MAINLINE®
Reliably Comfortable.™

Elite® Series Gas Furnaces

EcoNet®

ML801V

80% A.F.U.E.†
EcoNet® Enabled
Heating Stages: Single Stage
Motor Type: Constant CFM
Input Rates: 50–125 kBTU [4.7–29.3 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.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Rheem® is under license. Other trademarks and trade names are those of their respective owners.

Table of Contents

Features & Benefits 3
Model Number Identification 4
Physical Data and Specifications 5
Dimensional Data 6
Blower Performance Data 7
Accessories 8-9
Limited Warranty 12

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
- **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	1	V	050	3	A	17	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	1 - Single-Stage	V - ECM Variable Speed	050 - 50,000 075 - 75,000 100 - 100,000 125 - 125,000	3 - 3 ton drive 4 - 4 ton drive 5 - 5 ton drive	A - 1st Design Series	17 - 17.5" Width 21 - 21" Width 24 - 24.5" Width	DZ - Downflow Zero Clearance	S - Standard N - Low NOx	B - Communicating, Bluetooth®, EcoNet®	A - 1st Series	P - Premium Grade

[ ] Designates Metric Conversions

AVAILABLE MODELS
ML801V0503A14DZ*BAP
ML801V0754A17DZ*BAP
ML801V0755A21DZ*BAP
ML801V1005A21DZ*BAP
ML801V1255A24DZ*BAP

* S = Standard, N = Low NOx

STANDARD EQUIPMENT
**Condensate Switch Connection
100% Safety Lock Out
29-4C Stainless Steel Secondary Heat Exchanger Design
Adjustable Cool Fan Off Delay
Aluminized steel primary heat exchanger design
Blower Compartment Door Safety Switch
Bluetooth® diagnostics
Bluetooth® setup
Bluetooth® setup and diagnostics
Completely assembled and wired
Direct Drive Motor
Thermostat Connections
Electronic On/Off Blower Time Control
Fully Insulated Heat Exchanger Cabinet
Humidistat Terminal Connection
Induced Draft Motor
Limit Controls
Low Speed Continuous Fan Option
Manual Shut-Off Valve
Marked condensate hoses
One Hour Automatic Retry
Power And Self-Test Diagnostics
Pressure Switch
PWM Controlled Constant Torque Electrically Commutated Blower Motor.
Redundant Main Gas Control
Single Stage Heating Thermostat Connection
Blower Insulation
Two Plus* Stage Cooling Thermostat Connection

*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

U.S. Models

MODEL NUMBERS ML801V1stg VS-CT DOWNFLOW SERIES	ML801V05 03A14DZ*BAP	ML801V07 54A17DZ*BAP	ML801V07 55A21DZ*BAP	ML801V10 05A21DZ*BAP	ML801V12 55A24DZ*BAP
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]
Blower (D x W) [mm]	11 x 6 [279 x 152]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	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
Heating CFM [L/s]	975 [460]	1175 [555]	1480 [698]	1710 [807]	1850 [873]
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]	800 [378]	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 [°C]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	35-65 [19.4-36.1]	35-65 [19.4-36.1]
Approx. Shipping Weight (Lbs.) [kg]	108.5 [49]	120.5 [55]	128.5 [58]	140 [63]	151 [68]
AFUE ②	80.0%	80.0%	80.0%	80.0%	80.0%

NOTES: All models are 115V, 60HZ, 1 Ph. Gas connection size for all models is 1/2" [13 mm] N.P.T.
① In accordance with D.O.E. test procedures.
② See Conversion Kit Index Form for high altitude derate.
*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 Dimensions

