

## Cylindrical condensers



The new Circlemiser series is characterized using microchannel condensers with the **heat exchange surface increased by 45%** compared to traditional condensers, thanks to the special cylindrical configuration of the heat exchanger.

The Geoclimate Research Development Department designed this special and unique cylindrical layout. This unique design makes it possible to increase the heat exchanger capacity reducing condensing

temperature as well as approach temperature.

Using the new Geoclimate condenser coil and evaporator design we have been able to achieve performance improvement without changing the footprint of our air-cooled chiller range.

## Cascade flooded evaporators

Circlemiser chillers are equipped with cascade flooded evaporators, which lead to the reduction of the  $\Delta T$  between evaporation temperature and outlet temperature of the fluid.

The cascade arrangement of the evaporators **increases the evaporation temperature** and, at the same time, **reduces energy consumption**. Using this type of evaporator Geoclimate has been able to further increase efficiency across the range of the Turbomiser air cooled chillers.



For contacts and information, please visit

[essb.my](http://essb.my)



All-round  
**efficiency.**



# Unique design

From the ultra-efficient technology of Turbomiser comes Circlemiser, the new and most efficient series of air cooled chillers present on the market.

The new Circlemiser series is characterized by incomparable performance improving the already very high efficiency of Turbomiser technology.

The technological innovation of Circlemiser is in the design and development of special cylindrical condensers, and the installation of cascade flooded evaporators.

\*EER in accordance with ANSI/AHRI STANDARD 551/591 (SI) and ANSI/AHRI STANDARD 550/590 (I-P).



# +15% of cooling efficiency

Comparing the Circlemiser with traditional air cooled Turbomiser chillers, at the same AHRI/EUROVENT conditions and same size (with the same number of compressors, same model of compressors, same capacity), Circlemiser records an increase in EER up to +9.5% (with one compressor units) and up to +15% (with multi-compressor units), with the **highest achievable value of EER 4.35**.

From the comparison of Circlemiser with Turbomiser with Evaporative System, with a relative humidity of 50%, **the efficiency ensured**

**by Circlemiser is equivalent to the efficiency achievable with the Evaporative System**, without costs and installation and maintenance conditions that come from the use of water for the evaporative system. Circlemiser represents therefore a valid alternative to the adiabatic units in those cases in which adiabatic configuration is not applicable.

The new **Circlemiser series is available for air cooled Turbomiser units**, both with R134a, and with HFO-1234ze refrigerants.

