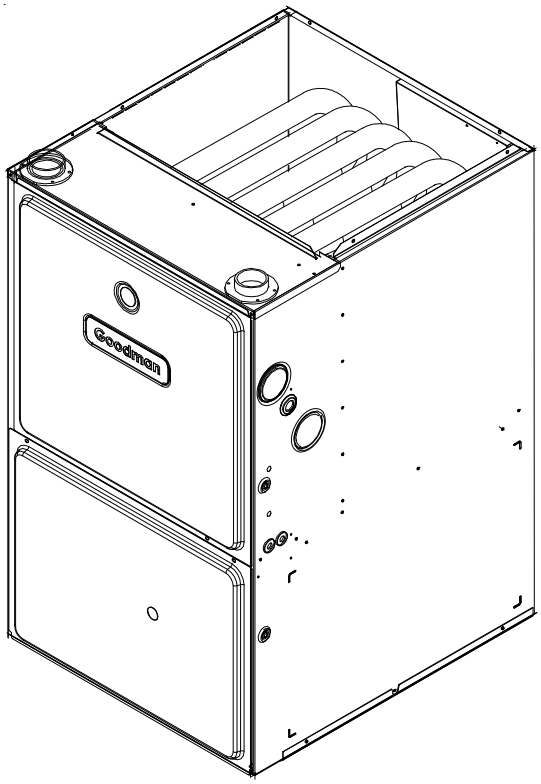
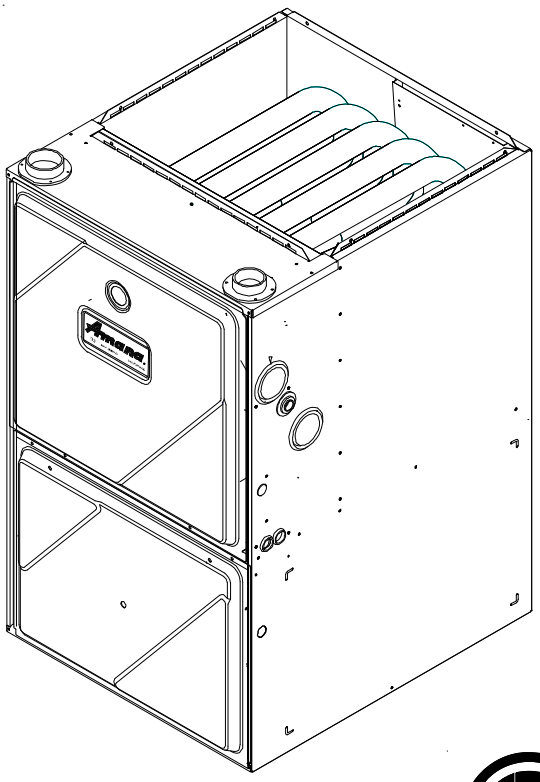
# TECHNICAL MANUAL

## *MH95

## 40" UP TO 96% Gas Furnace

- Refer to Service Manual RS6610004 for installation, operation, and troubleshooting information.
- All safety information must be followed as provided in the Service Manual.
- Refer to the appropriate Parts Catalog for part number information.
- Model numbers listed on page 3.



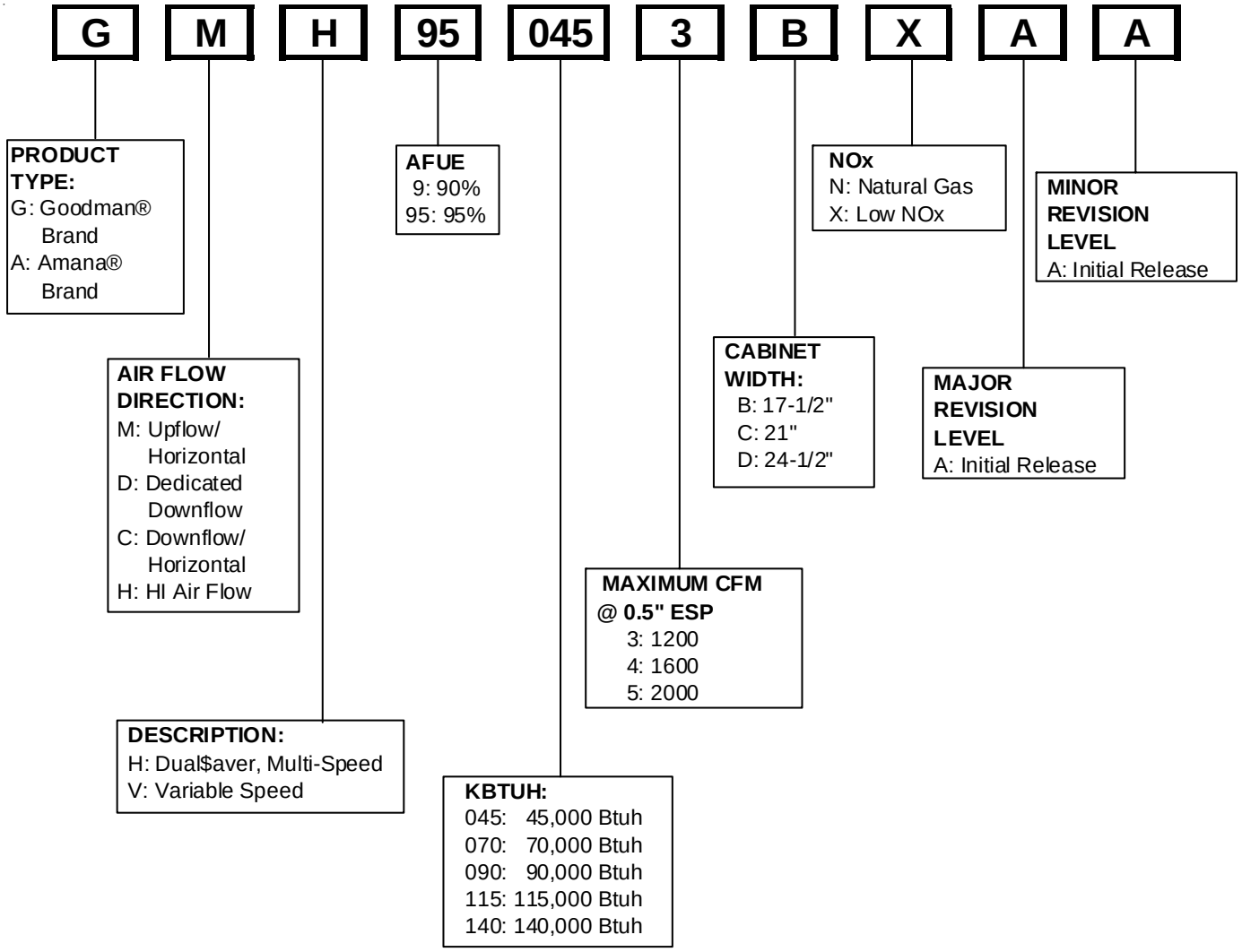

Intertek

This manual is to be used by qualified, professionally trained HVAC technicians only. Goodman does not assume any responsibility for property damage or personal injury due to improper service procedures or services performed by an unqualified person.

RT6612018r9
January 2013

# PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. Please use these numbers when requesting service or parts information.






