Goodman
Air Conditioning & Heating

# GMS8/GDS8/GHS8

*Heating Input : 40,000–140,000 BTU/h*

## *Single-Stage, Multi-Speed, Multi-Position Gas Furnace 80% AFUE*


***Contents***



### *Standard Features*

- Heavy-duty aluminized-steel, dual-diameter tubular heat exchanger
- Single-stage gas valve
- Durable Hot-surface igniter
- Quiet, single-speed draft induced
- Self-diagnostic control board
- Color-coded low-voltage terminals
- Multi-speed blower motor
- California Low NOx emissions models available
- GHS8: High static airflow capability
- Can no longer be installed in California's South Coast Air Quality Management District (SCAQMD) on or after October 1, 2019.
- AHRI Certified; ETL Listed

### *Cabinet Features*

- Installation:
  - GMS8/GHS8-upflow, horizontal left or right
  - GDS8- Dedicated downflow
- 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*

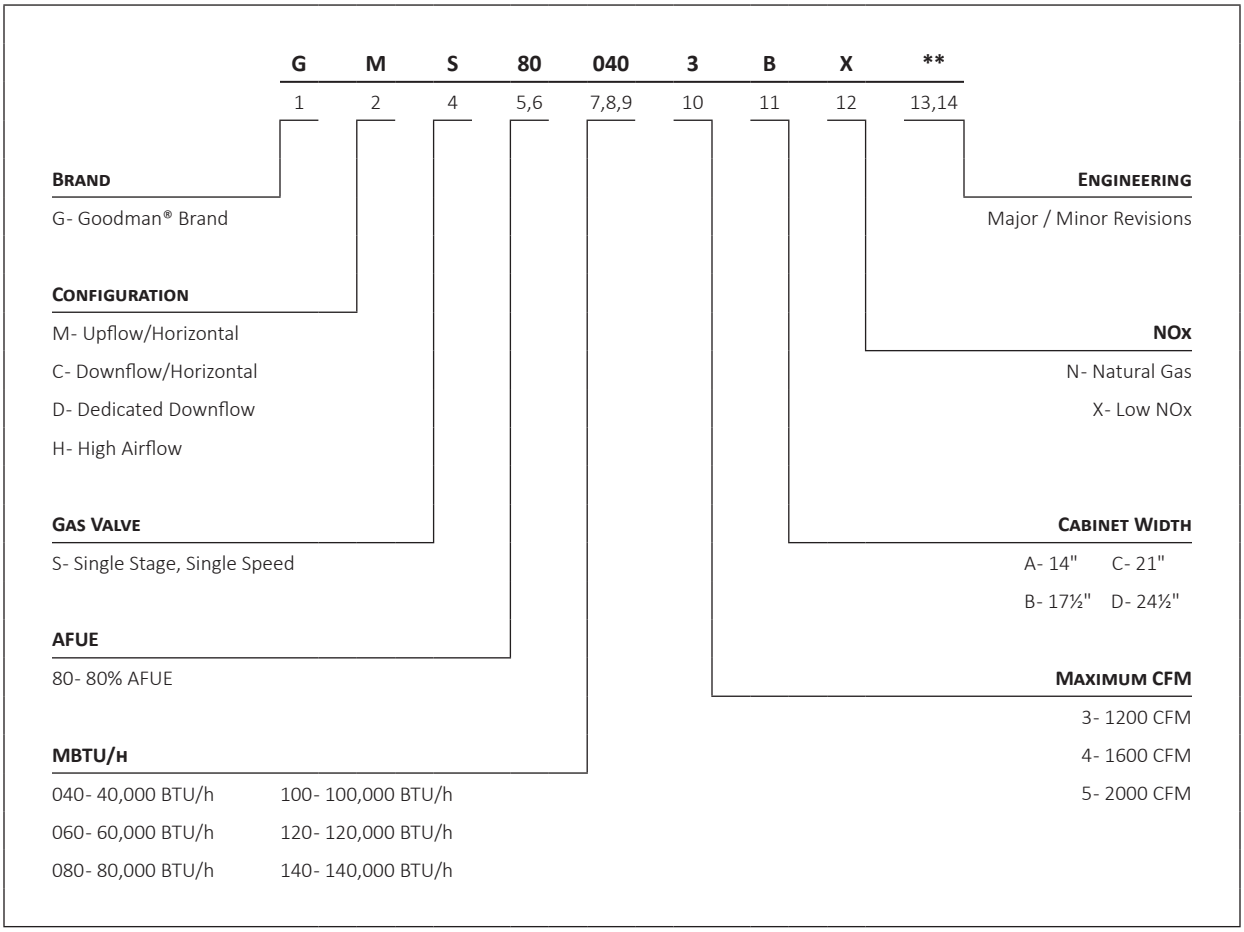
Intertek

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 =

COMPANY WITH ENVIRONMENTAL SYSTEM CERTIFIED BY DNV GL = ISO 14001 =

BBB ACCREDITED BUSINESS

* 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) 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.


G M S 80 040 3 B X **
1 2 4 5,6 7,8,9 10 11 12 13,14
BRAND
G- Goodman® Brand
CONFIGURATION
M- Upflow/Horizontal
C- Downflow/Horizontal
D- Dedicated Downflow
H- High Airflow
GAS VALVE
S- Single Stage, Single Speed
AFUE
80- 80% AFUE
MBTU/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
140- 140,000 BTU/h
MAXIMUM CFM
3- 1200 CFM
4- 1600 CFM
5- 2000 CFM
CABINET WIDTH
A- 14" C- 21"
B- 17½" D- 24½"
NOx
N- Natural Gas
X- Low NOx
ENGINEERING
Major / Minor Revisions

