

ENGINEERING
TOMORROW

Danfoss

Plan now, for a **smooth** and **profitable conversion**. The countdown to R32 has begun!

R32 alternative

Get ready for the new, low GWP refrigerant.

BE PREPARED FOR **THE BIG CHANGE**

The countdown has started! It's time to get ready for the change from prohibited refrigerants such as R22 to others with a low GWP, such as R32. Don't get caught out. Start planning now so that your business can handle the transition smoothly.

NEW REGULATIONS

Governments around the world are introducing regulations to minimise the negative environmental impacts of HVAC systems. The choice of refrigerant is a key factor. As of 2013, R32 will be one of the refrigerants used to replace R22, which is soon to be banned.

R32 - THE SUCCESSOR

R32 is similar to R410A in many ways and is, in fact, the main component in R410A. It offers low GWP (Global Warming Potential) and better volumetric efficiency.

LOW GWP As awareness of environmental impacts increases, there is growing international pressure to move away from refrigerants with high Global Warming Potential (GWP). R32 has a much lower GWP (675) than R22 (1810) and R410A (2100).

VOLUMETRIC CAPACITY The volumetric capacity of R32 is 20% higher than that of R410A, which means that the volume charged to the system can be much lower.





1

Contact point

for all your R32
needs.

65%
lower GWP

As a result of
switching from R22
to R32.

WE'RE GETTING READY FOR R32! ARE YOU?

Suitable for use across a broad range of products, R32 has clear financial and environmental benefits. Danfoss supports R32 as the safe choice of refrigerant and, as such, we're developing R32-adapted products for optimal performance in our customers' applications. You can rely on us to support you fully throughout the conversion process...and beyond!



COMPRESSORS

A new range of R32-friendly compressors is currently being developed and soon will be ready for commercial launch.



HEAT EXCHANGERS

Our MCHE and MPHE heat exchangers are designed to require a minimal refrigerant charge, which makes them ideal for use with R32. Customers are currently testing our products in their own applications.



THERMOSTATIC EXPANSION DEVICES

We offer thermostatic expansion devices which are prepared for use with R32.



ELECTRONIC EXPANSION DEVICES

Our range of electronic expansion devices is now in the final stages of development. Soon to be tested in customers' applications.



CONTROLLERS

Regardless of the refrigerant used, Danfoss offers a wide range of controllers based on a global, open and flexible system. Ensure the safety of your system, using our world-class control equipment.



OTHER COMPONENTS

The preparation of filter driers, sight glasses, ball valves, check valves and solenoid valves for the introduction of R32 has been already completed.



R32

GET GOING, THE EASY WAY

ENJOY A SMOOTH CONVERSION

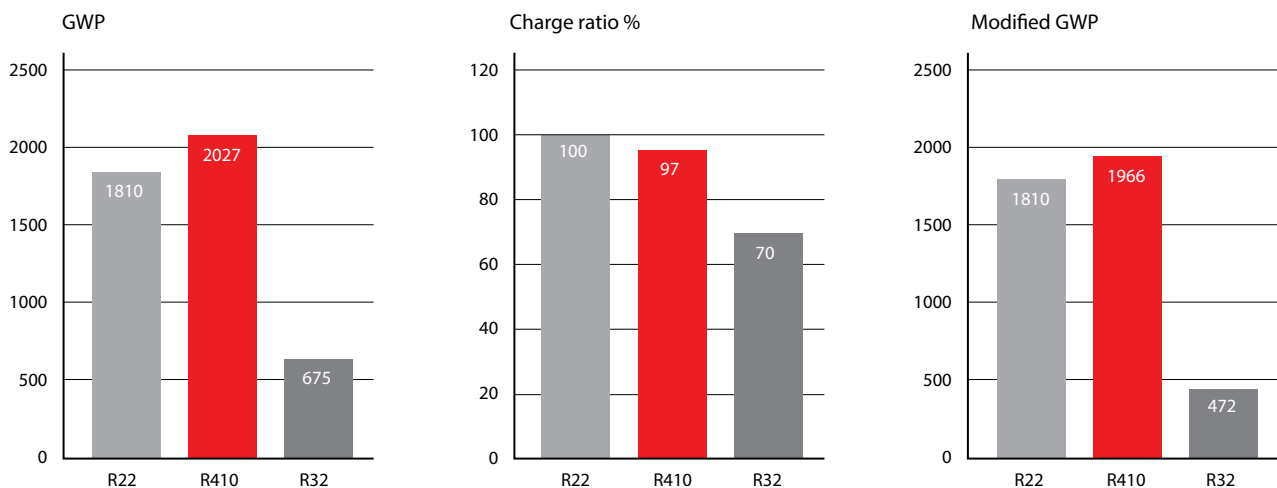
Although it is clear that the conversion to R32 brings benefits to the environment and to the industry, adaptation nonetheless implies a major effort on the part of manufacturers. Danfoss can help you make that transition with minimal disruption to your business. We can help you prepare in advance so that orders and production continue to flow as usual and your business remains profitable.

