



Air Conditioning & Heating

# GMSS96 / GCSS96

HEATING INPUT: 40,000–120,000 BTU/H

SINGLE-STAGE, MULTI-SPEED

GAS FURNACE

UP TO 96% AFUE



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## Standard Features

- Heavy-duty aluminized-steel tubular heat exchanger
- Stainless-steel secondary heat exchanger
- Single-stage gas valve
- Durable Silicon Nitride igniter
- Quiet single-speed induced draft blower
- Self-diagnostic control board with constant memory fault code history output to a LED
- All models comply with California 40 ng/J Low NOx emissions standard
- For installation in California's South Coast Air Quality Management District (SCAQMD) only: This furnace does not meet the SCAQMD Rule 1111 14 ng/J NOx emission limit, and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the SCAQMD Clean Air Furnace Rebate Program: [www.CleanAirFurnaceRebate.com](http://www.CleanAirFurnaceRebate.com).
- AHRI Certified; ETL Listed

## Cabinet Features

- Designed for multi-position installation — GMSS96: upflow, horizontal left or right GCSS96: downflow, 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 — GMSS96/upflow models only
- Convenient left or right connection for gas and electrical service
- Cabinet air leakage ( $Q_{Leak} \leq 2\%$ )
- 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\*



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](http://www.amana-hac.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.

|                                                                                | G | M | S | S | 96  | 060   | 3  | B  | N  | **    |                                                                 |
|--------------------------------------------------------------------------------|---|---|---|---|-----|-------|----|----|----|-------|-----------------------------------------------------------------|
|                                                                                | 1 | 2 | 3 | 4 | 5,6 | 7,8,9 | 10 | 11 | 12 | 13,14 |                                                                 |
| <b>BRAND</b>                                                                   |   |   |   |   |     |       |    |    |    |       | <b>ENGINEERING</b>                                              |
| G - Goodman® Brand                                                             |   |   |   |   |     |       |    |    |    |       | Major / Minor Revisions<br>* Not used for inventory control.    |
| <b>CONFIGURATION</b>                                                           |   |   |   |   |     |       |    |    |    |       | <b>NOx</b>                                                      |
| M - Upflow/Horizontal<br>C - Downflow/Horizontal                               |   |   |   |   |     |       |    |    |    |       | N - Low NOx                                                     |
| <b>MOTOR</b>                                                                   |   |   |   |   |     |       |    |    |    |       | <b>CABINET WIDTH</b>                                            |
| V - Variable Speed ECM / ComfortNet<br>E - Multi-Speed ECM<br>S - Single Speed |   |   |   |   |     |       |    |    |    |       | A - 14"<br>B - 17½"<br>C - 21"<br>D - 24½"                      |
| <b>GAS VALVE</b>                                                               |   |   |   |   |     |       |    |    |    |       | <b>MAXIMUM CFM</b>                                              |
| M - Modulating<br>C - Two- Stage<br>S - Single Stage                           |   |   |   |   |     |       |    |    |    |       | 2 - 800 CFM<br>3 - 1200 CFM<br>4 - 1600 CFM<br>5 - 2000 CFM     |
| <b>AFUE</b>                                                                    |   |   |   |   |     |       |    |    |    |       | <b>MBTU/h</b>                                                   |
| 97 - 97% AFUE<br>92 - 92% AFUE                                                 |   |   |   |   |     |       |    |    |    |       | 040 - 40,000 BTU/h<br>060 - 60,000 BTU/h<br>120 - 120,000 BTU/h |

