

PRESS RELEASE

KONVEKTA AG

Subject: Vehicle air conditioning

Think long-term and bank on quality - the UltraLight 3 air conditioning unit range

Konvekta is refreshing its UltraLight range of bus air conditioning units with extensive enhancements.

The roof-mounted UltraLight (UL) range of compact air conditioning units that have been proven thousands of times in the field has undergone advanced development and optimization. The principle of reduction has been significantly applied when compared to the previous range. The new system comes with a considerably reduced quantity of refrigerant, while offering consistently excellent performance.

Even with the new UltraLight 3, the proven, specially developed high-performance material is used as the basis for holding all components, which makes servicing and maintenance very straightforward.

Greater efficiency, less refrigerant

The high leak-tightness and the insulating effect of the material have a favourable impact on the energy requirement. By overhauling and replacing components and lines, the entire system requires 50% less refrigerant compared to its predecessor. The quantity of refrigerant can be reduced drastically from approximately 10 kg to less than 5 kg (R134a or R513a) without affecting performance.

In today's times, this is extremely important since the EU has strictly regulated the use of F gases such as R134a. Based on this, the importation of this refrigerant has been and is being reduced drastically in multiple stages. The next reduction from 63% to 45% is scheduled to take place in 2021 and the consequences of this will be perceptible in the following year. Finally, R134a has become more expensive by four or five times, and there have on

occasions been bottlenecks lasting several weeks. It is all the more important that air conditioning units become increasingly more economical and more efficient. In this way, the new UltraLight 3 range of air conditioners contribute significantly in terms of reducing the CO₂ footprint.

Aerodynamic and ultra-lightweight

The UltraLight 3 air conditioning units are characterized by a highly modern design. With its dynamic and sharply cut edge profiles, and the puristic surfaces, it not only stands for a modern, vehicular design – but also, in particular, for functionality and aerodynamics.

In fact, this series is even known as the UltraLight range. Thanks to a further reduction in the weight, the UltraLight 3 - having undergone advanced development - weighs only approximately 100 kilograms in its most lightweight design.

The power range of the UL model range goes from 24 kW right up to 45 kW of cooling power, and an equally generous heating power of 30 kW up to 48 kW.

Optimized: servicing and maintenance

As far as life cycle costs (LCC) are concerned, the UL 3 is a must-have for cost-conscious public transport companies, and this is not just because of the reduced quantity of refrigerant. Moreover, the basic material prevents the entrance of dust and impurities into the unit. Thanks to the plug-in principle used in the design that primarily dispenses with screw connections and the new placement of the components, the servicing and maintenance locations are easily accessible. Furthermore, all components can be replaced easily and quickly. The unit has to be opened from the side, which means that one does not need to walk on the roof of the bus. All cover parts are optimally equipped with quick-release fasteners and cover holders to facilitate quick servicing.

Respect for the environment

The commitment of Konvekta AG towards the environment as well as its conservation is also reflected in the UL 3. The aim of the improvements was also to develop air conditioning and heating systems in the future and all processes associated with them to ensure that they are environmentally-friendly and energy-efficient. Accordingly, for the facelift of the UltraLight, attention has been paid to components and processing methods. In this way, even for this generation, the entire system remains 100% recyclable.

All stages of the production process have been optimized with respect to the environment and energy efficiency. The application of environmentally-friendly

components and the efficient use of raw materials and energy are other favourable characteristics of the system.

In addition, even an optimized packaging and transportation system has been developed. Multi-use building blocks made from a lightweight but robust material carry the air conditioning units and facilitate the stacking of multiple systems. As a result, additional cardboard boxes and plastic packaging are avoided.

The UltraLight 3 is a technological statement for the future.

About Konvekta

Konvekta AG is an internationally operating manufacturer of innovative and future-oriented air conditioning systems for buses, construction and agricultural machinery, electric vehicles, as well as refrigerated rail and transport vehicles. Established in 1957, the family-run company based in Schwalmstadt in North Hesse has over 60 years of experience and know-how in the field of refrigeration and air conditioning technology. With its worldwide presence in key markets, Konvekta AG guarantees flexibility and proximity to the customer for servicing and maintenance work.

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