**⚠ 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.**

**⚠ WARNING**

**Goodman will not be responsible for any injury or property damage arising from improper service or service procedures. If you install or perform service on this unit, you assume responsibility for any personal injury or property damage which may result. Many jurisdictions require a license to install or service heating and air conditioning equipment.**

**⚠ WARNING**

**Installation and repair of this unit should be performed ONLY by individuals meeting the requirements of an "entry level technician", at a minimum, as specified by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI). Attempting to install or repair this unit without such background may result in product damage, personal injury or death.**

# PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. Please use these numbers when requesting service or parts information.

| | |
|---|---|
| AMH950453BXA* | GMH950453BXA* |
| AMH950703BXA* | GMH950703BXA* |
| AMH950704CXA* | GMH950704CXA* |
| AMH950904CXA* | GMH950904CXA* |
| AMH950905CXA* | GMH950905CXA* |
| AMH950905DXA* | GMH950905DXA* |
| AMH951155DXA* | GMH951155DXA* |

**⚠ WARNING** **The United States Environmental Protection Agency ("EPA") has issued various regulations regarding the introduction and disposal of refrigerants introduced into this unit. Failure to follow these regulations may harm the environment and can lead to the imposition of substantial fines. These regulations may vary by jurisdiction. Should questions arise, contact your local EPA office.**

**⚠ WARNING** **Do not connect or use any device that is not design certified by Goodman for use with this unit. Serious property damage, personal injury, reduced unit performance and/or hazardous conditions may result from the use of such non-approved devices.**

**⚠ WARNING** **To prevent the risk of property damage, personal injury, or death, do not store combustible materials or use gasoline or other flammable liquids or vapors in the vicinity of this appliance.**

# PRODUCT DESIGN

***General Operation***

The *MH95 furnaces are equipped with an electronic ignition device used to light the burners and an induced draft blower to exhaust combustion products.

An interlock switch prevents furnace operation if the blower door is not in place. Keep the blower access door in place except for inspection and maintenance.

This furnace is also equipped with a self-diagnosing electronic control module. In the event a furnace component is not operating properly, the control module LED will flash on and off in a factory-programmed sequence, depending on the problem encountered. This light can be viewed through the observation window in the blower access door. Refer to the *Troubleshooting Chart* for further explanation of the LED codes and *Abnormal Operation - Integrated Ignition Control* section in the Service Instructions for an explanation of the possible problem.

The rated heating capacity of the furnace should be greater than or equal to the total heat loss of the area to be heated. The total heat loss should be calculated by an approved method or in accordance with "ASHRAE Guide" or "Manual J-Load Calculations" published by the Air Conditioning Contractors of America.

*Obtain from: American National Standards Institute 1430 Broadway New York, NY 10018

***Location Considerations***

- The furnace should be as centralized as is practical with respect to the air distribution system.
- Do not install the furnace directly on carpeting, tile, or combustible material other than wood flooring.
- When suspending the furnace from rafters or joists, use 3/8" threaded rod and 2" x 2" x 3/8" angle as shown in the Installation and Service Instructions. The length of the rod will depend on the application and clearance necessary.
- When installed in a residential garage, the furnace must be positioned so the burners and ignition source are located not less than 18 inches (457 mm) above the floor and protected from physical damage by vehicles.

**Notes:**

1. 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.
2. Line voltage wiring can enter through the right or left side of the furnace. Low voltage wiring can enter through the right or left side of furnace.
3. Conversion kits for high altitude natural or propane gas operation are available. See High Altitude Derate chart for details.
4. Installer must supply the following gas line fittings, depending on which entrance is used:

   **Left** -- Two 90º Elbows, one close nipple, straight pipe.

   **Right** -- Straight pipe to reach gas valve.

***Accessibility Clearances (Minimum)***

| MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS (INCHES) | | | | | | |
|---|---|---|---|---|---|---|
| POSITION* | FRONT | SIDES | REAR | TOP | FLUE | FLOOR |
| Upflow | 3 | 0 | 0 | 1 | 0 | C |
| Horizontal | 3 | 6 | 0 | 6 | 0 | C |

*= All positioning is determined as installed unit is viewed from the front.

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

NC= For instalaltion on non-combustible floors only. A non-combustible subbase must be used for installations on combustible flooring.

24" at front is required for servicing or cleaning.

**Note:** In all cases accessibility clearance shall take precedence over clearances from the enclosure where accessibility clearances are greater. All dimensions are given in inches.

***High Altitude Derate***

When this furnace is installed at high altitude, the appropriate High Altitude orifice kit must be installed. This is required due to the natural reduction in the density of both the gas fuel and combustion air as altitude increases. The kit will provide the proper design certified input rate within the specified altitude range.

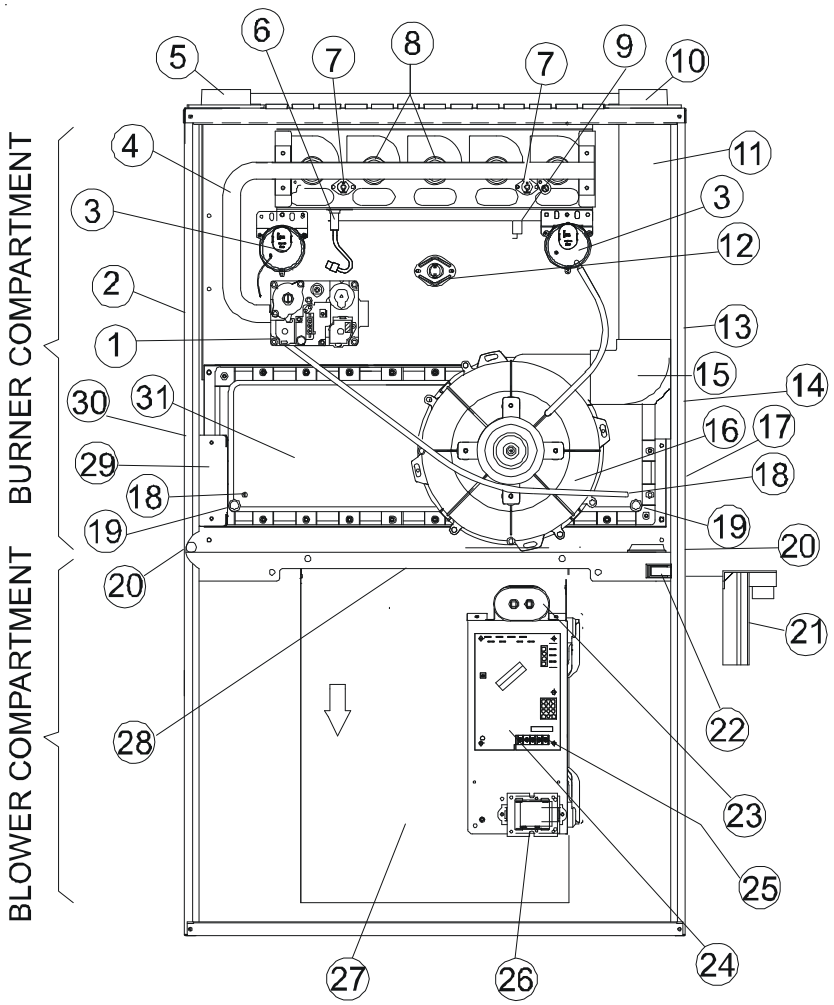
| PROPANE AND HIGH ALTITUDE KITS FOR *MH95*****XA* MODELS | | | |
|---|---|---|---|
| **0 to 7,000 ft.** | **7,001 to 9,000 ft.** | **9,001 to 11,000 ft.** | **7,001 to 11,000 ft.** |
| **LPM-05**[1] **LPM-06**[2] Propane Conversion Kit (#55 Orifices) | **HANG11** High Altitude Natural Gas Kit (#44 Orifices) | **HANG12** High Altitude Natural Gas Kit (#45 Orifices) | **HALP 10** High Altitude LP Gas Kit (#56 Orifices) |

