

AC & Refrigeration Gas Update

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INTRODUCTION

Viking Airtech is committed to work with the industry to do our part towards the usage of AC & refrigeration gases with the minimum impact on the environment. For information about the road map to more energy efficient AC & refrigeration gases for a wide range of applications please click [here](#) .

THE F-GAS REGULATION

Download [EU regulations](#) for a brief overview of how F-Gas regulation will impact you. You can also check Honeywell's [case studies](#) to see how Honeywell is helping customers comply.

RETROFITTING OF COMPRESSORS

Viking Airtech work with compressor makers that provide high quality efficient compressors that can use the latest AC & refrigerant gases. For an update of new refrigerants approved for Bitzer's new 2-stage reciprocating compressors please click [here](#) .

Bitzer's older compressors already installed can be used, but depending on the operating conditions, the discharge temperatures are very high, about 20 - 30 degrees higher temperatures here compared to R404A.

In addition, the o-ring gaskets on the sight glass and on the oil pump should be changed, as the elastomer mix on older compressors is not compatible with the new HFOs. We also recommend replacing the shaft seal.

For further information from Bitzer for the retrofitting of compressors with R448A / R449A please click [here](#).

R404A has a GWP (Global Warming Potential) of 3920 compared to 1273 for R448A which is the most energy-efficient (5-15% more energy efficient on a Bitzer semi-hermetic compressor depending level of optimization and refrigeration temperature), reduced-GWP alternative to R404A available. For further information about R404A replacements in commercial refrigeration please click [here](#).

A successful retrofit includes several steps to produce a low maintenance and efficient system. For further information about retrofitting of R404A to R448A, please click [here](#).

WE CAN HELP!

[Contact](#) Viking Airtech by sending your AC & refrigeration schematics and equipment data sheets and we can advise further on how we can retrofit your vessel to be more energy efficient, reduce the impact on the environment and be ready for future legislation and a reduction in supply of R404A. To download a survey form, go to [Survey Form](#).