



Air Conditioning & Heating

GMVC8

COMFORTNET™-COMPATIBLE TWO-STAGE, VARIABLE-SPEED GAS FURNACE

80% AFUE

HEATING INPUT:
60,000-100,000 BTU/H

Standard Features

- Aluminized steel, dual-diameter tubular heat exchanger
- Two-stage gas valve operates on two-stage or single-stage thermostats
- ComfortNet™ Communications System compatible
- Efficient and quiet, variable-speed ECM circulator motor gently ramps up or down according to heating or cooling demand
- Silicon Nitride igniter
- Furnace control board with self-diagnostics, color-coded low-voltage terminals, and provisions for electronic air cleaner and 120-volt or 24-volt humidifiers
- Low constant fan speed allows homeowner to activate a very low speed, efficiently circulating air throughout the home. This setting costs as little as a 100-watt light bulb to operate.
- Quiet, two-speed induced draft blower
- All models comply with California NOx emissions standards

Cabinet Features

- Fully insulated, heavy-gauge steel cabinet with durable baked-enamel finish
- Designed for multi-position installation: upflow, horizontal left or right
- Removable bottom for side- or bottom-return applications
- Coil and furnace fit flush for most installations



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* 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 is not required in California or Québec.



NOMENCLATURE

	G	M	V	C	8	060	4	C	*	*	*	
	1	2	3	4	5	6,7,8	9	10	11	12	13	
Brand	G Goodman® Brand or Distinctions™										Revisions	
											Major and Minor Revisions	
Airflow Direction	C Downflow/Horizontal D Dedicated Downflow H High Airflow K Dedicated Upflow M Upflow/Horizontal										NOx	
											N Natural Gas X Low NOx	
Description/Motor	V Two-Stage/Variable-speed H Two-Stage/Multi-speed S Single-Stage/Multi-speed E Two-Stage/High-Efficiency										Cabinet Width	
											A 14" B 17½" C 21" D 24½"	
SystemType	C ComfortNet™ Communicating System										Maximum CFM @ 0.5" ESP	
											3 1200 4 1600 5 2000	
AFUE	95 95% 8 80% 9 90%+										MBTU/h	
											040: 40,000 100: 100,000 060: 60,000 120: 120,000 080: 80,000	



SPECIFICATIONS

	GMVC8 0604B*B	GMVC8 0805C*B	GMVC8 1005C*B
HEATING CAPACITY			
High Fire Input (BTU/h) ¹	60,000	80,000	100,000
High Fire Output (BTU/h) ¹ (below)			
Natural Gas	48,000	64,000	80,000
LP Gas	48,000	64,000	80,000
Low Fire Input (BTU/h) ¹	42,000	56,000	70,000
Low Fire Output (BTU/h) ¹ (below)			
Natural Gas	33,600	44,800	56,000
LP Gas	33,600	44,800	56,000
AFUE ²	80	80	80
Available AC @ 0.5" ESP	20 - 50	20 - 50	25 - 55
Temperature Rise Range (° F)	1.5 - 4.0	2.0 - 5.0	2.0 - 5.0
CIRCULATOR BLOWER			
Size (D x W)	10" x 8"	10" x 10"	10" x 10"
Horsepower - RPM	¾	¾	¾
Speed	Variable	Variable	Variable
Vent Diameter ¹	4"	4"	4"
No. of Burners	3	4	5
Disposable Filter Size (in ²)	576	460	460
ELECTRICAL DATA			
Min. Circuit Ampacity ³	11.7	11.7	11.7
Max. Overcurrent Device (amps) ⁴	15	15	15
SHIP WEIGHT (LBS)	152	178	194

¹ Natural Gas BTU/h. For altitudes above 2,000', reduce input rating 4% for each 1,000' above sea level.

² DOE AFUE based upon Isolated Combustion System (ICS)

