

# R-32 Refrigerant: Advancing HVAC



R-32 refrigerant's impact goes beyond sustainability — it's a low Global Warming Potential (GWP) refrigerant that can allow for high HVAC system performance, efficiency, and ease of use as a single-component refrigerant.





# **R-32 Innovation**

To advance future sustainability goals, a timely transition from the blended R-410A to the pure, single-component, low GWP R-32 refrigerant is essential.

## **Snapshot of R-32 benefits:**



#### **Efficiency**

R-32 refrigerant has excellent thermodynamic performance with about 10% more thermal capacity than R-410A. This may help use less energy during operations which could lead to cost savings over the lifespan of the system.



#### **Maintenance**

R-32 is a single component refrigerant, making it easy to service and maintain. the refrigerant's single-component nature simplifies cycling and recharging.



#### **Availability**

Homowners and businesses need available HVAC solutions. R-32 is widely available, manufactured by numerous refrigerant producers, and distributed globally.



### Sustainability

R-32 lower global warming potential results in less environmental impact compared to R-410A. This can help businesses meet regulatory standards and sustainability goals.

# **Discover our R-32 refrigerant products.**

Select Amana® brand indoor comfort solutions utilize R-32, a low global warming potential refrigerant for enhanced energy efficiency.







# Refrigerants and R-32:



### Why is R-32 efficient?

R-32 refrigerant can help engineers design systems that use less electricity than comparable R-410A systems, and it has excellent thermodynamic performance with about 10% more thermal capacity compared to R-410A.



### The role of refrigerants in HVAC systems:

To understand how R-32 refrigerant works, it's important to first understand the role of refrigerant. In an air conditioning or heat pump system, refrigerants are responsible for transferring heat. They undergo phase changes—switching from liquid to gas and back to liquid—as they absorb and release heat. This cycle is what allows air conditioners and heat pumps to cool or heat indoor spaces.

In cooling mode, the refrigerant absorbs heat from inside the building and releases it outside. In heating mode, the process is reversed, and refrigerant absorbs heat from the outside and releases it inside. The efficiency of this heat transfer process is critical to the overall performance and energy consumption of the HVAC system.



### **How R-32 Works with Modern HVAC Systems:**

R-32 is compatible with the latest Amana brand HVAC systems, including air conditioner and heat pump systems. These modern systems are designed to maximize the efficiency of R-32 and can feature inverter technology that further optimizes the system's performance by adjusting the compressor's speed to match the heating or cooling demand.



### Low Global Warming Potential (GWP):

An important feature of R-32 refrigerant is its low Global Warming Potential (GWP). R-32 has a GWP of 675, which is significantly lower than R-410A, which has a GWP of 2,088. This means that if R-32 is accidentally released into the atmosphere, it can have a much smaller impact on global warming than its predecessors.



### Refrigerant with the future in mind:

R-32 refrigerant stands as a benchmark of innovation in the realm of refrigerants. Its energy efficiency properties, ease of use, and low global warming potential showcase our dedication to creating sustainable solutions for dependable indoor comfort. Amana's adoption of R-32 refrigerant represents a pivotal moment in refrigerant technology.

**Amana brand heating and air conditioning** is part of one of the leading manufacturers of energy-efficient residential, commercial and industrial HVAC systems and refrigerants. The brand has access to global resources and support to ensure that outstanding technology, manufacturing processes, testing and product limited warranties\* are applied in all products.



**R32** 

#### ADDITIONAL INFORMATION

Before purchasing this appliance, read important information about its estimated annual energy consumption, yearly operating cost, or energy efficiency rating that is available from your retailer.

\* Complete warranty details are available from your local Amana brand dealer or at www.amana-hac.com.



A DAIKIN BRAND

Our continuing commitment to quality products may mean a change in specifications without notice.

© 2025 DAIKIN COMFORT TECHNOLOGIES NORTH AMERICA, INC. · Houston, Texas · USA · www.amana-hac.com