Heating & Air Conditioning
Amana
AMERICA'S BRAND FOR COMFORT™

ARVS96-U

Heating Input: 60,000–80,000 BTU/h

Ultra Low NOx, Variable-Speed ECM Gas Furnace Up to 96% AFUE

Contents

R32

Standard Features

- Heavy-duty stainless-steel tubular heat exchanger
- Super-ferritic Stainless-steel secondary heat exchanger
- Single-stage gas valve
- Durable Silicon Nitride igniter
- Quiet multi-speed induced draft blower
- Self-diagnostic control board with constant memory fault code history output to a LED
- 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.
- AHRI Certified; ETL Listed

Cabinet Features

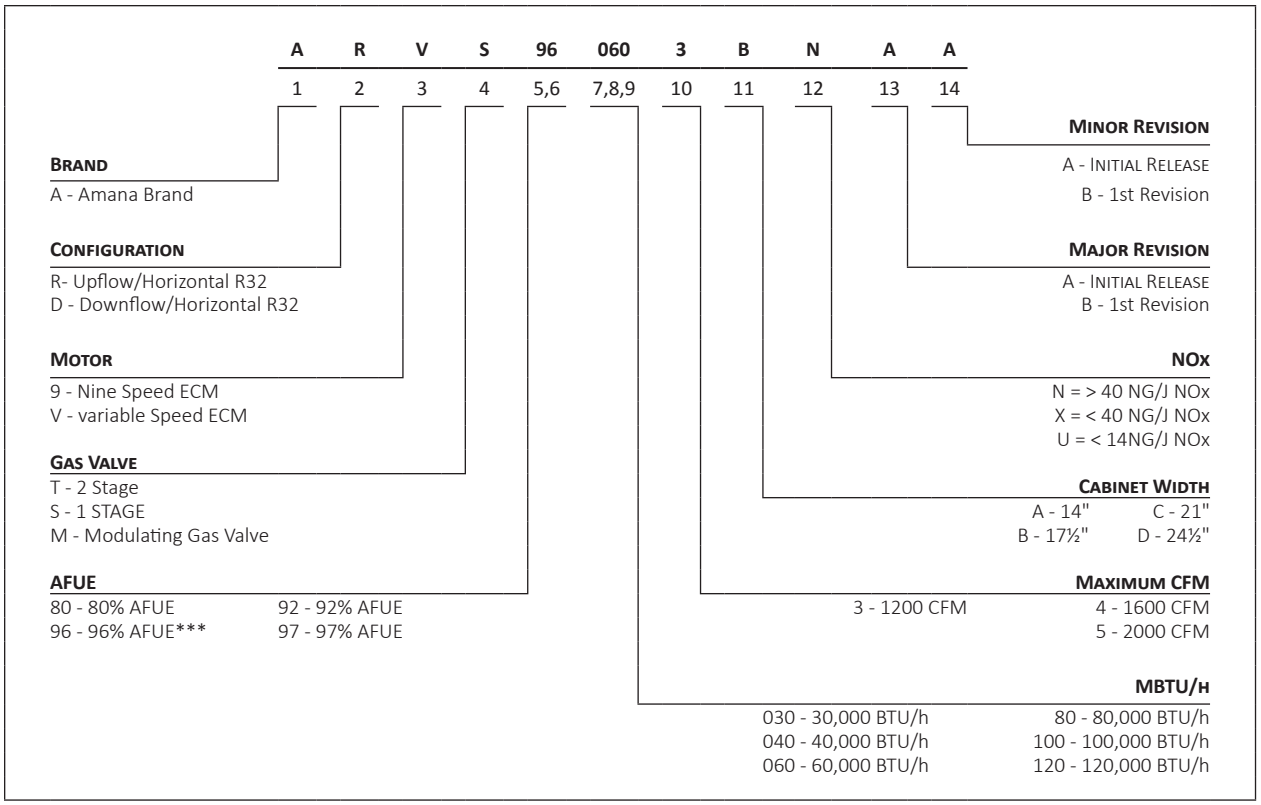
- Designed for multi-position installation — ARVS96-U: upflow, horizontal left or right
- Certified for direct vent (2-pipe) or non-direct vent (1-pipe)
- Easy-to-install top venting with optional side venting — ARVS96-U: upflow models only
- Convenient left or right connection for gas and electrical service
- Cabinet air leakage (Q_{Leak}) ≤ 1.4%
- Heavy-gauge steel cabinet with durable finish
- Fully insulated heat exchanger and blower section
- Airtight solid bottom or side return with easy-cut tabs for effortless removal in bottom air-inlet applications

