MAINLINE®

Reliably Comfortable.™ ≈

Elite® Series Gas Furnaces

EcoNet®

ML802V

80% A.F.U.E.†
EcoNet® Enabled
Heating Stages: Two-Stage
Motor Type: Constant CFM
Input Rates Downflow: 50-125 kBTU [14.7-36.6 kW]
Configuration Options: Downflow

Manufactured for
Mainline®
HVACmainline.com

† A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.

Table of Contents

Features and Benefits

- **Diagnostics:** With the BluArch™ Contractor App & Bluetooth® technology makes monitoring, troubleshooting and repairing the product easier than ever before

- **Dip Switch Free Installation Commissioning via Bluetooth® Technology:** Seamless final install step without DIP switch configuration using the BluArch™ Contractor App

- **Ignition System:** Proven Direct Spark Ignition (DSI) for reliability and longevity

- **Two-Stage Heating:** Furnace operation mainly stays at low capacity around 60-65%, but will switch to high capacity to deliver stable heat distribution

- **Constant CFM Motor:** Truly variable speed technology allows for ultimate humidity control, quieter sound levels and year-round energy savings

- **Quieter Operation[1]:** A fully insulated blower cabinet, solid bottom and truly variable speed airflow technology makes this furnace one of the quieter options available

- **EcoNet® Enabled Furnace:** The latest in sensor technology and the EcoNet® monitoring system provides a new level of protection, control and energy savings

- **Allows on-the-go control** and receipt of system alerts by the homeowner via the EcoNet® Smart Thermostat and EcoNet® App[2]

[1]Based on manufacturer's furnace offering, and the product's heating stages, motor type and cabinet insulation. Sound levels are also dependent on furnace location and installation.

[2]Wifi broadband internet connection required. Download the EcoNet® App from the App Store® or Google Play® to set up your EcoNet® Smart Thermostat. Receipt of notifications depend on home WiFi set up. Amazon, Alexa and all related logos are trademarks of Amazon.com, Inc. or its affiliates.

Gas Furnaces

ML	80	2	V	050	3	A	14	DZ	S	B	A	P
Brand	Furnace Efficiency	Stages of Heating	Motor Type	Heating Input	AC Max. Capacity	Major Series	Width	Position	NOx	Controls	Minor Series	Option Code
ML - Mainline	80 - 80% AFUE	2 - Two-Stage	V - Variable Speed	050 - 50K BTUH [14.7 kW] 075 - 75K BTUH [22.0 kW] 100 - 100K BTUH [29.3 kW] 125 - 125K BTUH [36.6 kW]	3 - 3 ton drive 4 - 4 ton drive 5 - 5 ton drive	A - 1st Design Series	14 - 14" Width 17 - 17.5" Width 21 - 21" Width 24 - 24.5" Width	DZ - Downflow Zero Clearance	S - Standard	B - Communicating, Bluetooth®, EcoNet®	A - 1st Series	P - Premium Grade

[   ] Designates Metric Conversions

AVAILABLE MODELS
ML802V0503A14DZSBAP
ML802V0754A17DZSBAP
ML802V0755A21DZSBAP
ML802V1005A21DZSBAP
ML802V1255A24DZSBAP

STANDARD EQUIPMENT	
**Adjustable Humidifier On/Off Delay	Electronic On/Off Blower Time Control
**Auxiliary Input Connection	Fully Insulated Heat Exchanger Cabinet
**Condensate Switch Connection	Humidifier Connections
**Outdoor Air Temperature Sensor Connection	Humidistat Terminal Connection
**Supply Air Sensor Connection	Limit Controls
100% Safety Lock Out	Low Speed Continuous Fan Option
2 Stage Induced Draft Motor	Manual Shut-Off Valve
Adjustable Cool Fan Off Delay	On Demand Dehumidifier Connection
Adjustable Humidifier On/Off Delay (EcoNet®/App Only)	One Hour Automatic Retry
Aluminized Steel Heat Exchanger Design	Power and Self-Test Diagnostics
Blower Compartment Door Safety Switch	Pressure Switches
Bluetooth® Diagnostics	PWM Controlled Constant Torque Electrically Commutated Blower Motor
Bluetooth® Setup	Redundant 2 Stage Main Gas Control
Completely Assembled and Wired	Single Speed Option for Heating and Cooling Applications
Direct Drive Motor	Blower Insulation
EcoNet® Thermostat Connections	Two Plus* Stage Cooling Thermostat Connection
Electronic Air Cleaner Connections	Two Speed Heating

