



# Omega Sky



BORIS YELTSIN PRESIDENTIAL CENTER  
Yekaterinburg - Russia  
OMEGA REV/HE 137.3 Supply 3,6 MW



High efficiency water cooled  
chillers and heat pumps.

**436 ÷ 1564 kW**





# OMEGA SKY

# ECODESIGN *ed*

### General

High efficiency water-source chillers.  
Screw compressors. Shell & tube heat exchangers.

### Configurations

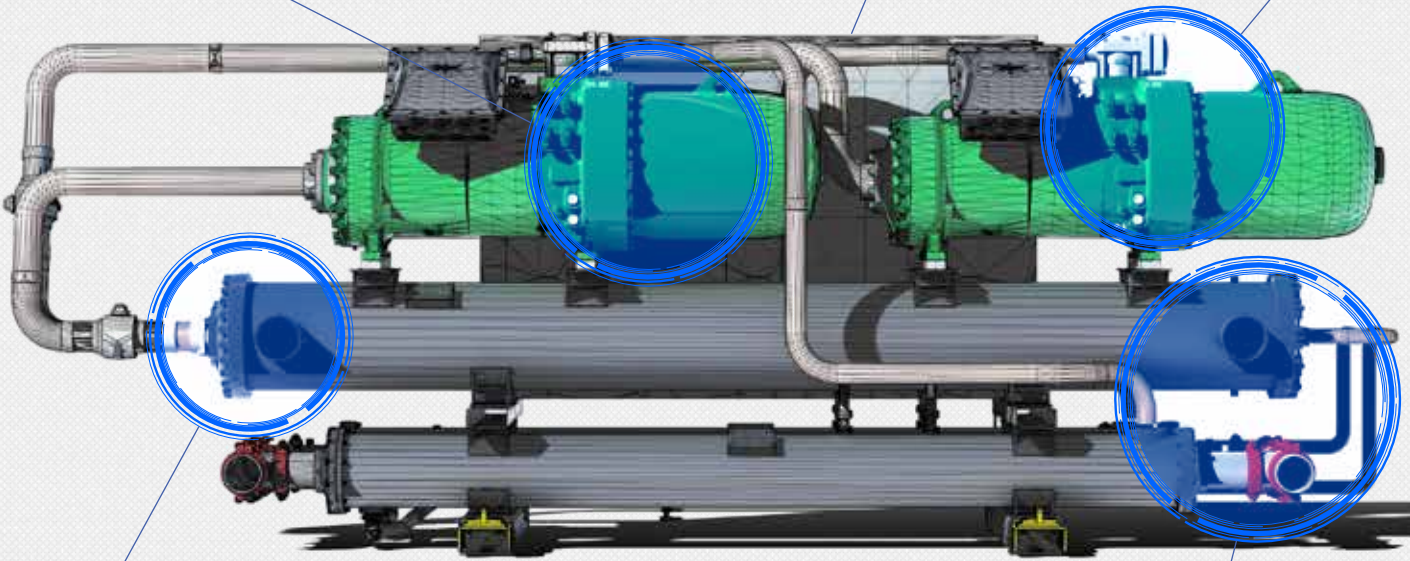
LN: low noise  
XLN: super low noise  
OH: heating-only heat pump  
HPW: reversible heat pump (water side)  
DC: total heat recovery  
LC: condenser-less execution for split system