| | GMS8 0403A*B | GMS8 0603A*B | GMS8 0604B*B | GMS8 0804B*B | GMS8 0805C*B | GMS8 1005C*B | GMS8 1205D*B | GMS8 1405DNC |
|---|---|---|---|---|---|---|---|---|
| **Heating Capacity** | | | | | | | | |
| Input | 40,000 | 60,000 | 60,000 | 80,000 | 80,000 | 100,000 | 120,000 | 140,000 |
| Natural Gas Output | 32,000 | 48,000 | 48,000 | 64,000 | 64,000 | 80,000 | 96,000 | 112,000 |
| LP Gas Output | 32,000 | 48,000 | 48,000 | 64,000 | 64,000 | 80,000 | 96,000 | 96,000 |
| AFUE [1] | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Available AC @ 0.5" ESP | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 |
| Temperature Rise Range (°F) | 25- 55 | 20- 50 | 20- 50 | 35- 65 | 35- 65 | 35- 65 | 40- 70 | 40- 70 |
| **Circulator Blower** | | | | | | | | |
| Size (D x W) | 10" x 6" | 10" x 6" | 10" x 8" | 10" x 8" | 10" x 10" | 10" x 10" | 11" x 10" | 11" x 10" |
| Horsepower @1075 RPM | ⅓ | ⅓ | ½ | ½ | ½ | ½ | ¾ | ¾ |
| Speed | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Vent Diameter [2] | 4" | 4" | 4" | 4" | 4" | 4" | 4" | 4" |
| No. of Burners | 2 | 3 | 3 | 4 | 4 | 5 | 6 | 6 |
| **Electrical Data** | | | | | | | | |
| Min. Circuit Ampacity [3] | 4.8 | 4.8 | 8.8 | 8.8 | 8.8 | 8.8 | 14.7 | 14.7 |
| Max. Overcurrent Device (amps) [4] | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| **Ship Weight (lbs)** | 84 | 88 | 98 | 106 | 114 | 118 | 130 | 130 |

All models available in California Low NOx-compliant versions (except GMS81405D*C*)

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

[2] 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).

[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.

| | GDS8 0403A*B | GDS8 0603A*B | GDS8 0804B*B | GDS8 1005C*B | GHS8 0403A*B | GHS8 0604B*B | GHS8 0805C*B |
|---|---|---|---|---|---|---|---|
| **HEATING CAPACITY** | | | | | | | |
| Input | 40,000 | 60,000 | 80,000 | 100,000 | 40,000 | 60,000 | 80,000 |
| Natural Gas Output | 32,000 | 48,000 | 64,000 | 80,000 | 32,000 | 48,000 | 64,000 |
| LP Gas Output | 32,000 | 48,000 | 64,000 | 80,000 | 32,000 | 48,000 | 64,000 |
| AFUE [1] | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Available AC @ 0.5" ESP | 3 | 3 | 4 | 5 | 3 | 4 | 5 |
| Temperature Rise Range (°F) | 25- 55 | 30-60 | 35-65 | 40- 70 | 20- 50 | 20- 50 | 35- 65 |
| **CIRCULATOR BLOWER** | | | | | | | |
| Size (D x W) | 10" x 6" | 10" x 6" | 10" x 8" | 10" x 10" | 11" x 6" | 11" x 8" | 11" x 10" |
| Horsepower @1075 RPM | 1/3 | 1/3 | 1/2 | 3/4 | 1/2 | 3/4 | 3/4 |
| Speed | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Vent Diameter [2] | 4" | 4" | 4" | 4" | 4" | 4" | 4" |
| No. of Burners | 2 | 3 | 4 | 5 | 2 | 3 | 4 |
| **ELECTRICAL DATA** | | | | | | | |
| Min. Circuit Ampacity [3] | 4.8 | 4.8 | 8.8 | 10.5 | 10.5 | 13.7 | 13.7 |
| Max. Overcurrent Device (amps) [4] | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| **SHIP WEIGHT (LBS)** | 88 | 92 | 105 | 113 | 90 | 102 | 117 |

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

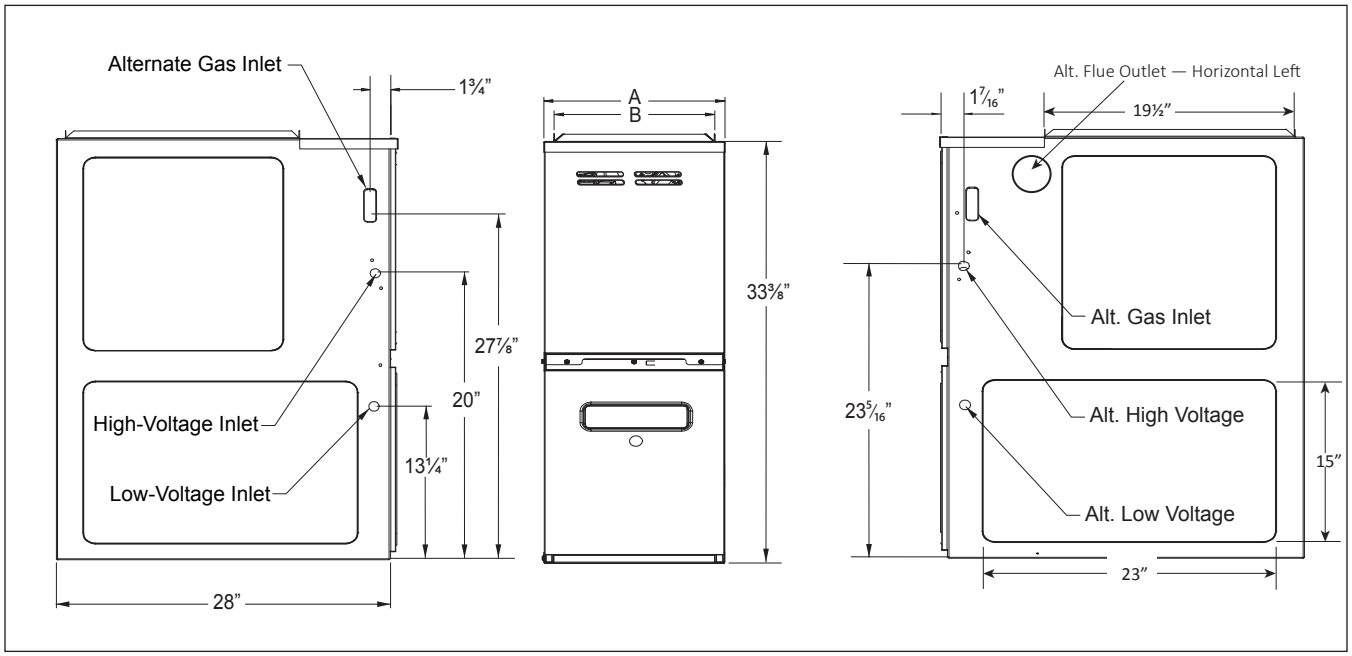
[2] Vent and combustion air diameters may vary depending upon vent length. Refer to the latest editions of the National Fuel Gas Code NFPA 54/ANSI Z223.1 (in the USA) and the Canada National Standard of Canada, CAN/CSA B149.1 and CAN/CSA B142.2 (in Canada).