[1] LPM-05* supports White-Rodgers 2-stage valves only

[2] LPM-06* supports Honeywell and White-Rodgers 2-stage valves

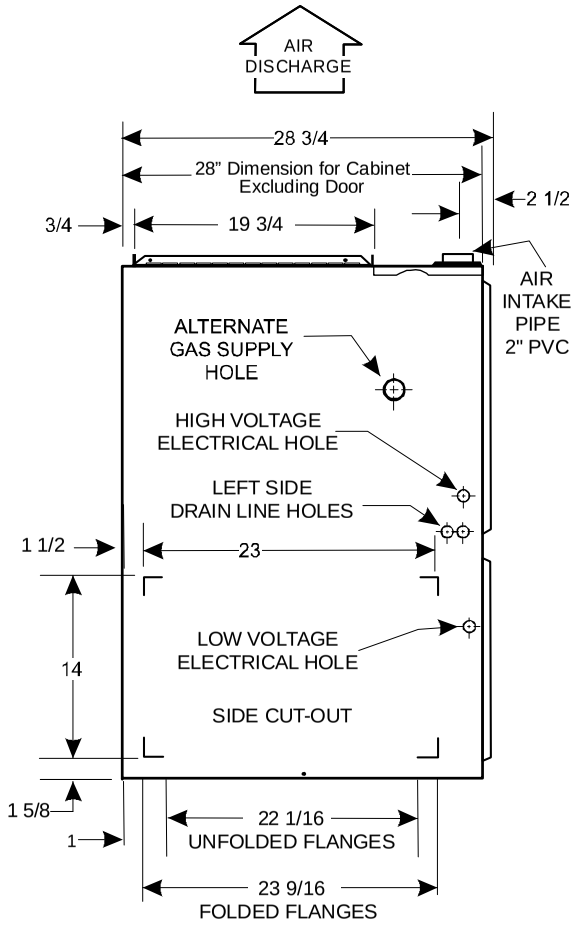
High altitude kits are purchased according to the installation altitude and usage of either natural or propane gas. Refer to the chart above for a tabular listing of appropriate altitude ranges and corresponding manufacturer's high altitude Natural Gas and Propane Gas kits. For a tabular listing of appropriate altitude ranges and corresponding manufacturer's High Altitude Pressure Switch kits, refer to either the *Pressure Switch Trip Points & Usage Chart* in this manual or the *Accessory Charts* in Service Instructions.

# COMPONENT IDENTIFICATION *MH95*****XA*



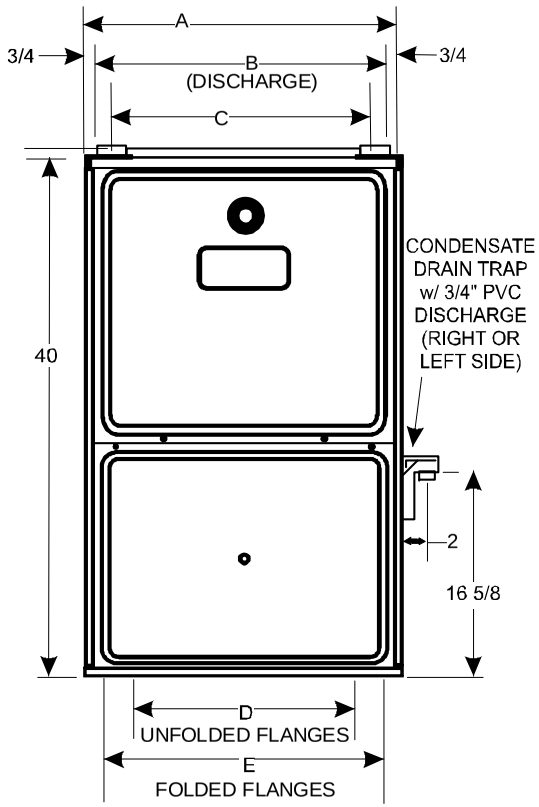

**Upflow/Horizontal**

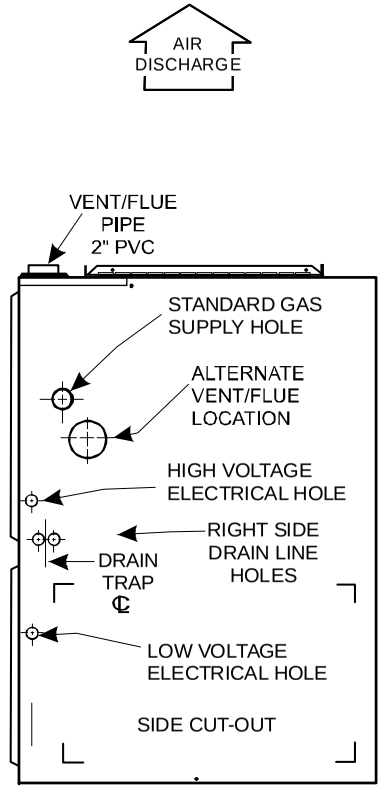
1 Gas Valve
2 Gas Line Entrance (Alternate)
3 Pressure Switch
4 Gas Manifold
5 Combustion Air Intake Connection / “Coupling”
6 Hot Surface Igniter
7 Rollout Limit
8 Burners
9 Flame Sensor
10 Flue Pipe Connection / “Coupling”
11 Flue Pipe (Internal)
12 Primary Limit
13 Gas Line Entrance
14 Flue Pipe Connection (Alternate)
15 Rubber Elbow
16 Induced Draft Blower
17 Electrical Connection Inlets (Alternate)
18 Coil Front Cover Pressure Tap
19 Coil Front Cover Drain Port
20 Drain Line Penetrations
21 Drain Trap
22 Blower Door Interlock Switch
23 Capacitor
24 Integrated Control Module (with fuse and diagnostic LED)
25 24-Volt Thermostat Connections
26 Transformer (40 VA)
27 Circulator Blower
28 Auxiliary Limit
29 Junction Box
30 Electrical Connection Inlets
31 Coil Front Cover




**LEFT SIDE VIEW**

**FRONT VIEW**




**RIGHT SIDE VIEW**

*Note: Airflow area will be reduced by approximately 18% if duct flanges are not unfolded. This could cause performance issues and noise issues.*

| Cabinet Size | *MH950453BXA* *MH950703BXA* | *MH950704CXA* *MH950904CXA* *MH950905CXA* | *MH950905DXA* *MH951155DXA* |
|---|---|---|---|
| **A** | 17-1/2" | 21" | 24-1/2" |
| **B** | 16" | 19-1/2" | 23" |
| **C** | 12-15/16" | 15-15/16" | 20-7/16" |
| **D** | 12-1/8" | 16" | 19-3/8" |
| **E** | 13-5/8" | 17-1/2" | 20-7/8" |

**PRESSURE SWITCH TRIP POINTS AND USAGE CHART**

| MODEL | NEGATIVE PRESSURE ID BLOWER WITH FLUE NOT FIRING TYPICAL SEA LEVEL DATA[1] | NEGATIVE PRESSURE ID BLOWER WITH FLUE FIRING TYPICAL SEA LEVE DATA[2] | NEGATIVE PRESSURE COIL COVER WITH FLUE NOT FIRING TYPICAL SEA LEVEL DATA[1] | NEGATIVE PRESSURE COIL COVER WITH FLUE FIRING TYPICAL SEA LEVE DATA[2] | PRESSURE SWITCH TRIP POINTS AND USAGE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 0 to 7,000 ft. | | | 7,001 to 11,000 ft. | | 9,000 to 11,000 | | | |
| | | | | | TRIP POINT COIL COVER PRESSURE SWITCH | COIL COVER PRESSURE SWITCH PART # | TRIP POINT ID BLOWER PRESSURE SWITCH | ID BLOWER PRESSURE SWITCH PART # | High Atitude Kit | High Atitude PS | High Atitude Kit | High Atitude PS | |
| *MH950453BXA* | -1.30 | -1.10 | -0.52 | -0.37 | -0.10 | 20197308 | -1.10 | 0130F00000P | HANG11 #44 Orifice | HAPS27 .16 | HANG12 #45 Orifice | HAPS27 -.16 | |
| *MH950703BXA* | -1.10 | -0.95 | -0.52 | -0.37 | -0.10 | 20197308 | -0.95 | 0130F00002P | | | | | |
| *MH950704CXA* | -1.30 | -1.10 | -0.52 | -0.37 | -0.1 | 20197308 | -1.10 | 0130F00000P | | | | | |
| *MH950904CXA* | -1.40 | -1.20 | -0.75 | -0.60 | -0.10 | 20197308 | -1.20 | 0130F00001P | | | | | |
| *MH950905CXA* | -1.50 | -1.35 | -0.25 | -0.10 | -0.10 | 20197308 | -1.35 | 0130F00110 | TBD | TBD | TBD | TBD | |
| *MH950905DXA* | -1.30 | -1.10 | -0.52 | -0.37 | -0.10 | 20197308 | -1.10 | 0130F00000P | HANG11 #44 Orifice | HAPS27 -.16 | HANG12 #45 Orifice | HAPS27 -.16 | |
| *MH951155DXA* | -1.30 | -1.10 | -0.75 | -0.60 | -0.10 | 20197308 | -1.10 | 0130F00000P | | | | | |

