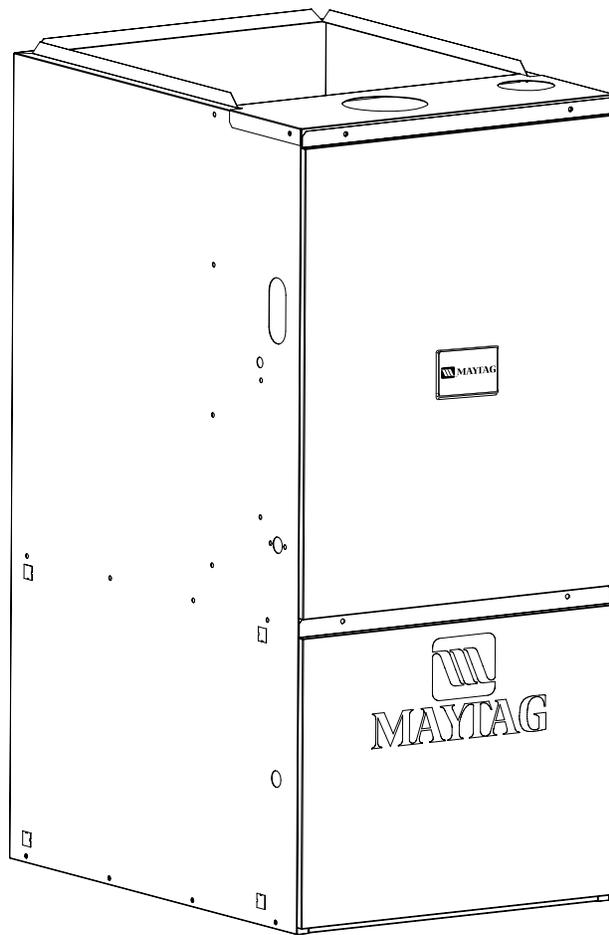




TECHNICAL SPECIFICATIONS

Model MGF1TE 2 Stage Series Upflow/Horizontal



M120 Product Line

**High Efficiency / 95.1 AFUE Direct Vent or
Non Direct Vent Condensing Furnace**

- **12 YEAR ALL PARTS WARRANTY**
- **This product offers a 10-Year Dependability Promise to replace the unit if the heat exchanger fails within the first 10 years of operation, to the original owner.**
- **Product registration required for 12-year All Parts Warranty and Dependability Promise within a limited period of time after the installation. See current warranty document for details. This can be viewed at www.maytagvac.com or ask your sales representative.**
- **This furnace features a limited lifetime heat exchanger warranty.**



The high efficiency 2-Stage gas furnace may be installed free standing in a utility room, basement, or enclosed in an alcove or closet. With kit, the upflow model converts easily to horizontal application. The extended flush jacket provides a pleasing “appliance appearance.” Design certified by the CSA International (Canadian Standards Association).

Features and Benefits

- **100% fired and tested** — All units and each component (both mechanical and electrical) are tested on the manufacturing line.
- **Best packaging in the industry** — Unique design assures product will arrive to the homeowner dent free.
- **Clean and quiet operation** — Due to the unique design of in-shot burners, location of inducer and use of insulation.
- **Fixed 30 second blower delay** at burner start-up assures a warm duct temperature at furnace start-up. Adjustable blower off settings (60, 120, 160 and 180 seconds).
- **Fixed 30-second post purge** increases life of heat exchanger.
- **SmartStart™ Control Board** — Provides extended life to ignitors in furnaces using hot surface ignition technology. Programmed to learn the heat-up characteristics of the ignitor, then adapt the ignition time to the characteristics of the furnace so the ignitor is energized appropriately.
- **Dependable, hot surface ignitor** — Innovative application of an appliance type ignitor with a 20-year history of reliability, assures no call-backs because of handling.
- **Color coded wire harness** — Designed to fit the components, all with quick-connect fittings for ease of service and replacement.
- **Tubular primary heat exchanger** — Heavy gauge aluminized steel heat exchanger assures a long life.
- **Stainless steel** secondary heat exchanger assures a long life.
- **Fixed cooling cycle blower-off delay (TDR)** increases cooling performance when matched with a Maytag coil.
- **Approved for direct vent furnace, category IV venting system** – May be vertically or horizontally vented using either a one-pipe or two-pipe system for maximum flexibility in installation.
- **Fully insulated blower cabinet** for quiet operation.
- **Variable speed blower** — Maximizes air conditioner and heat pump efficiencies. On selected units, SEER ratings up to 16 and HSPF ratings up to 8.5 are ARI listed.
- **LP convertible** — Simple burner orifice and regulator spring change for ease of convertibility.
- **Factory installed drain system** — for reliable performance.
- **Diagnostic light flashes identify limit failure, pressure switch failure and improper ground and polarization** — for easy troubleshooting.
- **Incorporates integrated control board** with connections for electronic air cleaner and humidifier.
- **Two piece door design** enhances furnace appearance and uses screw fasteners for great fit and accessibility.
- **3 amp fuse** protection against low voltage shorts; protects transformer and control board.
- **Low voltage terminal board** for easy field wiring.