[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.




| Model | A | B |
|---|---|---|
| GMS80403A*B | 14" | 12½" |
| GMS80603A*B | 14" | 12½" |
| GMS80604B*B | 17½" | 16" |
| GMS80804B*B | 17½" | 16" |

| Model | A | B |
|---|---|---|
| GMS80805C*B | 21" | 19½" |
| GMS81005C*B | 21" | 19½" |
| GMS81205D*B | 24½" | 23" |
| GMS81405DNC* | 24½" | 23" |

**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.
- Conversion kits for high-altitude (4500+ ft) natural gas operation are available. Contact your Goodman distributor or dealer for details.

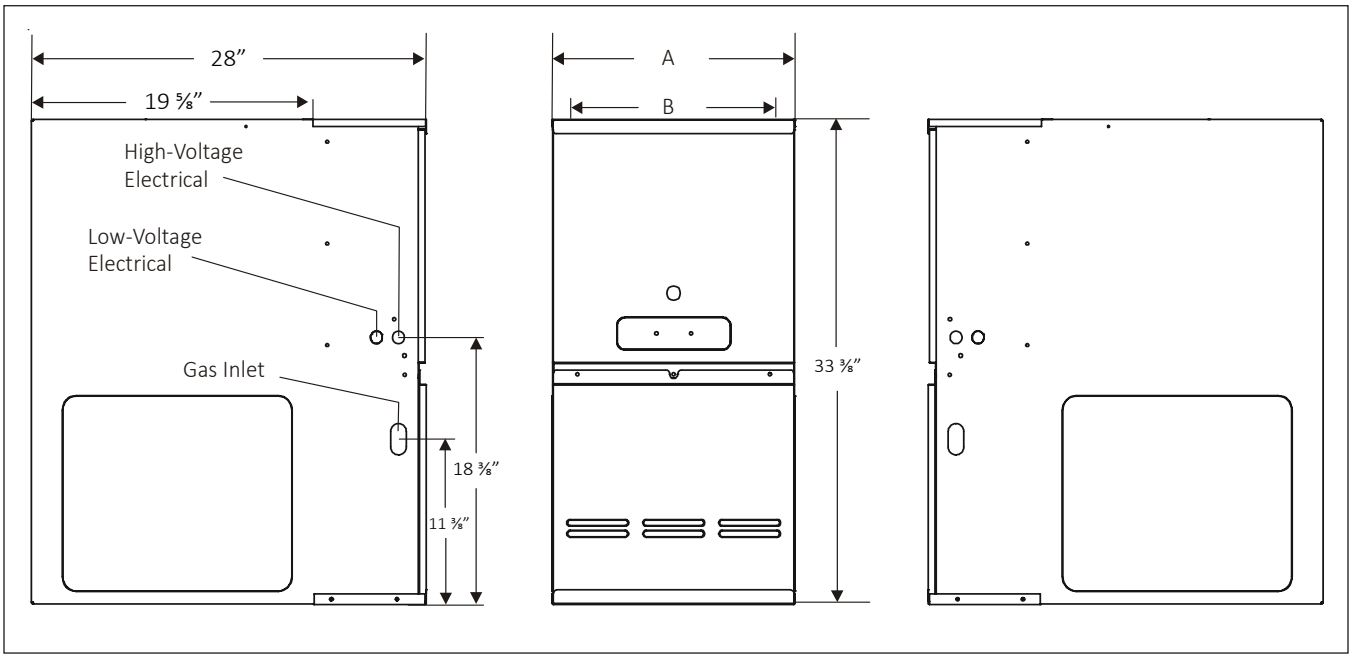
## *Minimum Clearances to Combustible Materials*

| Sides | Rear | Front[1] | Vent[2] | | Top |
|---|---|---|---|---|---|
| | | | SW | B | |
| 1" | 0" | 3" | 6" | 1" | 1" |

[1] 24" clearance for serviceability recommended.

[2] Single Wall Vent (SW) to be used only as a connector. 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).

Note: GMS8 approved for line contact in the horizontal position.




| Model | A | B | Non-Combustible Floor Base |
|---|---|---|---|
| GDS80403A*B | 14” | 12½” | SBT14 |
| GDS80603A*B | 14” | 12½” | SBT14 |
| GDS80804B*B | 17½” | 16” | SBT17 |
| GDS81005C*B | 21” | 19½” | SBT21 |

**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.
- Conversion kits for high-altitude (4500+ ft) natural gas operation are available. Contact your Goodman distributor or dealer for details.

