

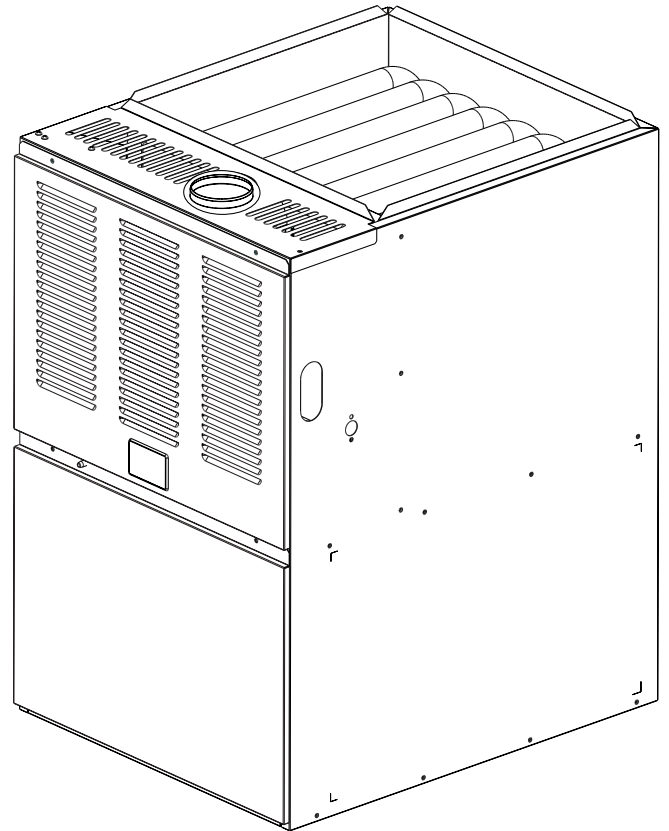
L1RA Series Upflow/Horizontal Gas Furnace

Induced Draft - 80+ AFUE
Input 45,000 - 126,000 Btuh

The upflow/horizontal gas furnace may be installed free standing in a utility room, basement, or enclosed in an alcove or closet. The extended flush jacket provides a pleasing "appliance appearance". The product is truly designed with the contractor and the consumer in mind.