NOTE: A thermostat is not included as standard equipment
  *When Connected to Three Speed or Modulating AC/HP Product
  **EcoNet® Only Features

WARNING
THIS FURNACE IS NOT APPROVED
OR RECOMMENDED
FOR USE IN MOBILE HOMES

Physical Data and Specifications – Downflow Models

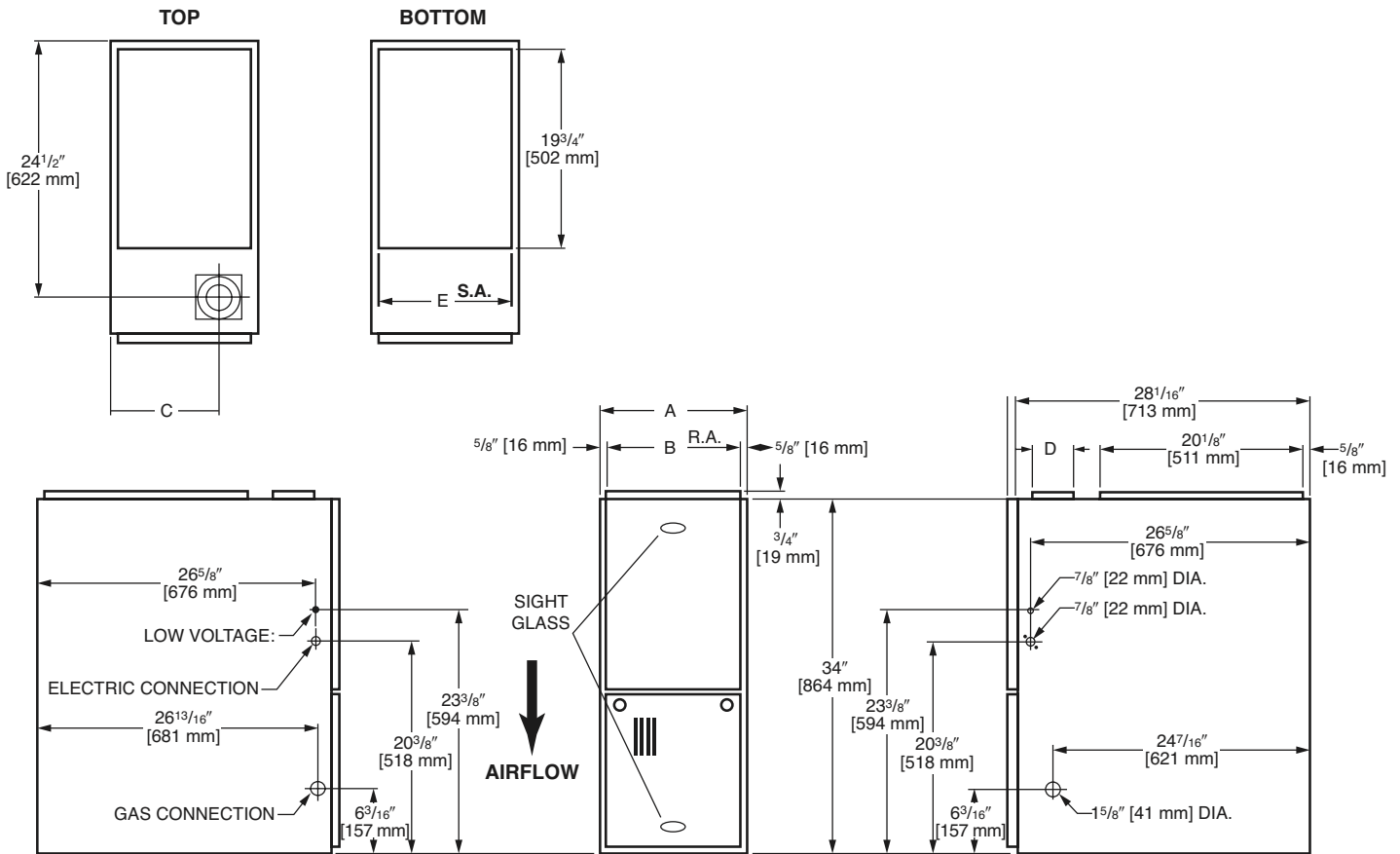| MODEL NUMBERS	ML802V0503 A14DZSBAP	ML802V0754 A17DZSBAP	ML802V0755 A21DZSBAP	ML802V1005 A21DZSBAP	ML802V1255 A24DZSBAP
Input-BTU/Hr [kW]	50,000 [15]	75,000 [22]	75,000 [22]	100,000 [29]	125,000 [37]
Heating Capacity BTU/Hr [kW] ①	40,000 [12]	60,000 [18]	60,000 [18]	80,000 [23]	100,000 [29]
Low Input BTU/Hr	35,000 [10]	52,500 [15]	52,500 [15]	70,000 [21]	87,500 [26]
Low Heating Capacity BTU/Hr	28,000 [8]	42,000 [12]	42,000 [12]	56,000 [16]	70,000 [21]
Blower (D x W) [mm]	11 x 6 [279 x 152]	11 x 7 [279 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
Motor H.P. [W] Type	1/2 [373] VS-CT(ECM)	3/4 [560] VS-CT(ECM)	1 [746] VS-CT(ECM)	1 [746] VS-CT(ECM)	1 [746] VS-CT(ECM)
Min. Circuit Ampacity	9	12	15	15	15
Min. Overload Protection Device	15	15	20	20	20
Max. Overload Protection Device	15	15	25	25	25
Motor Full Load Amps	6.1	9.6	12.4	12.4	12.4
