

HEATING INPUT: 40,000–120,000 BTU/H

**TWO-STAGE, VARIABLE-SPEED
ECM GAS FURNACE
UP TO 97.50% AFUE**



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R32



Standard Features

- Integrated communicating ComfortBridge™ Technology
- Commissioning and diagnostics via on board Bluetooth with the CoolCloud phone and tablet application
- Heavy-duty aluminized-steel tubular heat exchanger
- Stainless-steel secondary heat exchanger
- Two-stage gas valve provides quiet, economical heating
- Durable Silicon Nitride igniter
- Quiet two-speed induced draft blower
- Compatible with any single-stage thermostat
- Self-diagnostic control board with constant memory fault code history output to a triple 7-segment display
- Color-coded low-voltage terminals with provisions for electronic air cleaner
- Efficient and quiet variable-speed airflow system gently ramps up or down according to heating or cooling demand
- Multiple continuous fan speed options offer quiet air circulation
- Auto-Comfort and enhanced dehumidification modes available
- All models comply with California 40 ng/l Low NOx emissions standard
- Can no longer be installed in California's South Coast Air Quality Management District (SCAQMD) on or after October 1, 2019.

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}) $\leq 2\%$
- Heavy-gauge steel cabinet with durable baked-enamel 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
REPLACEMENT
LIMITED
WARRANTY*

10 YEAR
PARTS
LIMITED
WARRANTY*



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.goodmanmfg.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 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.

	G	R	V	T	96	060	3	B	N	A	A	
	1	2	3	4	5,6	7,8,9	10	11	12	13	14	
BRAND G - Goodman Brand												MINOR REVISION A - Initial Release B - 1st Revision
CONFIGURATION R - Upflow/Horizontal D - Downflow/Horizontal												MAJOR REVISION A - Initial Release B - 1st Revision
MOTOR 9 - Nine Speed ECM V - Variable Speed ECM												NOX N - Natural Gas ≥ 40 NG/J NOx N - Low NOx (90%+) ≥ 40 NG/J NOx X - Low NOx (80%) ≤ 40 NG/J NOx U - Ultra Low NOx ≤14 NG/JNOx
GAS VALVE T - 2 Stage S - Single Stage												CABINET WIDTH A - 14" C - 21" B - 17½" D - 24½"
AFUE 80 - 80% AFUE 92 - 92% AFUE 96 - 96% AFUE ***												MAXIMUM CFM 3 - 1200 CFM 4 - 1600 CFM 5 - 2000 CFM
												MBTU/h 030 - 30,000 BTU/h 080 - 80,000 BTU/h 040 - 40,000 BTU/h 100 - 100,000 BTU/h 060 - 60,000 BTU/h 120 - 120,000 BTU/h

*** Some models are rated up to 97.50%

	GRVT96 0403BN	GRVT96 0603BN	GRVT96 0803BN	GRVT96 0804CN	GRVT96 1005CN	GRVT96 1005DN	GRVT96 1205DN
HEATING DATA							
High Fire Input ¹	40,000	60,000	80,000	80,000	100,000	100,000	120,000
High Fire Output ¹	39,000	58,200	76,880	77,600	96,100	97,500	115,320
Low-Fire Input ¹	28,000	42,000	56,000	56,000	70,000	70,000	84,000
Low-Fire Output ¹	27,300	40,740	53,816	54,320	67,270	68,250	80,724
AFUE ²	97.50	97.00	96.10	97.00	96.10	97.50	96.10
TEMPERATURE RISE RANGE (°F) HIGH	20 - 50	30 - 60	35 - 65	25 - 55	35 - 65	30 - 60	35 - 65
TEMPERATURE RISE RANGE (°F) LOW FIRE	20 - 50	25 - 55	35 - 65	20 - 50	35 - 65	25 - 55	35 - 65
VENT DIAMETER ³	2" - 3"	2" - 3"	2" - 3"	2" - 3"	2" - 3"	2" - 3"	2" - 3"
No. of Burners	2	3	4	4	5	5	6
CIRCULATOR BLOWER							
Available AC @ 0.5" ESP	1.5 - 3	1.5 - 3	1.5 - 3	1.5 - 4	2 - 5	2 - 5	2 - 5
Size (D x W)	10" x 8"	11" x 8"	11" x 8"	11" x 10"	11" x 10"	11" x 11"	11" x 11"
HORSEPOWER @ 1075 RPM	1/2	1/2	1/2	3/4	1	1	1
Speed	VS ECM	VS ECM	VS ECM	VS ECM	VS ECM	VS ECM	VS ECM
FILTER SIZE (IN²) (QTY)	(1) 16 x 25 (side or bottom)	(1) 16 x 25 (side or bottom)	(1) 16 x 25 (Side or Bottom) ⁶	(1) 20 x 25 (bottom) or (2) 16 x 25 (side)	(1) 20 x 25 (bottom) or (2) 16 x 25 (side)	(1) 20 x 25 (bottom) or (2) 16 x 25 (side)	(1) 20 x 25 (bottom) or (2) 16 x 25 (side)
ELECTRICAL DATA							
MIN. CIRCUIT AMPACITY ⁴	7.6	7.6	7.6	10.9	13.9	13.9	13.9
MAX. OVERCURRENT DEVICE (AMPS) ⁵	15	15	15	15	20	20	20
SHIPPING WEIGHT (LBS)	114	117	120	141	143	153	156
POTENTIAL ELIGIBILITY FOR IRA TAX CREDIT	✓	✓	NO	✓	NO	✓	NO
ENERGY STAR® CERTIFIED							