High Efficiency Upflow 95.1 Gas Furnace

Roll-out switch.

Aluminized steel in-shot burners, hot surface ignitor and redundant gas valve provide safe, reliable ignition and efficient combustion.

Remote flame sensor for proof of carry-over.

Supply air limit.

Two Stage Gas Valve.

Vent switch protects against blocked flue.

Add-on integrated control makes operation of two stage heating and cooling. It has built-in staging timer.

SmartStart™ integrated control monitors the burner flame and limit circuit continuously. Blower timing has adjustable OFF settings. Provides humidifier and electronic air cleaner connections.

Front door screw fasteners ensure tight fit.

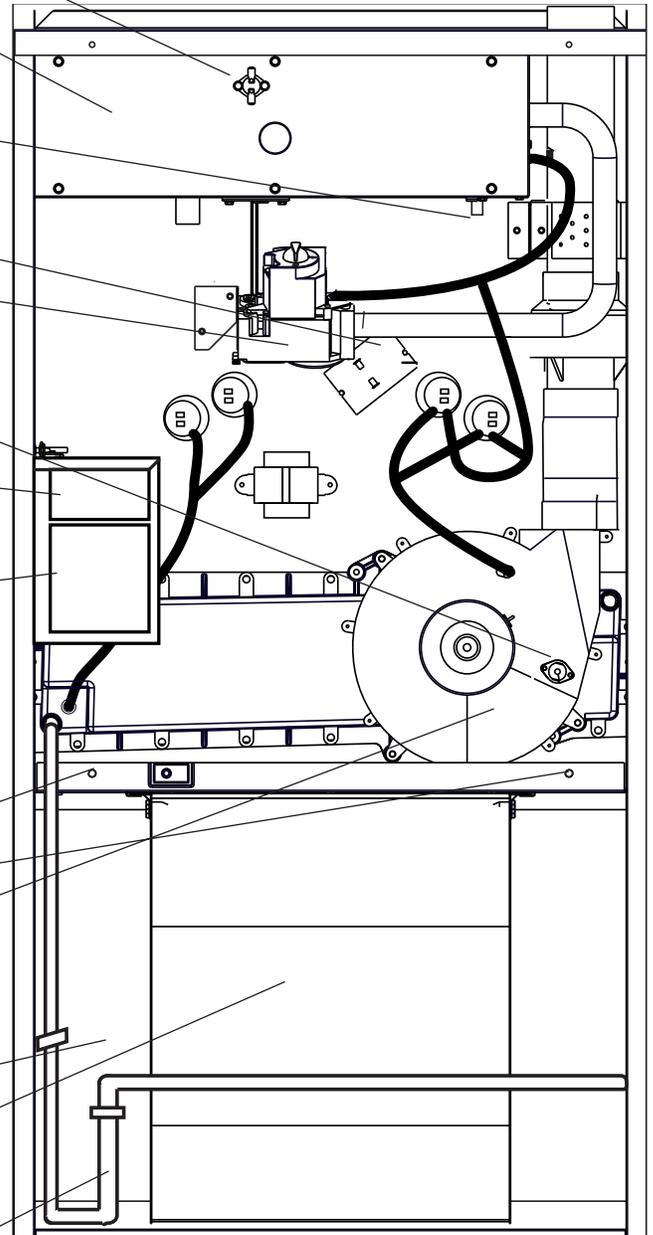
Induced draft blower provides quiet and reliable operation.

Fully Insulated blower compartment.

Variable speed motor/blower provides quiet airflow, reliable operation, and is installed on a slide out track.

Factory installed drain for reliable performance.