|                                             | GMSS96<br>0403ANA                                   | GMSS96<br>0402BNA                  | GMSS96<br>0603BNA                  | GMSS96<br>0803BNA                  | GMSS96<br>0804CNA                  | GMSS96<br>0805CNA                                   | GMSS96<br>1005CNA                                   | GMSS96<br>1205DNA                                     |
|---------------------------------------------|-----------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|
| <b>HEATING DATA</b>                         |                                                     |                                    |                                    |                                    |                                    |                                                     |                                                     |                                                       |
| High Fire Input <sup>1</sup>                | 40,000                                              | 40,000                             | 60,000                             | 80,000                             | 80,000                             | 80,000                                              | 100,000                                             | 120,000                                               |
| High Fire Output <sup>1</sup>               | 38,400                                              | 38,400                             | 57,600                             | 76,800                             | 76,800                             | 76,800                                              | 96,000                                              | 115,200                                               |
| AFUE <sup>2</sup>                           | 96                                                  | 96                                 | 96                                 | 96                                 | 96                                 | 96                                                  | 96                                                  | 96                                                    |
| Temperature Rise Range (°F)                 | 25 - 55                                             | 25 - 55                            | 35 - 65                            | 35 - 65                            | 25 - 55                            | 25 - 55                                             | 30 - 60                                             | 35 - 65                                               |
| Vent Diameter <sup>3</sup>                  | 2" - 3"                                             | 2" - 3"                            | 2" - 3"                            | 2" - 3"                            | 2" - 3"                            | 2" - 3"                                             | 2" - 3"                                             | 3"                                                    |
| No. of Burners                              | 2                                                   | 2                                  | 3                                  | 4                                  | 4                                  | 4                                                   | 5                                                   | 6                                                     |
| <b>CIRCULATOR BLOWER</b>                    |                                                     |                                    |                                    |                                    |                                    |                                                     |                                                     |                                                       |
| Available AC @ 0.5" ESP                     | 1.5 - 3                                             | 1.5 - 3                            | 1.5 - 3                            | 1.5 - 3                            | 1.5 - 4                            | 3 - 5                                               | 3 - 5                                               | 3 - 5                                                 |
| Size (D x W)                                | 11" x 6"                                            | 10" x 8"                           | 10" x 8"                           | 10" x 8"                           | 10" x 10"                          | 11" x 10"                                           | 11" x 10"                                           | 11" x 11"                                             |
| Horsepower @ 1075 RPM                       | $\frac{1}{3}$                                       | $\frac{1}{3}$                      | $\frac{1}{3}$                      | $\frac{1}{2}$                      | $\frac{1}{2}$                      | $\frac{3}{4}$                                       | $\frac{3}{4}$                                       | $\frac{3}{4}$                                         |
| Speed                                       | 4                                                   | 4                                  | 4                                  | 4                                  | 4                                  | 4                                                   | 4                                                   | 4                                                     |
| <b>FILTER SIZE (IN<sup>2</sup>) (QTV)</b>   | (1) 16 x 25<br>(side) or<br>(1) 14 x 25<br>(bottom) | (1) 16 x 25<br>(side or<br>bottom) | (1) 16 x 25<br>(side or<br>bottom) | (1) 16 x 25<br>(side or<br>bottom) | (1) 16 x 25<br>(side or<br>bottom) | (1) 20 x 25<br>(bottom)<br>or (2) 16 x 25<br>(side) | (1) 20 x 25<br>(bottom)<br>or (2) 16 x 25<br>(side) | (1) 20 x 25 (bot-<br>tom)<br>or (2) 16 x 25<br>(side) |
| <b>ELECTRICAL DATA</b>                      |                                                     |                                    |                                    |                                    |                                    |                                                     |                                                     |                                                       |
| Min. Circuit Ampacity <sup>4</sup>          | 9.3                                                 | 9.6                                | 9.6                                | 12.8                               | 11.7                               | 13.7                                                | 13.7                                                | 13.7                                                  |
| Max. Overcurrent Device (amps) <sup>5</sup> | 15                                                  | 15                                 | 15                                 | 15                                 | 15                                 | 15                                                  | 15                                                  | 15                                                    |
| <b>SHIPPING WEIGHT (LBS)</b>                | 106                                                 | 111                                | 114                                | 116                                | 139                                | 140                                                 | 142                                                 | 154                                                   |

<sup>1</sup> Natural Gas BTU/h<sup>2</sup> DOE AFUE based upon Isolated Combustion System (ICS)<sup>3</sup> 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.<sup>4</sup> 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.<sup>5</sup> 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  $\frac{1}{2}$ " 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.

|                                             | GCSS96<br>0402BNA | GCSS96<br>0603BNA | GCSS96<br>0804CNA | GCSS96<br>1005CNA | GCSS96<br>1205DNA |
|---------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| <b>HEATING DATA</b>                         |                   |                   |                   |                   |                   |
| High Fire Input <sup>1</sup>                | 40,000            | 60,000            | 80,000            | 100,000           | 120,000           |
| High Fire Output <sup>1</sup>               | 38,400            | 57,600            | 76,800            | 95,000            | 114,000           |
| AFUE <sup>2</sup>                           | 96                | 96                | 96                | 95                | 95                |
| Temperature Rise Range (°F)                 | 25 - 55           | 35 - 65           | 35 - 65           | 40 - 70           | 45 - 75           |
| Vent Diameter <sup>3</sup>                  | 2" - 3"           | 2" - 3"           | 2" - 3"           | 2" - 3"           | 3"                |
| No. of Burners                              | 2                 | 3                 | 4                 | 5                 | 6                 |
| <b>CIRCULATOR BLOWER</b>                    |                   |                   |                   |                   |                   |
| Available AC @ 0.5" ESP                     | 1.5 - 3           | 1.5 - 3           | 2.5 - 4           | 3 - 5             | 3 - 5             |
| Size (D x W)                                | 10" x 8"          | 10" x 8"          | 10" x 10"         | 11" x 10"         | 11" x 11"         |
| Horsepower @ 1075 RPM                       | $\frac{1}{3}$     | $\frac{1}{3}$     | $\frac{1}{2}$     | $\frac{3}{4}$     | $\frac{3}{4}$     |
| Speed                                       | 4                 | 4                 | 4                 | 4                 | 4                 |
| <b>ELECTRICAL DATA</b>                      |                   |                   |                   |                   |                   |
| Min. Circuit Ampacity <sup>4</sup>          | 9.6               | 9.6               | 11.7              | 13.7              | 13.7              |
| Max. Overcurrent Device (amps) <sup>5</sup> | 15                | 15                | 15                | 15                | 15                |
| <b>SHIPPING WEIGHT (LBS)</b>                | 111               | 114               | 139               | 142               | 154               |

<sup>1</sup> Natural Gas BTU/h

<sup>2</sup> DOE AFUE based upon Isolated Combustion System (ICS)

