OMICRON SKY S4 R5

Multi-function unit for 4-pipe systems
and R454B refrigerant
cooling **40÷800** kW
heating **45÷840** kW

WESTERN ™
AIRCONDITIONING
WARMTEPOMPEN

BlueBox
by Swegon

Energy Loop

Omicron Sky

use waste energy from different applications to generate new one for free, creating infinite energy loop and increasing **indoor environmental quality**.

Specifically **designed to reduce carbon footprint** of the whole HVAC system combining:

- **High efficiency in every working mode**
- **MAX Heat Recovery in every working conditions due to advanced integrated control and integrated of 4 pipes system**
- **R454B with low Global warming potential and excellent thermodynamic characteristic**

Modular multifunctional units for 4-pipe systems. Units with scroll compressors, 2 or more refrigerant circuits totally indipendent to guarantee perfect functioning in every possible working mode.

Eurovent certified   **Low GWP below 500**   **Advanced control**

CLIMATE CHANGE CHALLENGE

Keep temperature increase **below 1.5°C**
Become a **climate neutral economy**

R 454B + 4 PIPE UNIT

REDUCE CARBON FOOTPRINT IN EVERY POSSIBLE WAY

TEWI

TOTAL **E**QUIVALENT **W**ARMING **I**MPACT

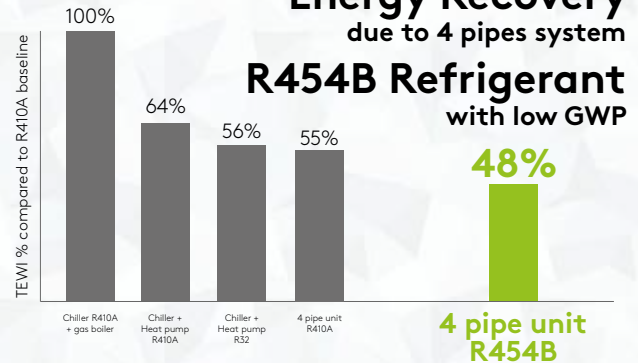| Direct emissions	+	Indirect emissions

Leakage rate per year
Service life (years)
Leftover refrigerant after disposal
Global Warming Potential

Plant cooling / Heating load
Heat pump efficiency
Electricity consumption
CO_2 emission intensity

Omicron SKY S4 R5 not only reduce
carbon Footprint due to astonishing Efficiency
at full and partial load
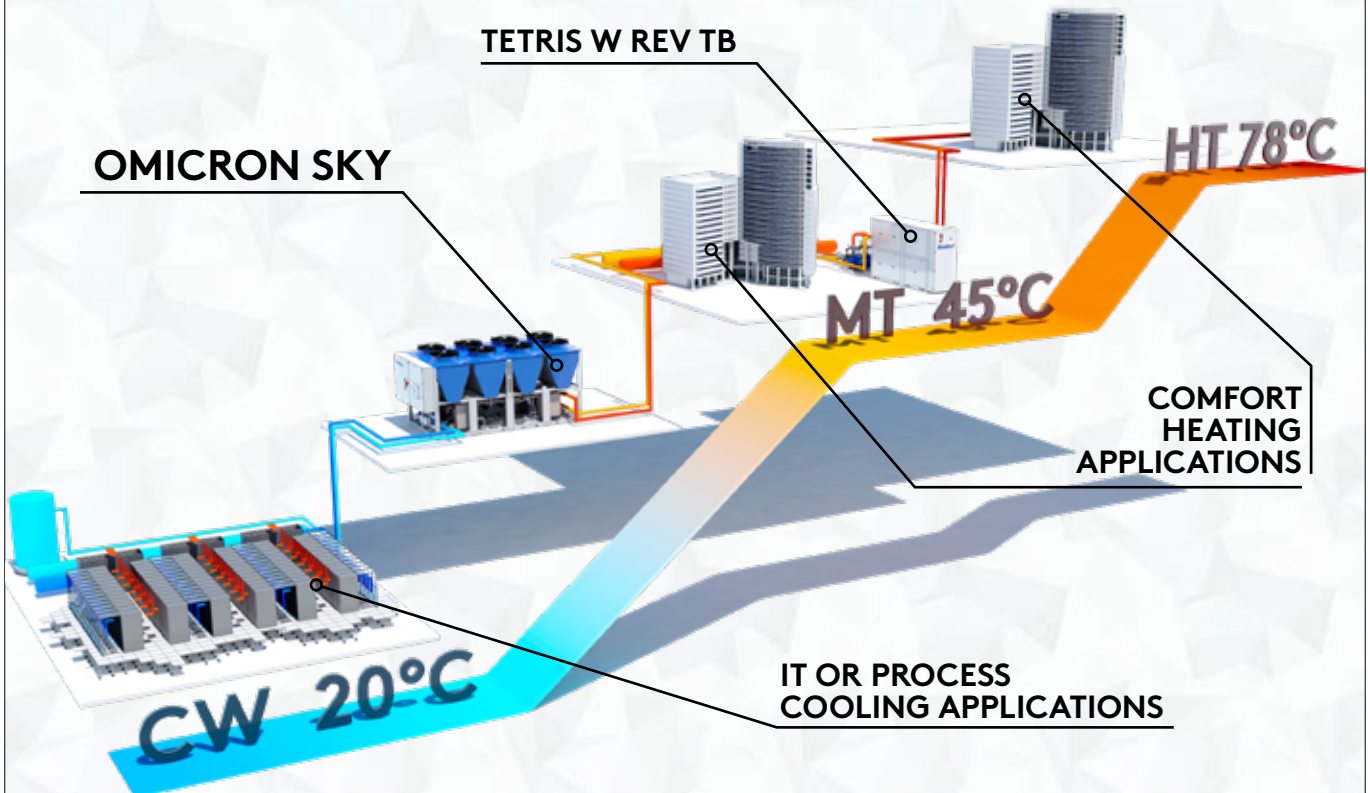but also due to 2 special features of the range:

Energy Recovery
due to 4 pipes system

R454B Refrigerant
with low GWP

TEWI % compared to R410A baseline

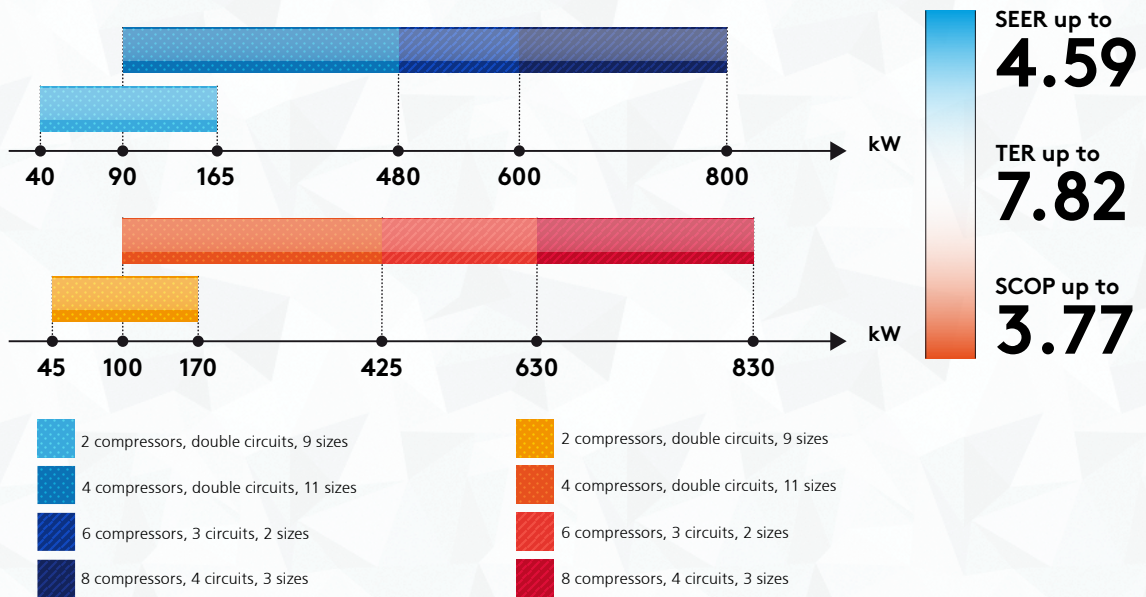|				
100%	64%	56%	55%	**48%**
Chiller R410A + gas boiler	Chiller + Heat pump R410A	Chiller + Heat pump R32	4 pipe unit R410A	**4 pipe unit R454B**

APPLICATIONS

No matter what sort of application, the maximum energy quantity is retrieved through the integrated 4 pipes heat recovery system

OMICRON SKY

TETRIS W REV TB

HT 78°C

MT 45°C

CW 20°C

COMFORT HEATING APPLICATIONS

IT OR PROCESS COOLING APPLICATIONS

WIDE CAPACITY RANGE

SEER up to
4.59

TER up to
7.82

SCOP up to
3.77

kW

40 90 165 480 600 800

kW

45 100 170 425 630 830

■ 2 compressors, double circuits, 9 sizes
■ 4 compressors, double circuits, 11 sizes
■ 6 compressors, 3 circuits, 2 sizes
■ 8 compressors, 4 circuits, 3 sizes

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■ 4 compressors, double circuits, 11 sizes
■ 6 compressors, 3 circuits, 2 sizes
■ 8 compressors, 4 circuits, 3 sizes

WIDER 4 PIPES HIGH EFFICIENCY R454B RANGE OF THE MARKET

Excellent efficiency in all working mode especially cooling.
Efficient multifunctional units such as OMICRON REV S4 allow to obtain better ratings, compared to alternative traditional systems, in programmes or incentives based on energy efficiency and sustainability.
Combining High Efficiency version , heat recovery guaranteed from 4 pipes units and new R454B refrigerant is possible to reduce Carbon Footprint of the unit and of the whole HVAC system providing really sustainable choice.