¹ Natural Gas BTU/h; for altitudes 0-4500' above sea level, reduce input rating by 4% for each 1000' above 4500' altitude.

² DOE AFUE based upon Isolated Combustion System (ICS)

³ Vent and combustion air 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.

⁶ Recommended to use 2 side ducts with 2 separate 16 x 25 filters or ONE 20 x 25 bottom filter for better mid rise & blower performance.

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.
- 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.

ENERGY STAR NOTES

Proper sizing and installation of equipment is critical to achieving optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet ENERGY STAR® criteria. Ask your contractor for details or visit www.energystar.gov. The www.energystar.gov website provides up-to-date system combinations certified to meet ENERGY STAR® requirements.

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HEATING DATA					
High Fire Input ¹	40,000	60,000	80,000	100,000	120,000
High Fire Output ¹	38,800	58,200	76,880	96,100	115,320
Low-Fire Input ¹	28,000	42,000	56,000	70,000	84,000
Low-Fire Output ¹	27,160	40,740	53,816	67,270	80,724
AFUE ²	97.00	97.00	96.10	96.10	96.10
TEMPERATURE RISE RANGE (°F) HIGH/LOW FIRE	20 - 50	25 - 55	35 - 65	35 - 65	35 - 65
TEMPERATURE RISE RANGE (°F) HIGH/LOW FIRE	20 - 50	20 - 50	35 - 65	35 - 65	35 - 65
VENT DIAMETER ³	2" - 3"	2" - 3"	2" - 3"	2" - 3"	2" - 3"
NO. OF BURNERS	2	3	4	5	6
CIRCULATOR BLOWER					
Available AC @ 0.5" ESP	1.5 - 3	1.5 - 3	1.5 - 4	2 - 5	2 - 5
Size (D x W)	10" x 8"	11" x 8"	11" x 10"	11" x 10"	11" x 11"
Horsepower @ 1075 RPM	1/2	1/2	3/4	1	1
No. of Speeds	VS ECM	VS ECM	VS ECM	VS ECM	VS ECM
FILTER SIZE (IN²) (QTY)	(2) 10 x 20 or (1) 16 x 25 (top return)	(2) 10 x 20 or (1) 16 x 25 (top return)	(2) 10 x 20 or (1) 16 x 25 (top return)	(1) 14 x 20 (bottom) or (1) 20 x 25 (top return)	(1) 14 x 20 (bottom) or (1) 20 x 25 (top return)
ELECTRICAL DATA					
Min. Circuit Ampacity ³	7.6	7.6	10.9	13.9	13.9
Max. Overcurrent Device (amps) ⁴	15	15	15	20	20
SHIPPING WEIGHT (LBS)	116	119	143	145	158
POTENTIAL ELIGIBILITY FOR IRA TAX CREDIT	✓	✓	NO	NO	NO
ENERGY STAR® CERTIFIED					

¹ Natural Gas BTU/h; for altitudes 0-4500' above sea level, reduce input rating by 4% for each 1000' above 4500' altitude.

