ARVS80-U

HEATING INPUT : 60,000 – 80,000 BTU/H

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

Contents

ComfortBridge™ technology

CoolCloud™

R32

Standard Features

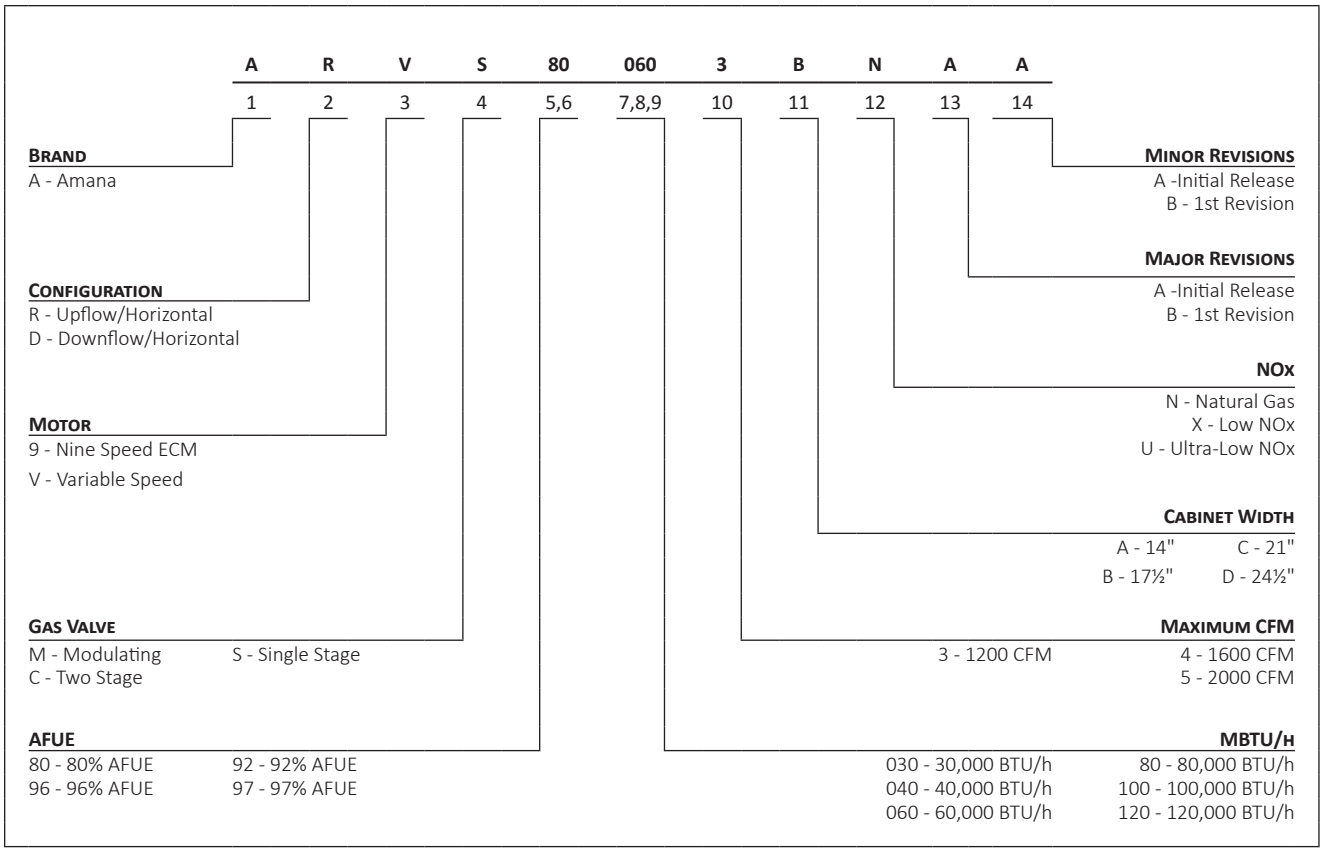
- Integrated communicating ComfortBridge™ Technology
- Commissioning and diagnostics via indoor board Bluetooth with the CoolCloud™ phone and tablet application
- Heavy-duty stainless-steel, dual-diameter tubular heat exchanger
- Single-stage gas valve
- Durable Hot-surface igniter
- Quiet, modulating 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