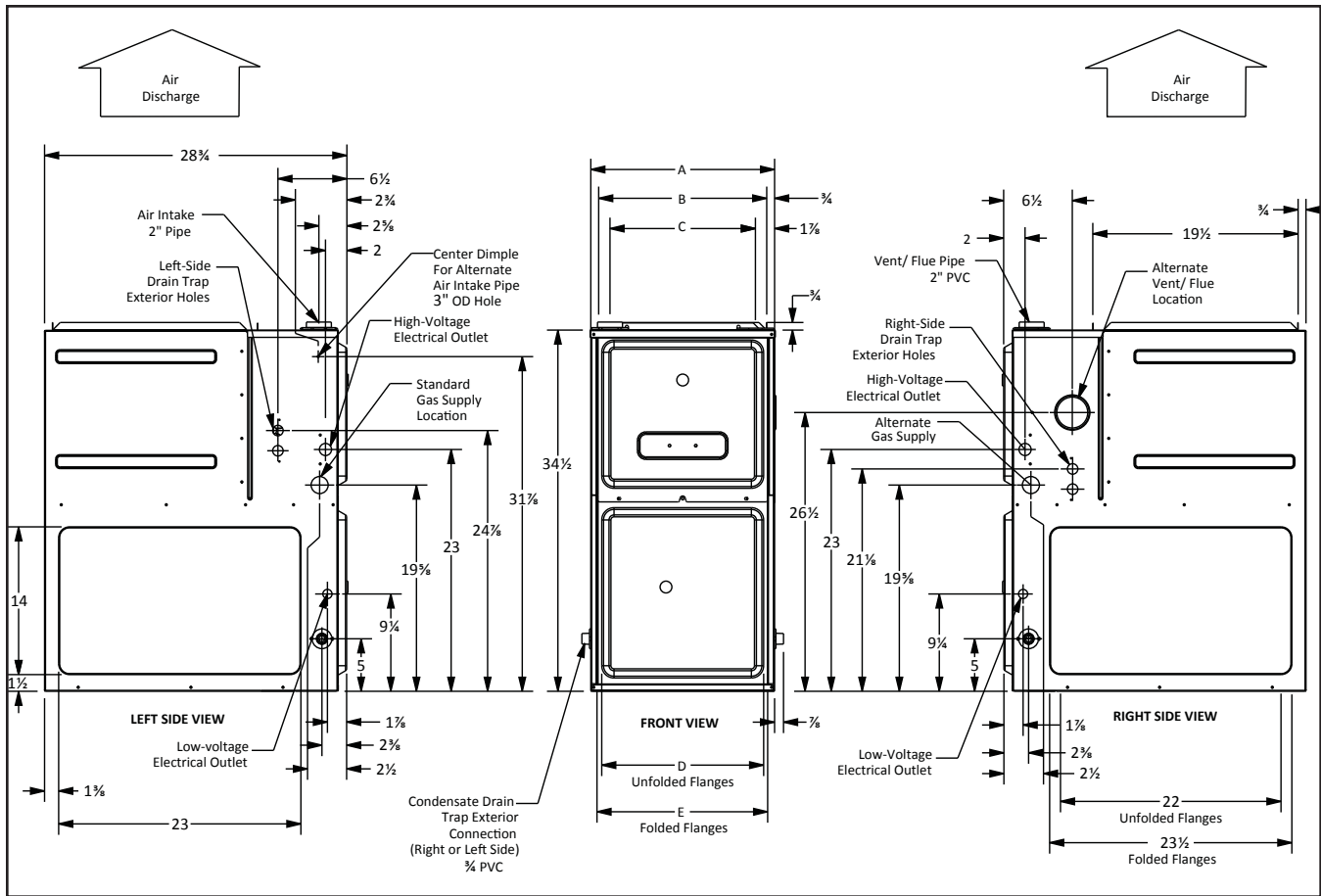
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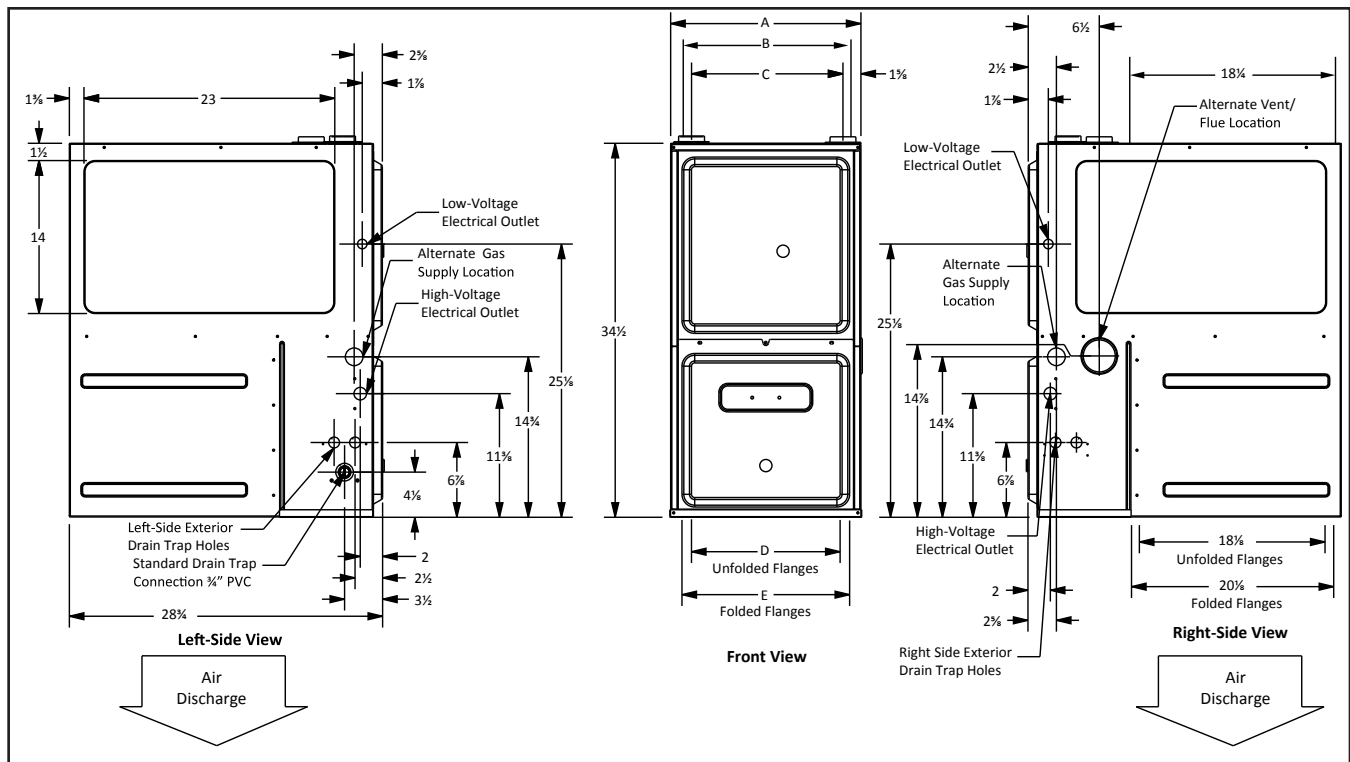
| MODEL         | W       | D       | H       |
|---------------|---------|---------|---------|
| GMSS960403ANA | 14"     | 28 7/8" | 34 1/2" |
| GMSS960402BNA | 17 1/2" | 28 7/8" | 34 1/2" |
| GMSS960603BNA | 17 1/2" | 28 7/8" | 34 1/2" |
| GMSS960803BNA | 17 1/2" | 28 7/8" | 34 1/2" |
| GMSS960804CNA | 21"     | 28 7/8" | 34 1/2" |
| GMSS960805CNA | 21"     | 28 7/8" | 34 1/2" |
| GMSS961005CNA | 21"     | 28 7/8" | 34 1/2" |
| GMSS961205DNA | 24 1/2" | 28 7/8" | 34 1/2" |