² DOE AFUE based upon Isolated Combustion System (ICS)

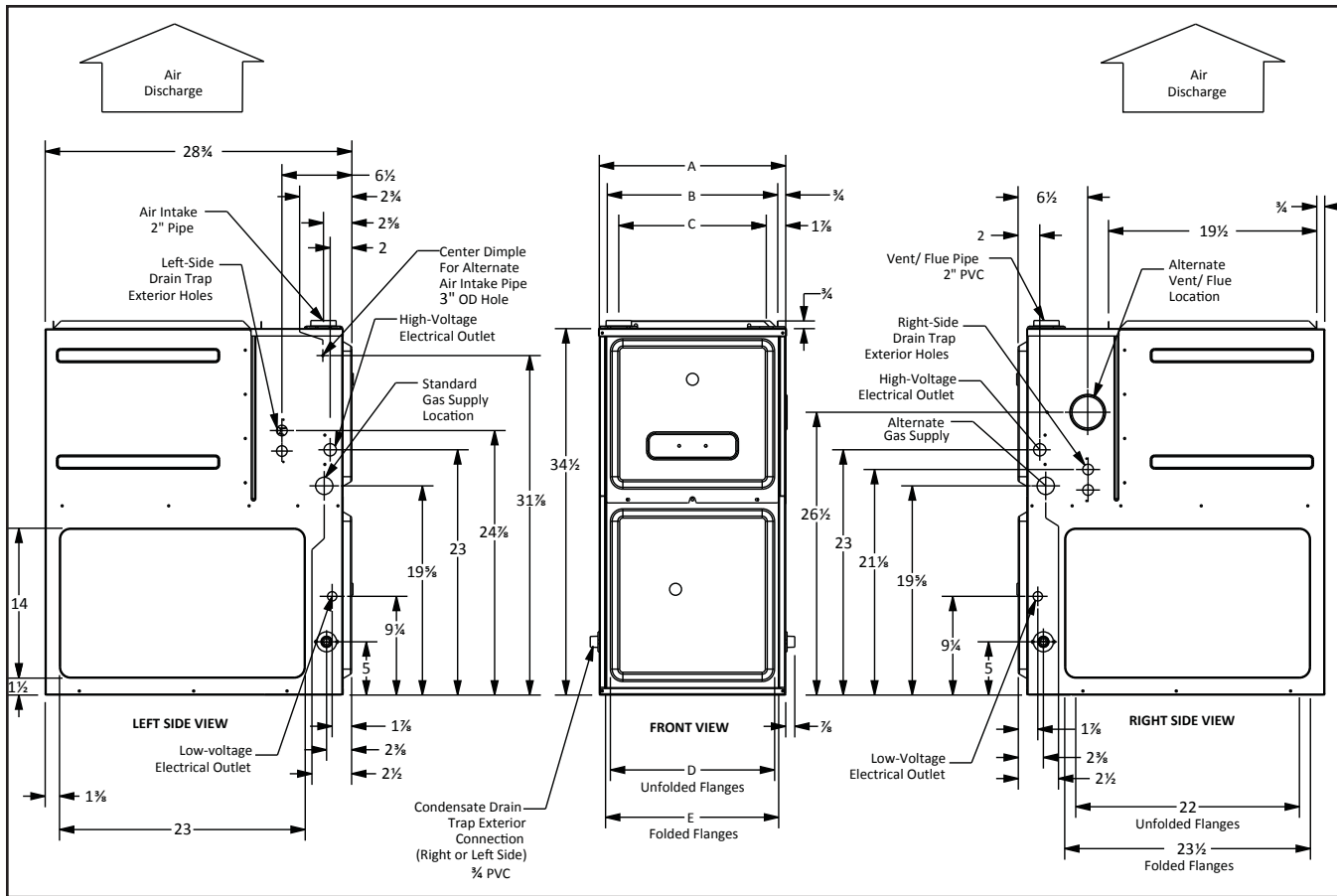
³ Vent and combustion air diameters may vary depending upon vent length. Refer to the latest editions of the National Fuel Gas Code NFPA 54/ANSI Z223.1 (in the USA) and the Canada

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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.