High Heating CFM [L/s]	975 [460]	1175 [555]	1480 [698]	1710 [807]	1850 [873]
Low Heating CFM [L/s]	695 [328]	1000 [472]	1176 [555]	1310 [618]	1450 [684]
MAX Cooling CFM [L/s]	1240 [585]	1650 [779]	1980 [934]	1980 [934]	1980 [934]
MIN Cooling CFM [L/s]	300 [142]	500 [236]	500 [236]	500 [236]	500 [236]
Fan CFM [L/s]	600 [283]	800 [378]	1000 [472]	1000 [472]	1000 [472]
Max. E.S.P. (In. W.C.) [kPa]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]
Temperature Rise Range °F – High Input	25-55 [13.9-30.6]	35-65 [19.4-36.1]	25-55 [13.9-30.6]	30-60 [16.7-33.3]	35-65 [19.4-36.1]
Temperature Rise Range °F – Low Input	20-50 [11.1-27.8]	25-55 [13.9-30.6]	20-50 [11.1-27.8]	25-55 [13.9-30.6]	30-60 [16.7-33.3]
Approx. Shipping Weight (Lbs.) [kg]	108.5 [49]	120.5 [55]	128.5 [58]	140 [63]	151 [68]
AFUE ②	80.00%	80.00%	80.00%	80.00%	80.00%

* S = Standard, N = Low NOx

This furnace does not meet air district requirements of 14 ng/J NOx emissions limit, and thus is subject to a mitigation fee of up to $450.

This furnace is to be installed for propane firing only in air districts requiring 14 ng/J NOx emission limits. Operating in natural gas mode is in violation of these Rules.