| AIR DISCHARGE |         |         | AIR RETURN |         |
|---------------|---------|---------|------------|---------|
| A             | B       | C       | D          | E       |
| 14"           | 12 1/2" | 10 1/2" | 8 5/8"     | 10 1/8" |
| 17 1/2"       | 16"     | 13 3/8" | 12 1/8"    | 13 3/8" |
| 17 1/2"       | 16"     | 13 3/8" | 12 1/8"    | 13 3/8" |
| 17 1/2"       | 16"     | 13 3/8" | 12 1/8"    | 13 3/8" |
| 21"           | 19 1/2" | 17 7/8" | 16"        | 17 1/2" |
| 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 7/8" | 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         | AIR RETURN |      |      | AIR DISCHARGE |      |
|---------------|------------|------|------|---------------|------|
|               | A          | B    | C    | D             | E    |
| GCSS960402BNA | 17½"       | 14¾" | 14"  | 14½"          | 16"  |
| GCSS960603BNA | 17½"       | 14¾" | 14"  | 14½"          | 16"  |
| GCSS960804CNA | 21"        | 18¾" | 17½" | 18"           | 19½" |
| GCSS961005CNA | 21"        | 18¾" | 17½" | 18"           | 19½" |
| GCSS961205DNA | 24½"       | 21¾" | 21"  | 21½"          | 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.