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- Important: Size fuses and wires properly and make electrical connections in accordance with the National Electrical Code and/or all existing local codes.
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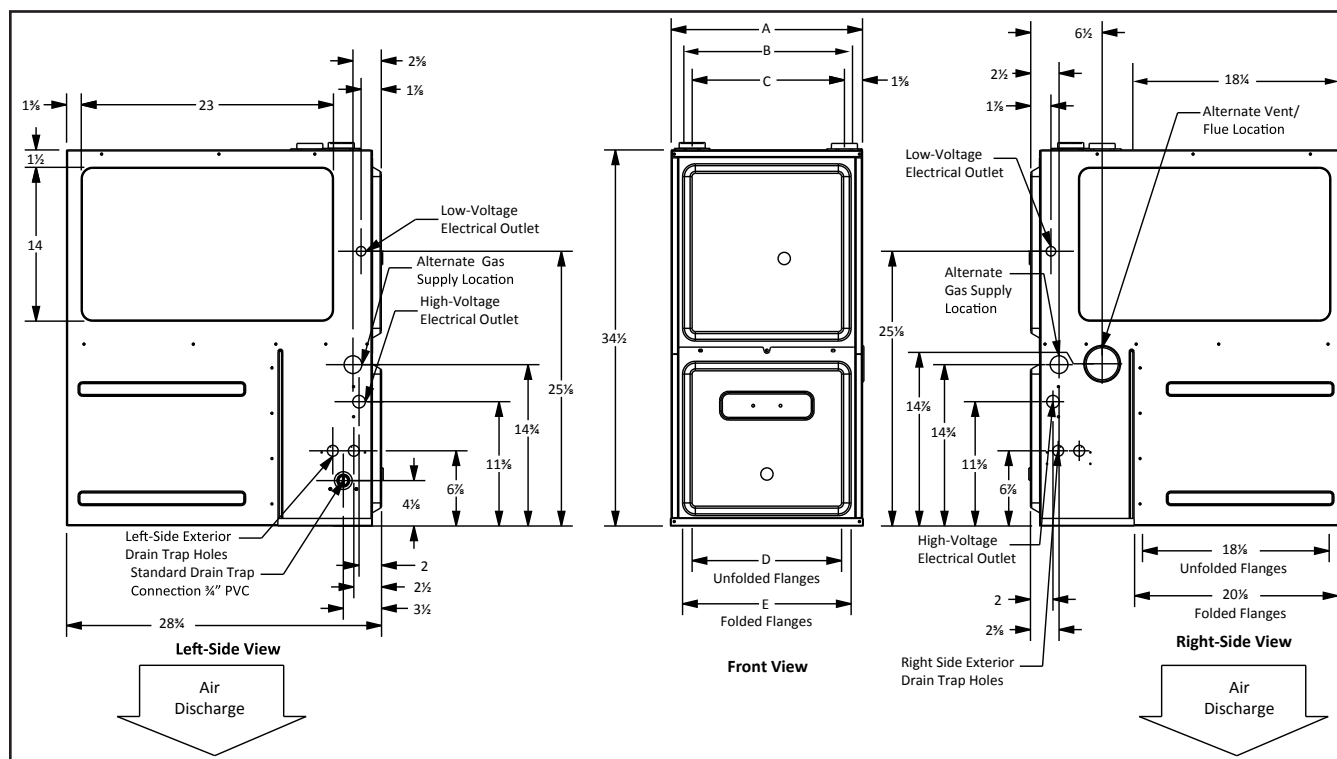
MODEL	W	D	H
GRVT960403BN	17 1/2"	28 3/8"	34 1/2"
GRVT960603BN	17 1/2"	28 3/8"	34 1/2"
GRVT960803BN	17 1/2"	28 3/8"	34 1/2"
GRVT960804CN	21"	28 3/8"	34 1/2"
GRVT961005CN	21"	28 3/8"	34 1/2"
GRVT961005DN	24 1/2"	28 3/8"	34 1/2"
GRVT961205DN	24 1/2"	28 3/8"	34 1/2"

AIR DISCHARGE			AIR RETURN	
A	B	C	D	E
17 1/2"	16"	13 3/8"	12 1/8"	13 5/8"
17 1/2"	16"	13 3/8"	12 1/8"	13 3/8"
17 1/2"	16"	13 3/8"	12 1/8"	13 5/8"
21"	19 1/2"	17 7/8"	16"	17 1/2"
21"	19 1/2"	17 7/8"	16"	17 1/2"
24 1/2"	23"	20 3/8"	19 3/8"	20 7/8"
24 1/2"	23"	20 3/8"	19 3/8"	20 7/8"

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	W	D	H
GDVT960403BN	17 1/2"	28 7/8"	34 1/2"
GDVT960603BN	17 1/2"	28 7/8"	34 1/2"
GDVT960804CN	21"	28 7/8"	34 1/2"
GDVT961005CN	21"	28 7/8"	34 1/2"
GDVT961205DN	24 1/2"	28 7/8"	34 1/2"