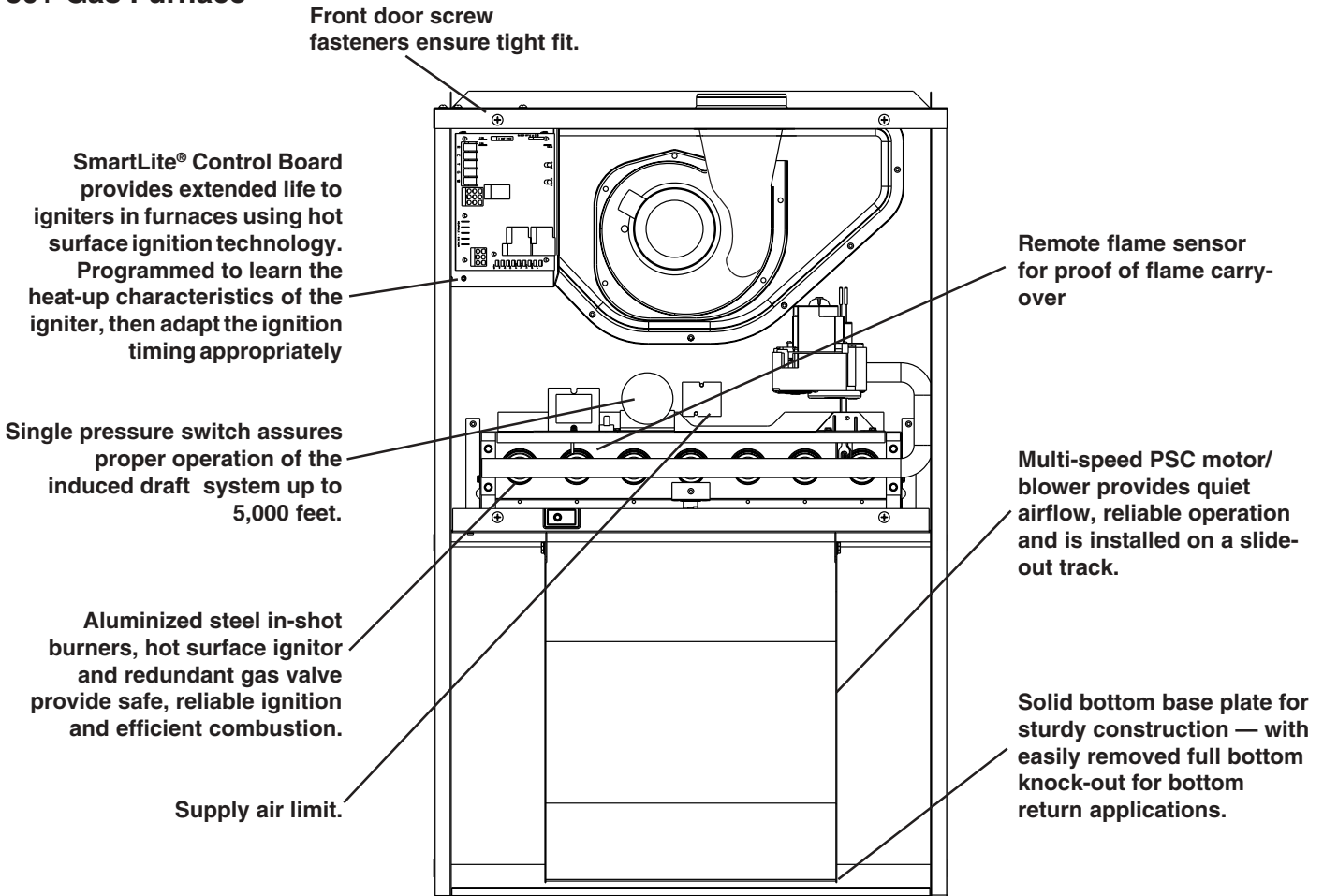
FEATURES and BENEFITS

- **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 design of in-shot burners, location of inducer and return air vents.
- **Fixed 30 second blower delay** at burner start-up assures a warm duct temperature at furnace start-up. Adjustable blower off settings (60, 90, 120 and 180 seconds).
- **Fixed 30 second post purge** increases life of heat exchanger.
- **Dependable, hot surface ignitor** — Innovative application of an appliance type ignitor with a 20 year history of reliability.
- **Color coded wire harness** — Designed to fit the components, all with quick-connect fittings for ease of service and replacement.
- **Approved for category I venting system** — May be common or dedicated vented for flexibility in installation.
- **Tubular primary heat exchanger** — Aluminized steel heat exchanger assures a long life.
- **90 second fixed cooling cycle blower-off delay (TDR)** increases cooling performance when matched with a NORDYNE coil.
- **Furnace is easy to handle** — short and lightweight.
- **Multi-speed direct drive blower** — Designed to give a wide range of cooling capacities. 40VA transformer included.
- **LP convertible** — Simple burner orifice and regulator spring change for ease of convertibility.
- **Diagnostic lights flash to identify limit failure, pressure switch failure, improper ground and polarization, and low flame signal** — for easy troubleshooting.
- **SmartLite[®] Control Board provides extended life to igniters** programmed to learn the heat-up characteristics of the igniter so the ignition timing is energized appropriately.
- **Two piece door design** enhances furnace appearance and uses screw fasteners for easier accessibility.
- **3 amp fuse** protection against low voltage shorts; protects transformer and control board.
- **Low voltage terminal board** for easy field wiring.
- **Warranty** — The best in the industry.
 - 5 year limited parts
 - 2 year mileage
 - 2 year labor
 - 20 year limited warranty on heat exchanger



FEATURES

Upflow/Horizontal 80+ Gas Furnace



STANDARD EQUIPMENT

Draft inducer; pressure switch; redundant main gas control; hot-surface ignition; timed ON/OFF blower controls (TDR) ; 40VA transformer for air conditioner application; limit controls; solid base plate with knock-out for easy removal; 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 distributor.