## (CFM &amp; TEMPERATURE RISE VS. EXTERNAL STATIC PRESSURE)

| MODEL             | MOTOR SPEED | TONS AC <sup>1</sup> | 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   |
| GMSS96<br>0403ANA | High        | 3                    | 1207                                            | 29   | 1153  | 30   | 1118  | 31   | 1067  | 33   | 1016  | 33   | 960   | 897   | 835   |
|                   | Med         | 2.5                  | 1047                                            | 33   | 1019  | 34   | 987   | 35   | 951   | 36   | 908   | 38   | 862   | 813   | 753   |
|                   | Med-Lo      | 2                    | 900                                             | 39   | 877   | 40   | 842   | 41   | 814   | 42   | 774   | 45   | 739   | 687   | 634   |
|                   | Low         | 1.5                  | 802                                             | 43   | 780   | 45   | 757   | 46   | 721   | 48   | 692   | 50   | 648   | 607   | 570   |
| GMSS96<br>0402BNA | High        | 3                    | 1,478                                           | N/A  | 1,418 | 25   | 1,354 | 26   | 1,290 | 28   | 1,208 | 29   | 1,129 | 1,040 | 930   |
|                   | Med         | 2.5                  | 1,299                                           | 27   | 1,265 | 28   | 1,225 | 29   | 1,167 | 30   | 1,112 | 32   | 1,033 | 949   | 841   |
|                   | Med-Lo      | 2                    | 1,081                                           | 33   | 1,064 | 33   | 1,039 | 34   | 997   | 36   | 945   | 38   | 886   | 819   | 722   |
|                   | Low         | 1.5                  | 966                                             | 37   | 951   | 37   | 925   | 38   | 892   | 40   | 861   | 41   | 808   | 750   | 666   |
| GMSS96<br>0603BNA | High        | 3                    | 1,432                                           | 37   | 1,374 | 39   | 1,319 | 40   | 1,237 | 43   | 1,157 | 46   | 1,063 | 958   | 854   |
|                   | Med         | 2.5                  | 1,289                                           | 41   | 1,250 | 43   | 1,204 | 44   | 1,142 | 47   | 1,066 | 50   | 981   | 897   | 789   |
|                   | Med-Lo      | 2                    | 1,080                                           | 49   | 1,057 | 50   | 1,022 | 52   | 980   | 54   | 926   | 58   | 861   | 785   | 700   |
|                   | Low         | 1.5                  | 967                                             | 55   | 945   | 56   | 919   | 58   | 879   | 61   | 844   | 63   | 789   | 712   | 632   |
| GMSS96<br>0803BNA | High        | 3                    | 1,620                                           | 44   | 1,561 | 46   | 1,478 | 48   | 1,401 | 51   | 1,322 | 54   | 1,239 | 1,150 | 1052  |
|                   | Med         | 2.5                  | 1,538                                           | 46   | 1,476 | 48   | 1,401 | 51   | 1,332 | 53   | 1,250 | 57   | 1,166 | 1,083 | 992   |
|                   | Med-Lo      | 2                    | 1,446                                           | 49   | 1,388 | 51   | 1,333 | 53   | 1,258 | 57   | 1,197 | 59   | 1,112 | 1,037 | 937   |
|                   | Low         | 1.5                  | 1,246                                           | 57   | 1,217 | 58   | 1,165 | 61   | 1,128 | 63   | 1,067 | N/A  | 994   | 938   | 840   |
| GMSS96<br>0804CNA | High        | 4                    | 1,795                                           | 40   | 1,720 | 41   | 1,642 | 43   | 1,555 | 46   | 1,467 | 48   | 1,385 | 1,283 | 1,170 |
|                   | Med         | 3.5                  | 1,691                                           | 42   | 1,622 | 44   | 1,563 | 45   | 1,486 | 48   | 1,394 | 51   | 1,325 | 1,222 | 1,125 |
|                   | Med-Lo      | 3                    | 1,488                                           | 48   | 1,445 | 49   | 1,403 | 51   | 1,338 | 53   | 1,260 | N/A  | 1,200 | 1,114 | 1,014 |
|                   | Low         | 2.5                  | 1,244                                           | N/A  | 1,222 | N/A  | 1,198 | N/A  | 1,157 | N/A  | 1,119 | N/A  | 1,062 | 986   | 905   |
| GMSS96<br>0805CNA | High        | 5                    | 2,233                                           | 32   | 2,159 | 33   | 2,086 | 34   | 2,024 | 35   | 1,941 | 37   | 1,850 | 1,753 | 1,651 |
|                   | Med         | 4                    | 1,820                                           | 39   | 1,778 | 40   | 1,742 | 41   | 1,695 | 42   | 1,638 | 43   | 1,551 | 1,485 | 1,384 |
|                   | Med-Lo      | 3.5                  | 1,571                                           | 45   | 1,535 | 46   | 1,497 | 48   | 1,446 | 49   | 1,402 | 51   | 1,338 | 1,280 | 1,204 |
|                   | Low         | 3                    | 1,361                                           | 52   | 1,333 | 53   | 1,290 | 55   | 1,255 | N/A  | 1,208 | N/A  | 1,171 | 1,104 | 1,051 |
| GMSS96<br>1005CNA | High        | 5                    | 2,157                                           | 41   | 2,087 | 43   | 2,028 | 44   | 1,953 | 46   | 1,858 | 48   | 1,775 | 1,661 | 1,558 |
|                   | Med         | 4                    | 1,907                                           | 47   | 1,852 | 48   | 1,800 | 49   | 1,738 | 51   | 1,675 | 53   | 1,605 | 1,514 | 1,410 |
|                   | Med-Lo      | 3.5                  | 1,608                                           | 55   | 1,580 | 56   | 1,493 | 60   | 1,501 | 59   | 1,440 | 62   | 1,367 | 1,296 | 1,219 |
|                   | Low         | 3                    | 1,390                                           | N/A  | 1,344 | N/A  | 1,326 | N/A  | 1,268 | N/A  | 1,227 | N/A  | 1,194 | 1,132 | 1,071 |
| GMSS96<br>1205DNA | High        | 5                    | 2,204                                           | 48   | 2,144 | 50   | 2,080 | 51   | 1,991 | 54   | 1,914 | 56   | 1,817 | 1,724 | 1,595 |
|                   | Med         | 4                    | 1,938                                           | 55   | 1,914 | 56   | 1,849 | 58   | 1,778 | 60   | 1,713 | 62   | 1,645 | 1,548 | 1,454 |
|                   | Med-Lo      | 3.5                  | 1,651                                           | 65   | 1,624 | 66   | 1,574 | 68   | 1,529 | 70   | 1,475 | 72   | 1,409 | 1,331 | 1,236 |
|                   | Low         | 3                    | 1,427                                           | 75   | 1,382 | N/A  | 1,345 | N/A  | 1,311 | N/A  | 1,272 | N/A  | 1,215 | 1,159 | 1,066 |

<sup>1</sup> 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 & 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 should not exceed value shown on the rating plate. The shaded area indicates ranges in excess of maximum static pressure allowed when heating.
- The above chart is for U.S. furnaces installed at 0-2000 feet. 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.

## MINIMUM FILTER SIZES

|                                      | GMSS96<br>0403ANA                               | GMSS96<br>0402BNA            | GMSS96<br>0603BNA | GMSS96<br>0803BNA | GMSS96<br>0804CNA | GMSS96<br>0805CNA                          | GMSS96<br>1005CNA | GMSS96<br>1205DNA |
|--------------------------------------|-------------------------------------------------|------------------------------|-------------------|-------------------|-------------------|--------------------------------------------|-------------------|-------------------|
| Filter Size (in <sup>2</sup> ) (Qty) | (1) 16 x 25 (side)<br>or (1) 14 x 25<br>bottom) | (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.