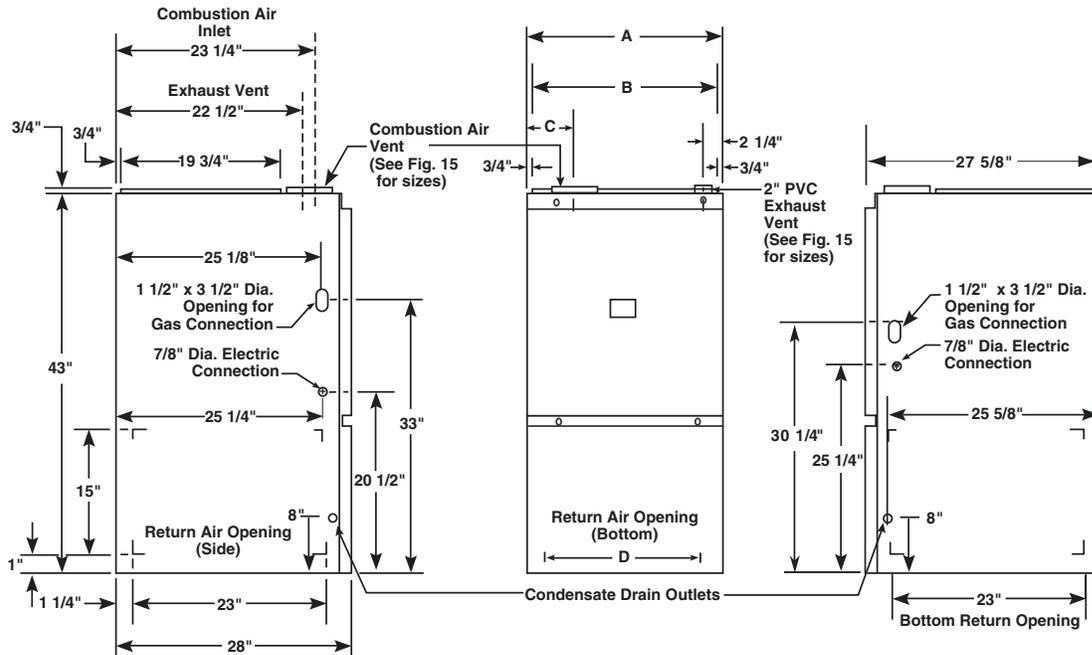
Counterflow heat exchanger orientation and aluminized steel tubular design, means improved efficiency and durability. (Not Shown)



DIMENSIONS

Upflow/Horizontal Furnace

| Model Number MGF1TE | High Fire Furnace Btuh | Low Fire Furnace Input | Dimensions (inches) | | | | Shipping Weight (lbs) |
|------------------------|------------------------------|------------------------------|---------------------|--------|-------|--------|-----------------------------|
| | | | A | B | C | D | |
| 060 | 60,000 | 42,000 | 14 1/2 | 12 3/4 | 5 1/8 | 11 3/4 | 155 |
| 060 | 60,000 | 42,000 | 19 3/4 | 18 1/4 | 7 7/8 | 17 1/4 | 195 |
| 080 | 80,000 | 56,000 | 19 3/4 | 18 1/4 | 7 7/8 | 17 1/4 | 195 |
| 100 | 100,000 | 70,000 | 19 3/4 | 18 1/4 | 7 7/8 | 17 1/4 | 200 |
| 120 | 120,000 | 84,000 | 22 1/2 | 21 | 9 1/4 | 20 | 220 |



STANDARD EQUIPMENT

Direct vent; draft inducer; pressure switch; redundant main gas control; hot-surface ignition; 40VA transformer for air conditioner application; limit controls; direct drive motor; all models can be converted to use L.P. (propane) gas. Factory approved kits only must be used and are available as an optional accessory from your Maytag distributor.

SPECIFICATIONS

| MODEL NUMBER *TE | 060(C,N)-VA | 060(C,N)-VB | 080(C,N)-VB | 100(C,N)-VB | 120(C,N)-VC |
|--|----------------|----------------|----------------|----------------|----------------|
| High Fire Rated Input(Btu/h) (a) | 60,000 | 60,000 | 80,000 | 100,000 | 120,000 |
| High Fire Heating Capacity(Btu/h) | 57,000 | 57,000 | 76,000 | 95,000 | 114,400 |
| Low Fire Rated Input(Btu/h) (a) | 42,000 | 42,000 | 56,000 | 70,000 | 84,000 |
| Low Fire Heating Capacity(Btu/h) | 40,000 | 40,000 | 53,000 | 67,000 | 72,000 |
| AFUE | 95+ | 95+ | 95+ | 95+ | 95+ |
| Maximum Heating Ext. St. Press.(in WC) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Blower Wheel D x W | 10 x 6 | 10 x 6 | 11 x 10 | 11 x 10 | 11 x 10 |
| Motor H.P. -Type | 1/2 - Variable | 3/4 - Variable | 3/4 - Variable | 3/4 - Variable | 3/4 - Variable |
| Motor FLA | 7.7 | 9.6 | 9.6 | 9.6 | 9.6 |
| High Fire Temperature Rise Range(F) | 30-60 | 30-60 | 30-60 | 35-65 | 45-75 |
| Low Fire Temperature Rise Range(F) | 30-60 | 30-60 | 30-60 | 35-65 | 40-70 |

