# FURNACES SERIES GAS 0096 EFFICIENT HIGH SPEED TWO-STAGE VARIABLE





The Only Gas Furnaces Made in Canada napoleonheatingandcooling.com



#### PROUDLY ENGINEERED AND MADE IN CANADA FOR NORTH AMERICAN WINTERS

# **ENERGY SAVINGS AND COMFORT**

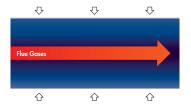
The 9600 Series features a two-stage gas valve and a variable-speed energy efficient ECM blower motor. Napoleon's two-stage furnace reduces temperature swings within your home, maintaining a more consistent, comfortable temperature. At up to 96% AFUE, the 9600 Series furnaces will operate on low fire for greater efficiency and comfort for most of the heating season. On colder days, when the first stage cannot satisfy the heating demand, the furnace can (automatically) switch to the second stage, producing more heat to satisfy demand. Ultimately, this balancing of the heat production results in quieter operation cycles and less energy being consumed throughout the heating season. An added benefit is increased comfort due to better balanced temperatures in the home.



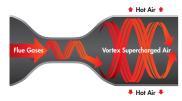


#### **EXCHANGER COMPARISON**

**Conventional Heat Exchanger** 



Patented Vortex Technology Heat Exchanger





#### **INSTALLATION OPTIONS**



Up flow



Down flow



9600 Gas furnace combo with Napoleon's Hybrid wood furnace and the HMFK-GT Transition kit



Horizontal left



Horizontal right



#### **EASY INSTALLATION & MAINTENANCE**

- Factory-fired and tested for trouble-free start-ups
- Self-diagnostic integrated furnace (IFC) control is mounted between the blower rails for easy accessibility
- Multiple intake/venting, gas pipe and electrical connection options
- Shortest 96%+ AFUE furnace on the market with 32 7/8" height and offering two cabinet width sizes, 17 1/2" and 22 1/2"
- Multi position (upflow, horizontal and downflow) for versatile installations
- Zero clearance in all positions with no additional kits, provides installation ease in closets and alcoves
- Direct vent (two pipe) and single vent (one pipe) certified with optional concentric venting
- Integrated furnace control board manages all operational functions and accommodates hook-ups for a humidifier, HRV and electronic air cleaner
- For use with single or two-stage thermostats
- Easily installed in all four positions with no additional kits required
- Simple conversion to propane
- Certified to 4500 feet in Canada with no modification
- Interior condensate trap for left or right drainage options
- Clear condensate collector to view furnace performance

#### **Superior Combinations**

At the 2012 HPBExpo Vesta Awards in Atlanta Georgia, Napoleon's Wood/ Gas Furnace Combination was honoured with winning the Central Heating Systems Category Award and went on to win the prestigious Daniel J. Melcon Award for Best-in-Show – Hearth Products. The Combo Furnace won for its industry first design, green technology and fuel saving capabilities.



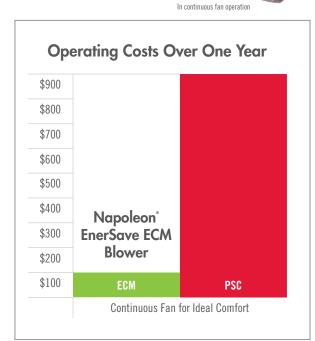
# VARIABLE SPEED (ECM) TECHNOLOGY

ECM=Electronically Commutated Motor

The ECM variable speed blower motor gives you increased comfort by accelerating and decelerating slowly, which eliminates sudden gusts of air. Running your fan continually removes cold spots in you home and gives you ideal comfort.

Napoleon's EnerSave ECM motor reduces electrical consumption by up to 80% over conventional blower motors

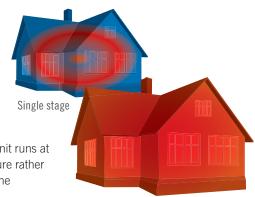
Enersave



#### **AIR COMFORT**

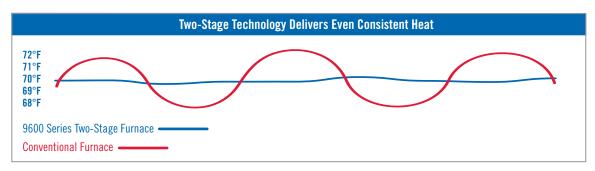
A two-stage furnace runs longer at lower levels of operation (60% versus 100%). This gives you many advantages:

- 1. Quiet operation- blower runs at 60% on first stage for most of the year.
- 2. Better circulation- blower runs longer and constant to push air evenly throughout the farthest reaches of your home.
- Balanced temperature- no more "hot" or cold spots. Since the unit runs at lower heat constantly, you will achieve even, balanced temperature rather than sudden bursts of high heat and sudden cool downs when the furnace turns off repeatedly.
- 4. Higher efficiency operating at 60% of heating capacity on first stage, saving you fuel and money



Napoleon® two-stage

#### TWO-STAGE TECHNOLOGY DELIVERS TWO FURNACES IN ONE

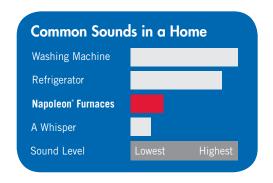


#### WHISPER QUIET OPERATION FEATURES

Customers indicated that noise level is an important factor in their satisfaction with a furnace, so Napoleon\* furnaces are designed to be "Whisper Quiet\*".

