



Air Conditioning & Heating

GME8

MULTI-POSITION, MULTI-SPEED GAS FURNACE

80% AFUE

HEATING INPUT: 60,000–100,000 BTU/H



Standard Features

- Dual-diameter tubular heat exchanger
- Two-stage gas valve that allows installer to turn on two-stage operation with the flip of a dipswitch
- Energy-efficient circulator motor (EEM)
- 115V Silicon Nitride igniter designed for long igniter life
- Furnace control board with self-diagnostics, color-coded low-voltage terminals, and provisions for electronic air cleaner and 24-volt humidifiers
- Control board stores the last five diagnostic codes in memory; simple push-button activation outputs the fault history to a flashing red LED
- Low constant fan allows homeowner to activate the low heat speed to efficiently circulate air throughout the home.
- Self-adjusting feature automatically adjusts furnace to high- or low-stage operation based on outside temperature without an outdoor temperature sensor
- Certain models available with low NOx emissions

Cabinet Features

- Fully insulated, heavy-gauge steel cabinet with durable baked-enamel finish
- Foil-faced insulation lines the heat exchanger
- Designed for multi-position installation: upflow, horizontal left or right
- Removable bottom for side- or bottom-return applications
- Convenient left or right connection for gas/electric service
- Top gas connection on most models
- 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 | E | 8 | 060 | 3 | B | * | * | |
|--------------------------|--|---|---|---------------|-------|--------------|---|----|---|--|
| | 1 | 2 | 3 | 4 | 5,6,7 | 8 | 9 | 10 | 11 | |
| Brand | Goodman® Brand or Distinctions™ | | | | | | | | Revisions | |
| | | | | | | | | | A Initial Release B 1st Revision C 2nd Revision | |
| 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 | V Two-Stage/Variable-speed H Two-Stage/Multi-speed S Single-Stage/Multi-speed | | | | | | | | Cabinet Width | |
| | | | | | | | | | A 14" B 17½" C 21" D 24½" | |
| AFUE | 95 95% 9 90%+ 8 80% | | | | | | | | Maximum CFM @ 0.5" ESP | |
| | | | | | | | | | 3 1,200 4 1,600 5 2,000 | |
| | | | | MBTU/h | | | | | | |
| | | | | 040: 40,000 | | 100: 100,000 | | | | |
| | | | | 060: 60,000 | | 120: 120,000 | | | | |
| | | | | 080: 80,000 | | | | | | |



SPECIFICATIONS

| | GME8 0603B*B | GME8 0805C*B | GME8 0805D*A | GME8 1005C*B |
|--|-----------------|-----------------|-----------------|-----------------|
| PERFORMANCE DATA | | | | |
| Input ¹ | 60,000 | 80,000 | 80,000 | 100,000 |
| Output ¹ | 48,000 | 64,000 | 64,000 | 80,000 |
| LP Output ¹ | 48,000 | 64,000 | 64,000 | 80,000 |
| AFUE ² | 80 | 80 | 80 | 80 |
| Tons AC @ 0.5" ESP | 3 | 5 | 5 | 5 |
| Temperature Rise Range (°F) | 20 - 50 | 35 - 65 | 30 - 60 | 35 - 65 |
| CIRCULATOR BLOWER | | | | |
| Size (D x W) | 10 X 8 | 10 X 10 | 10 X 10 | 10 X 10 |
| HP | 1/2 | 1 | 1 | 1 |
| Speed | 5 | 5 | 5 | 5 |
| Vent Diameter ³ | 4 | 4 | 4 | 4 |
| No. of Burners | 3 | 4 | 4 | 5 |
| Disposable Filter (in ²) | 290 | 480 | 480 | 480 |
| ELECTRICAL DATA | | | | |
| Min. Circuit Ampacity ⁴ | 8.2 | 14.8 | 14.8 | 14.8 |
| Max. Overcurrent Protection ⁵ | 15 | 15 | 15 | 15 |
| SHIP WEIGHT (LBS) | | | | |
| | 98 | 116 | 123 | 120 |

¹ Low-fire rate is 75% of high-fire rate.

² DOE AFUE based upon Isolated Combustion System (ICS).

³ Vent diameter 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).

