

13 & 15 SEER high efficiency GAS/ELECTRIC PACKAGED SYSTEMS, PACKAGED AIR CONDITIONERS AND HEAT PUMPS









# NUTONE PACKAGED AIR CONDITIONERS AND HEAT PUMPS

### Packaged systems maximize living space.

Split systems separate heating and cooling components inside and outside the house. Either with a furnace and coil (inside) and air conditioner (outside). Or, an air handler (inside)

and heat pump (outside). Packaged systems, however, perform both heating and cooling functions in a "single outside package," freeing up maximum living space inside.

Depending on structural limitations and available space, packaged systems can be installed on the roof or at ground level on a slab.

- A Fixed-speed ECM direct-drive motor provides higher torque and operating speeds for improved air flow capacity
  - B Smoother motor operation reduces noise and lowers winding temperatures that help to extend bearing-life of the motor
  - c Efficiently reduces electricity consumption for blower operation compared to standard motors
- **A** 1.5 mil silicone-polyurethane finish provides superior corrosion resistance
  - **B** 950-hr. salt-spray rated finish, 50% better protection than standard outdoor finishes
  - **c** Cabinet—galvanized steel for added strength and durability
- The wire guard coated with earth-friendly epoxy and mesh hail guard protect against impact of flying debris due to mowing, golf balls, hail and other hazards
- Enhanced evaporator coils to better combat corrosion
- Two-stage heating and cooling provides increased comfort levels, in select models.
- NuTone's Easy-Access<sup>™</sup> cost-conscious engineering reduces service time to maintain electrical and refrigerant components
- Corrosion-resistant drain pan (not shown)





#### Our packaged air conditioners.

| 7(0)          | Cooling<br>Efficiency | Two-Stage    | Outdoor<br>Micro-Channel Coil | Rooftop<br>Mounting | Slab<br>Mounting |
|---------------|-----------------------|--------------|-------------------------------|---------------------|------------------|
| 13 SEER Small | 13 SEER               |              | $\checkmark$                  |                     |                  |
| 13 SEER Large | 13 SEER               |              |                               | $\checkmark$        | $\checkmark$     |
| 15 SEER Small | 15 SEER               | $\checkmark$ |                               |                     | $\checkmark$     |

### Two-stage technology.

Two-stage cooling operates at lower capacity during mild days, then full capacity during harsher days. Because they idle down to a reduced capacity, these NuTone packaged systems provide better comfort and perform quieter than a standard packaged system. Longer cycles improve air circulation, minimizing temperature swings to a couple of degrees, while reducing hot and cold spots.

# Which Packaged System?

The choice in a packaged system will either be a heat pump, an air conditioner, or a combination furnace and air conditioner called a gas/electric packaged system, or "gas pack" for short. Typically, in milder climates, heat pumps will suffice to perform double duty. Even if temperatures are near freezing, they can extract heat from outside air, then transfer it inside to become a highly energy-efficient heat source. Similarly, by reversing the flow of refrigerant with a switchover valve, a heat pump can also extract heat from the inside, then transfer it outside to cool the house. In the case of a packaged air conditioner, it provides cooling and warmth if need be – supplied by a 20KW heating strip.

#### How much will you save?



Annual costs based on 36,000 Btu unit, 1500 cooling load hours, and .08/kwh. Actual costs may vary depending on climate conditions, energy rates and patterns of usage.



# Our packaged heat pumps.

| 700                          | Cooling<br>Efficiency | Heating<br>Efficiency | Two-Stage | Variable-<br>Speed | Rooftop<br>Mounting | Slab<br>Mounting |              |
|------------------------------|-----------------------|-----------------------|-----------|--------------------|---------------------|------------------|--------------|
| 13 SEER Small                | 13 SEER               | 7.7 HSPF              |           |                    |                     | $\checkmark$     |              |
| 13 SEER Large                | 13 SEER               | 7.7 HSPF              |           |                    | $\checkmark$        | $\checkmark$     |              |
| <b>İ</b> Hybrid <sup>®</sup> | 15 SEER               | 8.0 HSPF/<br>80% AFUE |           | $\checkmark$       | $\checkmark$        | $\checkmark$     | $\checkmark$ |
| 15 SEER Small                | 15 SEER               | 8.0 HSPF              |           | $\checkmark$       |                     | $\checkmark$     |              |

# **íHybrid**

# NUTONE PACKAGED iHYBRID™ DUAL FUEL

# For ultimate energy efficiency, go with the NuTone iHybrid.

The NuTone iHybrid series of dual-fuel gas/electric packaged systems offer quiet, energy-efficient performance year-round. It's like having a packaged heat pump and gas/electric packaged system in one highly efficient unit. The dual-fuel NuTone iHybrid heats with electric heat pump heat when temperatures are mild, and with gas when temperatures are colder, to



reduce utility bills in the winter. Plus, two-stage heating/ two-stage cooling capability with a variable-speed motor provides more consistent temperatures throughout the home and increased dehumidification and comfort. It's the ultimate packaged system for comfort and energy savings.