AIR RETURN			AIR DISCHARGE	
A	B	C	D	E
17 1/2"	14 5/8"	14"	14 1/2"	16"
17 1/2"	14 5/8"	14"	14 1/2"	16"
21"	18 1/8"	17 1/2"	18"	19 1/2"
21"	18 1/8"	17 1/2"	18"	19 1/2"
24 1/2"	21 1/8"	21"	21 1/2"	23"

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

POSITION	SIDES	REAR	FRONT	BOTTOM	FLUE	TOP
Downflow	0"	0"	3"	NC	0"	1"
Horizontal	6"	0"	3"	C	0"	6"

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

NC = For installation on non-combustible floors only. A combustible floor sub-base must be used for installations on combustible flooring.

MODEL/TEMP RISE RANGE (MID-RISE)	GDVT960403BNA* 20 - 50 (35)		GDVT960603BNA* 25 - 55 (40)		GDVT960804CNA* 25 - 55 (40)		GDVT961005CNA* 35-65 (50)		GDVT961205DNA* 35-65 (50)		GRVT960403BNA* 20-50 (35)	
	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE
Recommended CFM for High Heat/ Expected Temperature Rise	1025	35	1350	40	1760	40	1770	50	2150	50	1025	35
Lowest Recommended CFM for High Heat/Expected Temperature Rise	720	50	980	55	1300	55	1360	65	1650	65	720	50

MODEL/TEMP RISE RANGE (MID-RISE)	GRVT960603BNA* 30 - 60 (45)		GRVT960803BNA* 35-65 (50)		GRVT960804CNA* 25 - 55 (40)		GRVT961005CNA* 35-65 (50)		GRVT961005DNA* 30-60 (45)		GRVT961205DNA* 35-65 (50)	
	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE
Recommended CFM for High Heat/ Expected Temperature Rise	1200	45	1400	50	1760	40	1770	50	2000	45	2150	50
Lowest Recommended CFM for High Heat/Expected Temperature Rise	900	60	1090	65	1300	55	1360	65	1500	60	1650	65