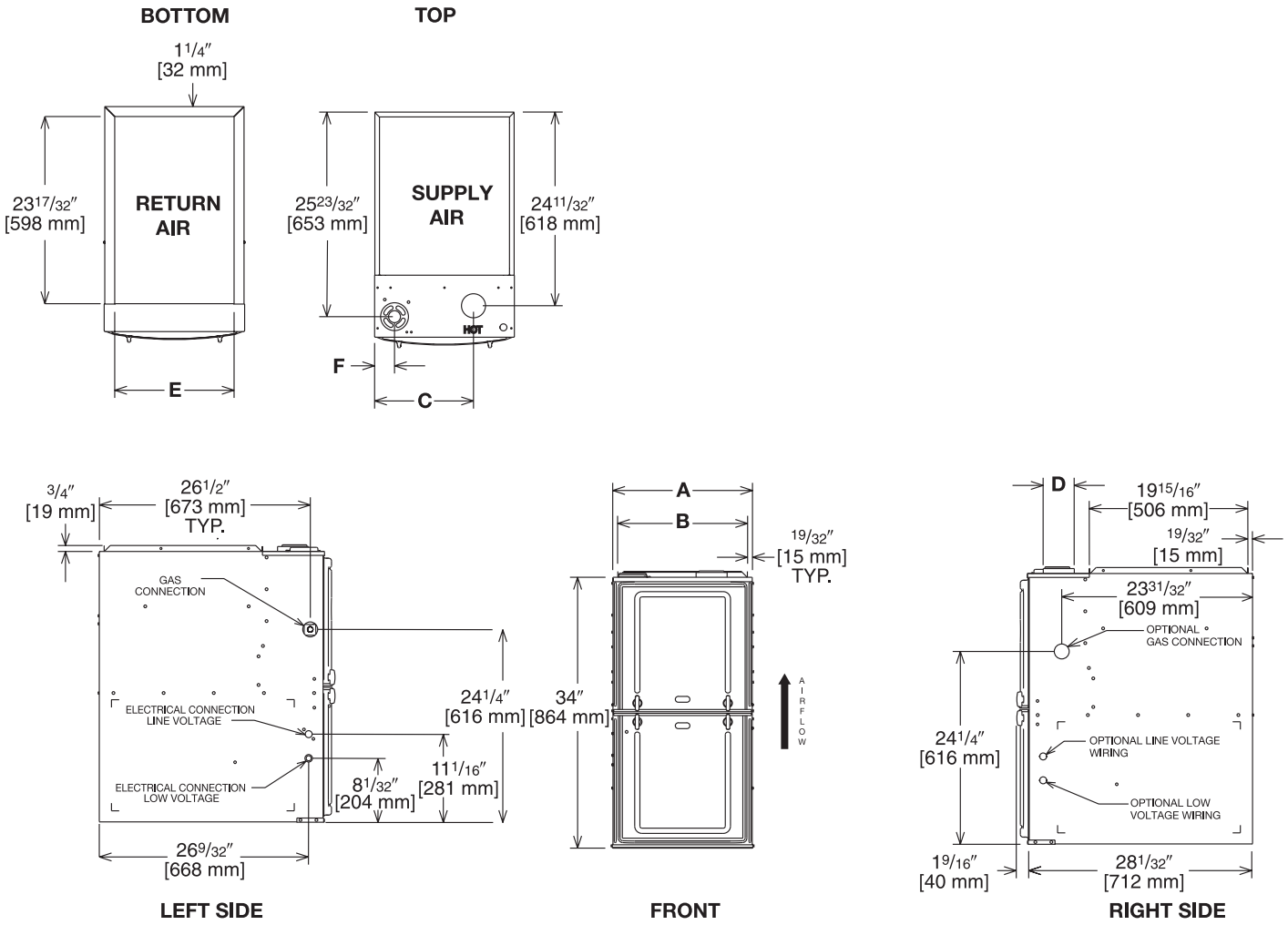


Illustration
ST-A1220-04-00
FIGURE 1

Dimensional Data—Downflow Models

MODEL ML801V	A	B	C	D	E	REDUCED CLEARANCES (IN.) [mm]					
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT
050	14 [356]	12 27/32 [326]	10 3/8 [264]	①	13 1/8 [333]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③
050417	17 1/2 [445]	16 11/32 [415]	12 1/8 [308]	①	16 5/8 [422]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③
075521	21 [533]	19 27/32 [504]	13 7/8 [352]	①	20 1/8 [511]	0	0	0	1 [25]	3 [76]	6 [152] ③
100	21 [533]	19 27/32 [504]	13 7/8 [352]	①	20 1/8 [511]	0	0	0	1 [25]	3 [76]	6 [152] ③
125	24 1/2 [622]	23 11/32 [593]	15 5/8 [397]	①	23 5/8 [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

Target Gas Heating Airflows

	ML801V05 03A14DZ*BAP	ML801V07 54A17DZ*BAP	ML801V07 55A21DZ*BAP	ML801V10 05A21DZ*BAP	ML801V12 55A24DZ*BAP
Factory Heating CFM [L/s]	975 [460]	1175 [555]	1480 [698]	1710 [807]	1850 [873]
Heating Approx. ±7°F CFM	878 [414]	1058 [499]	1332 [629]	1539 [726]	1665 [786]
Heating Approx. ±12°F CFM	810 [382]	976 [461]	1229 [580]	1420 [670]	1536 [725]

* S = Standard, N = Low NOx

[ ] Designates Metric Conversions

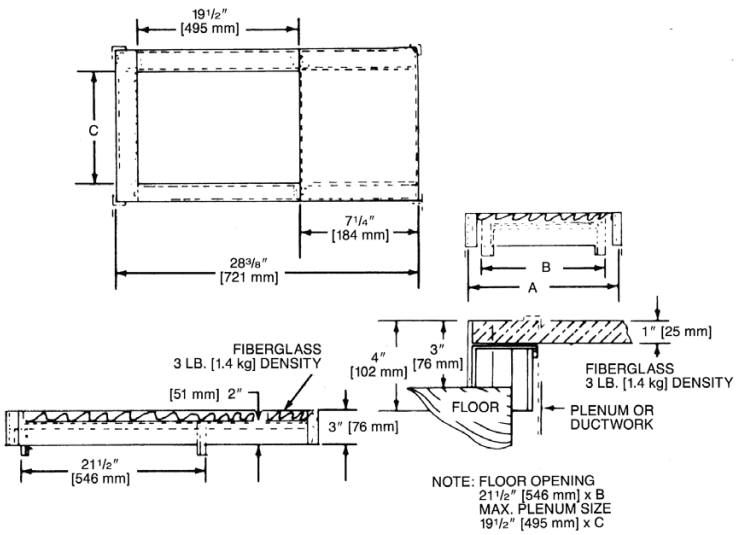
Downflow Accessories

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	ML801V050	14 1/2 [368]	13 1/4 [337]	11 1/4 [286]
RXGC-B17	ML801V075317	18 [457]	16 3/4 [425]	14 3/4 [451]
RXGC-B21	ML801V100521, ML801V075521	21 1/2 [546]	20 1/4 [514]	18 1/4 [464]
RXGC-B24	ML801V125	25 [635]	23 3/4 [603]	21 3/4 [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®

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.**

Conditional Parts
(Registration Required).....Ten (10) Years
Heat Exchanger .....Twenty (20) Years

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

"In keeping with its policy of continuous progress and product improvement, Mainline reserves the right to make changes without notice."

www.MainlineCollection.com

PRINTED IN U.S.A. 6/24 QG FORM NO. GML-667 REV. 2