



GREEN[AIR]

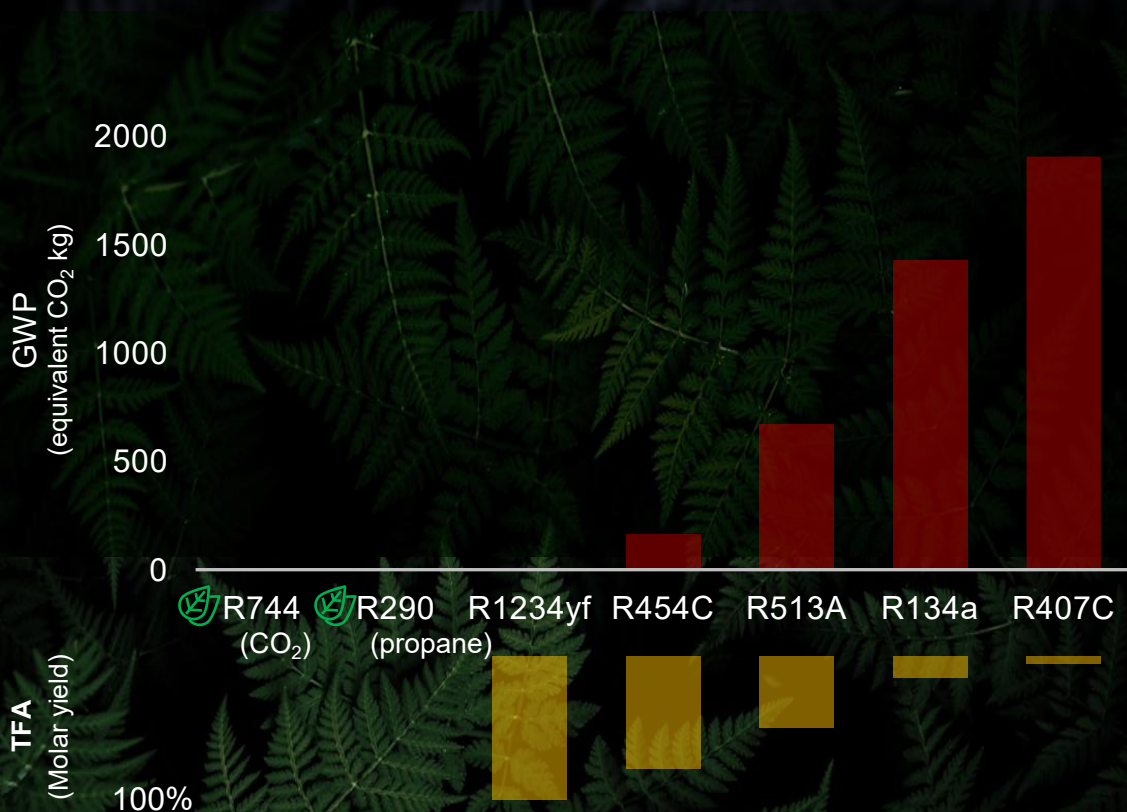
EFFICIENCY MEETS SUSTAINABILITY:
REDIFINING HVAC SYSTEMS FOR A GREENER
JOURNEY



MERAK

Natural Refrigerants cut climate impact

while conventional gases can have a global warming potential (GWP) more than 1.400 times higher and TFA (trifluoroacetic acid) by-products that harm ecosystems and water quality.