SPECIFICATIONS

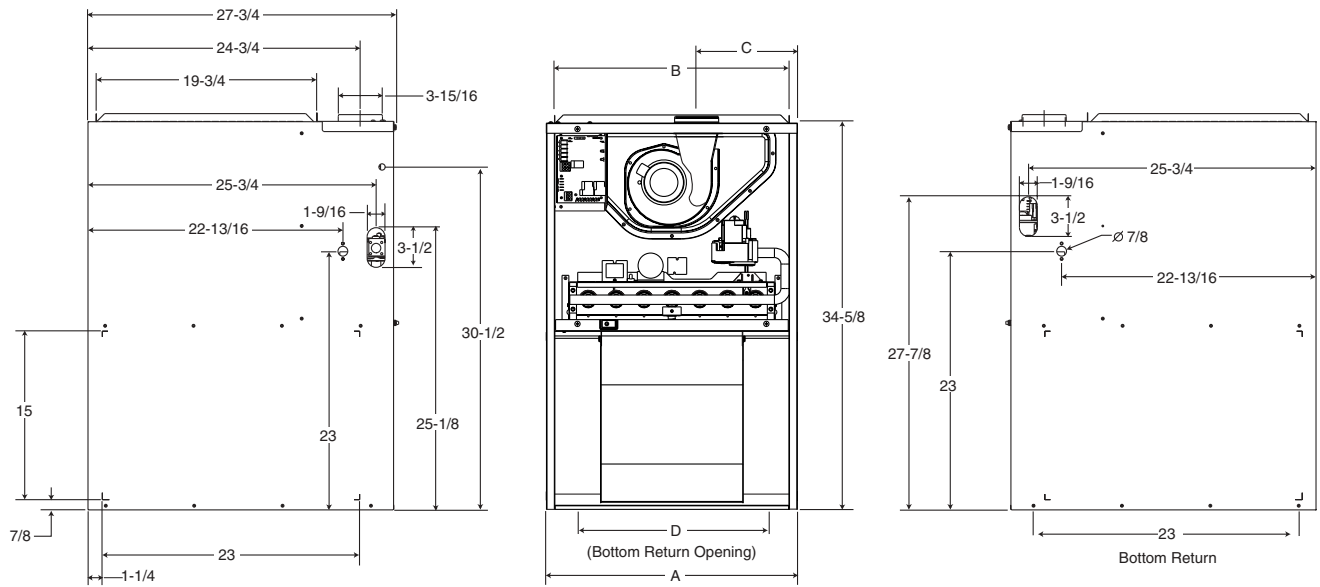
| L1RA MODEL NUMBERS | 045(*)08A | 054(*)12A | 072(*)12A | 072(*)12B | 072(*)16B | 090(*)12B | 090(*)16B | 090N20B | 108(*)16B | 108N20B | 108(*)20C | 126(*)20C |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Input-Btuh (a) | 45,000 | 54,000 | 72,000 | 72,000 | 72,000 | 90,000 | 90,000 | 90,000 | 108,000 | 108,000 | 108,000 | 126,000 |
| Heating Capacity - Btuh | 36,000 | 43,000 | 58,000 | 58,000 | 58,000 | 72,000 | 72,000 | 72,000 | 86,000 | 86,000 | 86,000 | 101,000 |
| AFUE | 80+ | 80+ | 80+ | 80+ | 80+ | 80+ | 80+ | 80+ | 80+ | 80+ | 80+ | 80+ |
| Max. Htg. Ext. St. Press. In W.C. | .5 | .5 | .5 | .5 | .5 | .5 | .5 | .5 | .5 | .5 | .5 | .5 |
| Blower Wheel D x W | 10 x 6 | 10 x 6 | 10 x 6 | 9 x 9 | 10 x 10 | 9 x 9 | 10 x 10 | 11 x 10 | 11 x 10 | 11 x 10 | 11 x 10 | 11 x 10 |
| Motor H.P. -Speed -Type | 1/5-2-PSC | 1/3-3-PSC | 1/3-3-PSC | 1/4-3-PSC | 1/2-4-PSC | 1/4-3-PSC | 1/2-4-PSC | 3/4-4-PSC | 1/2-4-PSC | 3/4-4-PSC | 3/4-4-PSC | 3/4-4-PSC |
| Motor FLA | 4.0 | 6.0 | 6.0 | 6.0 | 8.8 | 6.0 | 8.8 | 10.1 | 8.8 | 10.1 | 10.1 | 10.1 |
| Temperature Rise Range - °F | 40 - 70 | 40 - 70 | 40 - 70 | 40 - 70 | 40 - 70 | 40 - 70 | 40 - 70 | 40 - 70 | 40 - 70 | 40 - 70 | 40 - 70 | 40 - 70 |

*Can be C or N.