(1) Data given is least negative pressure required for pressure switch to close.
(2) Data given is the least negative pressure required for pressure switch to remain closed.

| PRIMARY LIMIT | | | |
|---|---|---|---|
| **Part Number** | **0130F00105** | **20162903** | **20162904** |
| **Open Setting (°F)** | 130 | 160 | 150 |
| ***MH950453BXA*** | | | 1 |
| ***MH950703BXA*** | | 1 | |
| ***MH950704CXA*** | | 1 | |
| ***MH950904CXA*** | | | 1 |
| ***MH950905CXA*** | 1 | | |
| ***MH950905DXA*** | | 1 | |
| ***MH951155DXA*** | | 1 | |

| ROLLOUT LIMIT SWITCHES | | |
|---|---|---|
| **Part Number** | **10123514 or 10123533** | **10123517** |
| **Open Setting (°F)** | 200 | 210 |
| ***MH950453BXA*** | 1 | |
| ***MH950703BXA*** | 2 | |
| ***MH950704CXA*** | 2 | |
| ***MH950904CXA*** | 2 | |
| ***MH950905CXA*** | | 2 |
| ***MH950905DXA*** | 2 | |
| ***MH951155DXA*** | 2 | |

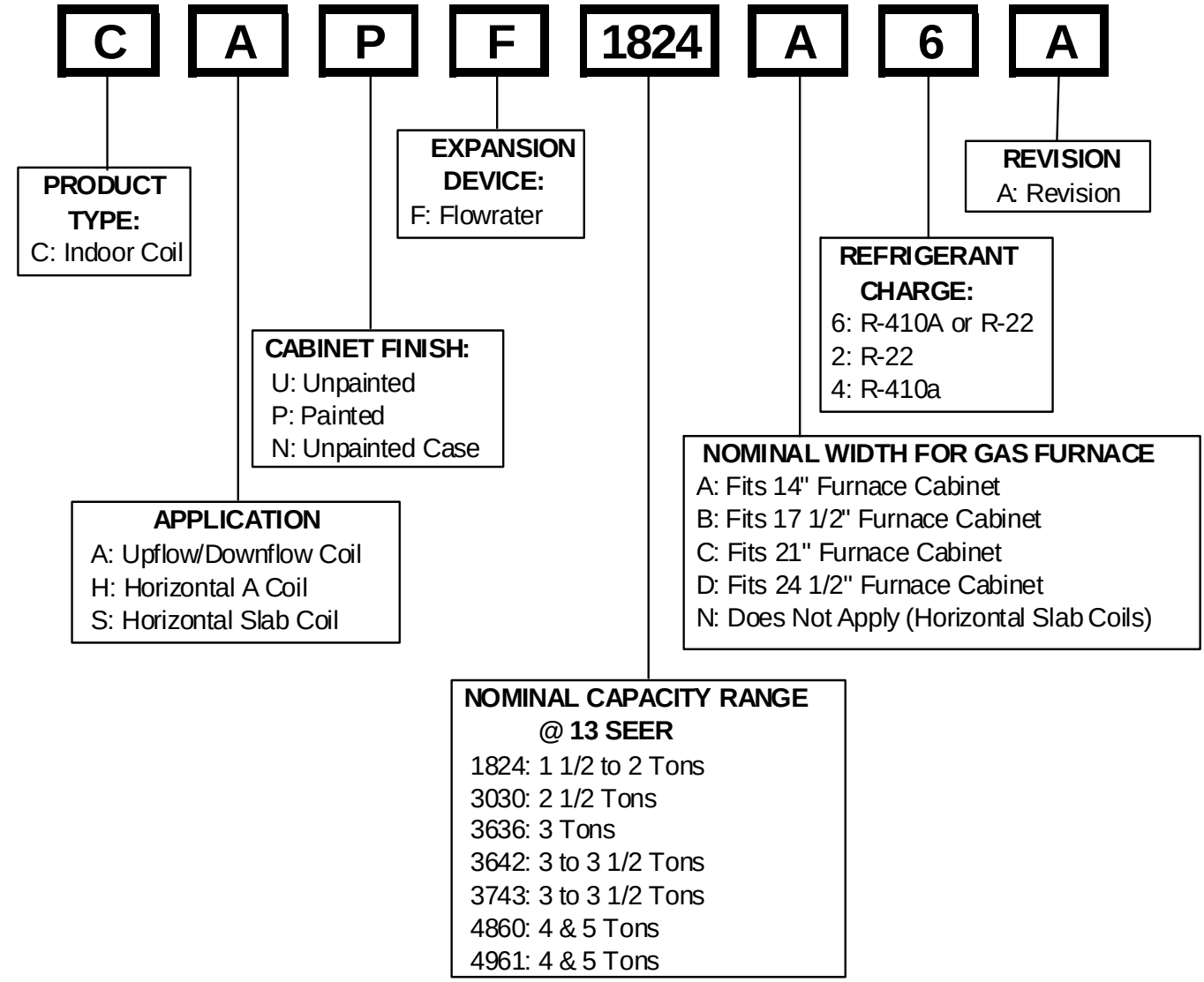
| AUXILIARY LIMIT SWITCHES | | | |
|---|---|---|---|
| **Part Number** | **10123535** | **10123519** | **0130F00038** |
| **Open Setting (°F)** | 150 | 160 | 120 |
| ***MH950453BXA*** | 1 | | |
| ***MH950703BXA*** | 1 | | |
| ***MH950704CXA*** | 1 | | |
| ***MH950904CXA*** | 1 | | |
| ***MH950905CXA*** | | | 1 |
| ***MH950905DXA*** | 1 | | |
| ***MH951155DXA*** | | 1 | |

# PRODUCT DESIGN *MH95*****XA***

## Coil Matches:

A large array of Amana® brand and Goodman® brand coils are available for use with the AMH95 and GMH95 furnaces, in either upflow or horizontal applications. These coils are available in both cased and uncased models (with the option of a field installed TXV expansion device). These 95%+ furnaces match up with the existing Amana® brand and Goodman® brand coils as shown in the chart below.

### Coil Matches (for Amana® brand & Goodman® brand units using R22 and R-410A):




- All CAPF coils in B, C, & D widths have insulated blank off plates for use with one size smaller furnaces.
- All CAPF coils have a CAUF equivalent.
- All CHPF coils in B, C & D heights have an insulated Z bracket for use with one size smaller furnace.
- All proper coil combinations are subject to being ARI rated with a matched outdoor unit.

# PRODUCT DESIGN

## Thermostats:

***NOTE:*** *Complete lineup of thermostats can be found in the Thermostat Specification Sheets.*

## Filters:

Filters are required with this furnace and must be provided by the installer. The filters used must comply with UL900 or CAN/ULCS111 standards. Installing this furnace without filters will void the unit warranty.