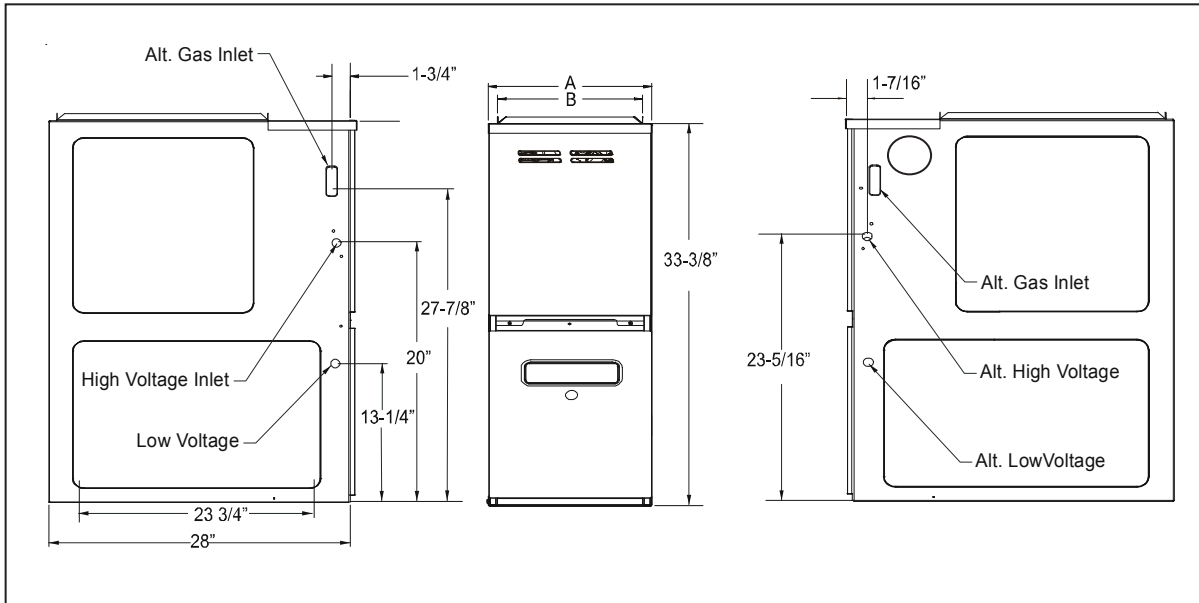
³ Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower amps. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

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.

DIMENSIONS



DIMENSIONS KEY

MODEL	A	B
GMVC80604B**	17½"	16"
GMVC80805C**	21"	19½"
GMVC81005C**	21"	19½"

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

SIDES	REAR	FRONT ¹	VENT ²		TOP
			SW	B	
1	0	3	6	1	1

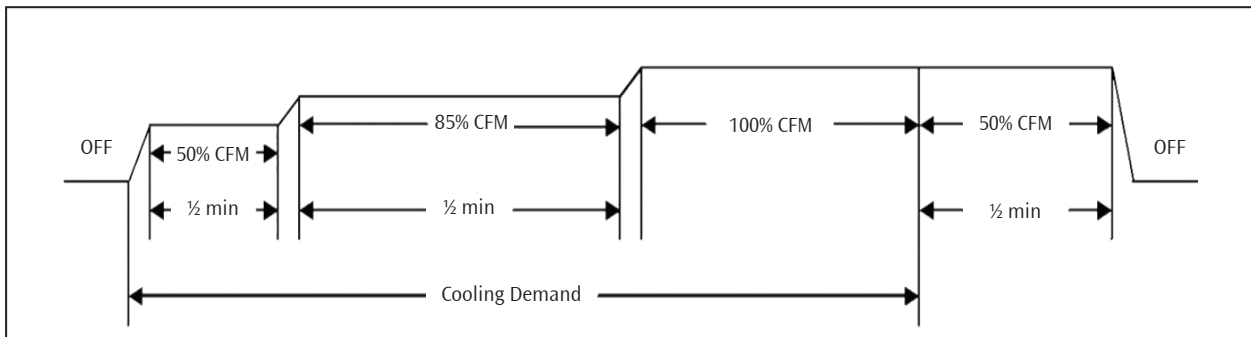
Approved for line contact in the horizontal position.

¹ 24" clearance for serviceability recommended.

² Single Wall Vent (SW) to be used only as a connector. Refer to the venting tables outlined in the Installation Manual for additional venting requirements.

AUTO-COMFORT MODE

During Auto-Comfort mode, the furnace ramps up to 50% of the demand for half a minute. It then ramps to 85% of the full cooling demand airflow and operates there for approximately 7½ minutes. The motor then steps up to the full demand airflow. This mode spends a half minute at 50% airflow OFF delay.



AIRFLOW DATA

HIGH- OR SINGLE-STAGE COOLING SPEEDS

GMVC80604B**		
COOLING SPEED TAP	ADJUST TAP	CFM ¹
A	Minus (-)	540
	Normal	600
	Plus (+)	660
B	Minus (-)	720
	Normal	800
	Plus (+)	880
C	Minus (-)	990
	Normal	1,100
	Plus (+)	1,210
D	Minus (-)	1,260
	Normal	1,400
	Plus (+)	1,540

GMVC80805C**		
COOLING SPEED TAP	ADJUST TAP	CFM ¹
A	Minus (-)	720
	Normal	800
	Plus (+)	880
B	Minus (-)	990
	Normal	1,100
	Plus (+)	1,210
C	Minus (-)	1,260
	Normal	1,400
	Plus (+)	1,540
D	Minus (-)	1,620
	Normal	1,800
	Plus (+)	1,980

GMVC81005C**		
COOLING SPEED TAP	ADJUST TAP	CFM ¹
A	Minus (-)	720
	Normal	800
	Plus (+)	880
B	Minus (-)	990
	Normal	1,100
	Plus (+)	1,210
C	Minus (-)	1,260
	Normal	1,400
	Plus (+)	1,540
D	Minus (-)	1,620
	Normal	1,800
	Plus (+)	1,980