LIFETIME HEAT EXCHANGER LIMITED WARRANTY* · 10 YEAR PARTS LIMITED WARRANTY* · LIFETIME UNIT REPLACEMENT LIMITED WARRANTY* · ETL LISTED 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 and some of the additional requirements are not required in Florida, California, or Québec. The duration of warranty coverage in Texas and Florida differs in some cases. Other limitations and exclusions apply; refer to complete warranty details for a full list of limitations and exclusions.


A R V S 80 060 3 B N A A
1 2 3 4 5,6 7,8,9 10 11 12 13 14
BRAND
A - Amana
CONFIGURATION
R - Upflow/Horizontal
D - Downflow/Horizontal
MOTOR
9 - Nine Speed ECM
V - Variable Speed
GAS VALVE
M - Modulating
C - Two Stage
S - Single Stage
AFUE
80 - 80% AFUE
92 - 92% AFUE
96 - 96% AFUE
97 - 97% AFUE
MINOR REVISIONS
A -Initial Release
B - 1st Revision
MAJOR REVISIONS
A -Initial Release
B - 1st Revision
NOX
N - Natural Gas
X - Low NOx
U - Ultra-Low NOx
CABINET WIDTH
A - 14"
B - 17½"
C - 21"
D - 24½"
MAXIMUM CFM
3 - 1200 CFM
4 - 1600 CFM
5 - 2000 CFM
MBTU/H
030 - 30,000 BTU/h
040 - 40,000 BTU/h
060 - 60,000 BTU/h
080 - 80,000 BTU/h
100 - 100,000 BTU/h
120 - 120,000 BTU/h

	ARVS80 0604BUA*	ARVS80 0805CUA*
Heating Capacity		
Input (BTU/h)[1]	60,000	80,000
Output (BTU/h)[1]	48,000	64,000
AFUE[2]	80	80
Available AC @ 0.5" ESP	1.5 - 3.0	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
No. of Speeds	Variable	Variable
Vent Diameter [3]	4"	4"
No. of Burners	1 Burner, 3 tubes	1 Burner, 4 tubes
Electrical Data		
Min. Circuit Ampacity [4]	12.2	12.2
Max. Overcurrent Device (amps) [5]	20	20
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)

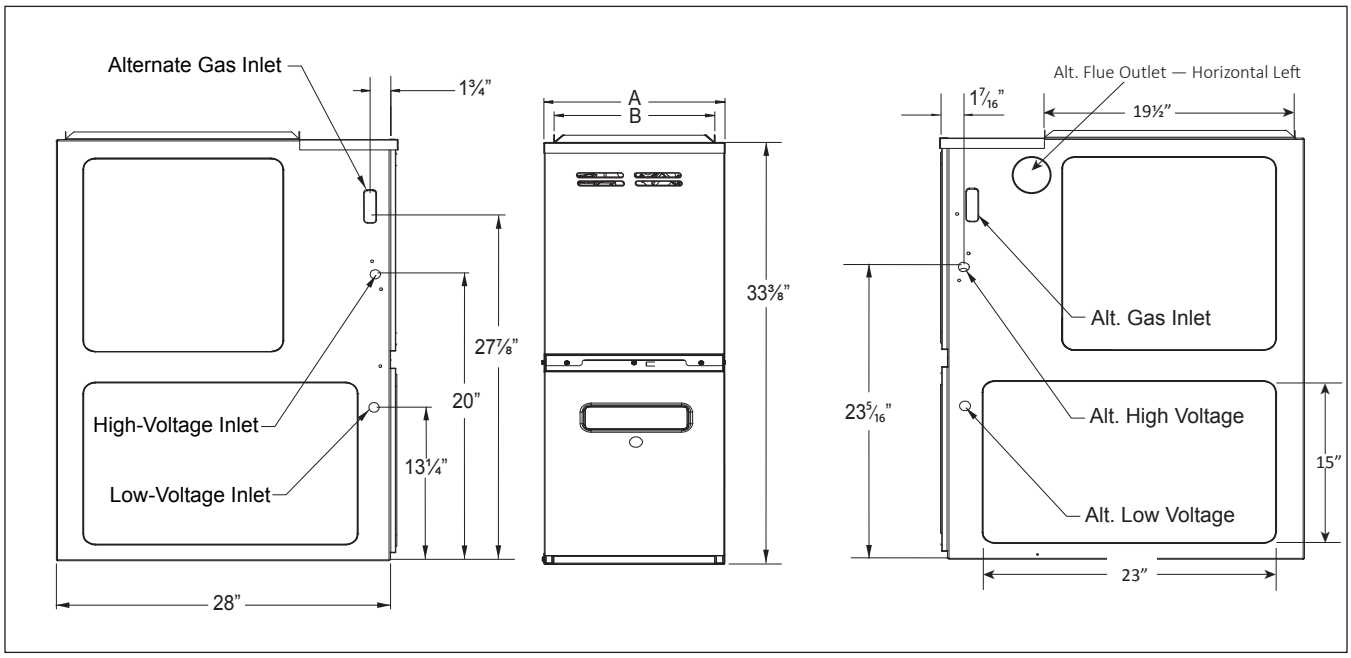
[3] Vent diameters may vary depending upon vent length. Refer to the latest editions of the National Fuel Gas Code NFPA 54/ANSI Z223.1 (in the USA) and the Canada National Standard of Canada, CAN/CSA B149.1 and CAN/CSA B142.2 (in Canada).