The high efficiency ECM variable speed blower motor with "soft start" gradually increases speed reducing the initial rush of air and noise created by conventional motors.

- Sound absorbing cabinet insulation
- Totally sealed cabinet
- Dynamically balanced blower

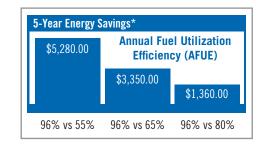


### ANNUAL FUEL UTILIZATION EFFICIENCY

96% AFUE translates into significantly lower fuel bills

Higher AFUE = More comfort for every dollar spent. The Annual Fuel Utilization Efficiency (AFUE) measures the amount of fuel converted to space heat in proportion to the amount of fuel entering the furnace. This is commonly expressed as a percentage. AFUE works much like the miles-per-gallon rating on a car - the higher the rating, the lower the fuel costs.

\*If a furnace is 25 years old or older, chances are that it has a rating of only 55% to 65% AFUE.







## 1. Corrosion Resistant Heavy Gauge Aluminized-Steel Tubular Triple-Pass Heat Exchanger

- Controlled wrinkle-bend design of heat exchanger creates tubes with consistent thickness and no weak areas
- Each row of tubes is offset to increase turbulence in the airflow and maximize heat transfer

#### 2. Stainless Steel Heat Recovery Coil

- Extracts the remaining heat from the flue gases once they exit the triple-pass heat exchanger
- Backed by our President's Limited Lifetime and Limited Replacement Guarantee for your peace of mind

#### 3. Aluminized Multi-Port in Shot Burners

• Perfectly shapes the flame cone for maximum flame efficiency

#### 4. Two-Stage Gas Valve

- First/low-stage operates at 60% of full capacity for optimum fuel efficiency on most days
- Second/high-stage provides maximum heat for bitter cold days and quick recovery from thermostat set back

#### 5. Self Diagnostic Integrated Furnace Control (IFC)

- Contains LED service indicator lights to ensure quick and accurate service diagnosis
- Constantly monitors all safety devices
- Interfaces with additional home comfort products using simple plug-in connections

#### 6. Electronically Commutated Motor (ECM)

- Reduces electrical consumption by up to 80% over conventional blower motors
- Soft-start soft-stop operation reduces noise levels by gradually increasing motor RPM's at start-up and ramping down slowly on shut down
- On continuous fan speed, the ECM motor consumes 60-80 watts compared to 400 watts for a conventional motor, reducing electrical consumption up to 80%.
- Whisper Quiet operation
- Blower is easily removed for servicing with the removal of two screws and a plug-in electrical connector

#### 7. Durable Sound Reducing Insulated Cabinet

 Acoustically insulated blower compartment & thermally insulated heat exchanger compartment for quiet operation and reduced clearance to combustibles

<sup>\*</sup>See warranty for details



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#### **SPECIFICATIONS**

#### **COMPARISON CHART**

Series	Efficiency (AFUE)	Single Stage	Two-Stage	SUREVIEW Window	PSC Motor (NSM Models)	DC X-13 Motor (NPX Models)	ECM EnerSave 2.3 Motor	Primary Stainless Steel Heat Exchanger	Secondary Stainless Steel Heat Exchanger	LED Cabinet Lights	Optional UV Light Air Purifier	Four Sided Insulated Cabinet	Made In Canada
9700	97.10%		•	•			•	•	•	•	•	•	•
9600	96%		•	•			•		•				•
9500	95%	•			•	•			•				•

#### **HEATING CAPACITIES**

9600 SERIES	NPV045T2A	NPV060T3A	NPV080T3A	NPV100T5A	NPV120T5A
Efficiency (AFUE)	95.3%	95.3%	95.3%	96.0%	95.3%
Input (High fire) BTU/hr 0-4500'	45,000	60,000	80,000	100,000	120,000
Input (Low fire) BTU/hr 0-4500'	27,000	36,000	48,000	60,000	72,000

#### CABINET DIMENSIONS (INCHES)

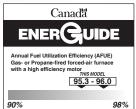
9600 SERIES	NPV045T2A	NPV060T3A	NPV080T3A	NPV100T5A	NPV120T5A
Width	17 1/2	17 1/2	17 1/2	22 1/2	22 1/2
Depth	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2
Height	32 7/8	32 7/8	32 7/8	32 7/8	32 7/8

#### VENTING - Certified for single or 2 pipe installation (direct vent)

9600 SERIES	NPV045T2A	NPV060T3A	NPV080T3A	NPV100T5A	NPV120T5A
Clearances to Combustibles	0	0	0	0	0
Minimum Vent Size (In.)	1 1/2	1 1/2	2	2	3
Maximum Vent Size (In.)	2	3	3	3	3
Minimum Vent Length (Ft.)	15	15	15	15	15
Maximum Vent Length (Ft.)	75	100	100	100	100

#### AIRFLOW AND COOLING

9600 SERIES	NPV045T2A	NPV060T3A	NPV080T3A	NPV100T5A	NPV120T5A
Motor Type and Size ECM 2.3	1/3hp	1/2hp	1/2hp	3/4hp	1hp
AC Tonnages	1 1/2, 2, 2 1/2	1 1/2, 2, 2 1/2, 3	1 1/2, 2, 2 1/2, 3	2, 3, 4, 5	2, 3, 4, 5



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