LIFE TIME HEAT EXCHANGER LIMITED WARRANTY* · LIFE TIME UNIT REPLACEMENT LIMITED WARRANTY* · 10 YEAR PARTS LIMITED WARRANTY* · ETL 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 Heat Exchanger Limited Warranty, the Lifetime Unit Replacement Limited Warranty (in both cases good for as long as you own your home), and the 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.



***Some models are rated up to 97% AFUE

	ARVS96 0603BUA*	ARVS96 0805CUA*
Heating Data		
Input (BTU/h)[1]	60,000	80,000
Output (BTU/h)[1]	57,600	76,880
AFUE[2]	96	96
Temperature Rise Range (°F)	30 - 60	30 - 60
Vent Diameter[3]	2" - 3"	2" - 3"
No. of Burners	1 Burner, 3 Tubes	1 Burner, 4 Tubes
Circulator Blower		
Available AC @ 0.5" ESP	1.5 - 3	2 - 5
Size (D x W)	11" x 8"	11" x 10"
Horsepower @ 1075 RPM	1/2	1
Speed	VS ECM	VS ECM
Filter Size (in²)	(1) 16 x 25 (side or bottom)	(2) 16 x 25 (sides) OR (1) 20 x 25 (bottom) & (1) 16 x 25 (side)
Electrical Data		
Min. Circuit Ampacity[4]	8.1	15.4
Max. Overcurrent Device (amps)[5]	15	25
Shipping Weight (lbs)	122	147

[1] For use with natural gas only. For altitudes + 4,500 ft above sea level, see installation manual

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

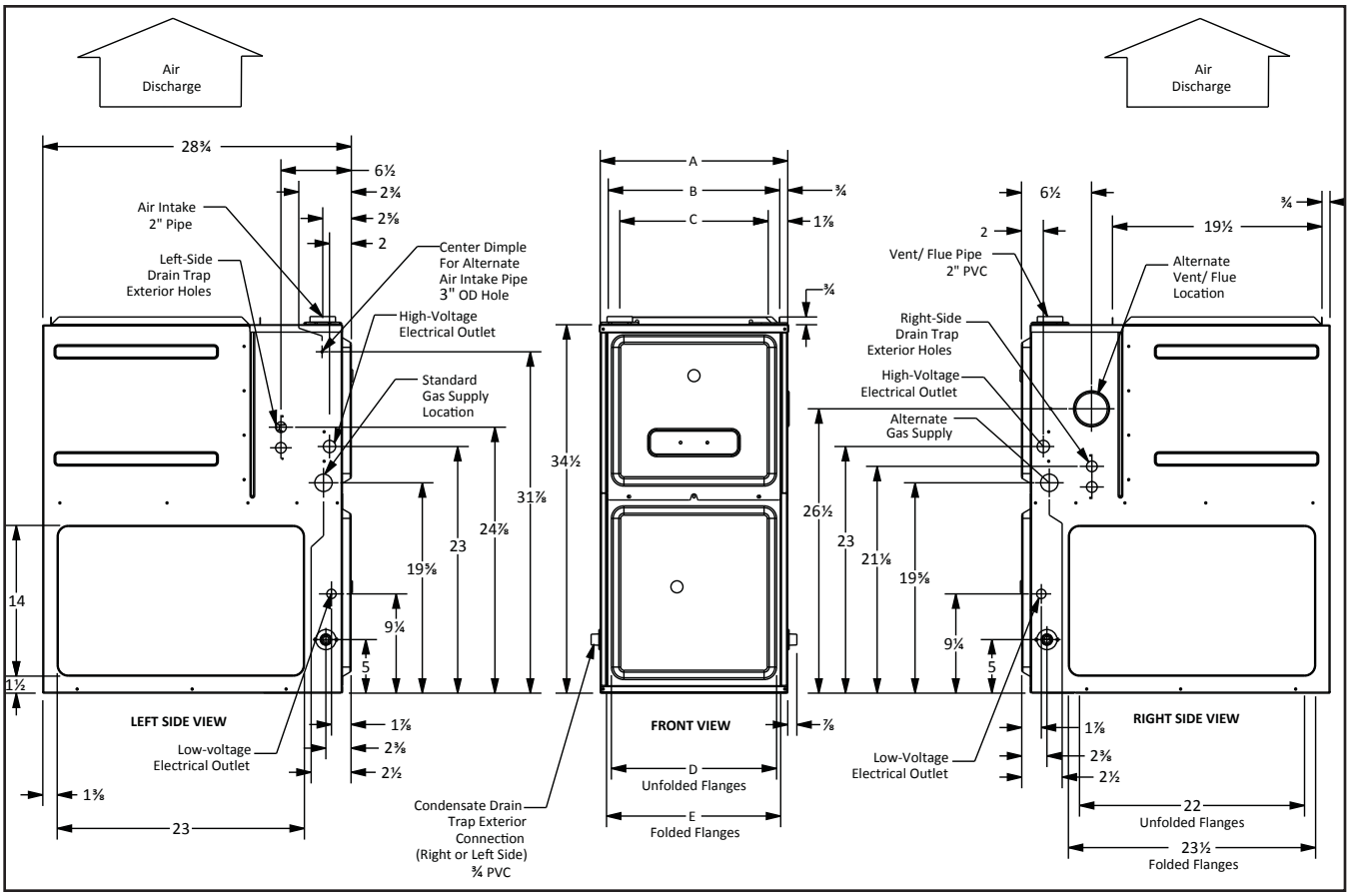
[3] Installer must supply one or two PVC pipes: one for combustion air (optional) and one for the flue outlet (required). Vent pipe must be either 2" or 3" in diameter, depending upon furnace input, number of elbows, length of run and installation (1 or 2 pipes). The optional Combustion Air Pipe is dependent on installation/code requirements and must be 2" or 3" diameter PVC.