TALK TO US

Danfoss is a leading industrial supplier and solution provider with over 20 years' experience in dealing with environmentally friendly refrigerants and refrigerant-based products. We have been named 'best-in-class' for our refrigerant safety and system reliability. All our products have the relevant quality and environmental certification, making them suitable for export to global markets.

Let us help you prepare now so that your business is ready to start selling R32-adapted products profitably from day one.

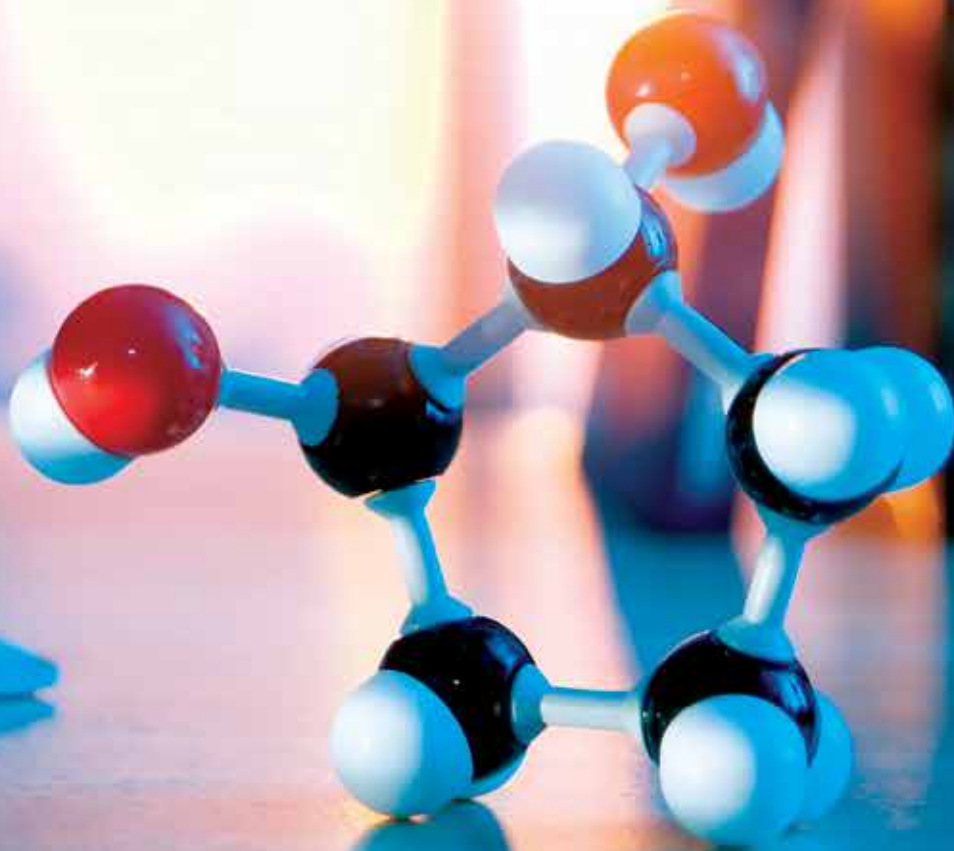
How to evaluate refrigerants' global warming impact





PROPERTIES

MOLECULAR FORMULA	CH_2F_2
MOLAR MASS	52.02 g mol^{-1}
EXACT MASS	$52.012456474 \text{ g mol}^{-1}$
APPEARANCE	COLOURLESS GAS
DENSITY	1.1 g cm^{-3}
MELTING POINT	$-136 \text{ }^\circ\text{C}, 137 \text{ K}, -213 \text{ }^\circ\text{F}$
BOILING POINT	$-52 \text{ }^\circ\text{C}, 221 \text{ K}, -62 \text{ }^\circ\text{F}$
LOG P	-0.611
VAPOUR PRESSURE	$1518.92 \text{ kPa (AT } 21.1 \text{ }^\circ\text{C)}$



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Danfoss supports the use of R32 and develops products suitable for use in our customers' applications - with the aim of optimising energy efficiency. Using R32 is a safe choice with core environmental benefits.