**GRVT960403BNA*, GRVT960603BNA*
GRVT960803BNA*, GDVT960403BNA*
GDVT960603BNA*
COOLING SPEED
(@ 0.1" - 0.8" w.c. ESP)**

TONS	HIGH-STAGE CFM	LOW-STAGE CFM
1.5	600	420
2	800	560
2.5	1,000	700
3	1,200	840
MAX	1,400	

**GRVT960804CNA*
GDVT960804CNA*
COOLING SPEED
(@ 0.1" - 0.8" w.c. ESP)**

TONS	HIGH-STAGE CFM	LOW-STAGE CFM
2	800	560
2.5	1,000	700
3	1,200	840
4	1,600	1,120
MAX	1,760	

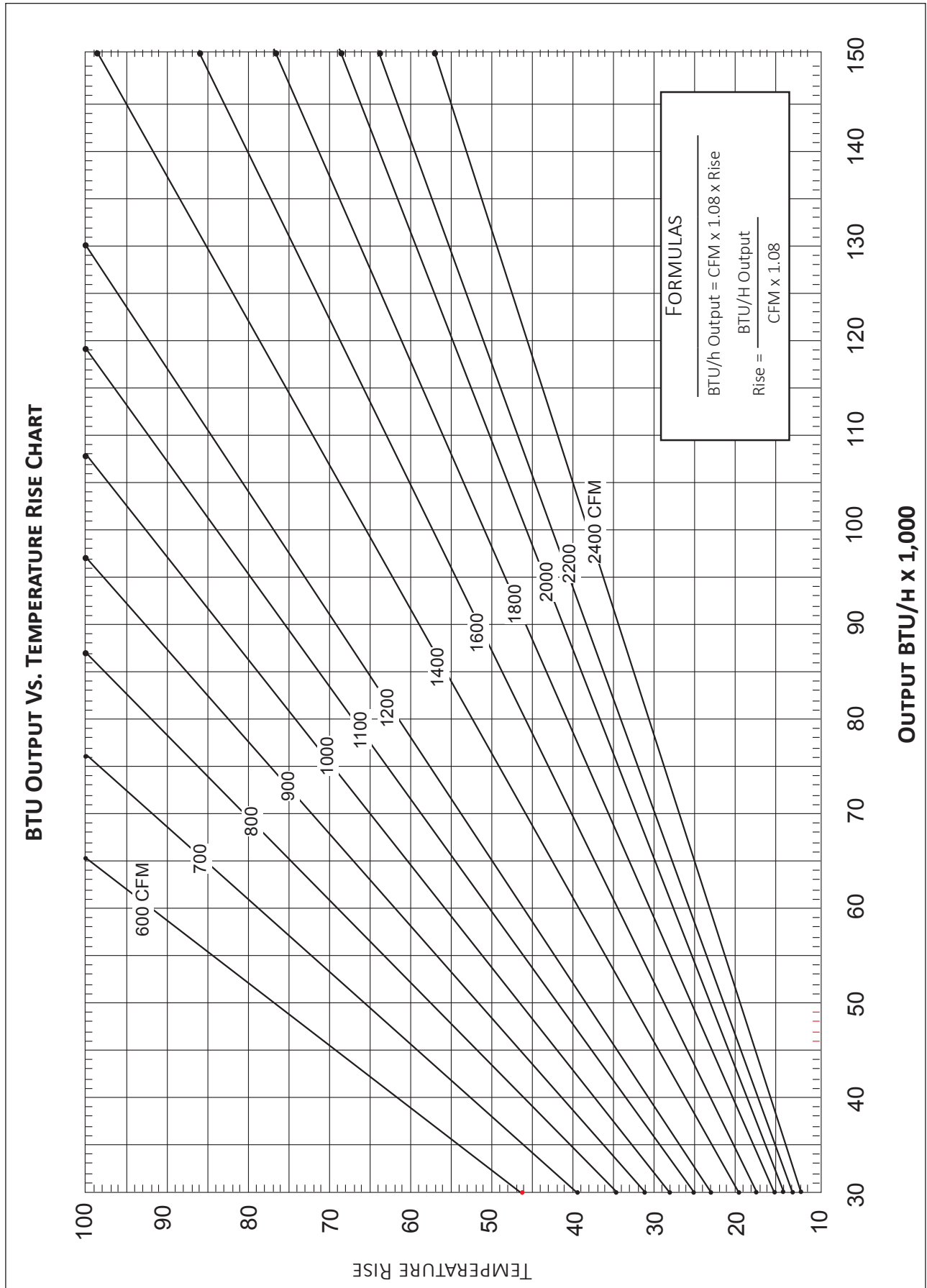
**GRVT961005CNA*, GRVT961005DNA*
GRVT961205DNA*
COOLING SPEED
(@ 0.1" - 0.8" w.c. ESP)**