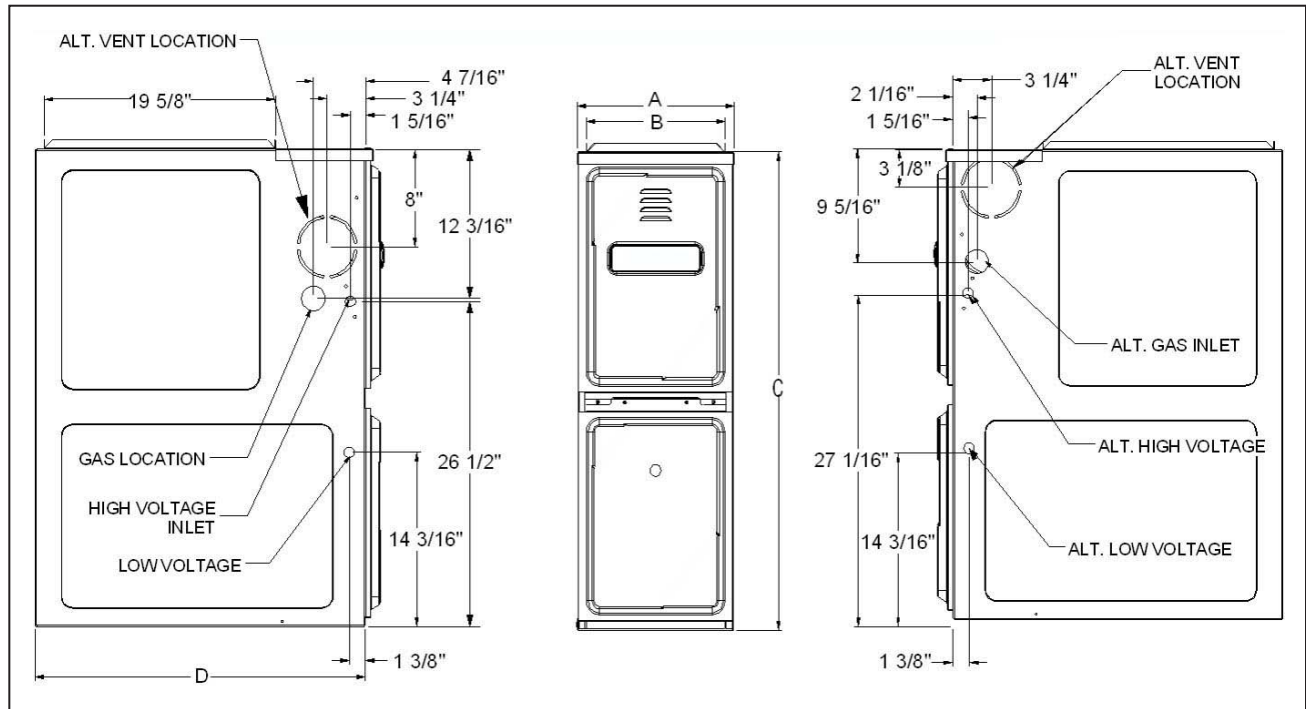
⁴ Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower amps. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

⁵ 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: It is required to size overcurrent protection device and wires properly and make electrical connections in accordance with the National Electrical Code and/or all existing local codes.

DIMENSIONS



| MODEL | A | B |
|-------------|------|------|
| GME80603B** | 17½" | 16" |
| GME80805C** | 21" | 19½" |
| GME80805D** | 24½" | 23" |
| GME81005C** | 21" | 19½" |

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

| SIDES | REAR | FRONT | BOTTOM | VENT | | TOP |
|-------|------|-------|--------|------|---|-----|
| | | | | SW | B | |
| 1 | 0 | 3 | C | 6 | 1 | 1 |

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

NOTES:

- For servicing or cleaning, a 24" front clearance is recommended.
- 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.
- Refer to the appropriate USA and Canadian codes:
 - ◊ In the USA: the National Fuel Gas Code NFPA 54 / ANSI Z223.1
 - ◊ In Canada: the Canada National Standard of Canada, CAN/CSA B149.1 and CAN/CSA B142.2

AIRFLOW DATA

(CFM & TEMPERATURE RISE VS. EXTERNAL STATIC PRESSURE)