All models are 115 V, 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.

DIMENSIONS



| FURNACE DIMENSIONS AND SHIPPING WEIGHTS | | | | | | | |
|---|-------------------------|------------|------------|------------|------------|----------------------|--------------------------|
| Model Number L1RA | Furnace Input (Btuh) | Dimensions | | | | Flue Outlet (in.) | Shipping Weight (lbs) |
| | | A (in.) | B (in.) | C (in.) | D (in.) | | |
| 045(*)-08A | 45,000 | 14 1/4 | 12 3/4 | 4 | 11 4/5 | 4 | 88 |
| 054(*)-12A | 54,000 | 14 1/4 | 12 3/4 | 4 | 11 4/5 | 4 | 94 |
| 072(*)-12A | 72,000 | 14 1/4 | 12 3/4 | 4 | 11 4/5 | 4 | 96 |
| 072(*)-12B | 72,000 | 19 3/4 | 18 1/4 | 7 5/8 | 17 1/3 | 4 | 108 |
| 072(*)-16B | 72,000 | 19 3/4 | 18 1/4 | 7 5/8 | 17 1/3 | 4 | 115 |
| 090(*)-12B | 90,000 | 19 3/4 | 18 1/4 | 7 5/8 | 17 1/3 | 4 | 115 |
| 090(*)-16B | 90,000 | 19 3/4 | 18 1/4 | 7 5/8 | 17 1/3 | 4 | 120 |
| 090N-20B | 90,000 | 19 3/4 | 18 1/4 | 7 5/8 | 17 1/3 | 4 | 123 |
| 108(*)-16B | 108,000 | 19 3/4 | 18 1/4 | 7 5/8 | 17 1/3 | 4 | 125 |
| 108N-20B | 108,000 | 19 3/4 | 18 1/4 | 7 5/8 | 17 1/3 | 4 | 128 |
| 108(*)-20C | 108,000 | 22 1/2 | 21 | 9 | 20 | 4 | 135 |
| 126(*)-20C | 126,000 | 22 1/2 | 21 | 9 | 20 | 4 | 137 |