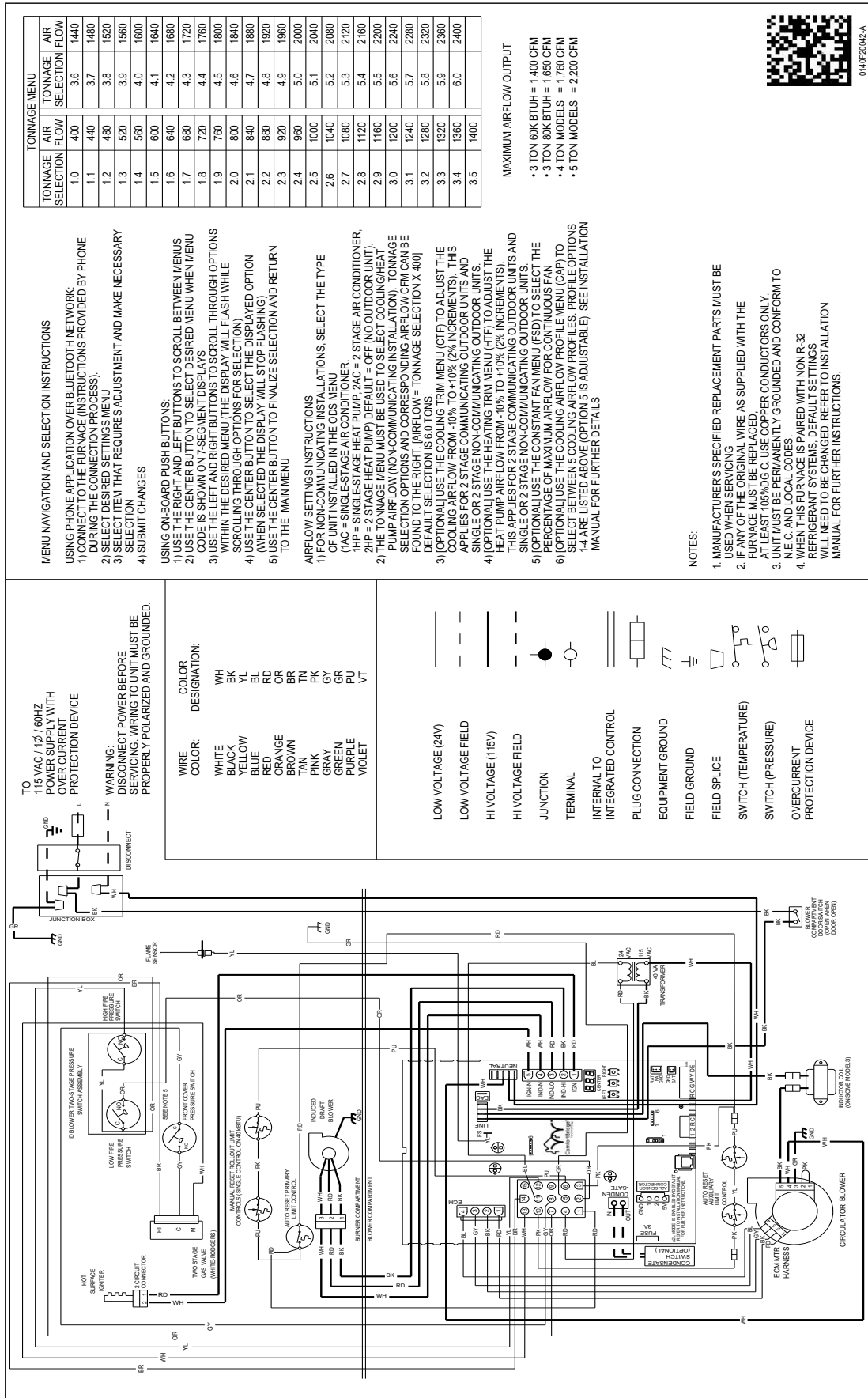
TONS	HIGH-STAGE CFM	LOW-STAGE CFM
2	800	560
3	1,200	840
4	1,600	1,120
5	2,000	1,400
MAX	2,200	

**GDVT961005CNA*
GDVT961205DNA*
COOLING SPEED
(@ 0.1" - 0.8" w.c. ESP)**

TONS	HIGH-STAGE CFM	LOW-STAGE CFM
2	800	560
3	1,200	840
4	1,600	1,120
5	2,000	1,400
MAX	2,200	

All furnaces ship as high speed for cooling. Installer must adjust blower speed as needed.
For most jobs, about 400 CFM per ton when cooling is desirable.
Do not operate above .5" w.c. ESP in heating mode. Operating CFM between .5" and .8" w.c. is tabulated for cooling purposes only





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



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.

MENU NAVIGATION AND SELECTION INSTRUCTIONS

USING PHONE APPLICATION OVER BLUETOOTH NETWORK:
1) CONNECT TO THE FURNACE (INSTRUCTIONS PROVIDED BY PHONE DURING THE CONNECTION PROCESS).
2) SELECT DESIRED SETTINGS MENU
3) SELECT ITEM THAT REQUIRES ADJUSTMENT AND MAKE NECESSARY SELECTION
4) SUBMIT CHANGES

USING ON-BOARD PUSH BUTTONS:

- 1) USE THE RIGHT AND LEFT BUTTONS TO SCROLL BETWEEN MENUS
- 2) USE THE CENTER BUTTON TO SELECT DESIRED MENU WHEN MENU CODE IS SHOWN ON 7-SEGMENT DISPLAYS
- 3) USE THE LEFT AND RIGHT BUTTONS TO SCROLL THROUGH OPTIONS WITHIN THE DESIRED MENU (THE DISPLAY WILL FLASH WHILE SCROLLING THROUGH OPTIONS FOR SELECTION)
- 4) USE THE CENTER BUTTON TO SELECT THE DISPLAYED OPTION (WHEN SELECTED THE DISPLAY WILL STOP FLASHING)
- 5) USE THE CENTER BUTTON TO FINALIZE SELECTION AND RETURN TO THE MAIN MENU