## (CFM &amp; TEMPERATURE RISE VS. EXTERNAL STATIC PRESSURE)

| MODEL             | MOTOR SPEED | TONS AC <sup>1</sup> | 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   |
| GCSS96<br>0402BNA | High        | 3                    | 1,425                                           | 25   | 1,345 | 26   | 1,271 | 28   | 1,198 | 30   | 1,138 | 31   | 1,051 | 945   | 864   |
|                   | Med         | 2.5                  | 1,254                                           | 28   | 1,218 | 29   | 1,155 | 31   | 1,107 | 32   | 1,040 | 34   | 952   | 869   | 761   |
|                   | Med-Lo      | 2                    | 1,082                                           | 33   | 1,051 | 34   | 1,007 | 35   | 965   | 37   | 910   | 39   | 841   | 770   | 660   |
|                   | Low         | 1.5                  | 889                                             | 40   | 872   | 41   | 829   | 43   | 815   | 44   | 765   | 46   | 711   | 659   | 585   |
| GCSS96<br>0603BNA | High        | 3                    | 1,348                                           | 40   | 1,283 | 42   | 1,217 | 44   | 1,151 | 46   | 1,086 | 49   | 1,014 | 931   | 844   |
|                   | Med         | 2.5                  | 1,188                                           | 45   | 1,139 | 47   | 1,098 | 49   | 1,039 | 51   | 986   | 54   | 916   | 834   | 758   |
|                   | Med-Lo      | 2                    | 1,015                                           | 53   | 985   | 54   | 945   | 56   | 909   | 59   | 858   | 62   | 804   | 733   | 655   |
|                   | Low         | 1.5                  | 821                                             | 65   | 814   | N/A  | 788   | N/A  | 765   | N/A  | 720   | N/A  | 677   | 640   | 564   |
| GCSS96<br>0804CNA | High        | 4                    | 1,736                                           | 41   | 1,613 | 44   | 1,578 | 45   | 1,498 | 47   | 1,409 | 50   | 1,314 | 1,226 | 1,119 |
|                   | Med         | 3.5                  | 1,657                                           | 43   | 1,583 | 45   | 1,501 | 47   | 1,441 | 49   | 1,366 | 52   | 1,282 | 1,173 | 1,077 |
|                   | Med-Lo      | 3                    | 1,581                                           | 45   | 1,510 | 47   | 1,443 | 49   | 1,371 | 52   | 1,280 | 56   | 1,199 | 1,110 | 990   |
|                   | Low         | 2.5                  | 1,369                                           | 52   | 1,313 | 54   | 1,278 | 56   | 1,225 | 58   | 1,147 | 62   | 1,071 | 990   | 888   |
| GCSS96<br>1005CNA | High        | 5                    | 2,018                                           | 44   | 1,953 | 46   | 1,877 | 47   | 1,788 | 50   | 1,735 | 51   | 1,659 | 1,556 | 1,448 |
|                   | Med         | 4                    | 1,826                                           | 49   | 1,749 | 51   | 1,660 | 54   | 1,566 | 57   | 1,496 | 59   | 1,415 | 1,335 | 1,220 |
|                   | Med-Lo      | 3.5                  | 1,618                                           | 55   | 1,539 | 58   | 1,476 | 60   | 1,406 | 63   | 1,340 | 66   | 1,275 | 1,194 | 1,093 |
|                   | Low         | 3                    | 1,402                                           | 63   | 1,354 | 66   | 1,296 | 69   | 1,242 | N/A  | 1,173 | N/A  | 1,108 | 1,042 | 965   |
| GCSS96<br>1205DNA | High        | 5                    | 2,123                                           | 50   | 2,053 | 52   | 2,000 | 53   | 1,916 | 56   | 1,832 | 58   | 1,739 | 1,646 | 1,561 |
|                   | Med         | 4                    | 1,912                                           | 56   | 1,844 | 58   | 1,770 | 60   | 1,708 | 62   | 1,619 | 66   | 1,543 | 1,436 | 1,349 |
|                   | Med-Lo      | 3.5                  | 1,684                                           | 63   | 1,622 | 66   | 1,578 | 68   | 1,503 | 71   | 1,442 | 74   | 1,374 | 1,302 | 1,204 |
|                   | Low         | 3                    | 1,493                                           | 71   | 1,436 | 74   | 1,371 | N/A  | 1,319 | N/A  | 1,264 | N/A  | 1,208 | 1,153 | 1,061 |

