Franklin™
Air Conditioning & Heating

GMVS96-U

Heating Input: 60,000–80,000 BTU/H

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

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ComfortBridge™ technology

CoolCloud™

Standard Features

- Integrated communicating ComfortBridge™ Technology
- Commissioning and diagnostics via indoor board Bluetooth with the CoolCloud™ phone and tablet application
- Heavy-duty stainless-steel tubular heat exchanger
- Super-ferritic Stainless-steel secondary heat exchanger
- Single-stage gas valve
- Durable Silicon Nitride igniter
- Quiet modulating induced draft blower
- Self-diagnostic control board with constant memory fault code history output to 3 x 7 segment display
- 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

- Designed for multi-position installation — 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
- 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

LIFETIME HEAT EXCHANGER LIMITED WARRANTY*

10 YEAR UNIT REPLACEMENT LIMITED WARRANTY*

10 YEAR PARTS LIMITED WARRANTY*

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.franklinhvacsystems.com. To receive the Lifetime Heat Exchanger Limited Warranty (good for as long as you own your home), 10-Year Unit Replacement Limited Warranty and 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec. The duration of warranty coverage in Texas and Florida differs in some cases.

G	M	V	S	96	060	3	B	U	**
1	2	3	4	5,6	7,8,9	10	11	12	13,14

Brand

G- Goodman® Brand

Configuration

M- Upflow/Horizontal

Motor

E- Multi-Speed ECM

V- Variable Speed ECM / ComfortBridge™

Gas Valve

S- Single Stage

AFUE

96- 96% AFUE

Engineering

Major / Minor Revisions

* Not used for inventory control.

NOx

U- Ultra Low NOx

Cabinet Width

B- 17½”

C- 21"

Maximum CFM

3- 1200 CFM

5- 2000 CFM

MBTU/h

40- 40,000 BTU/h

60- 60,000 BTU/h

80- 80,000 BTU/h

	GMVS96 0603BUA*	GMVS96 0805CUA*
Heating Data		
BTUH Input[1]	60,000	80,000
BTUH Output[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 Ports	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	0.5	1
Speed	VS ECM	VS ECM
Filter Size (in^2) (Qty)	(1) 16 x 25 (side or bottom)	(1) 20 x 25 (bottom) or (2) 16 x 25 (side)
Electrical Data		
Min. Circuit Ampacity[4]	8.8	15.4
Max. Overcurrent Device (amps)[5]	15	20
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)