# Breathe Easy, Save Big

Comfort is nice, but saving money on monthly utility costs is even better. An economical two-stage air conditioner or heat pump packaged system can also reduce your energy bills by hundreds of dollars each season when compared to older, inefficient systems. So when utility bills come due, you can breathe a lot easier.

# **Energy definitions.**

#### SEER—Seasonal Energy Efficiency Rating

Measures cooling performance on air conditioners, heat pumps and gas/electric package product. HSPF—Heating Seasonal Performance Factor

It is a measure of the average number of Btu of heat delivered for every Watt-hour of electricity used by the heat pump over the heating season. As ratings increase, so does unit efficiency.

#### AFUE—Annual Fuel Utilization Efficiency

It measures the amount of heat actually delivered to your house compared to the amount of fuel that you must supply to the furnace. Thus, a furnace that has an 80% AFUE rating converts 80% of the fuel that you supply to heat—the other 20% is lost out of the chimney. As ratings increase, so does unit efficiency.

# Helping to save Mother Earth.

Awarded by the U.S. Department of Energy and the Environmental Protection Agency for helping to conserve energy, promote cleaner air, and prevent global warming. To qualify, packaged air conditioners and heat pumps must have a Seasonal Energy Efficiency Ratio (SEER) rating of 14.0 or higher and an energy efficiency ratio (EER) of 11.0 or higher. Packaged heat pumps are also ENERGY STAR<sup>®</sup> rated by a Heating Seasonal Performance Factor (HSPF) of 8.0 or higher.





**NuTone two-stage, variable-speed** products are energy-efficient, environmentally responsible products. Look for the ecoLogic<sup>®</sup> seal.

# NUTONE GAS/ELECTRIC PACKAGED SYSTEMS

# For your life. style. home.™

You can trust NuTone to comfort your life, style and home. Where climates require more heating capacity, a combination air conditioner (electricity) and furnace (gas) packaged system, "gas pack," delivers improved energy efficiency.

 Long-lasting peace of mind. Every gas/electric packaged system is triple checked at each manufacturing stage, for an average of 72 quality checks as your unit is built. In addition, all electrical and mechanical components are 100% fired and tested on the manufacturing line.

- **Total comfort.** Great airflow and quiet performance are part of the NuTone comfort equation.
- **Designed for easy care.** Smooth and practical lines make your

NuTone packaged system attractive on the outside. All units are finished with a silicone protective polyurethane finish. This step protects your unit from corrosion 50% more than standard outdoor finishes.

- **Built to last.** From a long-lasting motor to the one-piece orifice, your unit will provide years of trouble-free and reliable service.
- A Fixed-speed direct-drive motor provides higher torque and operating speeds for improved air flow capacity
  - **B** Smoother motor operation reduces noise and lowers winding temperatures that help to extend bearing-life of the motor
  - c Efficiently reduces electricity consumption for blower operation compared to standard motors
  - **A** 1.5 mil silicone-polyurethane finish provides superior corrosion resistance
  - **B** 950-hr. salt-spray rated finish, 50% better protection than standard outdoor finishes
  - c Cabinet-galvanized steel for added strength and durability
- 3 The wire guard coated with earth-friendly epoxy and mesh hail guard protect against impact of flying debris due to mowing, golf balls, hail and other hazards

Gas/electric packaged system cutaway view shown

- Enhanced evaporator coils to better combat corrosion
- NuTone's Easy-Access<sup>™</sup> cost-conscious engineering reduces service time to maintain electrical and refrigerant components
- Corrosion-resistant drain pan (not shown)
- SmartLite<sup>®</sup> control board programs igniter to adapt to furnace's heat-up characteristics extending service life