### Upflow Filters

This furnace has provisions for the installation of return air filters at the side and/or bottom return. The furnace will accommodate the following filter sizes depending on cabinet size:

| SIDE RETURN | | |
|---|---|---|
| Cabinet Width (in.) | Nominal Filter Size (in.) | Approx. Flow Area ($in^2$) |
| All | 16 x 25 x 1 | 400 |

| BOTTOM RETURN (1) | | |
|---|---|---|
| Cabinet Width (in.) | Nominal Filter Size (in.) | Approx. Flow Area ($in^2$) |
| 17-1/2 | 14 x 25 x 1 | 350 |
| 21 | 16 x 25 x 1 | 400 |
| 24-1/2 | 20 x 25 x 1 | 500 |

**(1) Flanges on bottom return must be unfolded**

Refer to Minimum Filter Area tables to determine filter area requirement. **NOTE:** Filters can also be installed elsewhere in the duct system such as a central return.

| | | COOLING AIRFLOW REQUIREMENT (CFM) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 600 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 |
| Input_Airflow | 0453BXA* | 388* | 388* | 480 | 576 | --- | --- | --- | --- |
| | 0703BXA* | --- | 647* | 647* | 647* | 672 | --- | --- | --- |
| | 0704CXA* | --- | --- | 583* | 583* | 672 | 768 | --- | --- |
| | 0904CXA* | --- | --- | 863* | 863* | 863* | 863* | --- | --- |
| | 0905CXA* | --- | --- | 863* | 863* | 863* | 863* | 864 | --- |
| | 0905DXA* | --- | --- | --- | 777* | 777* | 777* | 864 | 960 |
| | 1155DXA* | --- | --- | --- | 971* | 971* | 971* | 971* | 971* |

*Minimum filter area dictated by heating airflow requirement.

### Disposable Minimum Filter Area ($in^2$)

[*Based on a 300 ft/min filter face velocity]*

| | | COOLING AIRFLOW REQUIREMENT (CFM) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 600 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 |
| Input_Airflow | 0453BXA* | 194* | 194* | 240 | 288 | --- | --- | --- | --- |
| | 0703BXA* | --- | 324* | 324* | 324* | 336 | --- | --- | --- |
| | 0704CXA* | --- | --- | 291* | 291* | 336 | 384 | --- | --- |
| | 0904CXA* | --- | --- | 432* | 432* | 432* | 432* | --- | --- |
| | 0905CXA* | --- | --- | 432* | 432* | 432* | 432* | 432* | --- |
| | 0905DXA* | --- | --- | --- | 388* | 388* | 388* | 432 | 480 |
| | 1155DXA* | --- | --- | --- | 486* | 486* | 486* | 486* | 486* |

*Minimum filter area dictated by heating airflow requirement.

### Permanent Minimum Filter Area ($in^2$)

*[Based on 600 ft/min filter face velocity]*

# FURNACE SPECIFICATIONS *MH95*****XA*

| MODEL | *MH95 0453BXA* | *MH95 0703BXA* | *MH95 0704CXA* | *MH95 0904CXA* | *MH95 0905CXA* | *MH95 0905DXA* | *MH95 1155DXA* |
|---|---|---|---|---|---|---|---|
| BTUH | | | | | | | |
| Natural Gas Input * | 46,000 | 69,000 | 69,000 | 92,000 | 92,000 | 92,000 | 115,000 |
| Natural Gas Output | 44,200 | 66,300 | 66,300 | 88,400 | 88,400 | 88,400 | 110,500 |
| LP Gas Input | 41,400 | 62,100 | 62,100 | 82,800 | 82,800 | 82,800 | 103,500 |
| LP Gas Output | 39,800 | 59,700 | 59,700 | 79,600 | 79,600 | 79,600 | 99,500 |
| A.F.U.E. | 96.1% | 96.1% | 96.1% | 96.1% | 96.1% | 96.1% | 96.1% |
| Rated External Static (" w.c.) | .20 - .50 | .20 - .50 | .20 - .50 | .20 - .50 | .20 - .50 | .20 - .50 | .20 - .50 |
| Temperature Rise (°F) | 35 - 65 | 30 - 60 | 35 - 65 | 30 - 60 | 30 - 60 | 35 - 65 | 35 - 65 |
| ID Blower Pressure Switch Trip Point (" w.c.) | -1.10 | -0.95 | -1.10 | -1.20 | -1.35 | -1.10 | -1.10 |
| Front Cover Pressure Switch Trip Point (" w.c.) | -0.37 | -0.37 | -0.37 | -0.60 | -0.10 | -0.37 | -0.60 |
| Blower Wheel (D" x W") | 10 x 8 | 10 x 8 | 10 x 10 | 10 x 10 | 11 x 10 | 11 x 10 | 11 x 10 |
| Blower Horsepower | 1/3 | 1/3 | 1/2 | 1/2 | 3/4 | 3/4 | 3/4 |
| Blower Speeds | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Max CFM @ 0.5 E.S.P. | 1200 | 1200 | 1600 | 1600 | 1800 | 2000 | 2000 |
| Power Supply | 115-60-1 | 115-60-1 | 115-60-1 | 115-60-1 | 115-60-1 | 115-60-1 | 115-60-1 |
| Minimum Circuit Ampacity (MCA)(1) | 9.4 | 9.4 | 13.8 | 13.8 | 13.2 | 13.2 | 13.2 |
| Maximum Overcurrent Device(2) | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 |
| Transformer (VA) | 40 | 40 | 40 | 40 | 40 | 40 | 40 |
| Primary Limit Setting (°F) | 150 | 160 | 160 | 150 | 130 | 160 | 160 |
| Auxiliary Limit Setting (°F) | 150 | 150 | 150 | 150 | 120 | 150 | 160 |
| Rollout Limit Setting (°F) | 200 | 200 | 200 | 200 | 210 | 200 | 200 |
| Fan Delay On Heating | 30 secs. | 30 secs. | 30 secs. | 30 secs. | 30 secs. | 30 secs. | 30 secs. |
| Off Heating (3) | 150 secs. | 150 secs. | 150 secs. | 150 secs. | 150 secs. | 150 secs. | 150 secs. |
| Fan Delay On Cooling | 6 sec. | 6 sec. | 6 sec. | 6 sec. | 6 sec. | 6 sec. | 6 sec. |
| Off Cooling | 45 secs. | 45 secs. | 45 secs. | 45 secs. | 45 secs. | 45 secs. | 45 secs. |
| Gas Supply Pressure (Natural/Propane) ("w.c.) | 7 / 11 | 7 / 11 | 7 / 11 | 7 / 11 | 7 / 11 | 7 / 11 | 7 / 11 |
| Manifold Pressure (Natural/Propane) ("w.c.) | 3.5 / 10 | 3.5 / 10 | 3.5 / 10 | 3.5 / 10 | 3.5 / 10 | 3.5 / 10 | 3.5 / 10 |
| Orifice Size (Natural/Propane) | 43 / 55 | 43 / 55 | 43 / 55 | 43 / 55 | 43 / 55 | 43 / 55 | 43 / 55 |
| Number of Burners | 2 | 3 | 3 | 4 | 4 | 4 | 5 |
| Vent Connector Diameter (inches)(4) | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Combustion Air Connector Diameter (inches)(5) | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Shipping Weight (lbs.) | 120 | 123 | 125 | 144 | 146 | 151 | 163 |

** Natural Gas BTU/h. For altitudes above 2,000', reduce input rating 4% for each 1,000' above sea level. Low-firerate is 75% of high-fire rate*

(1) Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.
(2) Maximum Overcurrent Protection Device: May use Time Delay Fuse or HACR type Circuit Breaker of the same size as noted.
(3) Off Heating - this fan delay timing is adjustable (100 and 150 seconds). Furnaces are shipped with 150 second off delay.
(4) See Installation Instructions for appropriate vent diameter, length and number of elbows.
(5) See Installation Instructions for appropriate combustion air pipe diameter, length and number of elbows.