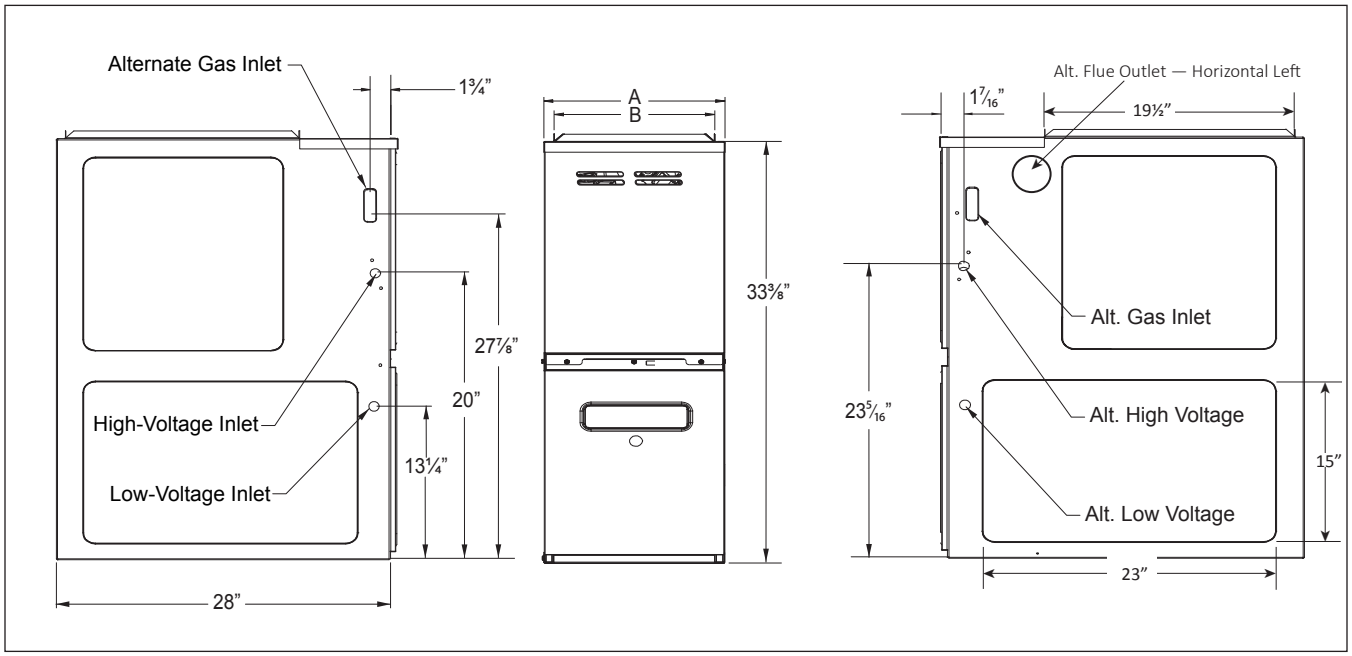
## *Minimum Clearances to Combustible Materials*

| Sides | Rear | Front[1] | Vent[2] | | Top |
|---|---|---|---|---|---|
| | | | SW | B | |
| 1” | 0” | 3” | 6” | 1” | 1” |

[1] 24” clearance for serviceability recommended.

[2] Single Wall Vent (SW) to be used only as a connector. 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).

Note: GMS8 approved for line contact in the horizontal position.




| Model | A | B |
|---|---|---|
| GHS80403AXB* | 14" | 12½" |
| GHS80604BXB* | 17½" | 16" |
| GHS80805CXB* | 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.
- Conversion kits for high-altitude (4500+ ft) natural gas operation are available. Contact your Goodman distributor or dealer for details.

## *Minimum Clearances to Combustible Materials*

| Sides | Rear | Front[1] | Vent[2] | | Top |
|---|---|---|---|---|---|
| | | | SW | B | |
| 1" | 0" | 3" | 6" | 1" | 1" |

[1] 24" clearance for serviceability recommended.

[2] Single Wall Vent (SW) to be used only as a connector. 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).

Note: GMS8 approved for line contact in the horizontal position.

