600 CFM
700
800
900
1000
1100
1200
1400
1600
1800
2000
2200
2400 CFM
Formulas
BTU/h Output = CFRM x 1.08 x Rise
Rise = BTU/H Output ÷ CFM / CFM x 1.08



NOTES:

1. SET HEAT ANTICIPATOR ON ROOM THERMOSTAT AT 0.7 AMPS.
2. MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
3. IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FURNACE MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105°C. USE COPPER CONDUCTORS ONLY.
4. UNIT MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C. AND LOCAL CODES.
5. TO RECALL THE LAST 6 FAULTS, MOST RECENT TO LEAST RECENT, DEPRESS SWITCH FOR MORE THAN 2 SECONDS WHILE IN STANDBY (NO THERMOSTAT INPUTS)
6. HUMIDIFIER INSTALLATION OPTIONS: USE HUM TERMINAL TO RUN HUMIDIFIER DURING HEAT CALL (COMMUNICATING OR LEGACY MODES). USE HUM-IN AND HUM-OUT TERMINALS TO RUN HUMIDIFIER DURING HEAT CALL (COMMUNICATING MODE OR LEGACY MODE) OR INDEPENDENTLY FROM HEAT CALL (COMMUNICATING MODE ONLY - SETUP IS DONE WITHIN COMMUNICATING THERMOSTAT)

0140F02506-A

COLOR CODES:
PK PINK
BR BROWN
WH WHITE
BL BLUE
GY GRAY
RD RED
YL YELLOW
OR ORANGE
PU PURPLE
GN GREEN
BK BLACK

LOW VOLTAGE (24V)
LOW VOLTAGE FIELD
HI VOLTAGE (115V)
HI VOLTAGE FIELD
JUNCTION
TERMINAL
INTERNAL TO INTEGRATED CONTROL
PLUG CONNECTION

EQUIPMENT GND
FIELD GND
FIELD SPLICE
SWITCH (TEMP.)
IGNITER
SWITCH (PRESS.)
OVERCURRENT PROT. DEVICE

WARNING

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

Model	Description	AMVS80 0604BU*	AMVS80 0805CU*
AFE18-60A	Fossil Fuel Kit	√	√
MVK-01 *	Masonry Vent Kit	√	√

* Upflow applications only

Minimum Filter Sizes

Model #	AMVS80 0604BU*	AMVS80 0805CU*
Filter Size (in²)	(1) 16 x 25 (Side or Bottom)	(2) 16 x 25 (Side) or (1) 20 x 25 (Bottom) [1]

Note: Larger filters may be used; filters may also be centrally located.

[1] Use 2- 16 x 25 filters on side returns or 20 x 25 filter on bottom return if furnace is connected to a cooling unit over 4 tons nominal capacity.