Net cooling capacity at A35 W12-7 – according to EN14511

PERFORMANCE EXTENDED
THROUGHOUT THE YEAR

TOTALLY
INDEPENDENT CIRCUITS

Management of independent defrost on each circuit for higher supplying stability
Aeraulic separation provides complete redundancy of the refrigeration circuits

T air
-15°C
Mode: heating (full load)

T air
up to 40°C
Mode: cooling (full load)

T water
up to 55°C
Heating (for T air down to -1°C)
or **Combined mode**

BLUE THINK

Monitoring, performance reports, full management.
Blue Box control platform allows a total access to the machine from any device, in complete autonomy.

Integrated web server

SET POINT
operating set point

MODE
unit mode (heating, cooling)

UNIT
visual status of unit (circuits, compressors..)

GRAPHS
real time diagrams of main variables (temperatures, pressure..)

INPUT/OUTPUT
status of inputs / outputs (digital and analogic)

MULTILOGIC
management of multiple units

LOGS
download and analyze unit data history

BLUEYE CONNECT
REMOTE ACCESS TO UNIT

**SAVE MONEY
FAST SERVICE**

BLUEYE CLOUD
CLOUD RECORDING DATAPOINTS

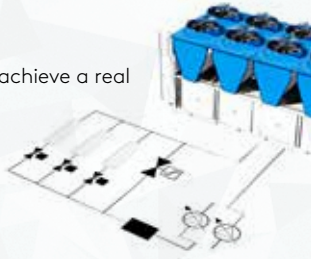**PREDICTIVE MAINTENANCE
CUSTOMER REPORTING
ANALYSIS**

FLOWZER
INVERTER-DRIVEN PUMPS CONTROL MANAGEMENT FOR DIFFERENT SYSTEM LAYOUTS

CONSTANT FLOW
- Simpler site's settings to achieve a real constant flow

CONSTANT HEAD PRESSURE
- The right pressure to the users in any condition

VARIABLE FLOW
- Full control of one unique hydraulic loop
- Primary / Secondary Loop, the right solution for any layout

UP TO

-53%

compared to nowadays common layout:
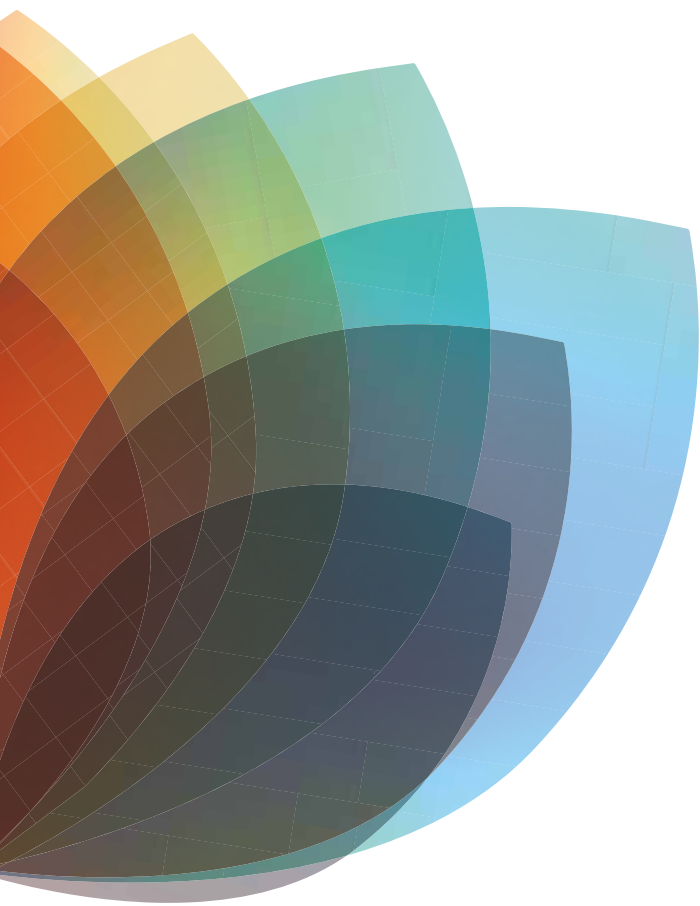primary fixed + secondary variable

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HYZER
HYDRONIC OPTIMIZER

BLUETHINK solution to manage several units, components and devices and build an optimized System.

- **Advanced algorithms** to maximize system total efficiency
- **Less Opex** thanks to lower energy consumption
- **Flexible management** of multi units, variable water flow and external devices (drycoolers, cooling towers, boilers,..)
- **Real time** energy consumption to obtain advanced structured data analysis
- **Modular design** to perfectly suit any project requirements in terms of application, size and complexity

Feel good **inside**