# Performance<sup>™</sup> 16 Two-Stage Heat Pump with Puron<sup>®</sup> Refrigerant



# Performance SERIES

Enhanced Comfort, Tax Credit Eligible, Infinity™ Control Capable

Carrier

## Comfort

Carrier's HYBRID HEAT® dual fuel system delivers peace of mind to homeowners concerned about the unpredictable nature of utility costs. A HYBRID HEAT dual fuel system pairs a gas furnace with an electric heat pump and compatible thermostat to provide comfort, economy and flexibility. Your Carrier system will automatically switch between electric and gas heating as needed to keep your home comfortable all winter long while optimizing the efficiencies of each fuel source. And, because the heat pump also delivers cool comfort when it's hot outside, your HYBRID HEAT dual fuel system is a complete, yearround indoor comfort solution. Ask your Carrier dealer if a HYBRID HEAT dual fuel system is right for you.





# Things to Consider Before You Buy

#### Puron<sup>®</sup> Refrigerant

Puron refrigerant is environmentally sound and won't deplete the ozone layer. Carrier introduced Puron refrigerant a full six years ahead of the competition, paving the way for the future. The Clean Air Act of 1990 prohibits the production of HCFC-based air conditioners and heat pumps by 2010, and bans Freon®-22\* production by 2020. As Freon® production reduces, its cost may increase. Freon®-12 in the

automotive industry increased by a whopping 800% in a short seven years a following its phase-out! Ensure your cooling costs by investing in systems with Puron refrigerant – environmentally sound, efficient and dependable refrigerant

designed for the future. The Carrier® Performance™ 16 two-stage heat pump with Puron refrigerant delivers excellent reliability and proven performance.

#### Performance

Carrier specializes in creating a customized home comfort system tailored to your needs with our broad selection of residential heating and cooling products. Your Carrier dealer can help you choose the best system for your home, including a highly efficient and economical Performance 16 heat pump and Carrier-exclusive features that further enhance your indoor environment.

- Two-stage operation allows the Performance 16 heat pump to provide 16.0 SEER cooling, 8.5 HSPF heating efficiency and quiet, even comfort throughout your home.
- Low-stage operation a majority of the time delivers a more continuous flow of comfort during typical days.
- High-stage operation maintains your comfort as outdoor temperatures change.
- Add a Carrier variable-speed furnace or fan coil and our exclusive

Infinity™ Control to achieve Ideal Humidity System® technology for even greater moisture *Ideal* control and comfort.



- greater moisture *IdealHumidity* control and comfort. Add a variable-speed fan coil or furnace and multi-stage electric
- furnace and multi-stage electric heating elements to create a Comfort® heat pump system that creates more consistent heating and up to 20 degrees warmer air in the heating mode.



### **High-Efficiency Products and Tax Credits**

As a part of the U.S. Government's efforts to reduce energy consumption, the ENERGY STAR<sup>®</sup> program encourages consumers to purchase highly efficient products. Now, your incentive is even greater as the Performance 16 two-stage heat pump is



incentive is even greater as the Performance 16 two-stage heat pump is eligible for U.S. Government tax credits. In addition, your local utility companies may offer cash rebates for purchasing high efficiency systems. Ask your dealer for details about how the tax credit program works and how much you can expect to save on a new Carrier system.

## **Carrier® Systems for Unmatched Performance**

Humidifier replenishes moisture to dry air.

**Evaporator Coil** allows the refrigerant to absorb heat from the air as it passes over the coil surface. The evaporator coil is located with the indoor unit and is also referred to as the indoor coil.

Fan Coil is the indoor section of your heat pump system. It should be properly matched to the outdoor unit for improved efficiency and long-term reliability.

Air Cleaner improves air quality by removing harmful and irritating airborne pollutants from your home.

Ultraviolet Germicidal Lamp inhibits the growth of contaminants on the indoor coil.



Ventilator combines fresh outdoor air with conditioned indoor air for improved air quality and maximum efficiency – great for today's tightly constructed home.

Zoning sets different temperatures for up to eight different areas of your home for truly customized comfort and enhanced utility savings.

Heat Pump provides reliable, high-efficiency heating and cooling for long-lasting comfort and energy savings.

Optional Infinity™

**Control** is more than just a thermostat. It's your interface to the Infinity™ System, the only system in the industry that allows you to control temperature, humidity, air quality, fan speed and ventilation.

### Reliability

At Carrier, your comfort is our business. That's why we have one of the most extensive product research and development facilities in the world. From initial design to final assembly, we monitor product quality throughout all phases of the process. Our exclusive 5-step, 100% run test ensures that every single unit we make exceeds industry expectations and meets the toughest standards of all – yours.

### Durability

Neither rain nor hail nor golf or soccer balls can keep a Carrier system from doing its job – they're built tough inside and out.