[ ] Designates Metric Conversions

Downflow Application

Dimensional Data: Downflow Model

MODEL ML802V	A	B	C	D	E	REDUCED CLEARANCE (IN.) [mm]					
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT
050	14 [356]	12²⁷/₃₂ [326]	10³/₈ [264]	①	13¹/₈ [333]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③
075417	17¹/₂ [445]	16¹¹/₃₂ [415]	12¹/₈ [308]	①	16⁵/₈ [422]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③
075521	21 [533]	19²⁷/₃₂ [504]	13⁷/₈ [352]	①	20¹/₈ [511]	0	0	0	1 [25]	3 [76]	6 [152] ③
100	21 [533]	19²⁷/₃₂ [504]	13⁷/₈ [352]	①	20¹/₈ [511]	0	0	0	1 [25]	3 [76]	6 [152] ③
125	24¹/₂ [622]	23¹¹/₃₂ [592]	15⁵/₈ [397]	①	23⁵/₈ [600]	0	0	0	1 [25]	3 [76]	6 [152] ③

NOTES: ① May require a 3" [76 mm] to 4" [102 mm] or 3" [76 mm] to 5" [127 mm] adapter.
② May be 0" [0 mm] with type B vent.
③ May be 1" [25 mm] with type B vent.
Furnaces must be vented in accordance with the National Fuel Gas Code, ANSI Z223.1 and in accordance with local codes.

[ ] Designates Metric Conversions

Blower Performance Data

	ML802V0503 A14DZSBAP	ML802V0754 A17DZSBAP	ML802V0755 A21DZSBAP	ML802V1005 A21DZSBAP	ML802V1255 A24DZSBAP
Factory Low Heating CFM [L/s]	695 [328]	1000 [472]	1176 [555]	1310 [618]	1450 [684]
Low Heat Approx. ±7°F CFM [L/s]	626 [295]	900 [425]	1059 [500]	1179 [556]	1305 [616]
Low Heat Approx. ±12°F CFM [L/s]	577 [272]	830 [392]	977 [461]	1088 [513]	1204 [568]
Factory High Heating CFM [L/s]	975 [460]	1175 [555]	1480 [698]	1710 [807]	1850 [873]
High Heat Approx. ±7°F CFM [L/s]	878 [414]	1058 [499]	1332 [629]	1539 [726]	1665 [786]
High Heat Approx. ±12°F CFM [L/s]	810 [382]	976 [461]	1229 [580]	1420 [670]	1536 [725]

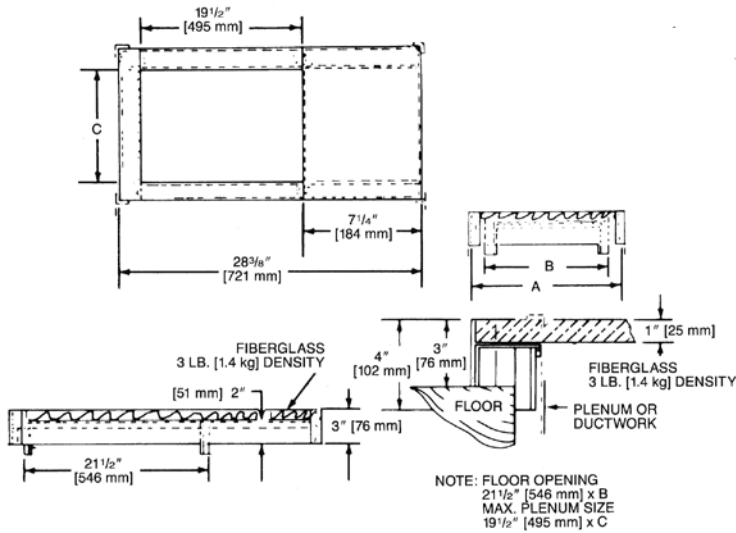**[   ] Designates Metric Conversions**

Downflow Accessories

DOWNFLOW WARNING: Unit design is certified for installation on non-combustible floor. A special factory supplied combustible floor sub-base is required when installing on a combustible floor. Failure to install the sub-base may result in fire, property damage and personal injury.