LOW-STAGE COOLING SPEEDS

GMVC80604B**		
COOLING SPEED TAP	ADJUST TAP	CFM ¹
A	Minus (-)	351
	Normal	390
	Plus (+)	429
B	Minus (-)	468
	Normal	520
	Plus (+)	572
C	Minus (-)	644
	Normal	715
	Plus (+)	787
D	Minus (-)	819
	Normal	910
	Plus (+)	1,001

GMVC80805C**		
COOLING SPEED TAP	ADJUST TAP	CFM ¹
A	Minus (-)	468
	Normal	520
	Plus (+)	572
B	Minus (-)	644
	Normal	715
	Plus (+)	787
C	Minus (-)	819
	Normal	910
	Plus (+)	1,001
D	Minus (-)	1,053
	Normal	1,170
	Plus (+)	1,287

GMVC81005C**		
COOLING SPEED TAP	ADJUST TAP	CFM ¹
A	Minus (-)	468
	Normal	520
	Plus (+)	572
B	Minus (-)	644
	Normal	715
	Plus (+)	787
C	Minus (-)	819
	Normal	910
	Plus (+)	1,001
D	Minus (-)	1,053
	Normal	1,170
	Plus (+)	1,287

¹ @ .1" to .8" W.C. ESP

NOTES

- These charts are for furnaces installed at 0' - 2,000'. At higher altitudes, a properly de-rated unit will have the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.
- THE INSTALLATION IS TO BE ADJUSTED TO OBTAIN A TEMPERATURE RISE WITHIN THE RANGE LISTED ON THE FURNACE NAMEPLATE.
- Propane gas installations will have a high-stage rise approximately 4° lower than shown in the tables.

AIRFLOW DATA (CONT.)

HEATING SPEEDS

GMVC80604B** (RISE RANGE: 20° - 50°F)				
COOLING SPEED TAP	ADJUST TAP	LOW-STAGE CFM ¹	HIGH-STAGE CFM ¹	RISE (°F)
A	Minus (-)	790	1125	46
	Normal	875	1250	41
	Plus (+)	960	1375	38
B	Minus (-)	850	1215	43
	Normal	945	1350	38
	Plus (+)	1040	1485	35
C	Minus (-)	915	1305	40
	Normal	1015	1450	36
	Plus (+)	1115	1595	33
D	Minus (-)	975	1395	37
	Normal	1085	1550	33
	Plus (+)	1195	1705	30

GMVC81005C** (RISE RANGE: 25° - 55°F)				
COOLING SPEED TAP	ADJUST TAP	LOW-STAGE CFM ¹	HIGH-STAGE CFM ¹	RISE (°F)
A	Minus (-)	1090	1555	55
	Normal	1210	1725	49
	Plus (+)	1330	1900	45
B	Minus (-)	1105	1575	54
	Normal	1225	1750	49
	Plus (+)	1350	1925	44
C	Minus (-)	1120	1600	53
	Normal	1245	1775	48
	Plus (+)	1370	1955	44
D	Minus (-)	1135	1620	53
	Normal	1260	1800	47
	Plus (+)	1385	1980	43

GMVC80805C** (RISE RANGE: 20° - 50°F)				
COOLING SPEED TAP	ADJUST TAP	LOW-STAGE CFM ¹	HIGH-STAGE CFM ¹	RISE (°F)
A	Minus (-)	945	1350	49
	Normal	1050	1500	44
	Plus (+)	1155	1650	40
B	Minus (-)	1010	1440	46
	Normal	1120	1600	42
	Plus (+)	1230	1760	38
C	Minus (-)	1070	1530	44
	Normal	1190	1700	39
	Plus (+)	1310	1870	36
D	Minus (-)	1135	1620	41
	Normal	1260	1800	37
	Plus (+)	1385	1980	34

¹ @ .1" to .8" W.C. ESP

NOTES

- These charts are for furnaces installed at 0' - 4,500'. At higher altitudes, a properly de-rated unit will have the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.
- The installation must be adjusted to obtain a temperature rise within the range listed on the furnace nameplate.
- Do not operate above .5" w.c. ESP in heating mode.
- Propane gas installations will have a high-stage rise approximately 4° lower than shown in the tables.

CONTINUOUS FAN SPEEDS

MODEL	FURNACE MAXIMUM CFM	CONTINUOUS FAN SPEED ^{1,2}
GMVC80604B**	1760	530
GMVC80805C**	2000	600
GMVC81005C**	2000	600

¹ Continuous fan speed is 25% of furnace maximum CFM

² Three continuous fan speeds are possible with the CTK01AA thermostat: 25%, 50%, and 75% of furnace maximum CFM

ACCESSORIES

MODEL	DESCRIPTION
LPM-06	LP Conversion Kit (Springs & Orifice) ¹
AFE18-60A	Fossil Fuel Kit (must be used in a dual-fuel application with a compatible thermostat)
ASAS	Electronic Air Cleaners (* = -10, -11, -12 or -18)
AMU	Media Air Cleaners (* = 1620, 2020, 1625 or 2025)

¹ White-Rodgers and Honeywell valves

NOTES