**CFM & Temperature Rise vs. External Static Pressure**

| Model | Motor Speed | Tons AC[1] | External Static Pressure, (Inches Water Column) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0.1 | | 0.2 | | 0.3 | | 0.4 | | 0.5 | | 0.6 | 0.7 | 0.8 |
| | | | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | CFM | CFM |
| GMS8 0403A*B | High | 3 | 1,521 | --- | 1,466 | --- | 1,414 | --- | 1,373 | --- | 1,298 | --- | 1,243 | 1,164 | 1,075 |
| | Med | 2.5 | 1,160 | 26 | 1,160 | 26 | 1,132 | 26 | 1,121 | 26 | 1,082 | 27 | 1,042 | 997 | 925 |
| | Med-Lo | 2 | 961 | 31 | 955 | 31 | 948 | 31 | 932 | 32 | 913 | 33 | 882 | 821 | 803 |
| | Low | 1.5 | 781 | 38 | 785 | 38 | 781 | 38 | 773 | 38 | 761 | 32 | 745 | 716 | 668 |
| GMS8 0603A*B | High | 3 | 1,422 | 31 | 1,352 | 33 | 1,307 | 34 | 1,197 | 37 | 1,157 | 38 | 1,092 | 1,075 | 983 |
| | Med | 2.5 | 1,098 | 40 | 1,081 | 41 | 1,051 | 42 | 1,039 | 43 | 1,021 | 44 | 983 | 924 | 868 |
| | Med-Lo | 2 | 919 | 48 | 913 | 49 | 892 | 50 | 847 | ---- | 829 | ---- | 818 | 792 | 728 |
| | Low | 1.5 | 758 | ---- | 741 | ---- | 741 | ---- | 733 | ---- | 699 | ---- | 677 | 649 | 626 |
| GMS8 0604B*B | High | 4 | 2,134 | 21 | 2,100 | 21 | 2,042 | 22 | 1,975 | 23 | 1,883 | 24 | 1,786 | 1,700 | 1,601 |
| | Med | 3.5 | 1,668 | 27 | 1,663 | 27 | 1,656 | 27 | 1,645 | 27 | 1,616 | 28 | 1,549 | 1,492 | 1,391 |
| | Med-Lo | 3 | 1,419 | 31 | 1,426 | 31 | 1,426 | 31 | 1,432 | 31 | 1,419 | 31 | 1,378 | 1,328 | 1,261 |
| | Low | 2.5 | 1,134 | 39 | 1,145 | 39 | 1,166 | 38 | 1,171 | 38 | 1,160 | 38 | 1,144 | 1,111 | 1,071 |
| GMS8 0804B*B | High | 4 | 2,051 | ---- | 1,983 | ---- | 1,895 | --- | 1,812 | --- | 1,725 | --- | 1,627 | 1,530 | 1,439 |
| | Med | 3.5 | 1,736 | --- | 1,708 | 35 | 1,652 | 36 | 1,611 | 37 | 1,540 | 38 | 1,475 | 1,394 | 1,307 |
| | Med-Lo | 3 | 1,493 | 35 | 1,668 | 36 | 1,459 | 41 | 1,429 | 41 | 1,389 | 43 | 1,339 | 1,274 | 1,204 |
| | Low | 2.5 | 1,200 | 49 | 1,185 | 50 | 1,180 | 50 | 1,173 | 51 | 1,158 | 51 | 1,125 | 1,125 | 1,080 |
| GMS8 0805C*B | High | 5 | 2,290 | ---- | 2,229 | ---- | 2,155 | ---- | 2,047 | ---- | 1,960 | ---- | 1,837 | 1,712 | 1,584 |
| | Med | 4 | 1,852 | --- | 1,820 | --- | 1,777 | --- | 1,719 | --- | 1,641 | 36 | 1,567 | 1,469 | 1,382 |
| | Med-Lo | 3.5 | 1,615 | 37 | 1,592 | 37 | 1,556 | 38 | 1,516 | 39 | 1,470 | 40 | 1,405 | 1,346 | 1,235 |
| | Low | 3 | 1,290 | 46 | 1,285 | 46 | 1,265 | 47 | 1,235 | 48 | 1,214 | 49 | 1,174 | 1,044 | 904 |
| GMS8 1005C*B | High | 5 | 2,323 | --- | 2,225 | --- | 2,120 | 35 | 2,040 | 36 | 1,974 | 38 | 1,801 | 1,688 | 1,577 |
| | Med | 4 | 1,858 | 40 | 1,847 | 40 | 1,799 | 41 | 1,744 | 42 | 1,674 | 44 | 1,577 | 1,493 | 1,399 |
| | Med-Lo | 3.5 | 1,596 | 46 | 1,587 | 47 | 1,571 | 47 | 1,552 | 48 | 1,493 | 50 | 1,397 | 1,326 | 1,217 |
| | Low | 3 | 1,291 | 57 | 1,272 | 58 | 1,261 | 59 | 1,257 | 59 | 1,205 | 61 | 1,168 | 1,118 | 1,060 |
| GMS8 1205D*B | High | 5 | 2,469 | --- | 2,389 | --- | 2,300 | --- | 2,223 | 40 | 2,131 | 42 | 2,027 | 1,902 | 1,786 |
| | Med | 4 | 1,575 | 56 | 1,558 | 57 | 1,545 | 58 | 1,513 | 59 | 1,500 | 59 | 1,419 | 1,354 | 1,271 |
| | Med-Lo | 3.5 | 1,402 | 63 | 1,380 | 64 | 1,343 | 66 | 1,319 | 67 | 1,296 | 69 | 1,245 | 1,183 | 1,106 |
| | Low | 3 | 1,200 | ---- | 1,186 | ---- | 1,161 | ---- | 1,127 | ---- | 1,082 | ---- | 1,042 | 995 | 926 |
| GMS8 1405DNC* | High | 5 | 2,469 | 42 | 2,389 | 43 | 2,300 | 45 | 2,223 | 47 | 2,131 | 49 | 2,027 | 1,902 | 1,786 |
| | Med | 4 | 1,575 | 66 | 1,558 | 67 | 1,545 | 67 | 1,513 | 69 | 1,500 | 69 | 1,419 | 1,354 | 1,271 |
| | Med-Lo | 3.5 | 1,402 | ---- | 1,380 | ---- | 1,343 | ---- | 1,319 | ---- | 1,296 | ---- | 1,245 | 1,183 | 1,106 |
| | Low | 3 | 1,200 | ---- | 1,186 | ---- | 1,161 | ---- | 1,127 | ---- | 1,082 | ---- | 1,042 | 995 | 926 |

[1] at 0.5" ESP

**Notes:**

- CFM in chart is without filter(s). Filters do not ship with this furnace, but must be provided by the installer. If the furnace requires two return filters, this chart assumes both filters are installed.
- All furnaces ship as high-speed cooling and medium-speed heating. Installer must adjust blower cooling and heating speed as needed.
- For most jobs, about 400 CFM per ton when cooling is desirable.
- INSTALLATION IS TO BE ADJUSTED TO OBTAIN TEMPERATURE RISE WITHIN THE RANGE SPECIFIED ON THE RATING PLATE.
- This chart is for information only. For satisfactory operation, external static pressure must not exceed value shown on the rating plate.
- The dashed (----) areas indicate a temperature rise not recommended for this model.
- At higher altitudes, a properly derated unit will have approximately the same temperature rise at a particular CFM, while ESP at the CFM will be lower.