### Bluethink advanced control

Web server  
Blueye supervision  
Multilogic function

**Environmentally friendly refrigerants:  
R513A default  
& LGW R1234ze**

**Highest performances  
on the market segment**



**High-efficiency dry evaporator**  
low charge, low pressure drop

**Plug & Play  
unit for easy  
indoor installation**

# ECODESIGN framework Directive (2009/125/EC)

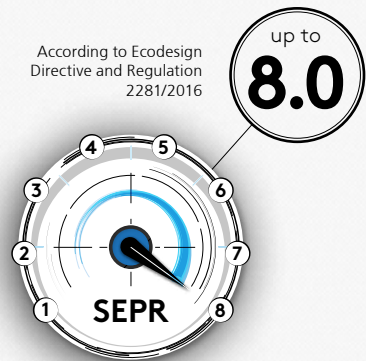
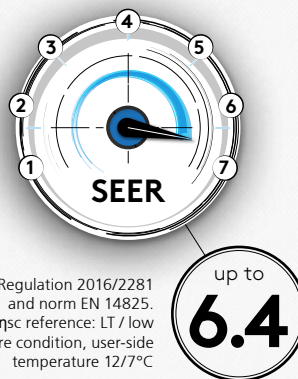
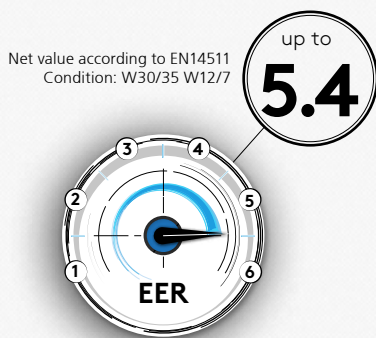
ENERGY RELATED PRODUCTS > SEASONAL EFFICIENCY > SEER | SEPR | SCOP

- The **ECODESIGN Directive**, with its Regulations, sets new challenging standards for a more efficient use of energy
- For the European market, all chillers and heat pumps must comply with related seasonal efficiency targets
- **SEER SEPR HT - Regulation 2281/2016: chillers and large heat pumps; mandatory since January 1st, 2018**

**All OMEGA SKY models comply to tier 1 • SEER (LT, MT) and SEPR HT.**

Also heat pump versions are compliant to Ecodesign.

## COOLING | HIGH EFFICIENCY AT PART LOAD



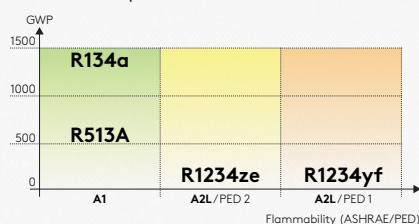
## LOW GWP



- Non flammable – category A1
- **Smart GWP 573\***
- Not subject to shortage or price hikes
- May be promoted by local incentive schemes
- R134a: option



- Category A2L, classified as PED group 2
- **Lowest GWP < 1\***
- Not subject to shortage or price hikes
- Totally exempted by local taxation/bans
- Best future-proof choice



Performances related to all three refrigerants are **certified by Eurovent.**

\* GWP (AR5) according to IPCC V time horizon 100 years.

## ENVIRONMENTALLY FRIENDLY HEATING

**2** versions to satisfy different requirements  
**HEATING ONLY & REVERSIBLE**  
compressor optimized for heating



**Leaving water temperature up to**

**65°C\***

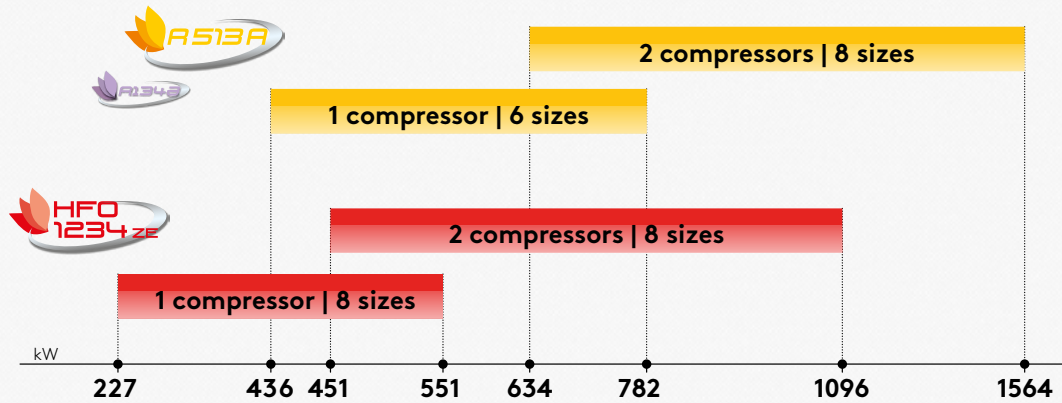


**High performance heating coupled with**

**LOW GWP refrigerants**

\* applies to OMEGA SKY LGW OH.