<sup>1</sup> at 0.5" ESP

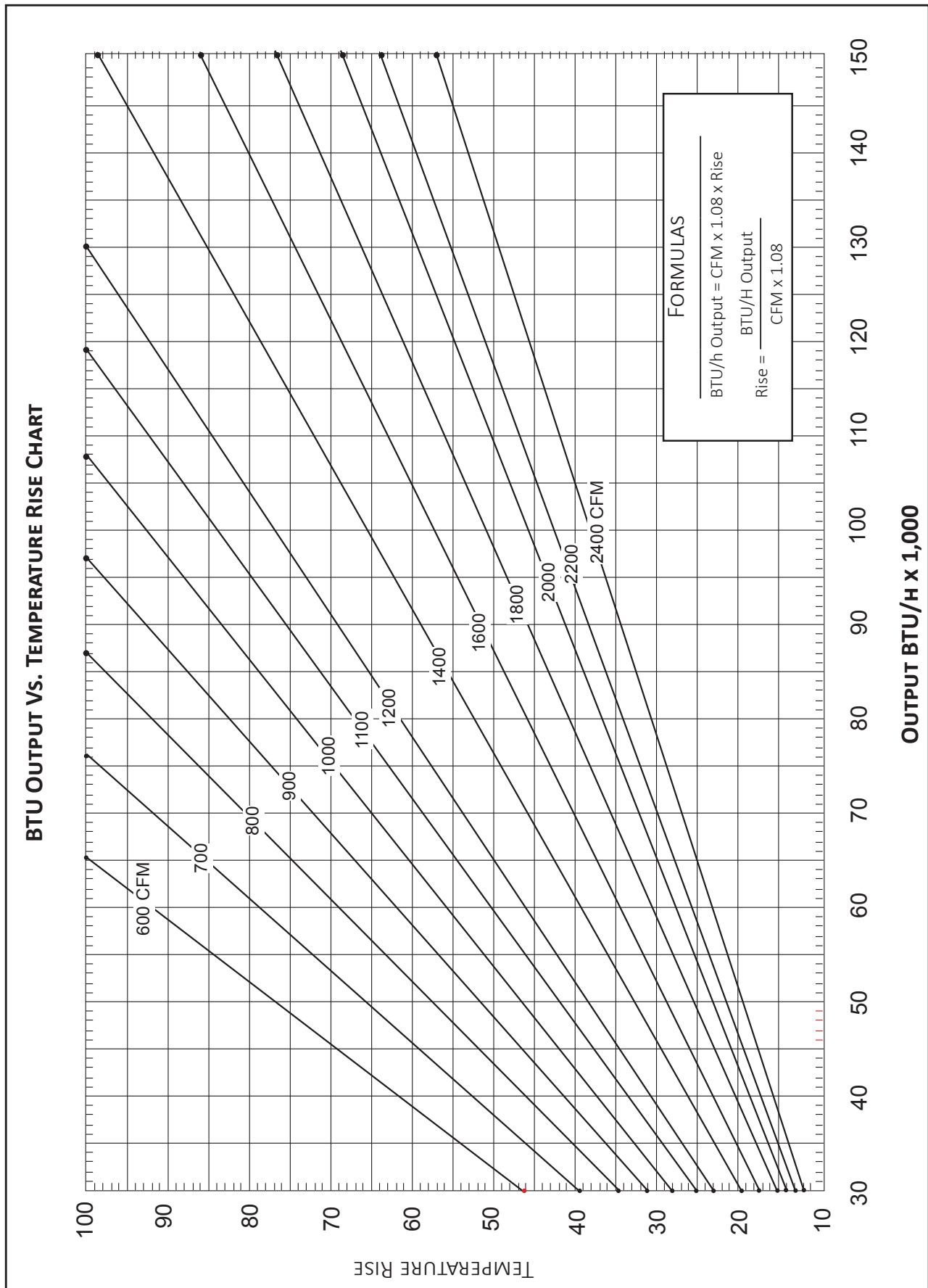
## NOTES

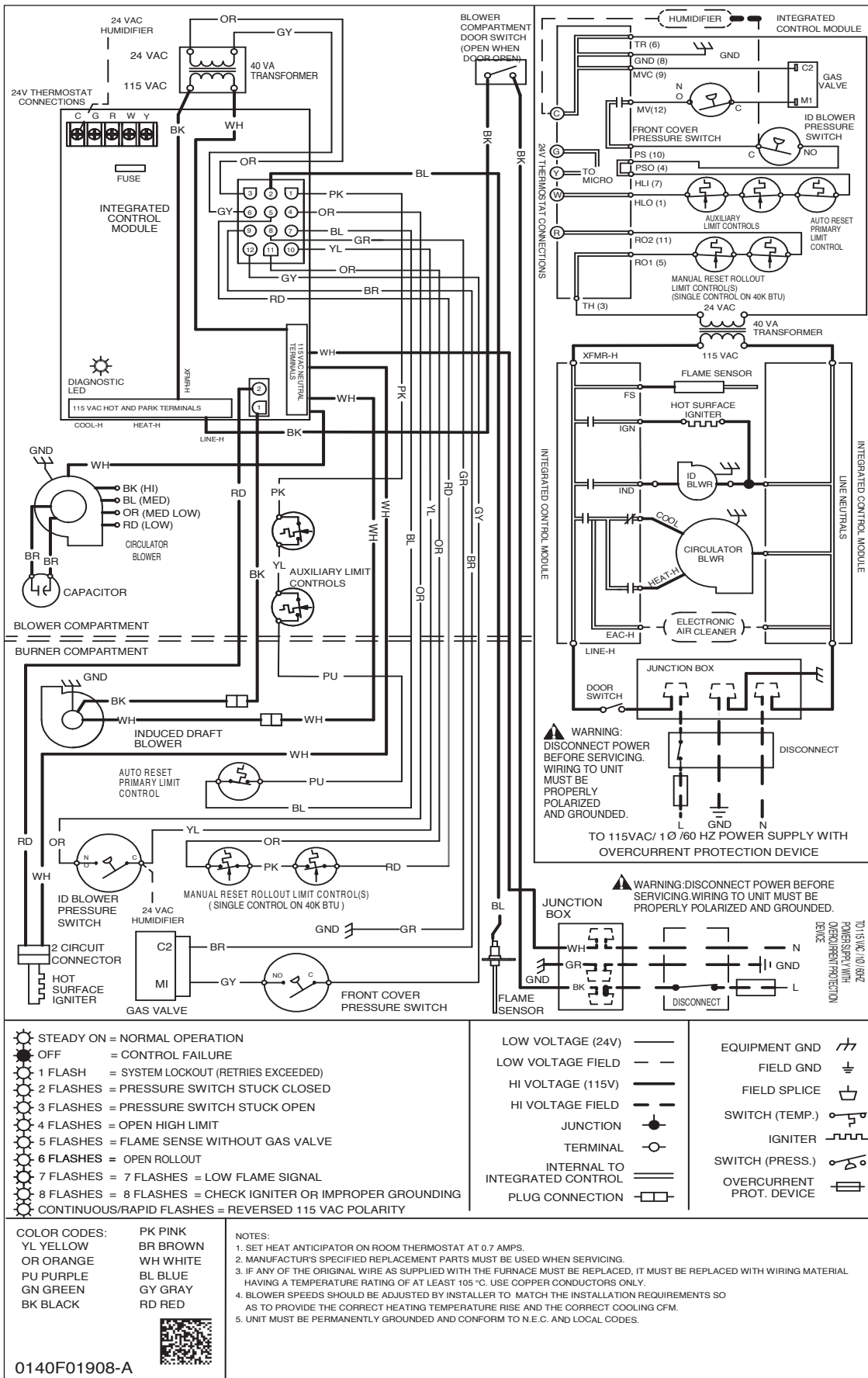
- CFM in chart is without filter(s). Filters do not ship with this furnace, but must be provided by the installer. If the furnace requires two return filters, this chart assumes both filters are installed.
- All furnaces ship as high-speed cooling and medium-speed heating. Installer must adjust blower cooling & 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 should not exceed value shown on the rating plate. The shaded area indicates ranges in excess of maximum static pressure allowed when heating.
- The above chart is for U.S. furnaces installed at 0-2000 feet. 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.