**CFM & Temperature Rise vs. External Static Pressure**

| Model | Motor Speed | Tons AC[1] | External Static Pressure, (Inches Water Column) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0.1 | | 0.2 | | 0.3 | | 0.4 | | 0.5 | | 0.6 | 0.7 | 0.8 |
| | | | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | CFM | CFM |
| GDS8 0403A*B | High | 3.0 | 1,353 | --- | 1,290 | --- | 1,246 | --- | 1,199 | 25 | 1,149 | 26 | 1,116 | 1,116 | 1,099 |
| | Med | 2.5 | 1,183 | 25 | 1,113 | 27 | 1,098 | 27 | 1,052 | 28 | 1,039 | 29 | 1,006 | 1,012 | 969 |
| | Med-Lo | 2.0 | 980 | 30 | 946 | 31 | 920 | 32 | 900 | 33 | 896 | 33 | 885 | 855 | 804 |
| | Low | 1.5 | 778 | 38 | 762 | 39 | 738 | 40 | 746 | 40 | 738 | 40 | 717 | 696 | 678 |
| GDS8 0603A*B | High | 3.0 | 1,290 | 34 | 1,236 | 36 | 1,194 | 37 | 1,166 | 38 | 1,176 | 38 | 1,166 | 1,108 | 1,029 |
| | Med | 2.5 | 1,139 | 39 | 1,090 | 41 | 1,035 | 43 | 1,063 | 42 | 1,063 | 42 | 1020 | 962 | 895 |
| | Med-Lo | 2.0 | 962 | 46 | 927 | 48 | 925 | 48 | 941 | 47 | 909 | 49 | 877 | 834 | 779 |
| | Low | 1.5 | 787 | 56 | 776 | 57 | 763 | 58 | 744 | 60 | 723 | --- | 690 | 641 | 581 |
| GDS8 0804B*B | High | 4.0 | 2,128 | --- | 2,063 | --- | 2,001 | --- | 1,927 | --- | 1,824 | --- | 1,726 | 1,628 | 1,529 |
| | Med | 3.5 | 1,840 | --- | 1,788 | --- | 1,745 | --- | 1,689 | 35 | 1,625 | 36 | 1,550 | 1,470 | 1,364 |
| | Med-Lo | 3.0 | 1,602 | 37 | 1,558 | 38 | 1,543 | 38 | 1,493 | 40 | 1,455 | 41 | 1,402 | 1,328 | 1,239 |
| | Low | 2.5 | 1,277 | 46 | 1,252 | 47 | 1,244 | 48 | 1,229 | 48 | 1,214 | 49 | 1,179 | 1141 | 1079 |
| GDS8 1005C*B | High | 5.0 | 2,405 | --- | 2,361 | --- | 2,250 | --- | 2,161 | --- | 2,037 | 36 | 1,937 | 1,808 | 1,689 |
| | Med | 4.0 | 1,880 | 39 | 1,838 | 40 | 1,794 | 41 | 1,734 | 43 | 1,677 | 44 | 1,568 | 1,510 | 1,401 |
| | Med-Lo | 3.5 | 1659 | 45 | 1,630 | 45 | 1,587 | 47 | 1,537 | 48 | 1,492 | 50 | 1,445 | 1,368 | 1,287 |
| | Low | 3.0 | 1,472 | 50 | 1,454 | 51 | 1,404 | 53 | 1,366 | 54 | 1,326 | 56 | 1300 | 1228 | 1139 |

[1] at 0.5" ESP

## GHS8 Airflow Data

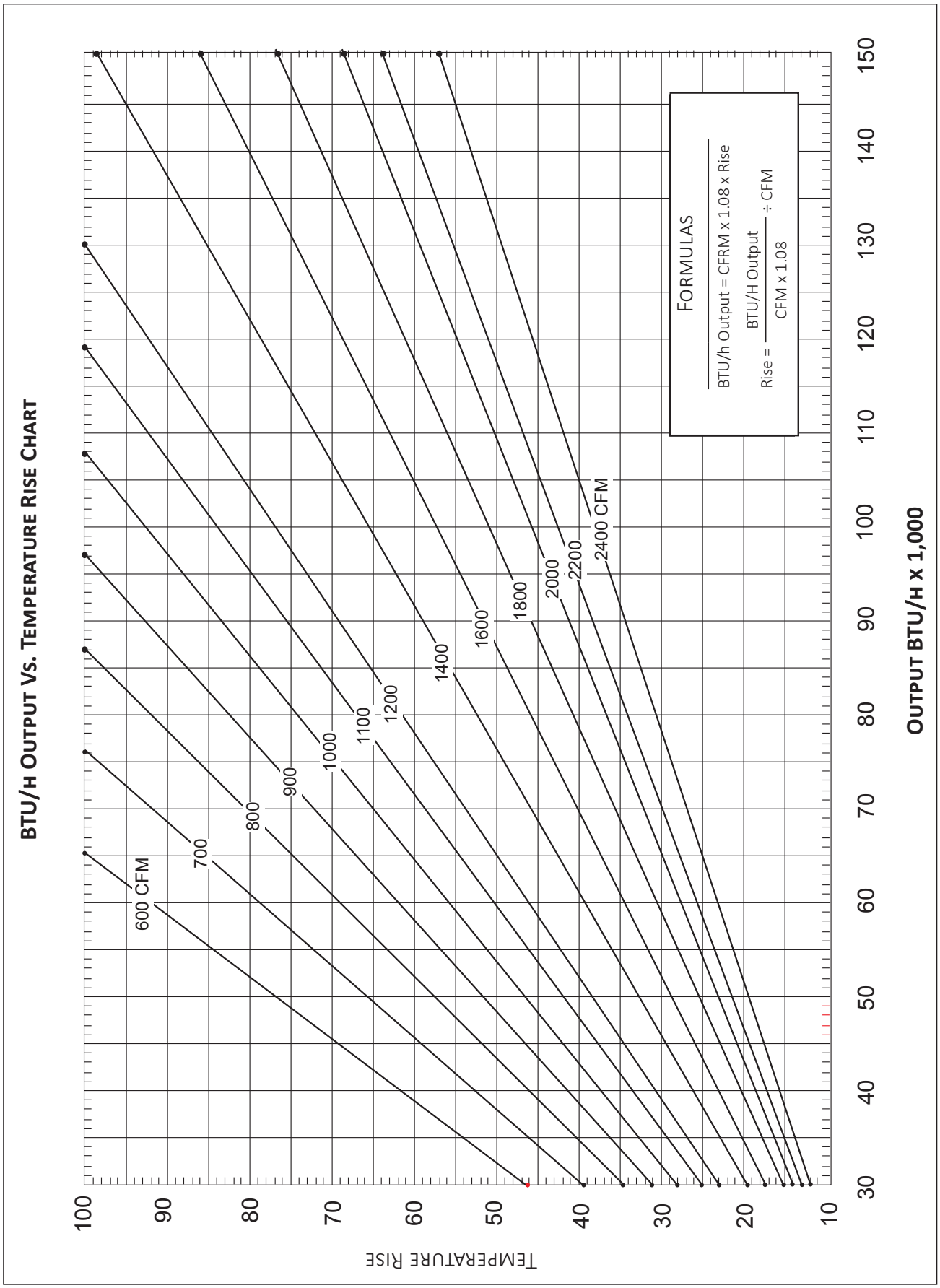
**CFM & Temperature Rise vs. External Static Pressure**