[4] 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.

[5] 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	Dimensions			Heights	
	W	D	H	A	B
ARVS800604BUA*	17½"	28"	33⅜"	17½"	16"
ARVS800805CUA*	21"	28"	33⅜"	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	Bottom	Vent[2]		Top
				SW	B	
1"	0"	3"	C	6"	1"	1"

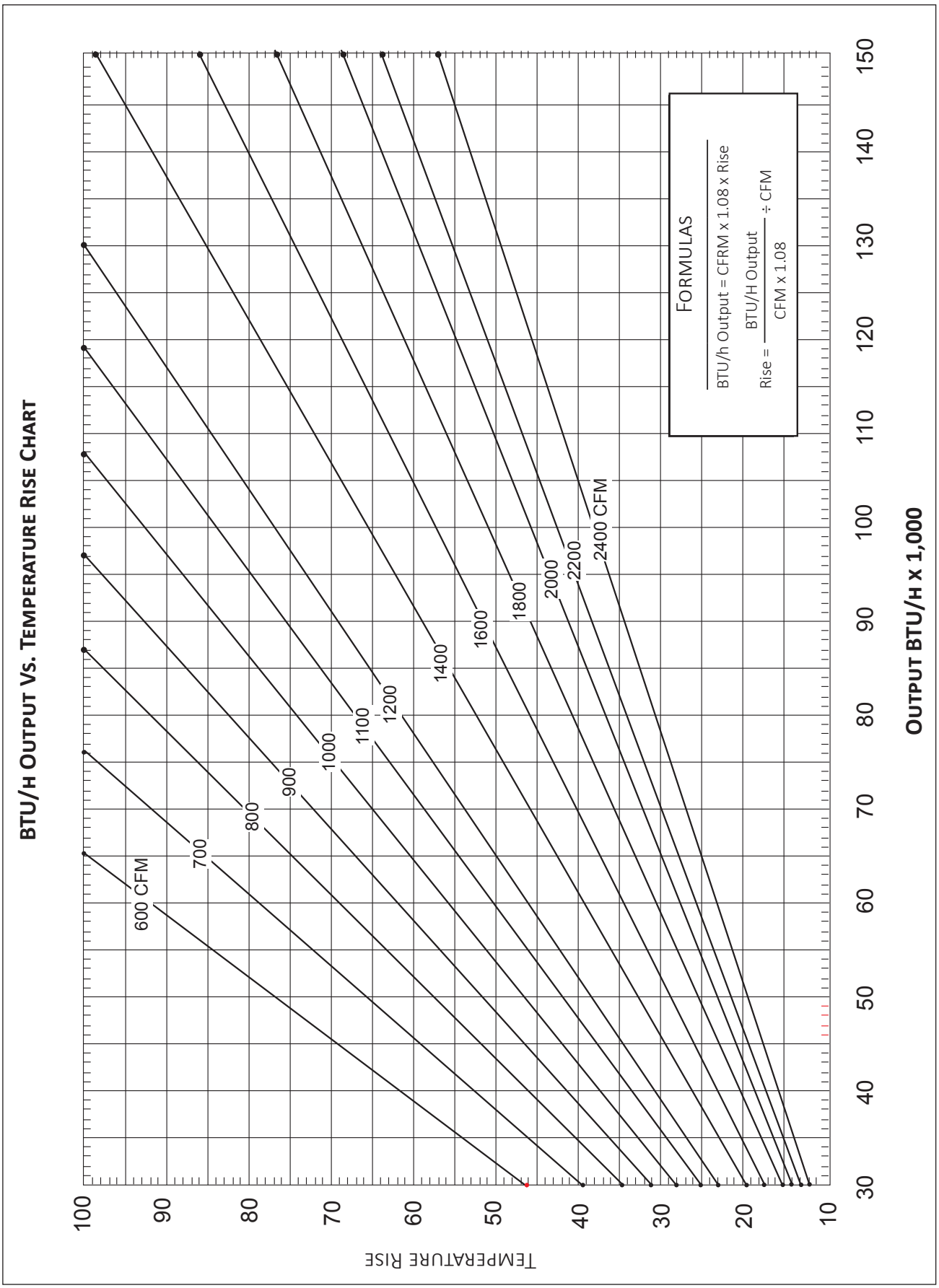
C = If placed on combustible floor, the floor MUST be wood ONLY.