Note: *Can be C or N

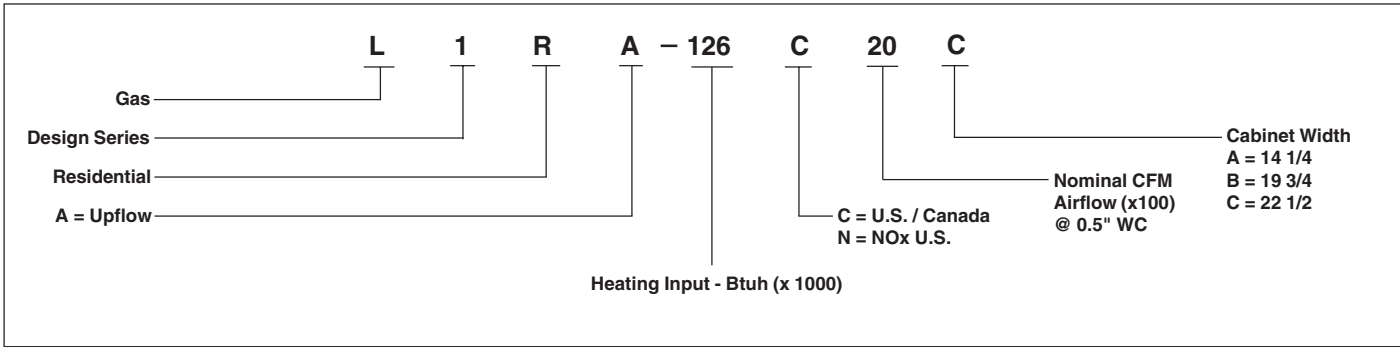
BLOWER PERFORMANCE

| MODEL NUMBER *RA | HEATING INPUT | MOTOR SPEED | MOTOR HP | EXTERNAL STATIC PRESSURE (INCHES OF 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 | Rise | CFM | Rise | CFM | Rise |
| 045-08A | 40,000 | HIGH* LOW** | 1/5 | 1000 | 33 | 970 | 34 | 950 | 35 | 920 | 36 | 870 | 38 | 820 | 41 | 770 | 43 | 700 | 47 |
| 054-12A | 54,000 | HIGH* MEDIUM LOW** | 1/3 | 1300 | 31 | 1280 | 32 | 1210 | 33 | 1160 | 34 | 1110 | 35 | 1050 | 38 | 980 | 40 | 910 | 44 |
| 072-12A | 72,000 | HIGH* MEDIUM LOW** | 1/3 | 1380 | 38 | 1350 | 39 | 1310 | 40 | 1260 | 42 | 1210 | 44 | 1150 | 46 | 1080 | 49 | 1000 | 53 |
| 072-12B | 72,000 | HIGH* MEDIUM LOW** | 1/4 | 1220 | 43 | 1190 | 44 | 1160 | 45 | 1120 | 47 | 1070 | 49 | 1020 | 52 | 950 | 55 | 880 | 60 |
| 072-16B | 72,000 | HIGH* MEDIUM LOW** | 1/2 | 1550 | 34 | 1500 | 35 | 1440 | 37 | 1360 | 40 | 1280 | 42 | 1190 | 45 | 1080 | 49 | 970 | 55 |
| 090-12B | 90,000 | HIGH* MEDIUM LOW** | 1/4 | 1380 | 52 | 1310 | 55 | 1240 | 58 | 1200 | 55 | 1140 | 58 | 1090 | 64 | 970 | 68 | 870 | 76 |
| 090-16B | 90,000 | HIGH* MEDIUM LOW** | 1/2 | 1985 | 33 | 1955 | 34 | 1905 | 35 | 1855 | 36 | 1790 | 37 | 1705 | 40 | 1630 | 41 | 1530 | 44 |
| 090-20B | 90,000 | HIGH* MEDIUM LOW** | 3/4 | 2375 | 28 | 2320 | 29 | 2280 | 30 | 2215 | 30 | 2150 | 31 | 2085 | 32 | 2015 | 33 | 1940 | 34 |
| 108-16B | 108,000 | HIGH* MEDIUM LOW** | 1/2 | 1985 | 40 | 1955 | 41 | 1905 | 42 | 1855 | 43 | 1790 | 45 | 1705 | 47 | 1630 | 49 | 1530 | 52 |
| 108-20B | 108,000 | HIGH* MEDIUM LOW** | 3/4 | 2410 | 32 | 2370 | 33 | 2330 | 34 | 2275 | 35 | 2230 | 36 | 2165 | 37 | 2075 | 38 | 1990 | 40 |
| 108-20C | 108,000 | HIGH* MEDIUM LOW** | 3/4 | 2270 | 35 | 2210 | 36 | 2190 | 36 | 2165 | 37 | 2130 | 38 | 2100 | 39 | 2030 | 40 | 1975 | 41 |
| 126-20C | 126,000 | HIGH* MEDIUM LOW** | 3/4 | 2270 | 40 | 2210 | 41 | 2190 | 42 | 2165 | 43 | 2130 | 44 | 2100 | 45 | 2030 | 46 | 1975 | 47 |

* Factory Set Cooling Speed
 ** Factory Set Heating Speed
 — Not Recommended

Notes: 1. Airflow rates of 1800 CFM or more require two return air connections. Data is for operation with filter(s).
 2. Temperature rises in the table are approximate. Actual temperature rises may vary.
 3. Temperature rises and airflows for external static pressures greater than 0.5 are for reference only. These conditions are not recommended.

MODEL IDENTIFICATION CODE



| High Efficiency with Honeywell VR Gas Valve | | Order Number |
|---|-----------|--------------|
| Kit | | |
| U.S. LP Conversion Kit (0 to 10,000 ft.) | | 904090A |
| Canadian LP Gas Conversion Kit (0 to 4,500 ft.) | | 904091A |
| Fossil Fuel Kit | | 914762 |
| External Side Return Filter Frame | | 541036 |
| Bottom Return Filter 20/Box | A Cabinet | 903088 |
| | B Cabinet | 903089 |
| | C Cabinet | 903090 |
| Internal Side Return Filter Retainers 10/Box | | 903152 |
| High Altitude Pressure Switch Kit (5,001 to 10,000 ft.) | | 903853 |

VENTING

All models may be common vented with a gas water heater. Type B gas vent materials may be used when connected to a vertical vent system. The installation must be in accordance with the venting instructions supplied with the furnace.



We Encourage Professionalism



Through Technician Certification by NATE