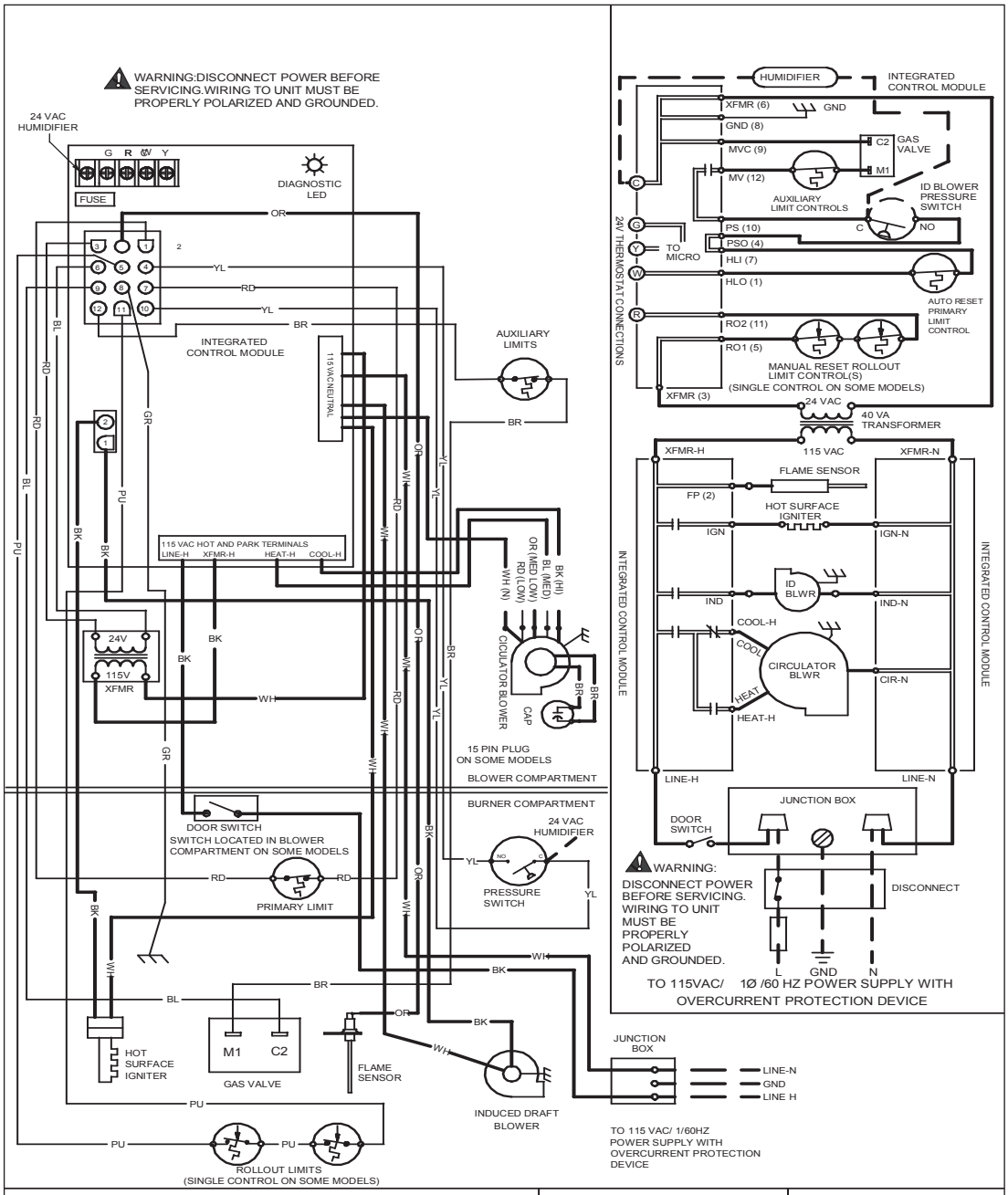
| Model | Motor Speed | Tons AC[1] | External Static Pressure, (Inches Water Column) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0.1 | | 0.2 | | 0.3 | | 0.4 | | 0.5 | | 0.6 | 0.7 | 0.8 |
| | | | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | Rise | CFM | CFM | CFM |
| GHS8 0403AXB* | High | 3.0 | 1,739 | --- | 1,656 | --- | 1,601 | --- | 1,551 | --- | 1,513 | 20 | 1,460 | 1,413 | 1,353 |
| | Med | 2.5 | 1,422 | 21 | 1,399 | 21 | 1,378 | 22 | 1,350 | 22 | 1,305 | 23 | 1,275 | 1,220 | 1,178 |
| | Med-Lo | 2.0 | 1,207 | 25 | 1,213 | 24 | 1,197 | 25 | 1,169 | 25 | 1,158 | 26 | 1,131 | 1,103 | 1,068 |
| | Low | 1.5 | 991 | 30 | 980 | 30 | 958 | 31 | 950 | 31 | 937 | 32 | 924 | 910 | 874 |
| GHS8 0604BXB* | High | 4.0 | 2,097 | 21 | 2,068 | 21 | 2,012 | 22 | 1,939 | 23 | 1,869 | 24 | 1,795 | 1,718 | 1,631 |
| | Med | 3.5 | 1,596 | 28 | 1,566 | 28 | 1,534 | 29 | 1,492 | 30 | 1,445 | 31 | 1,401 | 1,354 | 1288 |
| | Med-Lo | 3.0 | 1,380 | 32 | 1,356 | 33 | 1,328 | 33 | 1,303 | 34 | 1,274 | 35 | 1,239 | 1,192 | 1127 |
| | Low | 3.0 | 1239 | 36 | 1191 | 37 | 1165 | 37 | 1133 | 39 | 1,104 | 40 | 1,082 | 1,040 | 996 |
| GHS8 0805CXB* | High | 5.0 | 2,382 | --- | 2,315 | --- | 2,234 | --- | 2,158 | --- | 2,078 | --- | 1,971 | 1,866 | 1,762 |
| | Med | 4.0 | 1,622 | 37 | 1,603 | 37 | 1,583 | 37 | 1,556 | 38 | 1,516 | 39 | 1,482 | 1,422 | 1,359 |
| | Med-Lo | 3.5 | 1,436 | 41 | 1,391 | 43 | 1,387 | 41 | 1,356 | 44 | 1,325 | 45 | 1,279 | 1,239 | 1,180 |
| | Low | 3.0 | 1,240 | 48 | 1,214 | 49 | 1,191 | 50 | 1,157 | 51 | 1,120 | 53 | 1,083 | 1,052 | 1,025 |

