



NEWMAC VSM* ULTRATECH™ MOTOR CONTROL

*Electronically Commutated Motor (E.C.M.)

FURNACE

- Uses conventional fan and limit control
- Air conditioning ready
- 3 non-heating speeds can be controlled by thermostat

CONTROL

- 24V AC powered appliance controller uses standard external HVAC transformer
- Furnace supply air sensor regulates heating speed
- Similar footprint to standard air conditioning fan centers
- Incorporates conventional thermostat connections

- Optimizes heating ramp-up rate with initial heating cycles
- Typical temperature rise is factory set but can be raised or lowered manually
- Two stage air conditioning compatible
- Simple air conditioning tonnage selection
- Compensates for a faulty supply air sensor
- LED indication of operating mode
- Data port integrated for diagnostic output
- Connections are designed to minimize incorrect wiring
- Built-in relay for 4 wire thermostat connection
- Built-in fuse protection

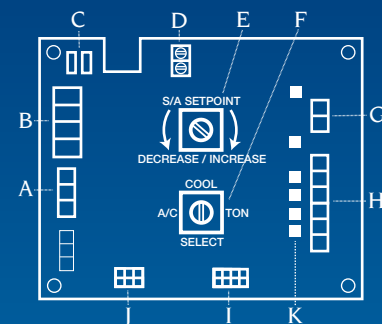


NL2

NLF

NMR

LFR



VSM BOARD LAYOUT

- A. VSM sensor connection
- B. Emerson® UltraTech™ motor connection
- C. 24 V AC power connection
- D. Rocker switch connection for constant blower operation
- E. Temperature rise dial
- F. A/C tonnage dial
- G. Burner connection
- H. Thermostat connection
- I. Data port for computer monitoring of rpm, burner status, sensor status, and supply air temperature
- J. Program port
- K. L.E.D. control status indicators



Check for local rebate programs specifying these types of high efficiency products. Choose products bearing the Energy Star registered trademark to save energy, money, and help the environment without compromising performance.



BURNERS

Approved with either Riello, Carlin or Beckett burners with flame retention head for maximum efficiency and minimum maintenance requirements.



Riello BF3



Riello 40



Carlin EZ Pro



Beckett

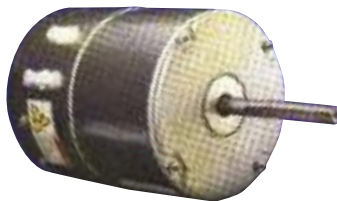


Beckett with airboot

EMERSON® ULTRATECH™ VSM* MOTOR

*Electronically Commutated Motor (E.C.M.)

The Emerson® UltraTech™ variable speed motor is a four wire Electronically Commutated Motor (ECM) with two-way communication. Utilizing leading-edge technology, the motor receives commands from the Newmac VSM control board, executes the command and confirms that the command has been completed. It's two-way communication made easier.



FEATURES

- No special set-up or software configurations
- Permanent magnet DC with ball bearing and equipped with plug-in connectors
- Motor can be replaced by a standard UltraTech™ motor with no special programming required
- A large selection of CFM points for improved cooling and heating comfort
- Lower Electromagnetic Interference (EMI) than existing competitive motors
- Up to 50% better surge protection over competition
- Low speed settings give up to 2 decibels quieter operation than competition
- Significant power savings over existing PSC motors (up to 50%) or conventional motors (up to 75%)

EMERSON® ULTRATECH™ VSM* MOTOR/BLOWER ASSEMBLY

The VSM blower/motor assembly uses either G10 or G12 blowers to give a full range of ramped heating and cooling cfm's.

FEATURES

- Belly band mounted
- Emerson® UltraTech™ motor can be operated by a 24V power connection on-board if VSM controller fails
- Standard 3.5 ton AC capability (3.0 ton for LFR)
- Optional 5 ton AC capability on NL2 model
- Quick connect 4 wire cable



The installation of the unit shall be in accordance with the regulations of the authorities having jurisdiction.

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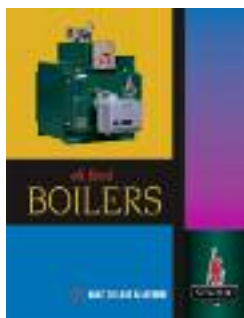
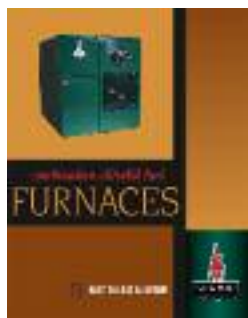
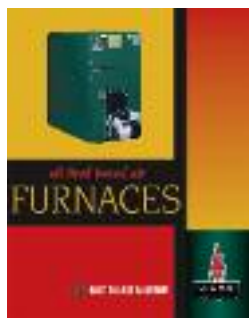
Newmac and its appliances are listed or certified by one or more of the following agencies:

ENERGYGUIDE

VERIFIED FOR ENERGY PERFORMANCE
RENDMENT ÉNERGETIQUE VÉRIFIÉ



Ask about Newmac's complete line of oil fired and combination oil/solid fuel furnaces/boilers.



NEWMAC

FURNACES & BOILERS