



Zeta Rev



High efficiency air source
chillers and heat pumps
cooling **40÷240 kW**





CHILLER

CITIZEN OF THE WORLD



**NIGHTSHIFT
FUNCTION**

★ **EER UP TO 3.26**
☾ **- 3 dB(A)**

SEER
UP TO **4,45**

**EXTENDED
OPERATING
LIMITS**

BLUETHINK
ADVANCED CONTROL

General

Chillers and reversible units. Extended range, versatile applications.
Also with inverter-driven brushless compressors.

Configurations

HE: high efficiency
SLN: Super Low Noise
SEi-HEi: inverter-driven compressor
/HP: reversible heat pump
LE: with remote user-side heat exchanger

/LN: low noise
DC: with desuperheater
DS: with total recovery



ECODESIGN framework Directive (2009/125/EC)

ENERGY
RELATED
PRODUCTS

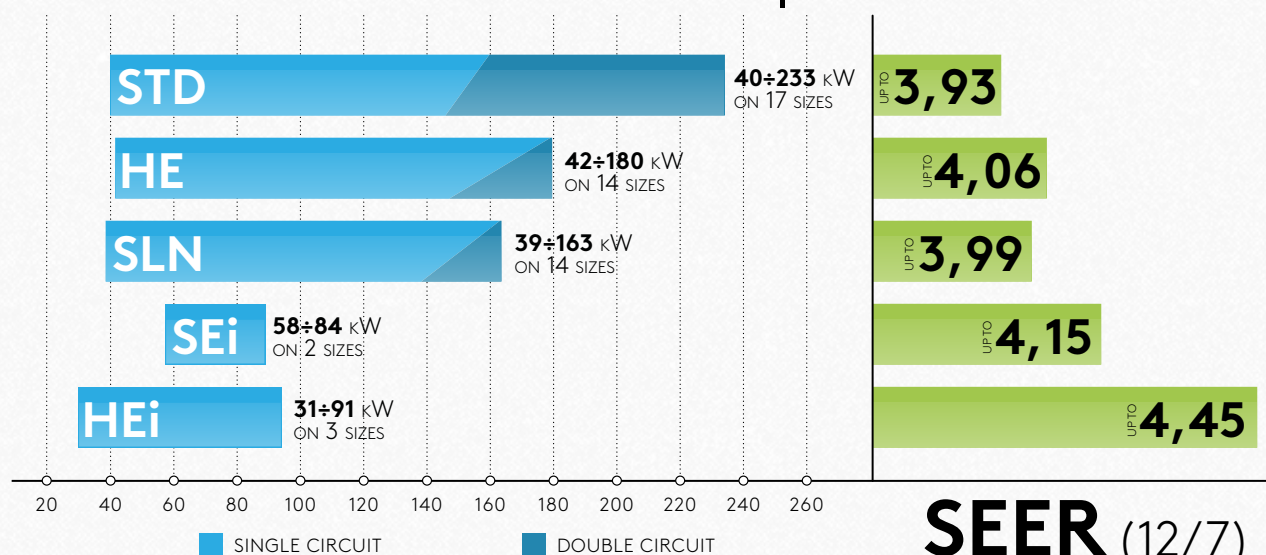
SEASONAL
EFFICIENCY

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**
- **SCOP - Regulation 813/2013: small heat pumps**

All ZETA REV models comply to tier 1 • SEER (LT, MT) and SEPR HT.
All ZETA REV heat pumps comply to Ecodesign (SCOP)

CAPACITY RANGE | EFFICIENCY



EN14511 - A35W12/7

HEAT PUMP OPERATING LIMITS

HOT WATER **47°C** < **-10°C**

FULLLOAD < **-15°C**

PARTLOAD < **-17°C**

Values referred to Zeta Rev HE with advanced control.
 Some sizes can achieve operating limits slightly different.
 For details, refer to specific documentation.

HYDRAULIC MODULE

A wide range of options allow to configure the chiller to suit various application. Differentiated levels of pump's useful head are available, with or without buffer tank.