[1] at 0.5" ESP

**Notes**

- CFM in chart is without filter(s). Filters do not ship with this furnace, but must be provided by the installer. If the furnace requires two return filters, this chart assumes both filters are installed.
- All furnaces ship as high-speed cooling and medium-speed heating. Installer must adjust blower cooling and heating speed as needed.
- For most jobs, about 400 CFM per ton when cooling is desirable.
- INSTALLATION IS TO BE ADJUSTED TO OBTAIN TEMPERATURE RISE WITHIN THE RANGE SPECIFIED ON THE RATING PLATE.
- This chart is for information only. For satisfactory operation, external static pressure must not exceed value shown on the rating plate.
- The dashed (----) areas indicate a temperature rise not recommended for this model.
- At higher altitudes, a properly derated unit will have approximately the same temperature rise at a particular CFM, while ESP at the CFM will be lower.


BTU/H Output Vs. Temperature Rise Chart
Temperature Rise
100
90
80
70
60
50
40
30
20
10
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 / CFM x 1.08
30
40
50
60
70
80
90
100
110
120
130
140
150
Output BTU/H x 1,000




| | |
|---|---|
| STEADY ON | = NORMAL OPERATION |
| OFF | = CONTROL FAILURE |
| 1 FLASH | = SYSTEM LOCKOUT (RETRIES/RECYCLES EXCEEDED) |
| 2 FLASHES | = PRESSURE SWITCH STUCK CLOSED |
| 3 FLASHES | = PRESSURE SWITCH STUCK OPEN |
| 4 FLASHES | = OPEN HIGH LIMIT |
| 5 FLASHES | = FLAME SENSE WITHOUT GAS VALVE |
| 6 FLASHES | = OPEN ROLLOUT |
| 7 FLASHES | = LOW FLAME SIGNAL |
| RAPID FLASHES | = REVERSED 115 VAC POLARITY/VERIFY GND |

| | |
|---|---|
| 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 | |

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

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. BLOWER SPEEDS MUST BE ADJUSTED BY INSTALLER TO MATCH THE INSTALLATION REQUIREMENTS SO AS TO PROVIDE THE CORRECT HEATING TEMPERATURE RISE AND THE CORRECT COOLING CFM. (SEE SPEC SHEET FOR AIR FLOW CHART)
5. UNIT MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C. AND LOCAL CODES.

0140F00119-C

**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.

| Model | Description |
|---|---|
| LPT-03 [1] | LP Conversion Kit |
| HANG20 | High-Altitude Natural Gas Kit (4500+ ft) |
| AFE18-60A | Fossil Fuel Kit |
| MVK-01 [2] | Masonry Vent Kit |
| MVK-02 [2] | Masonry Vent Kit (for GMS81205D* & GMS81405D* only) |
| TK-400 | Twinning Kit |

[1] White-Rodgers and Honeywell valves

[2] Upflow applications only

## *Downflow Sub-base for:*

| Model | Description | GDS8 0403A*B | GDS8 0603A*B | GDS8 0804B*B | GDS8 1005C*B |
|---|---|---|---|---|---|
| SBT14 | 14" Furnace | √ | √ | | |
| SBT17 | 17½" Furnace | | | √ | |
| SBT21 | 21" Furnace | | | | √ |

## *Minimum Filter Sizes*

| Model # | GMS8 0403A* | GMS8 0603A* | GMS8 0604B* | GMS8 0804B* | GMS8 0805C* | GMS 81005C* | GMS8 1205D* | GMS8 1405D* |
|---|---|---|---|---|---|---|---|---|
| Filter Size (in²) | (1) 16 x 25 (Side) or (1) 14 x 24 (Bottom) | | (1) 16 x 25 (Side or Bottom) | | (1) 16 x 25 (Side or Bottom) [1] | (2) 16 x 25 (Side) or (1) 20 x 25 (Bottom) | (2) 16 x 25 (Side) or (1) 24 x 24 (Bottom) | |

| Model # | GDS8 0403A* | GDS8 0603A* | GDS8 0804B* | GDS8 1005C* |
|---|---|---|---|---|
| Filter Size (in²) | (2) 10 x 20 or (1) 14 x 25 (Top Return) | | (2) 14xX 20 or (1) 16 x 25 (Top Return) | (2) 14 x 20 or (1) 20 x 25 (Top Return) |

| Model # | GHS8 0403A* | GHS8 0604B* | GHS8 0805C* |
|---|---|---|---|
| Filter Size (in²) | (1) 16 x 25 (Side) or (1) 14 x 24 (Bottom) | (1) 16 x 25 (Side or Bottom) | 1- 16 X 25 (Side or 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.