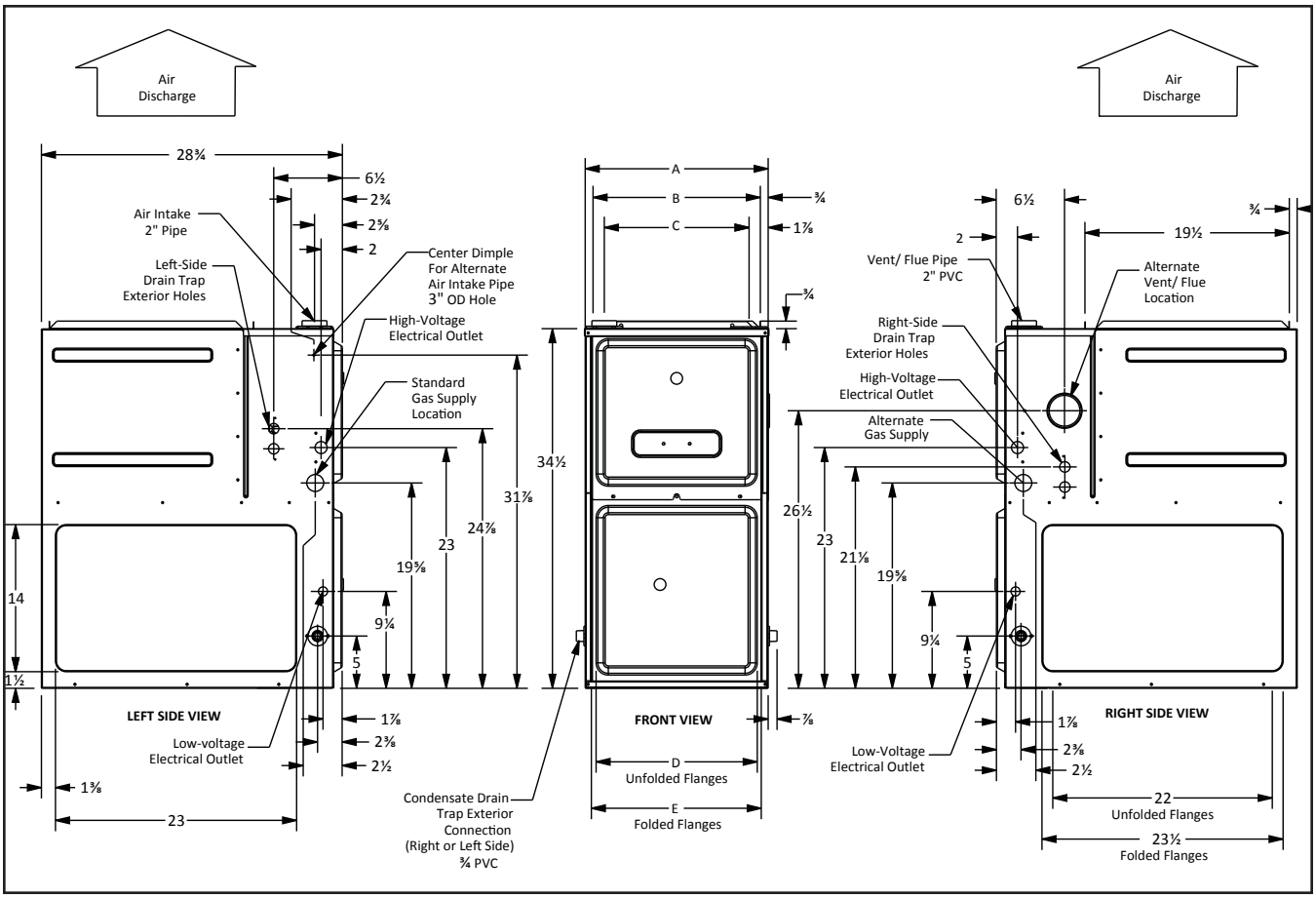
[3] Installer must supply one or two PVC pipes: one for combustion air (optional) and one for the flue outlet (required). Vent pipe must be either 2" or 3" in diameter, depending upon furnace input, number of elbows, length of run and installation (1 or 2 pipes). The optional Combustion Air Pipe is dependent 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 115 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
GMVS960603BU	17½"	28⅞"	34½"
GMVS960805CU	21"	28⅞"	34½"

	Air Discharge			Air Return
A	B	C	D	E
17½"	16"	13⅞"	12⅛"	13⅝"
21"	19½"	17⅞"	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.

(CFM & Temperature Rise vs. External Static Pressure)

MODEL / TEMP RISE RANGE	GMVS960603BUA* 30-60 (45)		GMVS960805CUA* 30-60-(45)	
	CFM	RISE	CFM	RISE
Recommended CFM for Heat Mode / Expected Temperature Rise	1100	45	1650	45
Lowest Recommended CFM for Heat Mode / 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.