## MINIMUM FILTER SIZES

|                                      | GCSS96<br>0402BNA                       | GCSS96<br>0603BNA | GCSS96<br>0804CNA | GCSS96<br>1005CNA                                | GCSS96<br>1205DNA |
|--------------------------------------|-----------------------------------------|-------------------|-------------------|--------------------------------------------------|-------------------|
| Filter Size (in <sup>2</sup> ) (Qty) | (2) 10 x 20 or (1) 16 x 25 (top return) |                   |                   | (1) 14 x 20 (bottom) or (1) 20 x 25 (top return) |                   |

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





**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                                           | GMSS96<br>0403ANA | GMSS96<br>0402BNA | GMSS96<br>0603BNA | GMSS96<br>0803BNA | GMSS96<br>0804CNA | GMSS96<br>0805CNA | GMSS96<br>1005CNA | GMSS96<br>1205DNA |
|-------------|-------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| CVENT-2     | Concentric Vent Kit (2")                              | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ---               |
| CVENT-3     | 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              | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 |
| EFR02       | External Filter Rack with 16"x25"<br>Permanent Filter | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ---               | ---               | ---               |
| 0170K00000S | Flush Mount Vent Kit - 3" or 2"                       | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 |
| 0170K00001S | Flush Mount Vent Kit - 2"                             | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ---               |
| AFE18-60A   | Fossil Fuel (Dual Fuel) Kit                           | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 |
| HASFK       | High-Altitude Natural Gas Kit                         | TBD               | HASFK-4           | HASFK-4           | HASFK-4           | HASFK-4           | HASFK-4           | HASFK-4           | HASFK-4           |
| HASFK       | High-Altitude LP Gas Kit                              | TBD               | HASFK-4,5,6       | HASFK-5,6         | HASFK-5,6         | N/A               | N/A               | N/A               | N/A               |
| LPLP03      | Low LP Gas Pressure Switch                            | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 |
| LPM-07      | LP Conversion Kits                                    | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 |
| TK-400      | Twinning Kit                                          | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 |

| MODEL       | DESCRIPTION                                           | GCSS96<br>0402BNA | GCSS96<br>0603BNA | GCSS96<br>0804CNA | GCSS96<br>1005CNA | GCSS96<br>1205DNA |
|-------------|-------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| CVENT-2     | Concentric Vent Kit (2")                              | ✓                 | ✓                 | ✓                 | ✓                 | ---               |
| CVENT-3     | 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              | ---               | ---               | ---               | ---               | ---               |
| EFR02       | External Filter Rack with 16"x25"<br>Permanent Filter | ✓                 | ✓                 | ✓                 | ---               | ---               |
| 0170K00000S | Flush Mount Vent Kit - 3" or 2"                       | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 |
| 0170K00001S | Flush Mount Vent Kit - 2"                             | ✓                 | ✓                 | ✓                 | ✓                 | ---               |
| AFE18-60A   | Fossil Fuel (Dual Fuel) Kit                           | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 |
| HASFK       | High-Altitude Natural Gas Kit                         | HASFK-4           | HASFK-4           | HASFK-4           | HASFK-4           | HASFK-4           |
| HASFK       | High-Altitude LP Gas Kit                              | HASFK-5           | HASFK-5           | HASFK-5           | HASFK-4           | HASFK-4           |
| LPLP03      | Low LP Gas Pressure Switch                            | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 |
| LPM-07      | LP Conversion Kits                                    | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 |
| TK-400      | Twinning Kit                                          | ✓                 | ✓                 | ✓                 | ✓                 | ✓                 |