AIRFLOW SETTINGS INSTRUCTIONS

- 1) FOR NON-COMMUNICATING INSTALLATIONS, SELECT THE TYPE OF UNIT INSTALLED IN THE COOLING MENU
1HP = SINGLE STAGE HEAT PUMP
2HP = 2 STAGE HEAT PUMP
2AC = 2 STAGE AIR CONDITIONER, PUMP AIRFLOW (NON-COMMUNICATING INSTALLATION). TONNAGE SELECTION OPTIONS AND CORRESPONDING AIRFLOW CFM CAN BE FOUND TO THE RIGHT. [AIRFLOW = TONNAGE SELECTION X 400]
DEFAULT SELECTION IS 6.0 TONS.
- 3) (OPTIONAL) USE THE COOLING TRIM MENU (CTF) TO ADJUST THE COOLING AIRFLOW FROM -10% TO +10% (2% INCREMENTS). THIS APPLIES FOR 2 STAGE NON-COMMUNICATING OUTDOOR UNITS AND SINGLE OR 2 STAGE NON-COMMUNICATING OUTDOOR UNITS.
- 4) (OPTIONAL) USE THE HEATING TRIM MENU (HTF) TO ADJUST THE HEAT PUMP AIRFLOW FROM -10% TO +10% (2% INCREMENTS). THIS APPLIES FOR 2 STAGE NON-COMMUNICATING OUTDOOR UNITS AND SINGLE OR 2 STAGE NON-COMMUNICATING OUTDOOR UNITS.
- 5) (OPTIONAL) USE THE COOLING TRIM MENU (CTF) TO SELECT THE COOLING AIRFLOW (NON-COMMUNICATING INSTALLATION). TONNAGE SELECTION OPTIONS AND CORRESPONDING AIRFLOW CFM CAN BE FOUND TO THE RIGHT. [AIRFLOW = TONNAGE SELECTION X 400]
- 6) (OPTIONAL) USE THE COOLING TRIM MENU (CTF) TO SELECT THE COOLING AIRFLOW (NON-COMMUNICATING INSTALLATION). TONNAGE SELECTION OPTIONS AND CORRESPONDING AIRFLOW CFM CAN BE FOUND TO THE RIGHT. [AIRFLOW = TONNAGE SELECTION X 400]

MAXIMUM AIRFLOW OUTPUT

- 3 TON 60K BTUH = 1400 CFM
- 3 TON 80K BTUH = 1650 CFM
- 4 TON MODELS = 1750 CFM
- 5 TON MODELS = 2200 CFM



014920042-A

MODEL	DESCRIPTION	GRVT96 0403BN	GRVT96 0603BN	GRVT96 0803BN	GRVT96 0804CN	GRVT96 1005CN	GRVT96 1005DN	GRVT96 1205DN
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"	√	√	√	√	√	√	—
HASFK	High-Altitude Natural Gas Kit	HASFK-1	HASFK-1	HASFK-1	HASFK-2	HASFK-3	TBD	HASFK-2
HASFK	High-Altitude LP Gas Kit	HASFK-1	HASFK-1	HASFK-1	HASFK-2	HASFK-2	TBD	HASFK-2
0270F20723	Horizontal Drain Tubing Kit	√	√	√	√	√	√	√
LPM-34	LP Conversion Kits	√	√	√	√	√	√	√

MODEL	DESCRIPTION	ADVT96 0403BN	ADVT96 0603BN	ADVT96 0804CN	ADVT96 1005CN	ADVT96 1205DN
72950	Concentric Vent Kit (2")	√	√	√	√	—
72951	Concentric Vent Kit (3")	√	√	√	√	√
CFSB17	Downflow Sub-Base 17.5"	√	√	—	—	—
CFSB21	Downflow Sub-Base 21"	—	—	√	√	—
CFSB24	Downflow Sub-Base 24"	—	—	—	—	√
RF000142	Drain Kit Horizontal Left Vertical Flue	√	√	√	√	√
0170K00000S	Flush Mount Vent Kit - 3" or 2"	√	√	√	√	√
0170K00001S	Flush Mount Vent Kit - 2"	√	√	√	√	—
HASFK	High-Altitude Natural Gas Kit	HASFK-1	HASFK-1	HASFK-2	HASFK-3	HASFK-3
HASFK	High-Altitude LP Gas Kit	HASFK-1	HASFK-1	HASFK-2	HASFK-2	HASFK-3
0270F20670	Horizontal Drain Tubing Kit	√	√	√	√	√
LPM-34	LP Conversion Kits	√	√	√	√	√

NOTES

√ Indicates available for this model

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