



SIGMA SKY R7



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High efficiency water source  
chillers and heat pumps

**38÷650 kW**

**BlueBox**   
by Swegon

# Sigma Sky R7

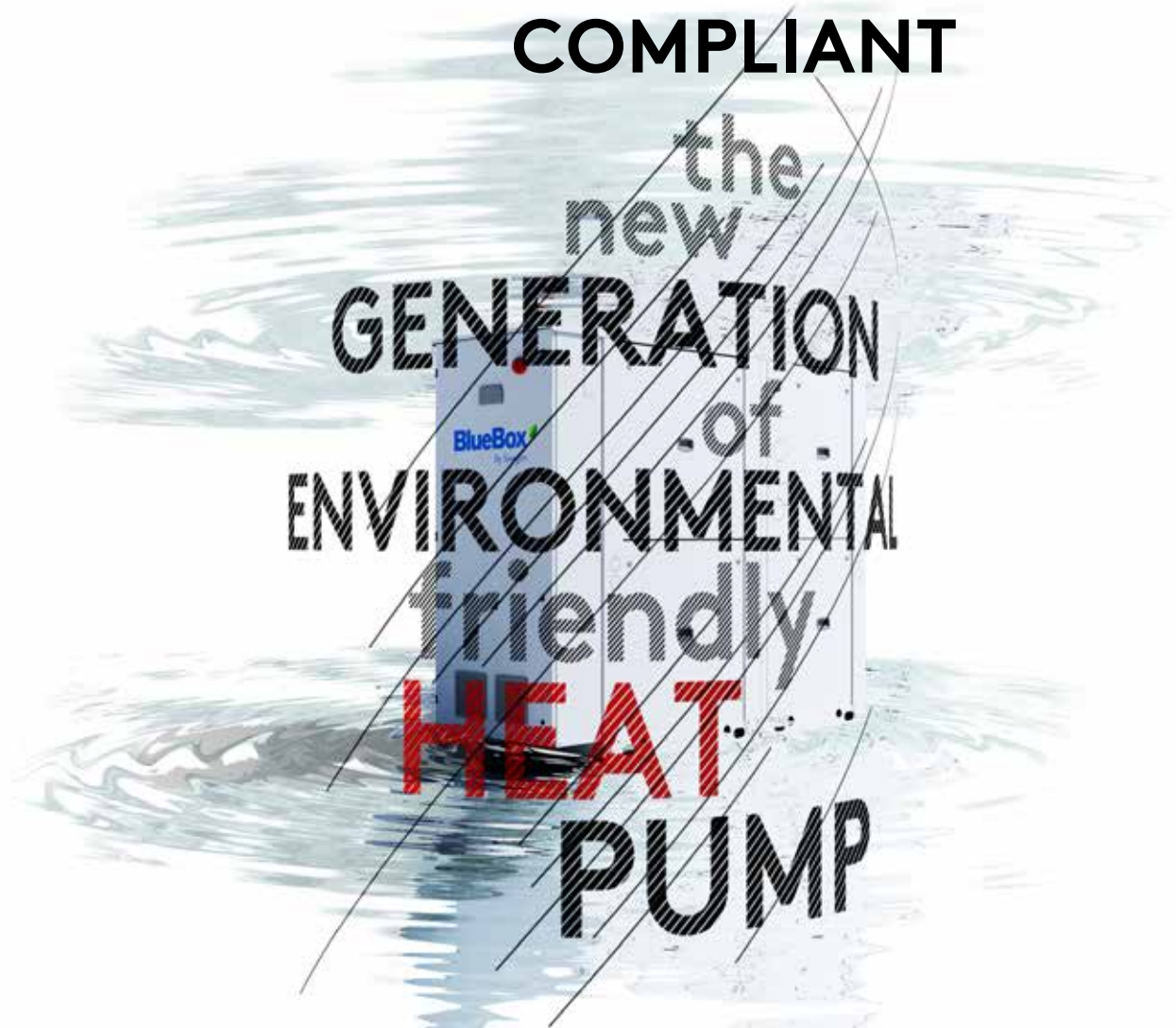
A complete range of

## WATER

## SOURCE units

# TIER 2

## COMPLIANT



Single and double circuit inverter or ON/OFF scroll compressors unit with plate heat exchangers:

- SKY generation, low environmental impact
- Extended working limits
- New design with reduced footprint
- Hydraulic modules on board available
- Compatible with Bluethink and Flowzer (options)