NOTE: This data is provided as a guide, it is important to electrically connect the unit and properly size fuses/circuit breakers and wires in accordance with all national and/or local electrical codes. Use copper wire only.

1. These furnaces are manufactured for natural gas operation. Optional kits are available for conversion to propane operation.
2. For elevations above 2000 feet the rating should be reduced by 4% for each 1000 feet above sea level. The furnace must not be derated, orifice changes should only be made if necessary for altitude.
3. The total heat loss from the structure as expressed in TOTAL BTU/HR must be calculated by the manufacturers method or in accordance with the "A.S.H.R.A.E. GUIDE" or "MANUAL J-LOAD CALCULATIONS" published by the AIR CONDITIONING CONTRACTORS OF AMERICA. The total heat loss calculated should be equal to or less than the heating capacity. Output based on D.O.E. test procedures.
4. Minimum Circuit Ampacity calculated as: (1.25 x Circulator Blower Amps) + I.D. Blower Amps.

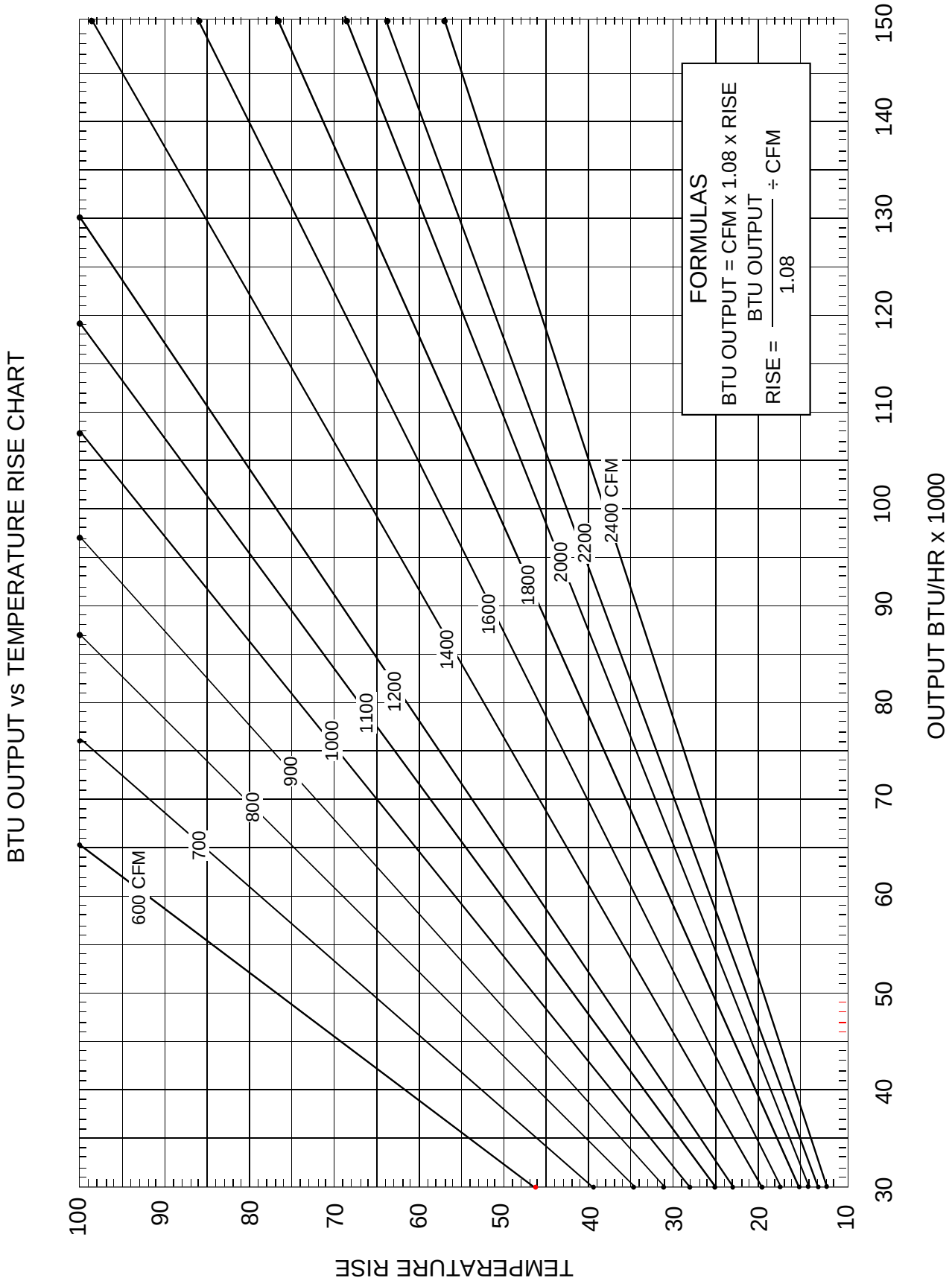
Unit specifications are subject to change without notice. **ALWAYS** refer to the units serial plate for the most up-to-date general and electrical information.

