Daikin presents its latest addition to the “Bluevolution” family - the R-32 Mini chiller

Daikin’s R-32 Mini Chiller is a very compact Air-Cooled unit, available both in cooling only (EWAA-DA) and heat pump configurations (EWYA-DA).

This new series replaces Daikin Mini Chiller equipped with R-410A (the EWAQ-AC and the EWYQ-AC), in line with a path already traced a few years back.

Daikin started replacing R-410A with R-32 in most of its residential AC products in 2012. Since then, Daikin has been pushing forward its commitment in using this low GWP refrigerant, extending it to Applied product as well. Introduction of the world’s first R-32 chiller in 2018, which has been followed by the introduction of the first R-32 heat pump in its segment in 2020. And now, the new R-32 Mini Chiller complements the “Bluevolution” series, which now can offer a complete set of Applied solutions featuring R-32 refrigerant.

R-32 Mini Chiller’s main aspects and features

The new R-32 Mini Chiller by Daikin, thanks to its new extended range from 11kW to 16kW, will be a green and efficient solution for all those residential applications requiring compact units for comfort cooling and heating.

As the other series of the “Bluevolution” family, the R-32 Mini Chiller is characterized by minimized environmental impact, thanks to the low GWP refrigerant (675). This allows this series to be perfectly compliant with regulations for the years to come.

Recyclability is another important aspect. R-32, in fact, not being a blend of refrigerants, can be easily recycled. It can be recovered during maintenance operations, for instance, and then reused. That allows to further respect the environment and regulations.

Efficiency then, is something the new R-32 Mini Chiller really stands out for.

This new series, in fact, ensures stunning efficiency values. The full load efficiency of the new series goes up to 3.71 COP (Ta DB/WB 7°C/6°C - LWC 45°C, Dt=5°C) and 3.35 EER (EW 12°C; LW 7°C; ambient conditions: 35°CDB), while the seasonal cooling efficiency at part load conditions (SEER) goes up to 5.79, and the seasonal efficiency in heating operation (SCOP) goes up to 4.82, substantially reducing the running costs.

The new R32 series can produce hot water at 60 ° C down to -7 ° C and always in heating mode, it can work down to -25 ° C.

An insight on Daikin’s refrigerant policy and response to new needs

Refrigerants are more than ever necessary since the cooling and heating needs of our world are growing. While refrigerant solutions of the past may have had consequences on today’s environment, it is important to find future-proof solutions to current challenges now. That is Daikin’s main goal. Contributing to mitigating refrigerants environmental impact with a comprehensive approach throughout refrigerant and equipment lifecycle.

When choosing a refrigerant, the main aspects to consider are usually safety, affordability, and environmental friendliness. It is a matter of balance between these different aspects and factors. Of course, choices might differ depending on the application, as a single perfect choice for any application simply doesn’t exist. But the recent changes introduced by new international regulations have led to new developments in the world of refrigerants, which has been moving towards lower GWP refrigerants in the recent years.

Daikin, as company who has a unique expertise coming from manufacturing and producing both refrigerants and equipment, has identified R-32 refrigerant as the most balanced refrigerant in terms of Environmental Impact, Energy Efficiency, Safety (R-32 is classified as a A2L - low flammability) and Cost-Effectiveness for AC and Heat Pump equipment. That is why Daikin believes in R-32.