# CAPACITY RANGE



Cooling capacity: net value according to EN14511. Condition: source W30/35, user W12/7

## EASY ON SITE HANDLING

- Depth 900 mm for sizes up to 800 kW (single compressor)
- Simple piping
- All connections on one side, with optional water manifold for condensers (sizes .2) or fittings
- Flanged connections (option)
- Ability to manage external pumps (1 or 2; on user-, source-side or also recovery)
- Control of condensation via different options, according to source-side layout, also suitable for external inverter-driven pumps



# FREE COOLING APPLICATION

- Fully integrated management of all components by Bluethink
- Boost on yearly energy savings

### Water-cooled indoor chillers = unique solution by Blue Box

- Ideal for systems with year-round cooling load, e.g. industrial applications, data centers
- Indoor installation allows to comply with architectural constraints.
- Selection of dry cooler easily matches noise requirements.





BLUE ● ● ● ●  
● ● ● ● THINK  
control platform

## Integrated web server



**Unit ON**  
ON / OFF unit



**Mode**  
unit mode  
(heating, cooling)



**Unit**  
visual status of unit  
(circuits, compressors..)



**Alarms**  
alarm history



**Set points**  
operating set point



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



**Input/Output**  
status of inputs / outputs  
(digital and analog)



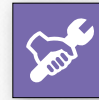
**Multilogic**  
status of multiple  
units



**Tools**  
visual status of unit  
(circuits, compressors..)



**Logs**  
download and  
analyze unit data history



**Maintenance**  
service advanced log in



**Sign Out**

## M Multilogic function

**Management of multiple units of a system / hydraulic loop.**

- > Specific operational logics to satisfy different installation requirements
- > Maximized energy efficiency
- > Fully embedded in the control resources and factory-preset
- > Fast commissioning. Simple LAN connection between units. No external devices required.



## Blueye

**Remote supervision via web by Blue Box.**

It offers, for one or more units / systems:

- > operation status monitoring
- > access to unit's settings and parameters
- > data recording via cloud, with options about data displaying, graphs, etc.
- > differentiated access profiles and privileges to ensure a safe and efficient interaction
- > also the status of system's additional components can be monitored, e.g. pumps, energy meters, valves



## Connectivity

**Default available**

- > Modbus over TCP/IP, Modbus RTU (RS-485)

**Options**

- > LonWorks Gateway
- > BACnet
- > SNMP Gateway
- > Hot Spot Wi-Fi

# Blue Box applied product range

find out the complete product range on our web site and catalogues



## Zeta Rev > 40÷240 kW

Chillers and reversible units. Extensive range, versatile applications.



## Zeta Rev HP XT > 40÷200 kW

Reversible heat pumps. Extreme heating envelope. Smart configuration options.



## Tetris 2 > 84÷913 kW

Modular chillers and reversible units for large commercial systems. Wide range; multiple combinations of high-efficiency, low-noise versions.



## Tetris W Rev > 32÷615 kW

Water-source chillers, with heating and reversible versions. Extensive range, versatile applications.



## Omega Sky Xi > 260÷970 kW

High efficiency water source chillers and heat pumps. Inverter-driven screw compressor.



## Kappa Rev > 296÷1983 kW

Modular air source chillers and reversible units.



## Kappa Sky > 260÷1360 kW

Modular air source chillers for large systems. Inverter-driven screw compressors.



## Omicron Rev S4 > 100÷860 kW

Modular multifunctional units for large 4-pipe systems. Smart configuration options.