Outside

- WeatherArmor<sup>™</sup> protection and galvanized steel cabinet protect against corrosion and keep your system looking its best for years.
- Louvered coil guard looks great and helps keep your system operating at its best by protecting your coil from rocks, sticks, lawn and sports equipment and more.
- Baked-on powder paint evenly coats all exterior painted surfaces to provide superior rust and corrosion protection.

#### Inside

- Filter drier removes moisture and debris from refrigerant to protect the compressor and maintain top efficiency and performance.
- Copper Microtube<sup>™</sup>/aluminum fin coil provides superior corrosion resistance and heat transfer.





### **Specifications**

Heat Pumps	Infinity <sup>™</sup> System	Infinity <sup>™</sup> Controls	Two-Stage Compressor	Scroll Compressor	SEER Rating (Up To)	HSPF Rating (Up To)	Energy Star®	Puron <sup>®</sup> Refrigerant	Silencer System II <sup>™</sup>	Sound Ratings Under 75 dB	HYBRID HEAT® Dual Fuel System Compatible
Infinity <sup>™</sup> 19	1	1	1	1	19.0	9.0	1	1	1	1	1
Infinity <sup>™</sup> 16	1	1	1		16.0	9.0	√*	1	1	1	1
Performance <sup>™</sup> Series		<ul> <li>Image: A second s</li></ul>	√*	1	16.0	8.6	<b>√</b> *	1	∕*	<b>√</b> *	1
Comfort <sup>™</sup> Series			1	1	17.0	8.5	√*	1		√*	1

\*Not available on all models

## **Limited Warranty**

To the original owner, the Carrier® Performance 16 two-stage heat pump is covered by a 10-year parts limited warranty upon timely registration of your new equipment.\* Ask your Carrier dealer about optional extended warranties, which may include labor.

\* Warranty period is five years if not registered within 90 days. Jurisdictions where warranty benefits cannot be conditioned on registration will automatically receive a 10-year parts limited warranty. See warranty certificate at carrier.com for complete details.

# Technology

Puron refrigerant – environmentally sound, and won't deplete the ozone layer.

Two-stage scroll compressor – the heart of the heat pump, the compressor pumps refrigerant though the system.

Infinity<sup>™</sup> electronic control board – works with the Infinity Control for the ultimate in comfort. "Smart" electronics track previous cycles and automatically select the best settings for maximum comfort and efficiency.

3 Copper Microtube™/aluminum fin coil – transfers heat to maximize indoor comfort while resisting corrosion.

4 High- and Low-pressure switches – protect the system from extreme conditions.

Filter drier – constantly filters the refrigerant to remove moisture or other contaminants that can harm your system.

6 Aerodynamic top – enhances airflow through the outdoor unit and reduces noisy turbulence.

WeatherArmor™ protection package – combines three design elements that protect your Performance:

a. Galvanized steel cabinet

b. Louvered steel coil guard

c. Baked-on powder paint



#### Efficiency

Because heat pumps provide both heating and cooling, their efficiency is measured with two distinct ratings. While in the cooling mode, heat pumps receive a Seasonal Energy Efficiency Ratio or SEER number. SEER is like gas mileage. The higher the gas mileage or SEER, the more efficient the automobile or system is. Most new heat pumps rate between 13.0 and 19.0 SEER.



While in the heating mode, heat pumps also receive a Heating Seasonal Performance Factor or HSPF rating. Again, the higher the number, the more efficiently the system works. Most new units have ratings between 7.7 and 9.0 HSPF.

As an ENERGY STAR<sup>®</sup> partner, Carrier Corporation has determined that the Performance<sup>™</sup> 16 two-stage heat pump that achieves system combinations of 14.5 SEER, 8.2 HSPF and 12.0 EER or higher meets the ENERGY STAR guidelines for energy efficiency.



Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your dealer for details or visit www.energystar.gov.



# High-Efficiency Heat Pump Designed with Your Comfort in Mind



#### **Greater Operational Efficiency**

The Carrier Performance 16 two-stage heat pump is available with efficiency ratings of up to 16.0 SEER and 13.0 EER when cooling and up to 9.3 HSPF when heating. For every \$100 spent to cool your home using a 10.0 SEER heat pump, a 16.0 SEER heat pump should cost you approximately \$63. Actual savings will depend on the efficiency of your current system compared to the efficiency of a new system.





#### Turn to the Experts

Willis Carrier invented air conditioning in 1902. Over 100 years later, we're proud to say Carrier<sup>®</sup> systems are trusted in more homes than any other brand.

Carrier continues to be on the forefront of innovative engineering and unsurpassed standards of excellence. So when choosing a home comfort system, you'll want to turn to the experts. Your Carrier dealer will evaluate your home, such as window placement and size, ductwork, other structural specifics and lifestyle to provide a customized indoor comfort plan designed specifically for you. And when you have an expert helping you make an educated decision, you're going to feel more comfortable.



#### Turn to the Experts."

#### www.carrier.com

#### 1-800-CARRIER

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Always look for these symbols, the heat pump industry seals of certified performance, efficiency and capacity.