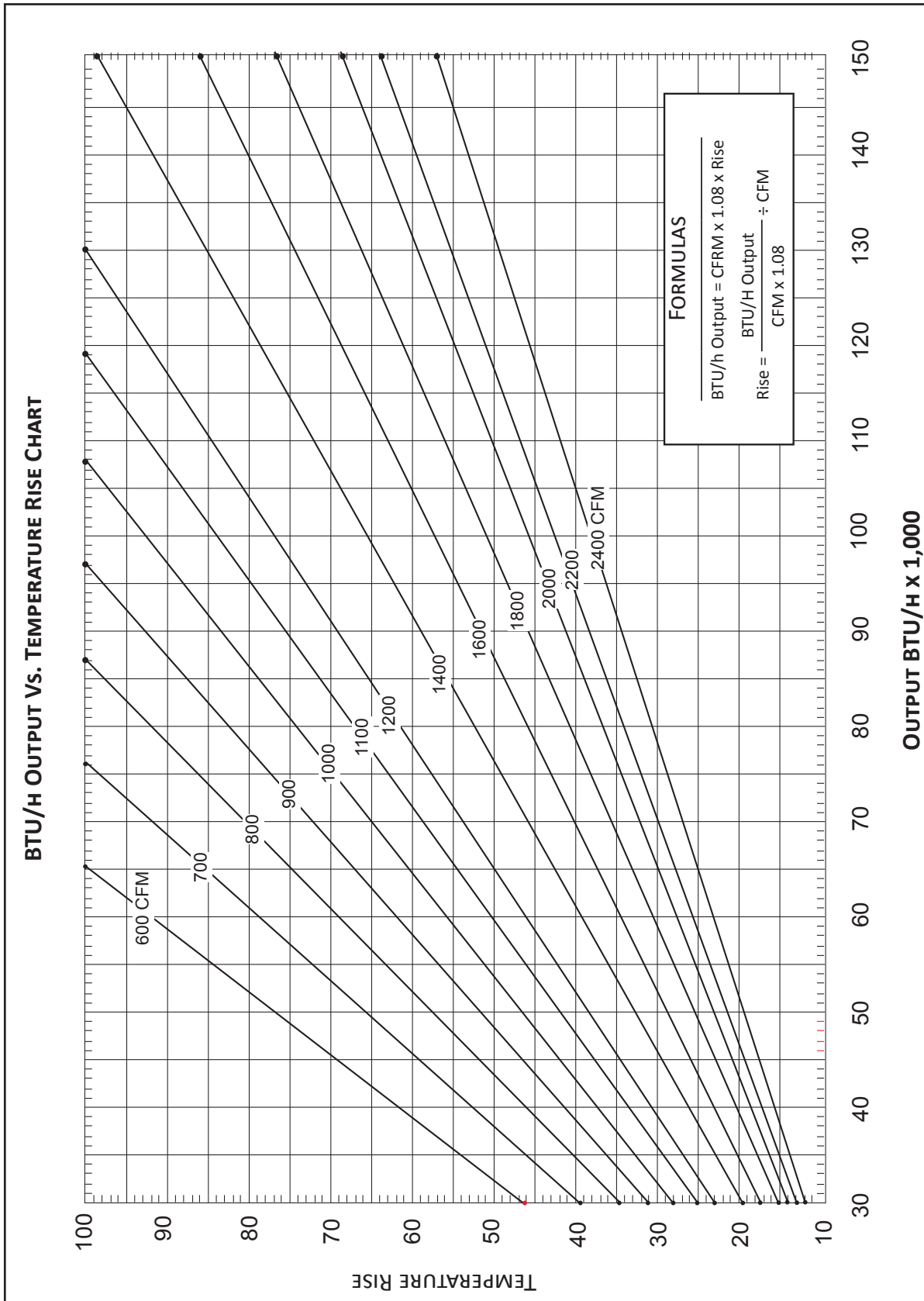
| MODEL | MOTOR SPEED | TONS AC ¹ | EXTERNAL STATIC PRESSURE, (INCHES WATER COLUMN) | | | | | | | | | | | | |
|-----------------|-------------|----------------------|---|------|-------|------|-------|------|-------|------|-------|------|-------|-------|-------|
| | | | 0.1 | | 0.2 | | 0.3 | | 0.4 | | 0.5 | | 0.6 | 0.7 | 0.8 |
| | | | CFM | RISE | CFM | RISE | CFM | RISE | CFM | RISE | CFM | RISE | CFM | CFM | CFM |
| GME8 0603B*B | T1 | 1½ | 875 | --- | 793 | --- | 736 | --- | 674 | --- | 592 | --- | 556 | 509 | 460 |
| | T2 | 2 | 1,032 | 43 | 965 | 46 | 914 | 49 | 861 | --- | 810 | --- | 756 | 712 | 659 |
| | T3 | 2½ | 1,217 | 37 | 1,153 | 39 | 1,098 | 40 | 1,051 | 42 | 1,009 | 44 | 964 | 918 | 877 |
| | T4 | 3 | 1,365 | 33 | 1,313 | 34 | 1,268 | 35 | 1,221 | 36 | 1,172 | 38 | 1,129 | 1,086 | 1,054 |
| | T5 | 3½ | 1,549 | 29 | 1,505 | 30 | 1,460 | 30 | 1,420 | 31 | 1,378 | 32 | 1,350 | 1,305 | 1,268 |
| GME8 0805C*B | T1 | 2½ | 1,268 | 47 | 1,198 | 49 | 1,151 | 51 | 1,092 | 54 | 1,041 | 57 | 988 | 932 | 883 |
| | T2 | 3 | 1,362 | 44 | 1,305 | 45 | 1,261 | 47 | 1,212 | 49 | 1,170 | 51 | 1,121 | 1,074 | 1,021 |
| | T3 | 3½ | 1,576 | 38 | 1,519 | 39 | 1,473 | 40 | 1,426 | 42 | 1,398 | 42 | 1,341 | 1,290 | 1,252 |
