

QUATTRO EA – range extension

Last generation 4 pipe unit with LOW GWP refrigerant

CAPACITY RANGE: 85 - 150 kW

QUATTRO

R454B



EXCELLENT EFFICIENCY ALL YEAR ROUND

CAPACITY RANGE: 85 - 150 kW

FEATURES

- All models 2 circuits with 4 scroll compressors / minimum 4 capacity steps
- Thermocold Adaptive Refrigerant System (TARS)
- Thermologic unit controller
- **R454B**, low GWP refrigerant
- High Efficiency (TER up to 8.4 and COP up to 3.3)
- EC (standard) and EC HESP fans (optional)
- Same options as CMAF 2V/3V
- Sound packages, hydraulic kits, low ambient protections
- Extended Heating Operating map (+47°C at -5°C of outdoor air temp.)



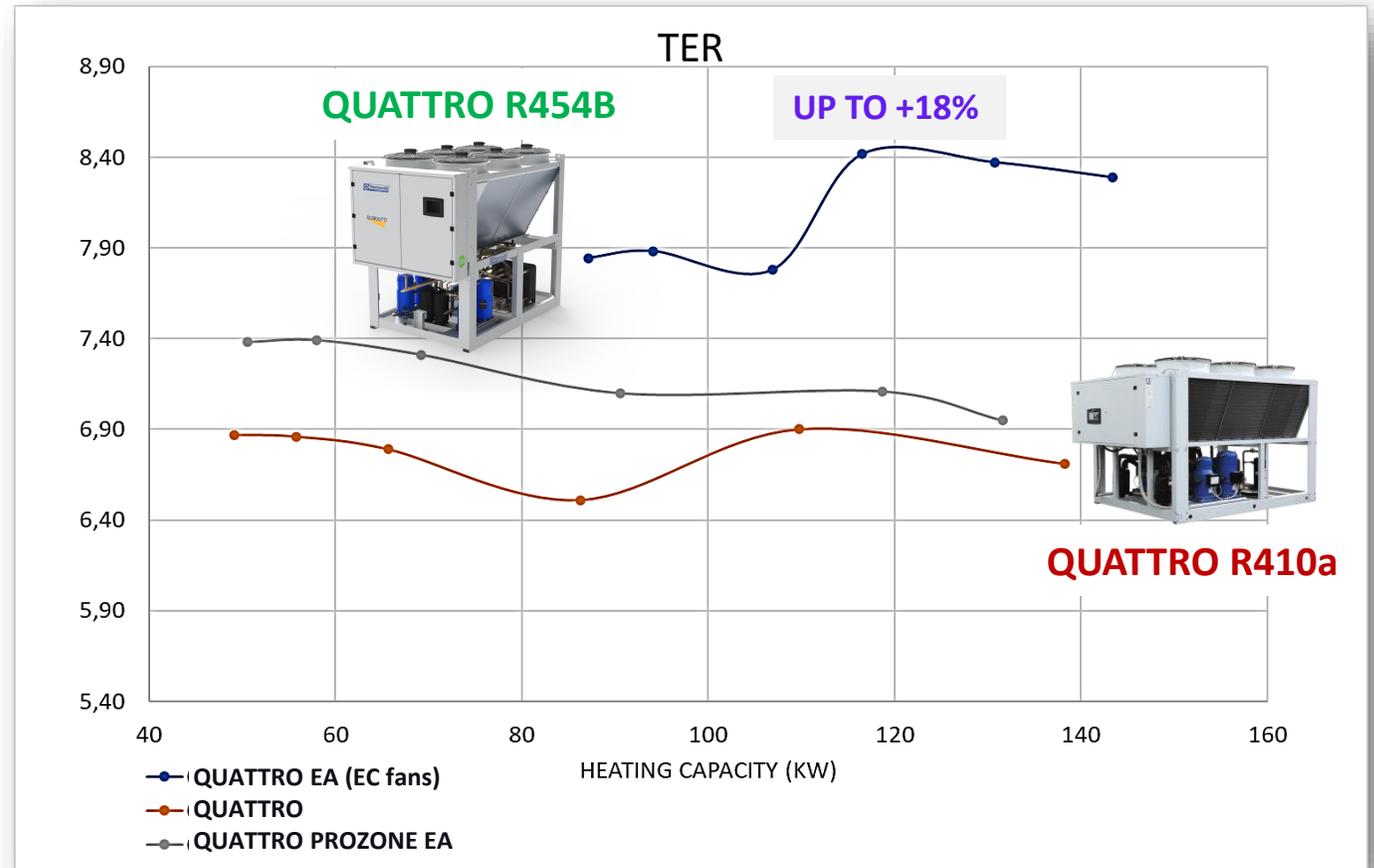
Product features



IMPROVED PERFORMANCES

One of the best on the market...

- Great fit for Comfort projects with simultaneous cooling and heating demand
- Electrification of heating in new buildings and for replacement of existing gas boilers
- Higher TER values compared to QUATTRO with R410a refrigerant
- Lower sound power level than QUATTRO with R410a refrigerant, up to -6dB of reduction
- Improved operating map: **+45°C** of hot water temperature down to **-8,5°C** outdoor air temperature versus **-2°** of QUATTRO with R410a refrigerant



TARS™ = Patented Thermocold Adaptive Refrigerant System

New Adaptive Refrigerant System™ able to optimizing refrigerant charge

- Highest Efficiency at any operating mode and temperature condition
- Faster steady state operation in mode changing
- Largest Operating Map in industry, especially in heat pump mode
- Limited risk of high pressure cut outs
- Refrigerant charge control reliability

TARS™ = Patented Thermocold Adaptive Refrigerant System

Detect refrigerant pressure at different locations on refrigerant line



Pressure
Sensor



Temperature
Sensor



Valves



Thermologic
controller



Receiver
Tank

THERMOLOGIC advanced controller uses a powerful, proprietary algorithm to process data and send signals to the rest of the system.

Modulating motorized valves on the refrigerant line are actioned by the THERMOLOGIC Controller

TARS™ = Patented Thermocold Adaptive Refrigerant System

The ideal refrigerant charge varies to get the best performance, best operating maps and best efficiency

The refrigerant is stored in a dynamic receiver tanks upstream of the expansion valve.



Receiver Tank

Refrigerant is filled and drained as required, it is controlled in all operating modes.

Vertical Market Applications



Thermocold QUATTRO multi-pipe units offer building owners of multifunctional facilities like office buildings, hospitals, theatres and hotels reduced investment costs, better use of floorspace and lower total operating costs while significantly improving the sustainability of their operations.