() Can be C or N

Note: All models are 115V, 60 Hz. Gas Connections are 1/2" N.P.T. AFUE = Annual Fuel Utilization Efficiency.

(a) Ratings to 2,000 feet. Over 2,000 feet, reduce 4% for each 1,000 ft. above sea level.

VENTING

All models are approved for vertical non direct (1 pipe) and direct (2 pipe) venting applications. See Vent Table below for specified sizes and allowable lengths.

| APPLICATION | SINGLE PIPE LENGTH (ft.) with 1 long radius elbow** | | DIRECT VENT, DUAL PIPE LENGTH (ft.) with 1 long radius elbow on each pipe** | | | | | |
|---------------------------------------|--|--------------|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Outlet 2" | Outlet 3" | Inlet/Outlet 2" | Inlet/Outlet 2" | Inlet/Outlet 3" | Inlet/Outlet 2" | Inlet/Outlet 3" | Inlet/Outlet 3" |
| PVC, CPVC or ABS SCH. 40 Pipe Size | | | | | | | | |
| Models *TE 060 | 65 | 200 | 30 | 30 | 40 | 40 | 110 | 110 |
| Models *TE 080 | 45 | 200 | 30 | 30 | 40 | 40 | 110 | 110 |
| Models *TE 100 | 40 | 200 | 25 | 25 | 40 | 40 | 110 | 110 |
| Models *TE 120 | 40 | 200 | 20 | 20 | 40 | 40 | 110 | 110 |

* NOTE:

1. Subtract 2.5 ft. for each additional 2" elbow and 3.5 ft. for each additional 3" elbow.
2. Two 45 degree elbows are equivalent to one 90 degree elbow.
3. One short radius elbow is equivalent to two long radius elbows.
4. Do not include termination elbows in calculation of vent length.
5. This table is applicable for elevations from sea level to 2000 ft. For higher elevations decrease vent pipe lengths by 8% per 1000 ft. of altitude.
6. Only the listed pipe materials are approved for use with these Condensing Furnaces.

ACCESSORIES

| Kit | Order Number |
|--|---|
| U.S. LP Conversion Kit (0 to 10,000 ft.) | 904404 |
| Canadian LP Gas Conversion Kit (0 to 4,500 ft.) | 904405 |
| Side Return Filter Kit | 541036 |
| Bottom Return Horizontal Installation | A Cabinet B Cabinet C Cabinet 903088 903089 903090 |
| Internal Side Return Filter Wire | 903152 |
| Horizontal Installation Kit | 903568 |
| Downflow "A" Combustion Floor Base | 902974 |
| Downflow "B" Combustion Floor Base | 902677 |
| Downflow "C" Combustion Floor Base | 904108 |

ELECTRICAL DATA

| Furnace Input (Btuh) | Cabinet Width (in.) | Nominal Electrical Supply | Maximum Operating Voltage | Minimum Operating Voltage | Maximum Furnace Amperes | Minimum Wire Gauge | Maximum Fuse or Circuit Breaker Amps* |
|----------------------|---------------------|---------------------------|---------------------------|---------------------------|-------------------------|--------------------|---------------------------------------|
| 60,000 | 14.50 | 115-60-1 | 127 | 103 | 12 | 14 | 15 |
| 60,000 | 19.75 | 115-60-1 | 127 | 103 | 12 | 14 | 15 |
| 80,000 | 19.75 | 115-60-1 | 127 | 103 | 12 | 14 | 15 |
| 100,000 | 19.75 | 115-60-1 | 127 | 103 | 12 | 14 | 15 |
| 120,000 | 22.50 | 115-60-1 | 127 | 103 | 12 | 14 | 15 |