Eurovent certified



Low GWP below 700



Advanced control



# CLIMATE CHANGE CHALLENGE

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



**REDUCE CARBON FOOTPRINT  
 IN EVERY POSSIBLE WAY**

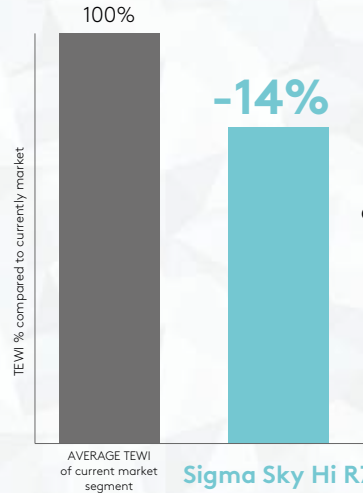
# TEWI

TOTAL EQUIVALENT WARMING IMPACT

**Direct emissions + Indirect emissions**

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

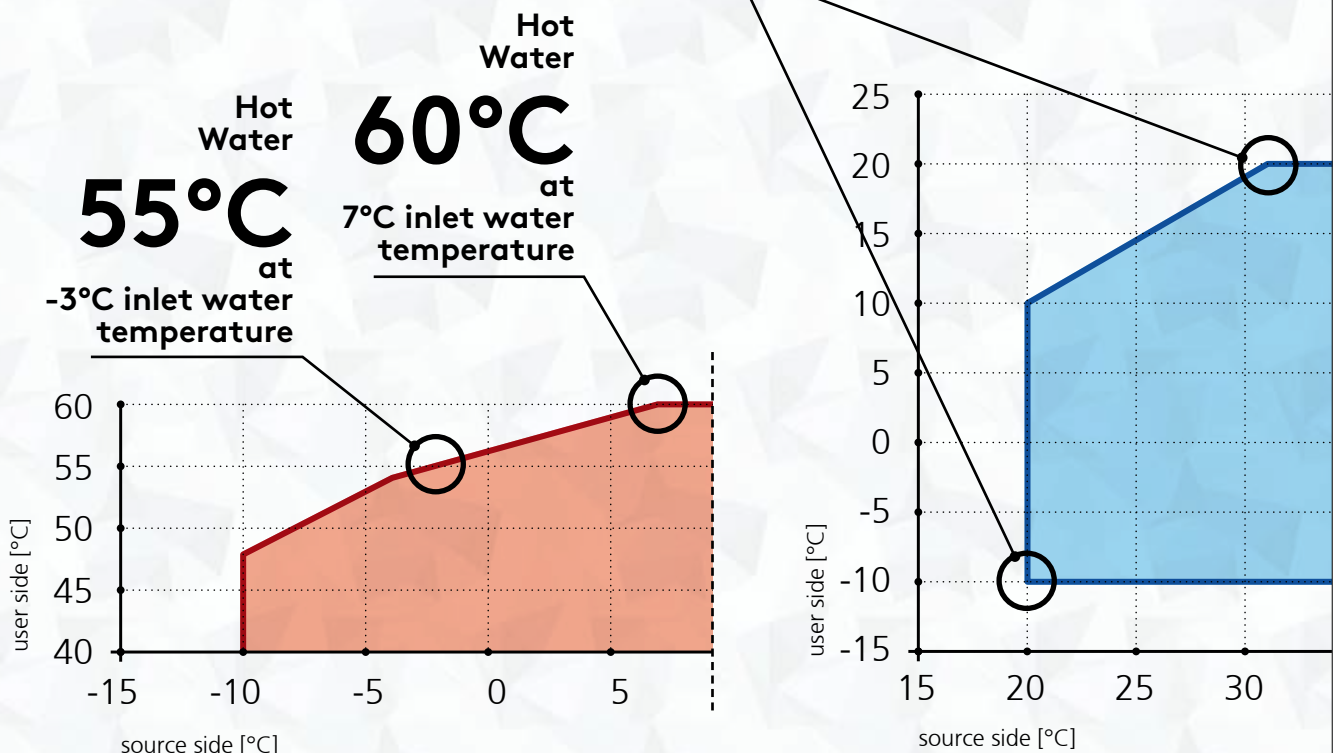
Plant cooling / Heating load  
 Heat pump efficiency  
 Electricity consumption  
 CO<sub>2</sub> emission intensity



Compared to the top level water to water units on the market, **Sigma Sky R7** reduces the environmental impact thanks to **low GWP refrigerant** and its high efficiency due the use of **inverter compressors**