| | T4 | 4 | 1,755 | --- | 1,711 | 35 | 1,657 | 36 | 1,627 | 36 | 1,579 | 38 | 1,548 | 1,502 | 1,463 |
| | T5 | 5 | 2,183 | --- | 2,128 | --- | 2,094 | --- | 2,060 | --- | 2,014 | --- | 1,992 | 1,944 | 1,847 |
| GME8 0805D*A | T1 | 3½ | 1,524 | 39 | 1,479 | 40 | 1,439 | 41 | 1,388 | 43 | 1,343 | 44 | 1,281 | 1,243 | 1,190 |
| | T2 | 4 | 1,683 | 35 | 1,646 | 36 | 1,607 | 37 | 1,569 | 38 | 1,531 | 39 | 1,488 | 1,441 | 1,395 |
| | T3 | 4 | 1,884 | 31 | 1,832 | 32 | 1,849 | 32 | 1,765 | 34 | 1,724 | 34 | 1,692 | 1,661 | 1,626 |
| | T4 | 4 | 1,951 | 30 | 1,904 | 31 | 1,879 | 32 | 1,842 | 32 | 1,803 | 33 | 1,768 | 1,734 | 1,687 |
| | T5 | 5 | 2,036 | 29 | 2,010 | 29 | 1,977 | 30 | 1,947 | 30 | 1,923 | 31 | 1,888 | 1,844 | 1,816 |
| GME8 1005C*B | T1 | 3 | 1,466 | 51 | 1,415 | 52 | 1,357 | 55 | 1,306 | 57 | 1,248 | 59 | 1,202 | 1,144 | 1,088 |
| | T2 | 3½ | 1,642 | 45 | 1,596 | 46 | 1,552 | 48 | 1,499 | 49 | 1,449 | 51 | 1,388 | 1,352 | 1,306 |
| | T3 | 4 | 1,750 | 42 | 1,750 | 42 | 1,707 | 43 | 1,667 | 44 | 1,610 | 46 | 1,574 | 1,531 | 1,486 |
| | T4 | 4 | 1,870 | 40 | 1,805 | 41 | 1,782 | 42 | 1,737 | 43 | 1,701 | 44 | 1,656 | 1,606 | 1,571 |
| | T5 | 5 | 2,297 | --- | 2,297 | --- | 2,224 | --- | 2,106 | 35 | 2,014 | 37 | 1,896 | 1,813 | 1,669 |