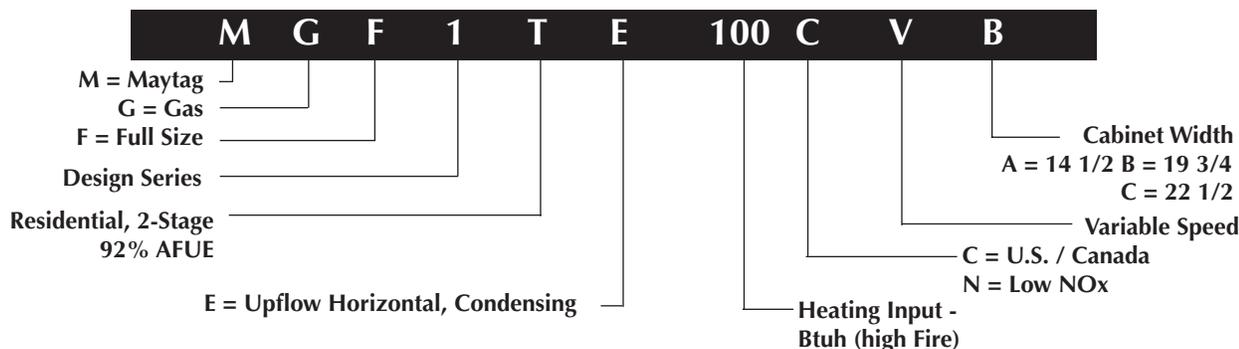
* Time-delay fuses or HACR-type circuit breakers are required.

| Thermostat Wire Gauge | Recommended Thermostat Wire Length | |
|-----------------------|------------------------------------|-----------------------|
| | 2-wire (heating) | 4 or 5-wire (cooling) |
| 24 | 55 ft. | 25 ft. |
| 22 | 90 ft. | 45 ft. |
| 20 | 140 ft. | 70 ft. |
| 18 | 225 ft. | 110 ft. |

VENT KITS

| Kit Description | Order Number |
|------------------------------|--------------|
| 2" Concentric Vent Kit | 904177 |
| 3" Concentric Vent Kit | 904176 |
| Neutralizer Kit (all models) | 902377 |
| 2" Side Wall Vent Kit | 904617 |
| 3" Side Wall Vent Kit | 904347 |

IDENTIFICATION CODE



CAPACITIES — Furnace Airflow Data

Cooling/Heat Pump Airflow Settings

| CFM | SWITCH NUMBER | | | | | | | Nominal A/C and HP Capacity | | |
|-----|---------------|------|---|---|---|---|---|-----------------------------|---|---|
| | LOW | HIGH | 1 | 2 | 3 | 4 | 5 | | 6 | 7 |
| 300 | 400 | 0 | 0 | 0 | 1 | | | | | |
| 330 | 480 | 0 | 0 | 0 | 0 | | | | | |
| 390 | 550 | 0 | 0 | 1 | 0 | | | | | |
| 420 | 600 | 1 | 0 | 0 | 1 | | | | | |
| 500 | 720 | 1 | 0 | 0 | 0 | | | | | |
| 550 | 800 | 1 | 0 | 1 | 0 | | | | | |
| 580 | 830 | 0 | 1 | 0 | 1 | | | | | |
| 640 | 930 | 0 | 1 | 0 | 0 | | | | | |
| 700 | 1010 | 1 | 1 | 0 | 1 | | | | | |
| 730 | 1070 | 0 | 1 | 1 | 0 | | | | | |
| 780 | 1140 | 1 | 1 | 0 | 0 | | | | | |
| 850 | 1230 | 1 | 1 | 1 | 0 | | | | | |

NOTE: 0 = OFF 1 = ON

*TE 060 (1/2 HP) Cooling/Heat Pump Airflow Settings

| CFM | SWITCH NUMBER | | | | | | | Nominal A/C and HP Capacity | | |
|------|---------------|------|---|---|---|---|---|-----------------------------|---|---|
| | LOW | HIGH | 1 | 2 | 3 | 4 | 5 | | 6 | 7 |
| 500 | 720 | 0 | 0 | 0 | 1 | | | | | |
| 550 | 800 | 0 | 0 | 0 | 0 | | | | | |
| 610 | 880 | 0 | 0 | 1 | 0 | | | | | |
| 650 | 945 | 1 | 0 | 0 | 1 | | | | | |
| 720 | 1050 | 1 | 0 | 0 | 0 | | | | | |
| 800 | 1155 | 1 | 0 | 1 | 0 | | | | | |
| 900 | 1305 | 0 | 1 | 0 | 1 | | | | | |
| 1000 | 1450 | 0 | 1 | 0 | 0 | | | | | |
| 1060 | 1530 | 1 | 1 | 0 | 1 | | | | | |
| 1100 | 1595 | 0 | 1 | 1 | 0 | | | | | |
| 1170 | 1700 | 1 | 1 | 0 | 0 | | | | | |
| 1290 | 1870 | 1 | 1 | 1 | 0 | | | | | |