With natural refrigerants, Merak delivers sustainable comfort for passengers

HVAC is only 3% of the train cost, but responsible for almost 30% of the energy consumption

3x

More energy
efficient

99.8%

Lower GWP

30%

Lower total cost
of ownership

compared to a standard HAC unit

**We combine cutting-edge engineering with
environmental responsibility**

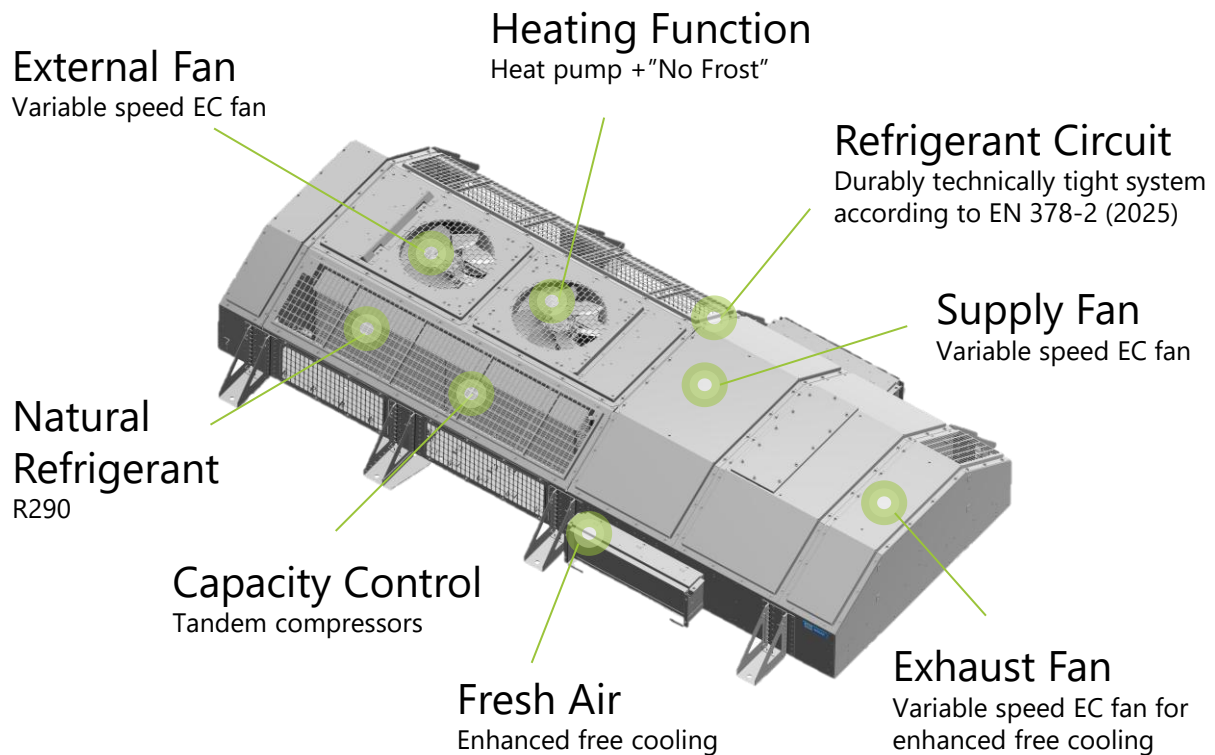
Our green[air] technology combines the usage of natural refrigerants with energy efficient features

- Heating Function Heat pump + “No Frost”
- ECO-Fans
- Optimized Capacity Control
- Fresh Air Control



Merak offers first class technologies for a green[air] journey

Our green[air] technology combines the usage of natural refrigerants with energy efficient features



Energy Efficiency

Achieve up to 40% energy savings with advanced system optimization



Lower Total Cost of Ownership

Reduce operating costs by up to 35%



Passenger Comfort Redefined

Precise control of temperature and humidity for a smoother journey



Smart System Intelligence

Integrated advanced controls and condition-based maintenance (CBM) algorithms



Sustainability at the Core

Cut carbon footprint by 20% through greener operation



Future-Proof Refrigerants

Designed for natural refrigerants, compliant with upcoming F-Gas and PFAS regulations



Adaptive Airflow Management

Intelligent variable-speed fans ensure efficiency in all conditions

Merak offers first class technologies for a green[air] journey

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 **KB SIGNALING**

 **ZELISKO**

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