¹ @ 0.5" ESP

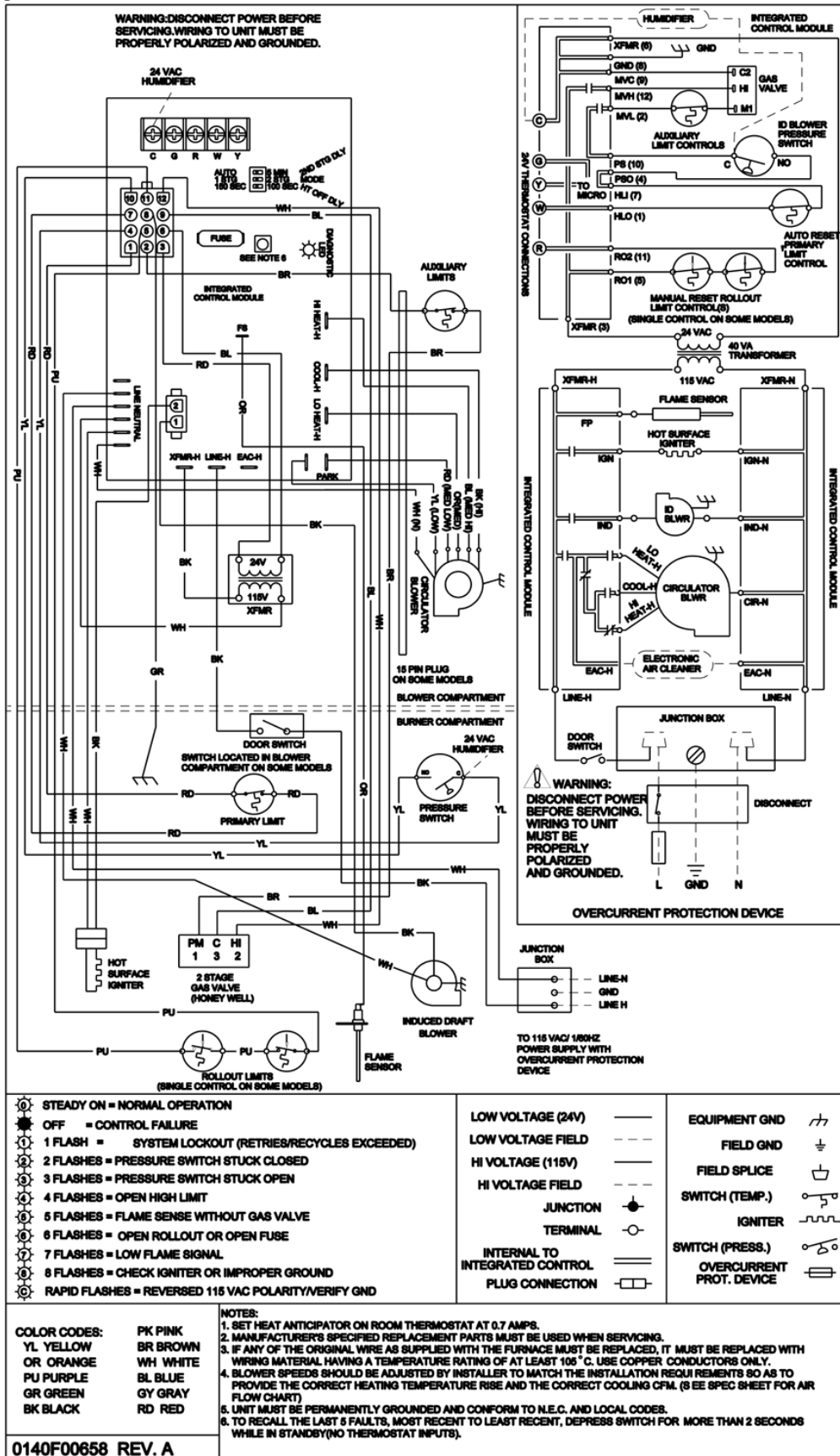
NOTES

- 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 375 - 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.
- 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.
- Factory Motor Speed Setting: T1 = 1st Stage Ht, T2 = 2nd Stage Ht, T5 = Cooling
- Temperature rise data is based on second-stage heat. First-stage heat is 75% of rise indicated above.

TEMPERATURE RISE CHART



WIRING DIAGRAM



ACCESSORIES

| MODEL | DESCRIPTION |
|---------------------|---|
| LPM-06 ¹ | LP Conversion Kit (Springs & Orifice) |
| HANG20 | High-Altitude Natural Gas Kit (4500+ Ft.) |
| AFE18-60A | Fossil Fuel Kit |

¹ Honeywell or White-Rodgers valves