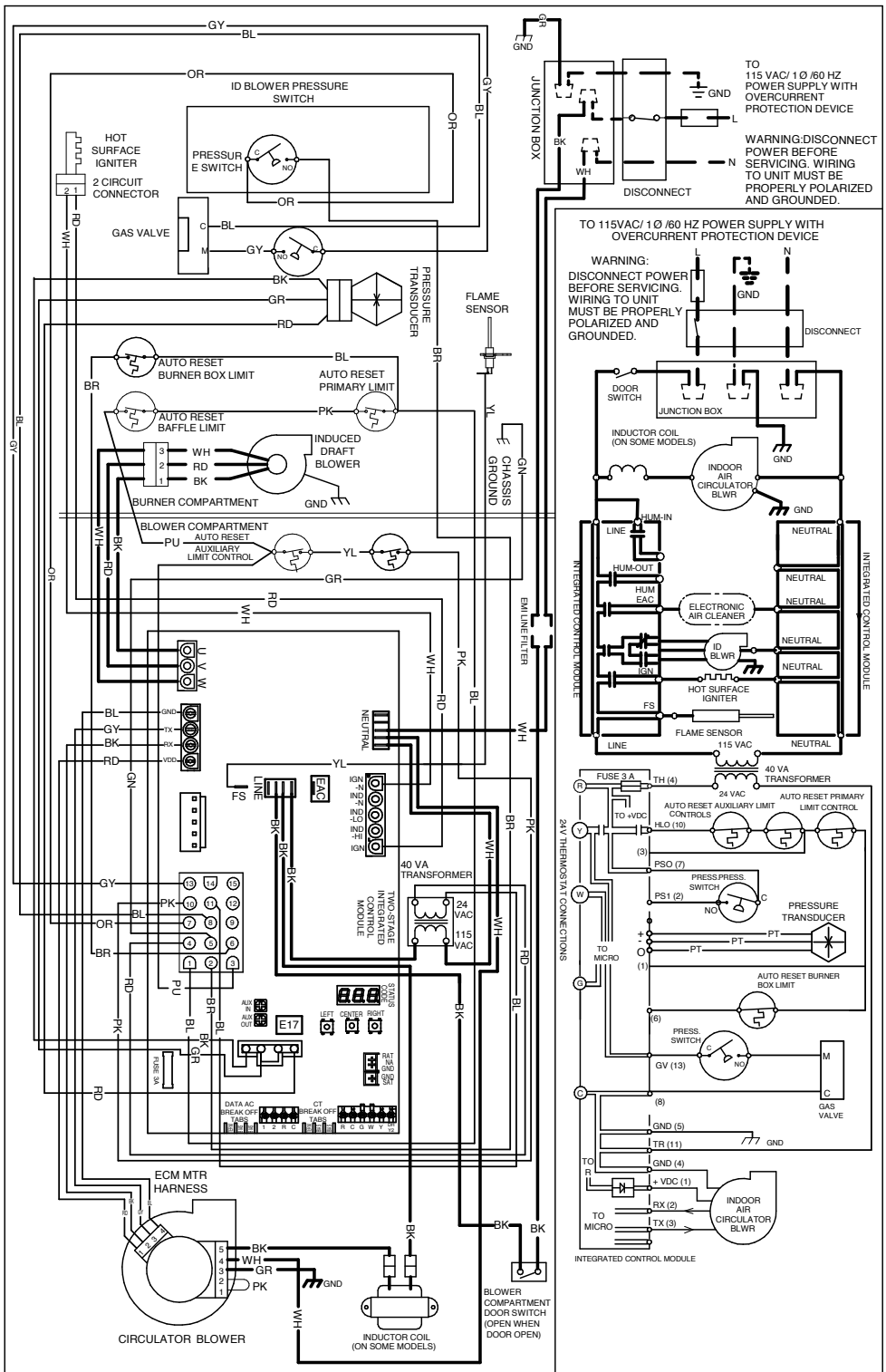
Accessories

Model	Description	GMVS96 0603BU	GMVS96 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"	√	√
0270F05404	Horizontal Drain Tubing Kit	√	√

Minimum Filter Sizes

	GMVS96 0603BU	GMVS96 0805CU
Filter Size (in²) (Qty)	(1) 16 x 25 (side or bottom)	(1) 20 x 25 (bottom) or (2) 16 x 25 (side)

Note: Other size filters of equal or greater dimensions may be used. Filters may also be centrally located.