[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 120 VAC, 60 Hz, single-phase electrical supply.
- Gas Service Connection ½" FNPT
- Important: Size fuses and wires properly and make electrical connections in accordance with the National Electrical Code and/or all existing local codes.
- For bottom return: Failure to unfold flanges may reduce airflow by up to 18%. This could result in performance and noise issues.
- For servicing or cleaning, a 24" front clearance is required. 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.



Model	W	D	H
ARVS960603BU	17½"	28⅞"	34½"
ARVS960805BU	21"	28⅞"	34½"

	Air Discharge			Air Return
A	B	C	D	E
17½"	16"	13⅜"	12⅛"	13⅝"
21"	19½"	17⅜"	16"	17½"

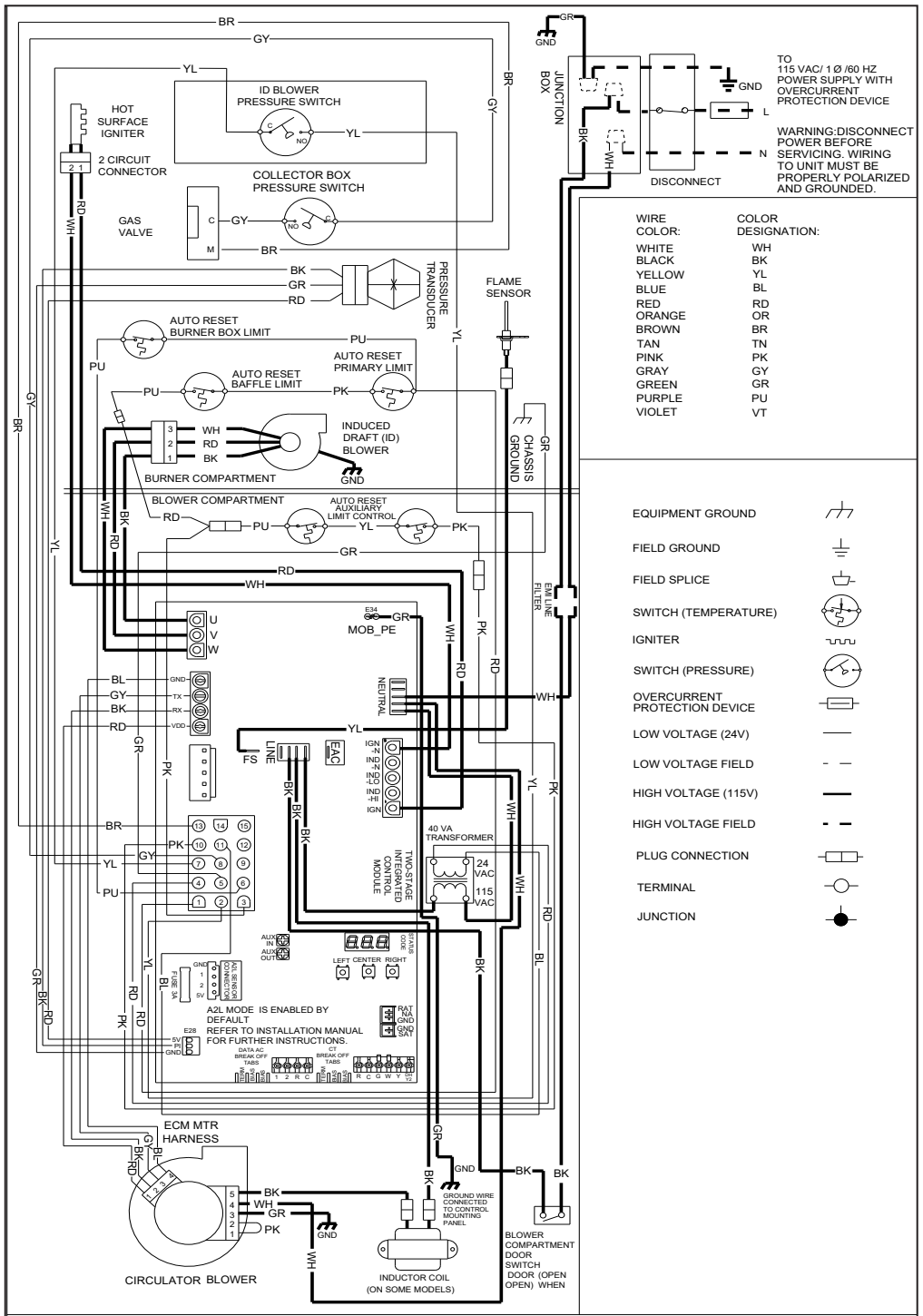
Minimum Clearances to Combustible Materials

Position	Sides	Rear	Front	Bottom	Flue	Top
Upflow	0"	0"	3"	C	0"	1"
Horizontal	6"	0"	3"	C	0"	6"

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

MODEL / TEMP RISE RANGE (MID RISE)	ARVS960603BU 30-60 (45)		ARVS960805CU 30-60 (45)	
	CFM	RISE	CFM	RISE
RECOMMENDED CFM & EXPECTED TEMPERATURE RISE	1100	45	1650	45
MINIMUM RECOMMENDED HEATING CFM & EXPECTED TEMPERATURE RISE	990	55	1480	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.



NOTES:

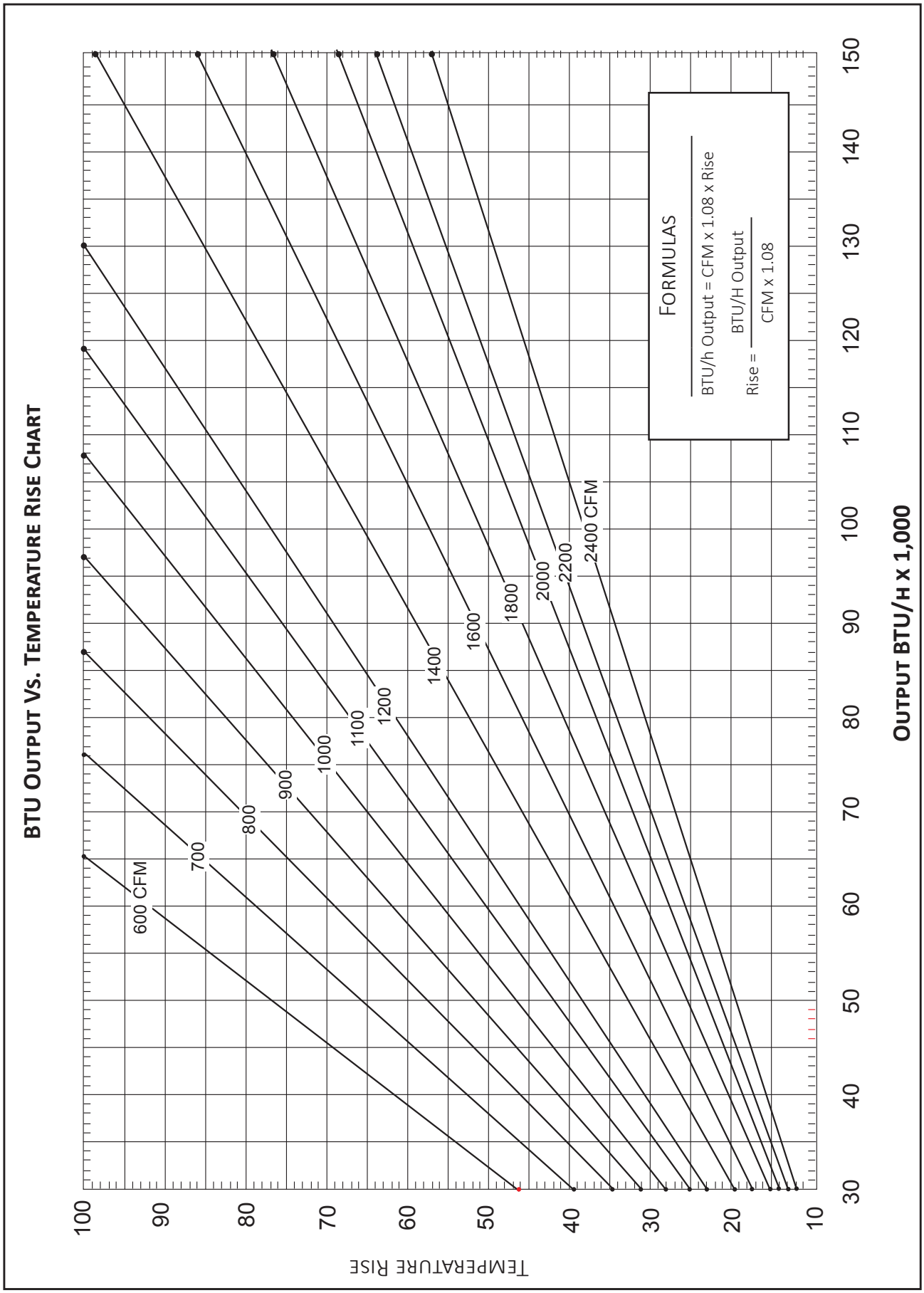
1. MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
2. IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FURNACE MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105° C. USE COPPER CONDUCTORS ONLY.
3. UNIT MUST BE PERMANENTLY GROUNDED 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.

0140F20040-A

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.

WARNING

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


BTU 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 = CFM x 1.08 x Rise
Rise = BTU/H Output / CFM x 1.08

MODEL	DESCRIPTION	ARVS96 0603BU	ARVS96 0805CU
72950	Concentric Vent Kit (2")	√	√
72951	Concentric Vent Kit (3")	√	√
RF000142	Drain Kit Horizontal Left Vertical Flue	√	√
EFR02	External Filter Rack with 16"x25" Permanent Filter	√	—
0170K00000S	Flush Mount Vent Kit - 3" or 2"	√	√
0170K00001S	Flush Mount Vent Kit - 2"	√	√
0270F20723	Horizontal Drain Tubing Kit	√	√

MINIMUM FILTER SIZES

MODELS	ARVS960603BU	ARVS960805CU
Filter Size (in^2)	(1) 16 x 25 (side or bottom)	(2) 16 x 25 (sides) OR (1) 20 x 25 (bottom) & (1) 16 x 25 (side) [1]

Note: Other size filters of equal or greater dimensions may be used. Filters may also be centrally located.
[1] Use (2) - 16 x 25 filters on side returns or (1) 20 x 25 filter on bottom and (1) 16 x 25 filter on side return if furnace is connected to a cooling unit over 4 tons nominal capacity.