# Our gas/electric packaged systems.

|  |                              | Cooling<br>Efficiency | Heating<br>Efficiency | Two-Stage    | Variable-<br>Speed | Outdoor<br>Micro-Channel Coil | Rooftop<br>Mounting | Slab<br>Mounting | ecoLogic•    |
|--|------------------------------|-----------------------|-----------------------|--------------|--------------------|-------------------------------|---------------------|------------------|--------------|
|  | 13 SEER Large                | 13 SEER               | 80% AFUE              |              |                    |                               |                     |                  |              |
|  | <b>İ</b> Hybrid <sup>®</sup> | 15 SEER               | 8.0 HSPF/<br>80% AFUE | $\checkmark$ | $\checkmark$       |                               |                     |                  | $\checkmark$ |
|  | 15 SEER Large                | 15 SEER               | 80% AFUE              |              |                    |                               | $\checkmark$        |                  |              |

### The inside story.

NuTone gas/electric packaged systems feature SmartLite® control boards which provide extended life to igniters using hot surface ignition technology. They are programmed to learn the heat-up characteristics of the igniter, then adapt the ignition time to the characteristics of the gas/electric packaged system so the igniter is energized appropriately.

NuTone employs hot surface ignition systems (HSI) in our residential gas/electric packaged systems. These use an igniter which, when energized, rapidly generates an intense heat sufficient to ignite the fuel gas.

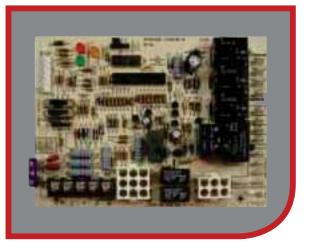
The SmartLite control board contains a program that varies the igniter heat-up time interval. It learns the heatup characteristics of the igniter in the gas/electric packaged system by searching for the threshold of ignition failure. It then adjusts the heat-up interval on the next trial accordingly. This is accomplished by microchip software reprogramming.

#### A compressor you can count on.

Your NuTone gas/electric packaged system, packaged air conditioner and heat pump have been carefully designed and engineered to give you outstanding energy efficiency and years of trouble-free operation. No detail has been left out.

Scroll Compressor. Standard on many NuTone packaged systems, fewer working
parts than reciprocating piston compressors for quieter operation, longer service
life and reliability.





# NuTone 10-Year Limited Warranty

#### **10-Year All Parts**

When a product is truly built to exacting standards of quality and durability, the manufacturer's confidence is reflected in its warranty. NuTone heating and cooling products offer one of the best warranties in the business- 10 years on all parts when product is registered. See warranty details for more information.

#### **10-Year NuTone Quality Pledge**

If the heat exchanger (the major component of your furnace) or the compressor (the most important part of your air conditioner and heat pump) fails within the first 10 years when registered, we'll replace the product with like product under the NuTone Quality Pledge program. A matched system is required to qualify for the NuTone Quality Pledge.

#### Limited Lifetime Heat Exchanger Warranty

When you register your new NuTone furnace or gas/electric packaged system, we will also extend the heat exchanger warranty from 20 years to the limited lifetime heat exchanger warranty.

#### **10-Year on Air Handlers & Coils**

When you install and register your new NuTone air handler or coil with your new NuTone system, we will also extend the warranty to the 10-Year Limited Parts Warranty.

#### **10-Year on Indoor Air Quality Products & Zoning Products**

When you install and register any of our NuTone Indoor Air Quality or Zoning with your new NuTone system, we will also extend the accessory warranties to the 10-Year Limited Parts Warranty.

#### **Commercial Applications**

Equipment utilized in commercial applications carries a 1-Year parts warranty, 5-Year compressor warranty and a 10-Year heat exchanger warranty.

#### Warranty Registration

To assure you take advantage of these longer warranties, register your system within 60 days of installation (or within 60 days of occupancy of a new residentially constructed home with these products) at www.nutonehvac.com. See warranty details for more information.

#### **Extended Warranty Protection**

While your NuTone warranty covers parts, it does not cover the cost of labor charged by your contractor for service and repair. However, extended labor protection plans are available to cover labor costs associated with repairs. Your contractor may offer various coverage plans; we recommend you look for the Contractors' Preferred Protection Plan brand approved for NuTone.



\* Warranties not registered default to 5 years.

# NuTone

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> PUBLICATION SERIAL #775D-0714 Specifications and illustrations subject to change without incurring obligation. Pictured installation varies per household.



CERTIFIED