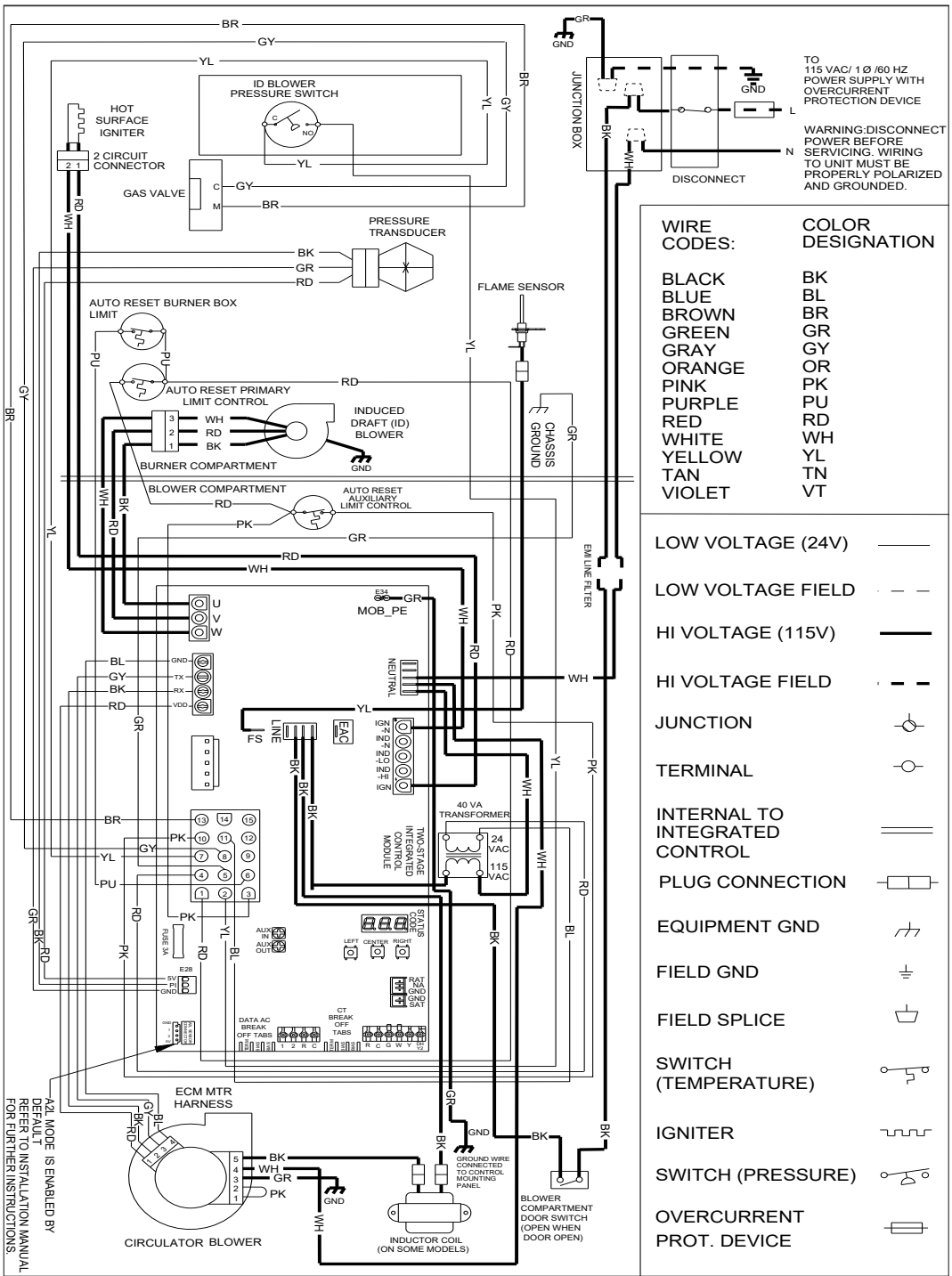
Notes:

- For servicing or cleaning, a 24" front clearance is recommended.
- Unit connections (electrical, flue, and drain) may necessitate greater clearances than the minimum clearances listed above.
- In all cases, accessibility clearance must take precedence over clearances from the enclosure where accessibility clearances are greater.
- Refer to the appropriate USA and Canadian codes:
  In the USA: the National Fuel Gas Code NFPA 54 / ANSI Z223.1
  In Canada: the Canada National Standard of Canada, CAN/CSA B149.1 and CAN/CSA B142.2

MODEL / TEMP RISE RANGE (MID RISE)	ARVS800604BU 20-50 (35)		ARVS800805CU 35-65 (50)	
	CFM	RISE	CFM	RISE
Recommended CFM & Expected Temperature Rise	1270	35	1200	50
Minimum Recommended Heating CFM & Expected Temperature Rise	1140	40	1080	50

Note: To Set Heating CFM Using Push Buttons;
1) Scroll using Left or Right push buttons until gTF appears on the 7 segment display.
2) Press & release center button & display will show current heating airflow trim 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.


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 x 1.08 ÷ CFM



NOTES:

1. MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
2. 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.
3. UNIT MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C. AND LOCAL CODES.
4. TO RECALL THE LAST 6 FAULTS, MOST RECENT TO LEAST RECENT, DEPRESS SWITCH FOR MORE THAN 2 SECONDS WHILE IN STANDBY (NO THERMOSTAT INPUTS)
5. 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)
6. WHEN THIS FURNACE IS PAIRED WITH NON R-32 REFRIGERANT SYSTEMS, DEFAULT SETTINGS WILL NEED TO BE CHANGED. REFER TO INSTALLATION MANUAL FOR FURTHER INSTRUCTIONS.

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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	ARVS80 0604BU*	ARVS80 0805CU*
AFE18-60A	Fossil Fuel (Dual Fuel) Kit	√	√
MVK-01	Masonry Vent Kit	√	√

* Upflow applications only

Minimum Filter Sizes

Model #	ARVS80 0604BU*	ARVS80 0805CU*
Filter Size (in)	(1) 16 x 25 (Side or Bottom)	(2) 16 x 25 (Side) or (1) 20 x 25 (Bottom)[1]

Note: Other size filters of equal or greater surface area 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.