NOTE: 0 = OFF 1 = ON

*TE 060/080/100/120 (3/4 HP) Cooling/Heat Pump Airflow Settings

Delay Settings

| Delay Description | Switch Number | | | | | | | | |
|-------------------|---------------|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Delay A | | | | | | | | 0 | 0 |
| Delay B | | | | | | | | 0 | 1 |
| No Delay | | | | | | | | 1 | 0 |
| De - Hum | | | | | | | | 1 | 1 |

Note: 0=Off, 1=On

- "Delay A" has a 2-step "on" profile operating the blower at 31% of the selected airflow for 30 seconds, then 75% of the selected airflow for 30 seconds. It will then operate at the selected airflow until the thermostat is satisfied, followed by an "off-cycle" profile running at 50% of the selected airflow for 60 seconds.
- "Delay B" has a single "on" profile operating the blower at 50% of the selected airflow for 30 seconds. It will then operate at the selected airflow until the thermostat is satisfied, followed by an "off-cycle" profile running at 50% of the selected airflow for 90 seconds.
- The "De-Hum" profile will operate the blower at 31% of the selected airflow for 30 seconds, followed by 75% of the selected airflow for 10 minutes. It will then operate at the selected airflow until the thermostat is satisfied.
- The "No Delay" option will ramp the blower up to the selected airflow. When the thermostat is satisfied, it will then ramp the blower off.

Heating Airflow Settings

| Nominal Airflow (CFM) and Temperature Rises (degree F) | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|-----------------------|--------|-----------------|--------|-----------------------|---------|-----------------|---------|------------------------|----|-----------------|----|-----------------------|-----|-----------------|----|------|----|-----|-----|------|----|--|
| Switches | | | *TE-060(CN)-VA Models | | | | *TE-080(CN)-VB Models | | | | *TE-100 (CN)-VB Models | | | | *TE-120(CN)-VC Models | | | | | | | | | | |
| | | | Low Fire Input | | High Fire Input | | Low Fire Input | | High Fire Input | | Low Fire Input | | High Fire Input | | Low Fire Input | | High Fire Input | | | | | | | | |
| 5 | 6 | 7 | 43,000 | 60,000 | 56,000 | 80,000 | 70,000 | 100,000 | 84,000 | 120,000 | 600 | 75 | 660 | 72 | 1090 | 63 | 660 | 90 | 1090 | 80 | 660 | 108 | 1090 | 96 | |
| 0 | 0 | # | 600 | 60 | 700 | 75 | 660 | 72 | 1090 | 63 | 660 | 90 | 1090 | 80 | 660 | 108 | 1090 | 96 | | | | | | | |
| 1 | 0 | # | 660 | 54 | 800 | 65 | 750 | 64 | 1240 | 57 | 750 | 80 | 1240 | 70 | 750 | 95 | 1240 | 84 | | | | | | | |
| 0 | 1 | # | 800 | 45 | 1048 | 50 | 1220 | 40 | 1680 | 42 | 1220 | 49 | 1680 | 52 | 1220 | 59 | 1680 | 62 | | | | | | | |
| 1 | 1 | # | 900 | 40 | 1296 | 40 | 1300 | 37 | 1880 | 37 | 1300 | 46 | 1880 | 46 | 1300 | 55 | 1880 | 56 | | | | | | | |

Switch not used - Can be 0 or 1.

Notes:

1. Recommended temperature rises are highlighted in bold.
2. Airflow rates of 1800 CFM or more require two return air connections. Data is for operation with filter(s).
3. Temperature rises in the table are approximate. Actual temperature rises may vary.
4. Temperature rises that are shaded grey are for reference only. These conditions are not recommended.
5. For single stage cooling, the indoor blower will operate at the CFM listed in the high column.



Before purchasing this appliance, read important energy cost and efficiency information available from your retailer. Specifications and illustrations subject to change without notice and without incurring obligations.

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