R32

WHITE PAPER

The Global Stance on R-32

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Goodman

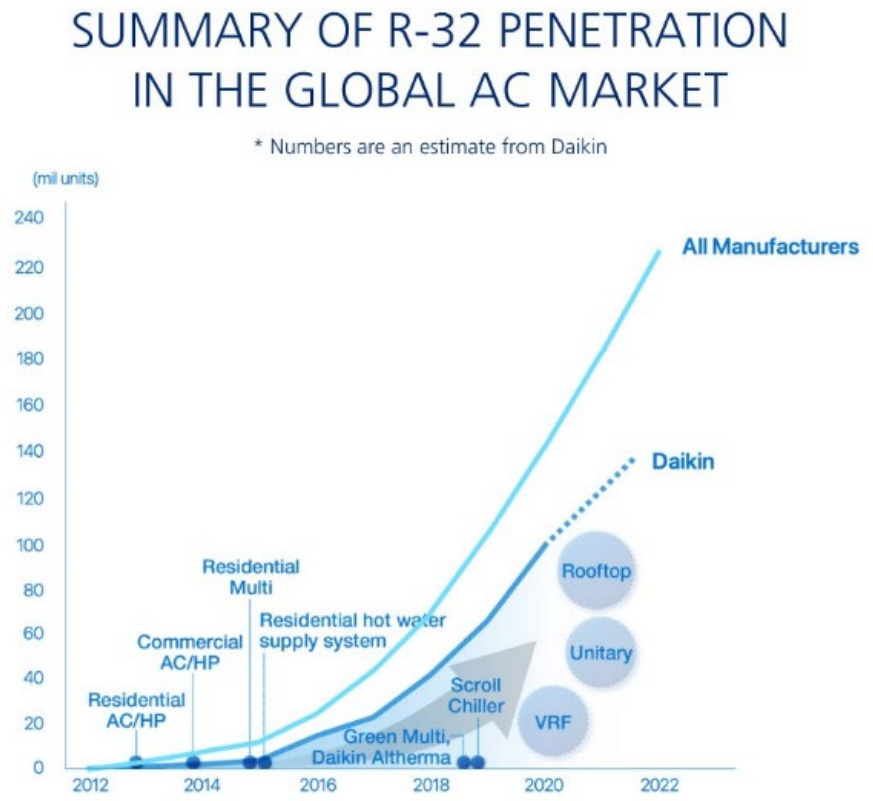
Did you know it's likely you're already using R-32 refrigerant? For many years, R-32 has been a key component of many other blended refrigerants. Because of R-32's availability, low cost, and excellent performance, it is used as a key ingredient in blends, including R-410A. In fact, R-32 is the pure, single component refrigerant that helps make blends like R-410A so efficient.

Refrigerant	% R-32	% R-125	% Other
R-32	100%		
R-454B	68.9%		31.1% R-1234YF
R-452B	67%	7%	26% R-1234YF
R-410A	50%	50%	

Because of R-32's excellent thermodynamic performance characteristics, an R-32 system could have up to 40% less charge than R-410A in certain applications, meaning you could reduce refrigerant usage in the equipment and potentially also reduce quantities leaking to the environment. R-32 can help us achieve the 3Rs: Reduce, Reuse, Recycle, a new reality in the industry.

Being a pure, single-component refrigerant, R-32 can't lose its composition like a blended refrigerant and is well suited to retain its quality over time. It can be topped off and recharged in the field in both liquid and gas phases; because the composition doesn't change, it's easy to clean and reuse on site. R-32 can be reclaimed and recycled with a simple cleaning process, as compared to blends with less stable HFOs that must be distilled to their pure compounds and then remixed.

What's not new, though, is the adoption of R-32 across the world. Back in 2012, HVAC companies in Japan introduced R-32 in split systems, followed by VRF systems and chillers. Companies in other countries across Europe, as well as India, Thailand and Australia followed suit in 2014. In 2016, window air conditioners in the United States began to take advantage of R-32's many benefits. With more than 230 million R-32 units already in operation worldwide and more than 40 million coming online every year, R-32 has become the de facto global standard.



WITH MORE THAN 230 MILLION UNITS INSTALLED WORLDWIDE, R-32 IS USED BY:

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