

OMICRON REV S4



## OMICRON REV S4

Multi-functional unit for 4-pipe systems  
cooling **40÷850 kW**  
heating **45÷890 kW**

**BlueBox**   
by Swegon



# Omicron Rev S4

## Designed for simultaneous heating and cooling in 4-pipe systems

### General

High efficiency modular multifunctional units for 4-pipe systems. Units with scroll compressors, 2 refrigerant circuits and plate heat exchangers (x.2 and x.4 sizes); with 3 or 4 circuits and shell&tube heat exchangers (x.6 and x.8 sizes). Two heat exchangers for independent and simultaneous supply to cooling and heating water circuits. Air source, axial fans.

### Configurations

HE: high efficiency unit

HE/LN: high efficiency, low noise unit

SLN: super low noise unit

**Flowzer options: inverter driven pump management**

**Flowzer VFPP, VPS:**

- Bluethink-based solutions
- Variable flow to maximize savings on pumping consumption
- Smart options for both refurbishments and new systems

**Multilogic function for multiple units' system (option)**

**Extended operation limits**

**Multiple independent circuits**

**Bluethink advanced control with integrated web server**

**Separated fan section for each circuit**

**Blueye supervision system (option)**



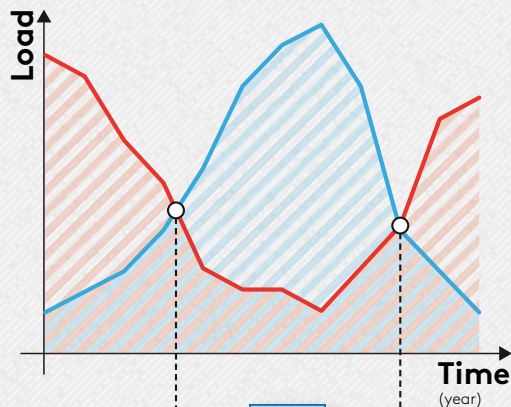


# 4-PIPE SYSTEMS

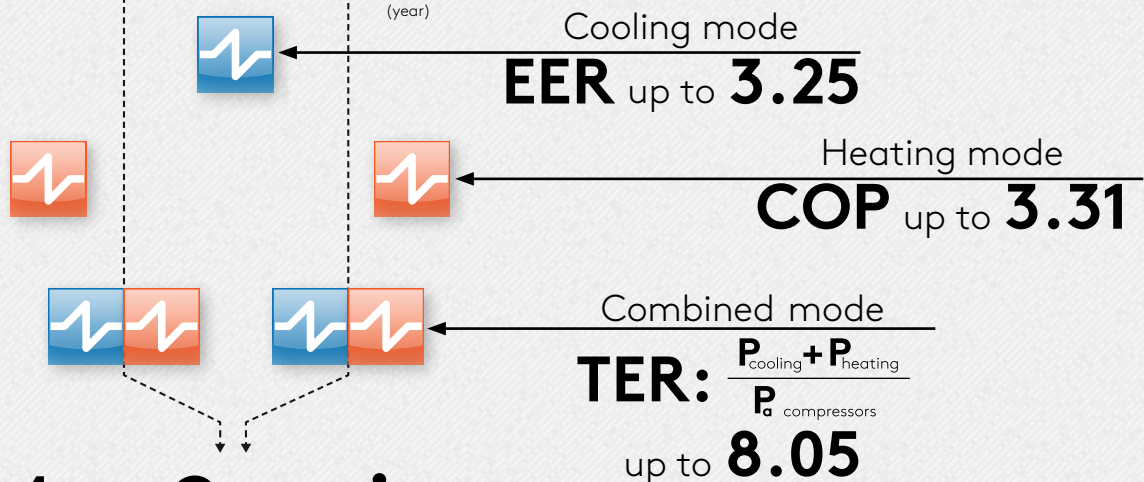
With nowadays construction techniques and increased thermal insulation, depending on solar exposure more and more commercial buildings require simultaneous cooling and heating during mid season and winter.

Moreover, latest European regulations are incentivizing the use of electrical heat pumps for heating, even in Northern European countries.

OMICROV REV S4 range has been designed to fulfill this market demand about providing cooling and heating simultaneously for warm and cold climates as well.

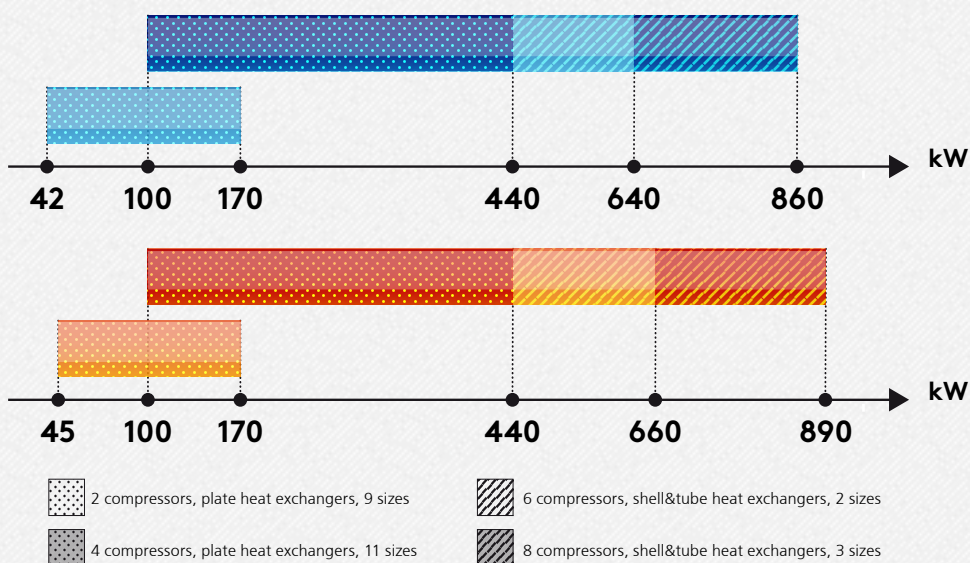


## ENERGY SAVING



EER=A35 W12-7; COP=A7(6) W40-45 – net values according to EN14511.  
TER=W12-7 W40-45

# WIDE CAPACITY RANGE



## High Efficiency

Excellent efficiency at full load, especially for cooling mode. Moreover, outstanding part-load performances can be achieved thanks to the partialization steps and the smart logic developed for OMICRON REV S4, also in the case of multiple units integrated into a single large system.

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. Qualifying the system in such a way provides also an intrinsically higher value for the building.

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

# PERFORMANCE EXTENDED THROUGHOUT THE YEAR

Operational limits favourable also for the heating mode: **up to 55°C** leaving water temperature. This is ideal for modern, energy-efficient buildings. **OMICRON REV S4** can operate **down to -15°C**, granting heating output without interruptions. In fact, the defrost cycle can be a critical condition:



Fully independent modular coils' sections for **each refrigerant circuit**. **Separate fan sections** allow independent defrost cycles, just when necessary. **No disruptions during heating** mode operation.

$T_{\text{air}}$   
**-15°C**  
  
**Mode: heating** (full load)

$T_{\text{air}}$   
up to **45°C**  
  
**Mode: cooling** (full load)

$T_{\text{water}}$   
up to **55°C**  
  
**Heating** (for  $T_{\text{air}}$  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

UP TO

# -53%

**PUMPING CONSUMPTION\***

compared to nowadays  
common layout:  
primary fixed + secondary variable

## 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