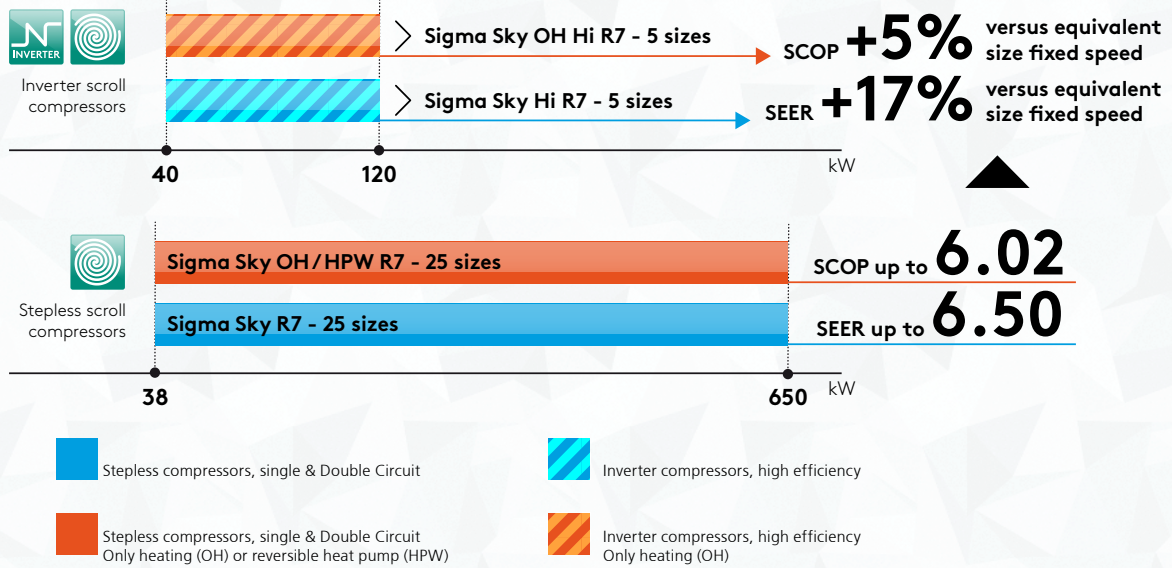
# OPERATING LIMITS

Chilled water production from  
**-10°C to 20°C**





# WIDE CAPACITY RANGE



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



## EASY INSTALLATION

Sigma Sky R7 **new design** provides a lot of options and pumping configurations to suit every requirements.

This means:

- **Less design time**
- **Quicker and less cost for installation team**
- **Reduced refrigerant charge.**
- **Reduced unit footprint**
- **Less connections for easier installation**

## ON BOARD HYDRAULIC MODULE

Sigma Sky R7 can be fitted with different hydraulic modules with a new compact design:

- 1 or 2 reduced pumps (user side only)
- 1 or 2 standard pumps (source or user side)
- 1 or 2 pumps oversized (source or user side)
- Valve for 1 pump & check valve for 2 pumps
- Auxiliary tank available on board



# 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



## HYZER

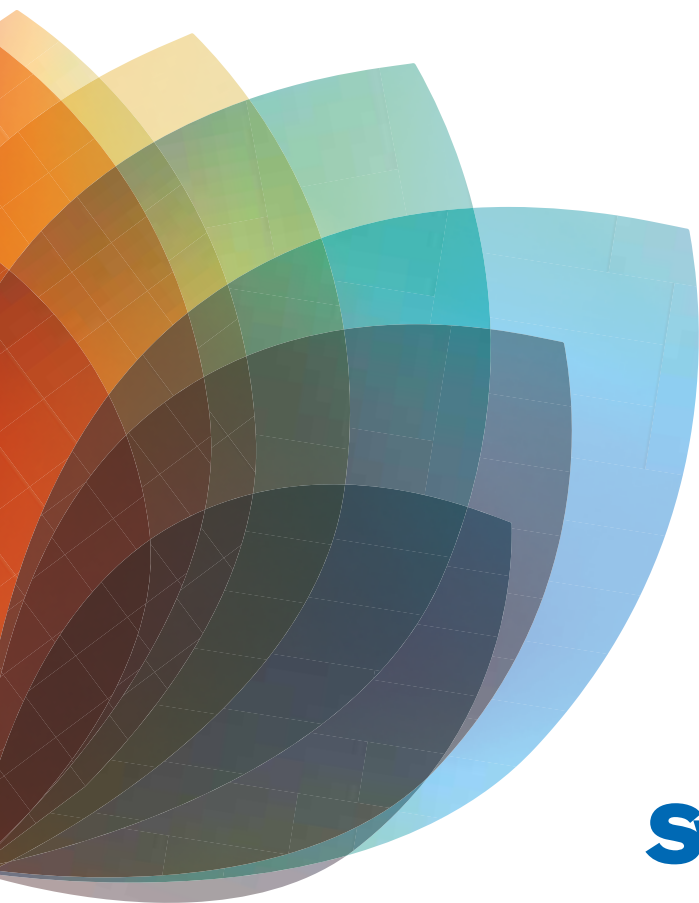
HYDRONIC OPTIMIZER

**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**



**Swegon** 