# BLOWER PERFORMANCE SPECIFICATIONS *MH95*****XA*

| BLOWER PERFORMANCE | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (CFM & Temperature Rise vs. External Static Pressure) | | | | | | | | | | | | | | | |
| Model *Heating Speed As Shipped* | Motor Speed | Tons AC at 0.5" ESP | 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 |
| *MH950453BXA* (MED-HI) | HIGH | 3.0 | 1352 | 29 | 1318 | 30 | 1260 | 31 | 1202 | 33 | 1128 | 35 | 1044 | 955 | 853 |
| | MED | 2.5 | 1214 | 32 | 1172 | 34 | 1123 | 35 | 1064 | 37 | 1012 | 39 | 938 | 859 | 741 |
| | MED-LO | 2.0 | 997 | 40 | 994 | 40 | 960 | 41 | 923 | 43 | 884 | 45 | 817 | 741 | 611 |
| | LOW | 1.5 | 757 | 52 | 753 | 52 | 734 | 54 | 704 | 56 | 674 | 59 | 620 | 524 | 438 |
| *MH950703BXA* (MED-HI) | HIGH | 3.0 | 1449 | 41 | 1409 | 42 | 1326 | 45 | 1273 | 47 | 1201 | 49 | 1194 | 1136 | 1018 |
| | MED | 2.5 | 1192 | 50 | 1172 | 51 | 1141 | 52 | 1094 | 54 | 1046 | 57 | 973 | 904 | 793 |
| | MED-LO | 2.0 | 981 | 61 | 962 | 62 | 943 | 63 | 917 | 65 | 888 | 67 | 830 | 764 | 665 |
| | LOW | 1.5 | 750 | 79 | 730 | 81 | 714 | 83 | 692 | 86 | 657 | 90 | 620 | 570 | 502 |
| *MH950704CXA* (MED-HI) | HIGH | 4.0 | 2069 | 29 | 1965 | 30 | 1871 | 32 | 1756 | 34 | 1661 | 36 | 1549 | 1415 | 1275 |
| | MED | 3.5 | 1752 | 34 | 1724 | 34 | 1667 | 36 | 1603 | 37 | 1488 | 40 | 1402 | 1290 | 1082 |
| | MED-LO | 3.0 | 1437 | 41 | 1437 | 41 | 1417 | 42 | 1369 | 43 | 1320 | 45 | 1256 | 1140 | 984 |
| | LOW | 2.5 | 1184 | 50 | 1177 | 50 | 1161 | 51 | 1132 | 52 | 1095 | 54 | 1047 | 928 | 837 |
| *MH950904CXA* (MED-HI) | HIGH | 4.0 | 1970 | 40 | 1874 | 42 | 1757 | 45 | 1667 | 48 | 1566 | 51 | 1431 | 1334 | 1182 |
| | MED | 3.5 | 1713 | 46 | 1650 | 48 | 1572 | 50 | 1510 | 52 | 1418 | 56 | 1313 | 1211 | 1079 |
| | MED-LO | 3.0 | 1439 | 55 | 1412 | 56 | 1370 | 58 | 1327 | 60 | 1260 | 63 | 1166 | 1078 | 956 |
| | LOW | 2.5 | 1183 | 67 | 1155 | 69 | 1122 | 74 | 1108 | 72 | 1062 | 75 | 1011 | 931 | 816 |
| *MH950905CXA* (MED-HI) | HIGH | 5.0 | 2058 | 39 | 1997 | 40 | 1928 | 42 | 1852 | 43 | 1777 | 45 | 1682 | 1600 | 1487 |
| | MED | 4.0 | 1718 | 47 | 1685 | 48 | 1632 | 49 | 1586 | 51 | 1520 | 53 | 1458 | 1369 | 1281 |
| | MED-LO | 3.5 | 1502 | 54 | 1464 | 55 | 1429 | 56 | 1380 | 58 | 1319 | 61 | 1272 | 1200 | 1137 |
| | LOW | 3.0 | 1305 | 62 | 1277 | 63 | 1253 | 64 | 1212 | 66 | 1175 | 69 | 1127 | 1081 | 1010 |
| *MH950905DXA* (MED-HI) | HIGH | 5.0 | 2147 | 37 | 2114 | 37 | 2057 | 39 | 2030 | 39 | 1978 | 40 | 1889 | 1784 | 1713 |
| | MED | 4.0 | 1675 | 47 | 1686 | 47 | 1640 | 48 | 1623 | 49 | 1557 | 51 | 1501 | 1455 | 1360 |
| | MED-LO | 3.5 | 1489 | 53 | 1470 | 54 | 1436 | 55 | 1409 | 56 | 1361 | 58 | 1318 | 1243 | 1130 |
| | LOW | 3.0 | 1307 | 61 | 1265 | 63 | 1234 | 64 | 1203 | 66 | 1168 | 68 | 1096 | 1053 | 991 |
| *MH951155DXA* (MED-HI) | HIGH | 5.0 | 2134 | 46 | 2103 | 47 | 2029 | 48 | 1941 | 51 | 1906 | 51 | 1818 | 1733 | 1625 |
| | MED | 4.0 | 1678 | 58 | 1643 | 60 | 1643 | 60 | 1577 | 62 | 1527 | 64 | 1489 | 1423 | 1339 |
| | MED-LO | 3.5 | 1453 | 68 | 1440 | 68 | 1426 | 69 | 1363 | 72 | 1349 | 73 | 1314 | 1253 | 1205 |
| | LOW | 3.0 | 1259 | 78 | 1239 | 79 | 1220 | 80 | 1181 | 83 | 1159 | 85 | 1118 | 1082 | 1015 |

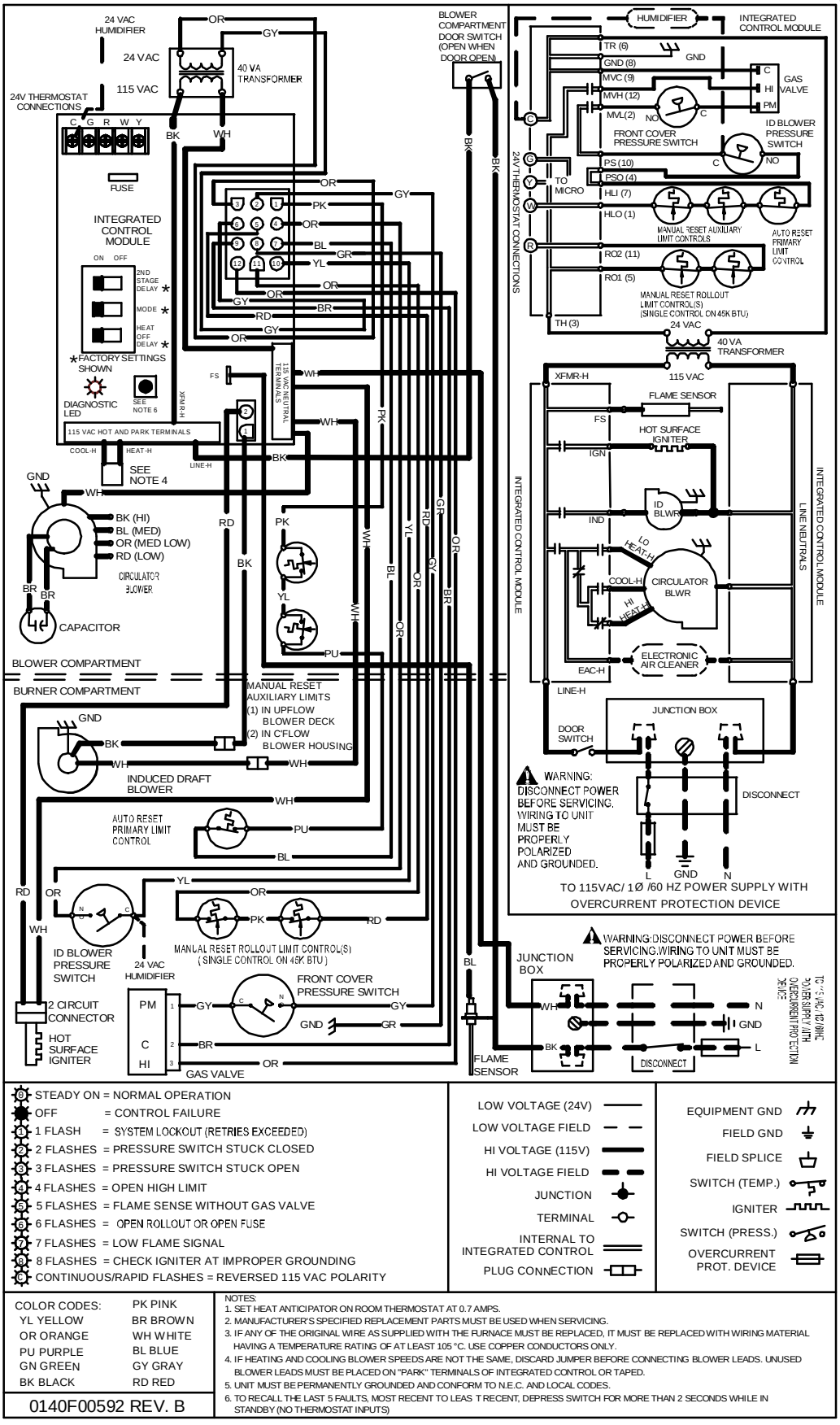
1. CFM in chart is without filters(s). Filters do not ship with this furnace, but must be provided by the installer. If the furnace requires two return filters, this chart assumes both filters are installed.
2. All furnaces ship as high speed cooling and medium-speed heating. Installer must adjust blower cooling & heating speed as needed.
3. For most jobs, about 400 CFM per ton when cooling is desirable.
4. INSTALLATION IS TO BE ADJUSTED TO OBTAIN TEMPERATURE RISE WITHIN THE RANGE SPECIFIED ON THE RATING PLATE.
5. The chart is for information only. For satisfactory operation, external static pressure must not exceed value shown on rating plate. The shaded area indicates ranges in excess of maximum external static pressure allowed when heating. The data for 0.6" w.c. to 0.8" w.c. is shown for air conditioning purposes only.
6. The above chart is for U.S. furnaces installed at 0-2000 feet. At higher altitudes, a properly de-rated unit will have approximately the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.