Combustible Floor Base Dimensions

COMBUSTIBLE FLOOR BASE	USE WITH FURNACE SIZES	A IN. [mm]	B IN. [mm]	C IN. [mm]
RXGC-B14	ML802V050	14½ [368]	13¼ [337]	11¼ [286]
RXGC-B17	ML802V075317	18 [457]	16¾ [425]	14¾ [451]
RXGC-B21	ML802V100521, ML801T075521	21½ [546]	20¼ [514]	18¼ [464]
RXGC-B24	ML802TV125	25 [635]	23¾ [603]	21¾ [552]

[ ] Designates Metric Conversions

RXGF-CC*

FILTER RACK—Downflow top return mount. Requires (2) 14 x 20 Filters.

NOTE: Filter racks are shipped without filters.

*Filters available through PROSTOCK ®.

For High Altitudes:

HIGH ALTITUDE OPTION CODE: U.S. & Canada – None required for high altitudes.

HIGH ALTITUDE CONVERSION KITS: U.S. & Canada – None required for high altitudes.

80+ HIGH ALTITUDE INSTRUCTIONS
Caution: Always follow National Fuel Gas Code (NFGC) guidelines when converting for high altitudes.

High altitude option codes are not required for these models. However, the burner orifice size needs to be recalculated and verified at elevations above 2000 ft. See Installation Instructions for more information.

NOTE: For Canadian installations only, an optional derate (manifold gas pressure reduction) method may be used to adjust the furnace for altitude. See Installation Instructions for more information. This optional method may **NOT** be used for U.S. installations.

L.P. CONVERSION KIT: RXGJ-FP15

Integrated Controls

EcoNet® is smart, technology that allows Heating and Cooling, products to communicate with each other on one integrated network.

THE ECONET® SMART THERMOSTAT

CETST800SYS

BUILT-IN WIFI

4.3" LCD TOUCH SCREEN

LOCAL WEATHER – Current conditions plus 6-day forecast

5 OPERATING MODES – Heat, Cool, Auto, Emergency Heat and Fan Only

7-DAY PROGRAMMABLE SCHEDULE – Offers comfort without thought

ONE-TOUCH AWAY – Quickly switch to your energy-saving away preferences

VACATION SCHEDULING – Allows you to save while you're away and come home to comfort

STANDBY SCREEN – Displays indoor temperature and current weather

OPERATIONAL FEATURES

AUTOMATIC CHANGEOVER – Transitions between heating and cooling automatically to keep the house comfortable

INTEGRATED WATER CONTROL – Enables easy water heater management

SMOOTH ARRIVAL – Prompts the system to start ahead of schedule to ensure the home is at the desired temperature at the scheduled time

HUMIDITY CONTROL – Supports humidifier accessories or over-cool based dehumidification

DETAILED OPERATING STATUS – View pertinent equipment status information and run times

CONTINUOUS FAN – Offers 5 speeds (Low, Medium Low, Medium, Medium High, High)

SHORT-CYCLE PROTECTION – Avoids damage to equipment from short run cycles

MONITORING & REMOTE CONTROL FEATURES

ACTIVE MONITORING – Alerts to problems that need immediate attention

REMOTE CONTROL – Allows adjusting of comfort and settings from anywhere using a mobile device

SERVICE ALERTS – Sends routine maintenance reminders

AIR FILTER MONITORING – Detects when it's time to replace the air filter

ALARM HISTORY – Displays time-stamped alarm codes with clear descriptions

MAINLINE®
Reliably Comfortable.™ ≈

GENERAL TERMS OF LIMITED WARRANTY*

Mainline® will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

*For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.

Parts..Ten (10) Years
Heat Exchanger .... Limited Lifetime