STANDARD ▶ av. **1,5** bars

OVERSIZED ▶ av. **2,7** bars

INDUSTRIAL ▶ up to **5** bars

SEi·HEi VERSIONS DC INVERTER SCROLL COMPRESSOR



Units with 1, 2 or 3 compressors, of which one brushless inverter DC type:

- higher energy efficiency at part load
- higher cooling capacity at peak load
- more accurate temperature control

energy saving

up to
12% per year

(compared with standard scroll compressor)

Yearly saving based on Ecodesign's SEER profile, comfort application.

SMART ANTI-ICE CIRCUIT

REVERSIBLE HEAT
PUMP VERSIONS

The defrost cycle can be a critical condition: ZETA REV features the **Smart Anti-Ice Circuit**, to avoid ice forming on the bottom part of exchanger: the function is efficiently activated according to air temperature - only when necessary.



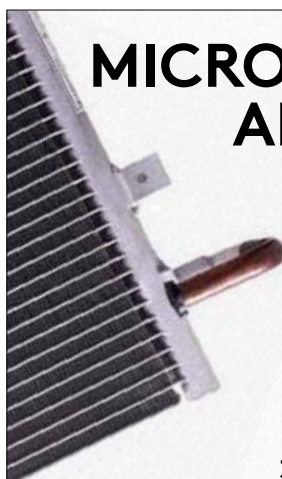
NIGHT SHIFT FUNCTION

The unit (HE or SLN) can operate in high efficiency mode or super low noise mode according to day time setting.

Zeta Rev HE → Zeta Rev SLN

up to 3 dB(A)
of sound power reduction

MICROCHANNEL ALUMINIUM COIL



Zeta Rev chillers use this new generation of condensing coil as standard.

30% LESS REFRIGERANT
10% OVERALL CHILLER WEIGHT REDUCTION
LESS AIR SIDE PRESSURE DROP

EC AXIAL FANS

ELECTRONICALLY COMMUTATED
BRUSHLESS MOTOR AS OPTION



STANDARD

15% ENERGY SAVING PER FAN

1.000 €/y* SAVING

(*2 unit with 3 fans; operating 8700 hours/year; 0,10 €/kWh)

OVERSIZE

FURTHER
ENERGY SAVING

+ 100 Pa

AVAILABLE PRESSURE PER FAN



PRESSURE RECUPERATOR

+ 50 Pa

AVAILABLE PRESSURE PER FAN
COMPARED TO OVERSIZED FANS

UP TO **3dB(A)**
OF UNIT NOISE REDUCTION

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

VPS

PLUG & PLAY VARIABLE FLOW
MANAGEMENT REDUCES YOUR OPEX
SAVING UP TO 55% OF PUMPING ENERGY

Dedicated controller and algorithm to manage inverter pumps on Primary + Secondary systems.

VFPP

FULLY VARIABLE FLOW
MANAGEMENT
REDUCES OPEX & CAPEX

Dedicated controller and algorithm to manage inverter pumps on system with Primary Circuit only.

UP TO

-53%

PUMPING CONSUMPTION*
compared to nowadays common layout:
primary fixed + secondary variable

VPS / VFPP available only for SEi - HEi versions.

*Yearly saving based on Ecodesign's SEER and SCOP profiles (Average climate), comfort application.

Blue Box applied product range

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

XT



Zeta Rev HP XT > 40÷200 kW 

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



Beta Rev > 40÷240 kW 

Chillers and reversible units for indoor installation. Extensive range, also with self-adaptive high-efficiency fans.



Tetris 2 > 84÷913 kW 

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



Kappa Rev > 296÷1983 kW  

Modular chillers and reversible units for large commercial systems. Wide range and versions available.



Tetris W Rev > 32÷615 kW 

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



Omega Sky > 444÷1589 kW  

Water-source chillers with heat pump reversible versions for indoor installations.



Omicron Rev S4 > 100÷860 kW 

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