# BLOWER PERFORMANCE SPECIFICATIONS



# WIRING DIAGRAMS

## *MH95[0453,0704,0905]*XAB
## *MH95[0703,0904,1155]*XAC



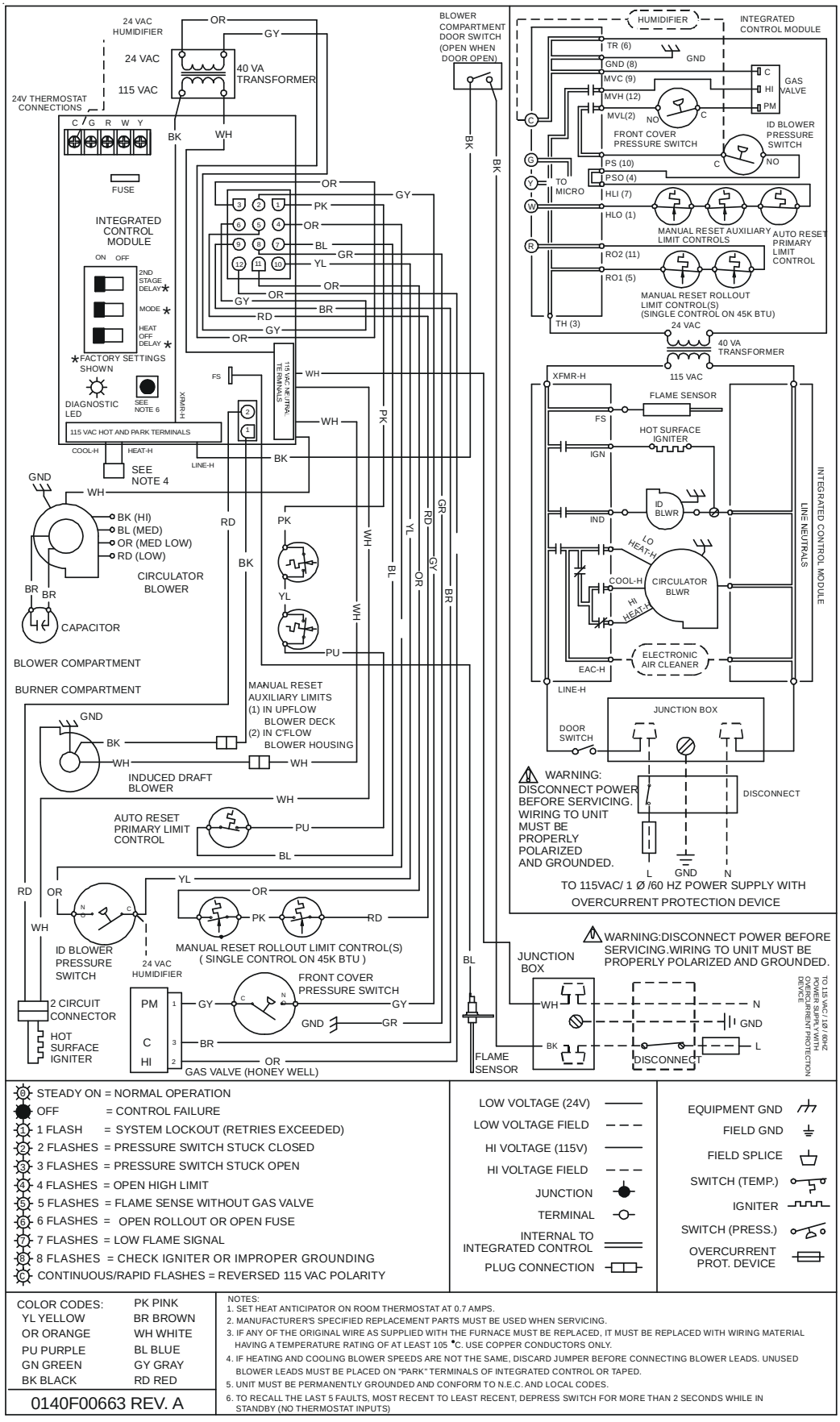

**WARNING**

**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.**

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

# WIRING DIAGRAMS

## *MH95[0453,0704,0905]*XAC
## *MH95[0703,0904,1155]*XAD

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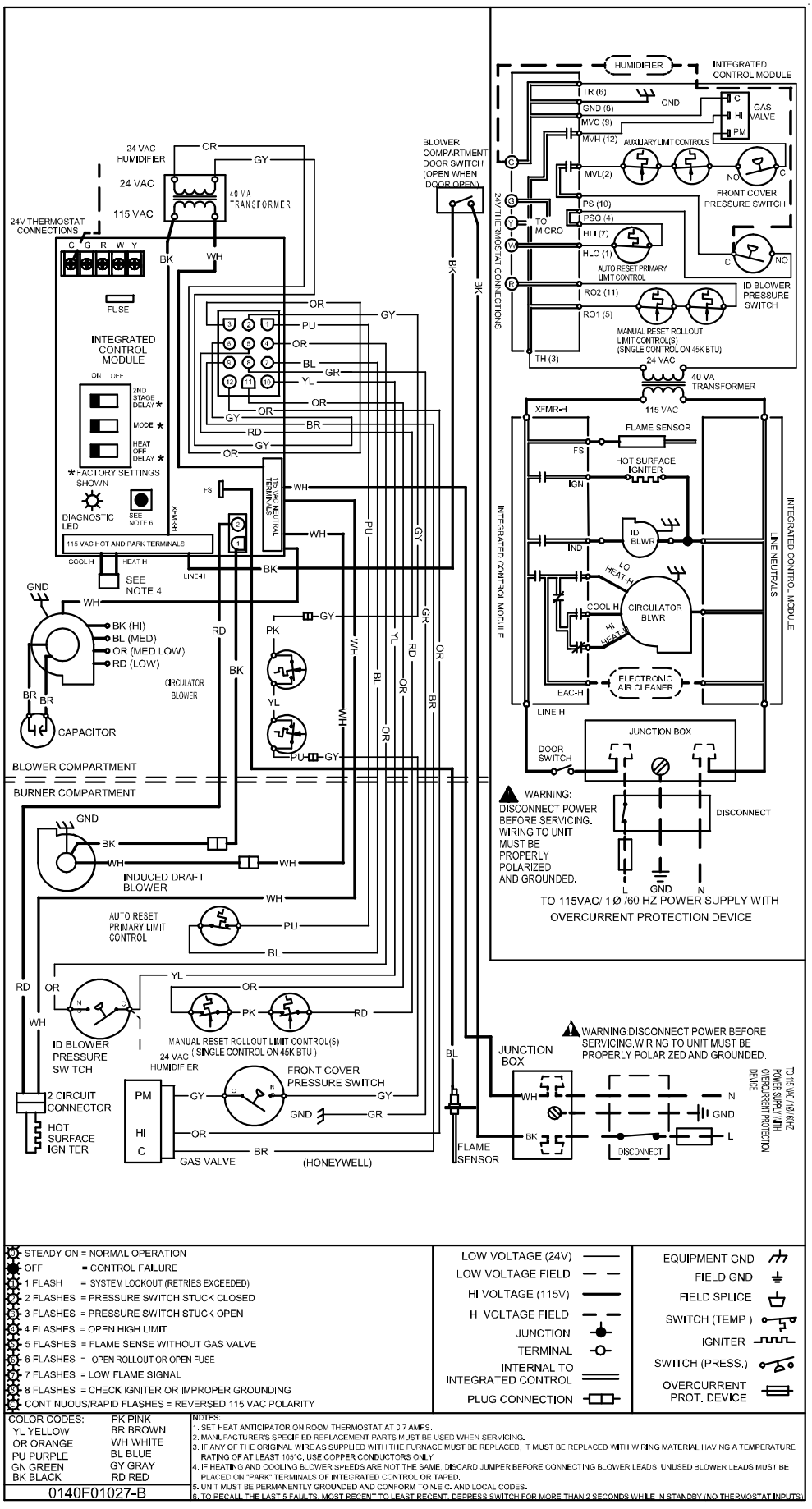


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**DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.**

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