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)

0140F02512-A

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

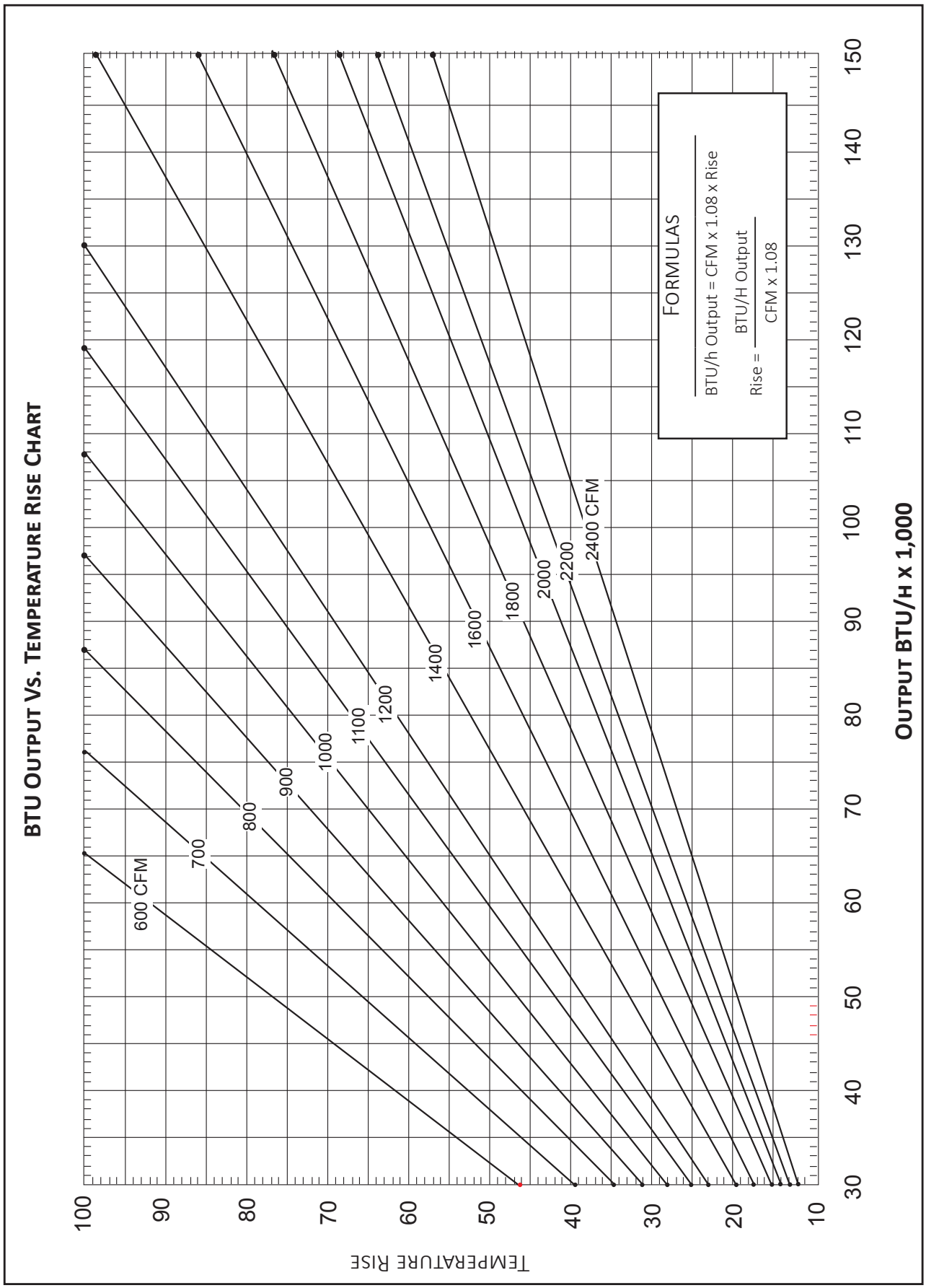
LOW VOLTAGE (24V)
LOW VOLTAGE FIELD
HI VOLTAGE (115V)
HI VOLTAGE FIELD
JUNCTION
TERMINAL
INTERNAL TO INTEGRATED CONTROL
PLUG CONNECTION

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

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
100
90
80
70
60
50
40
30
20
10
30
40
50
60
70
80
90
100
110
120
130
140
150

The manufacturing entity reserves the right to discontinue or change the specifications or design at any time without notice and without incurring any obligations.