

KAPPA SKY



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

260÷1360 kW



WESTERNTM
AIRCONDITIONING
WARMTEPOMPEN

BlueBox 
by Swegon

KAPPA SKY

LET'S COOL THE PLANET

Environmentally friendly refrigerants:
R513A default & LGW R1234ze

Cooling capacity range extended on the low end

Quiet operation & two low-noise versions

Performance vs compactness with 4 choices

Dedicated combination of external **inverter** and **variable Vi** reserved screw compressor

Bluethink advanced control
Web server
Blueeye supervision
Multilogic function
Flowzer

BLUE BOX PROPRIETARY CONTROL STRATEGY



General

Modular air source chillers for large systems. Inverter-driven screw compressors. Wide capacity range with multiple versions. Free-cooling models available.

Configurations

Xi: high efficiency with full inverter compressors
Xh: high efficiency with hybrid compressors
Si: compact version with full inverter compressors
Sh: compact version with hybrid compressors
Xi LGW: R1234ze refrigerant full inverter compressors

/SLN: super low noise unit
/LN: low noise unit
/DS: with desuperheater
/DC: with total recovery



ECODESIGN framework Directive (2009/125/EC)

ENERGY
RELATED
PRODUCTS

SEASONAL
EFFICIENCY

SEER | SEPR

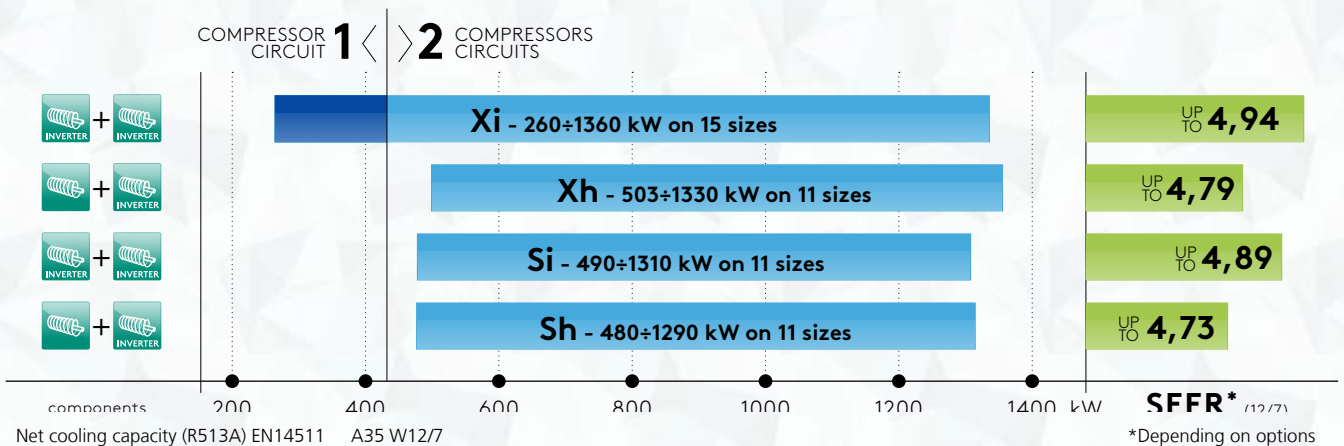
- The **ECODESIGN Directive**, with its Regulations, sets new challenging standards for a more efficient use of energy
- For the European market, all chillers and heat pumps must comply with related seasonal efficiency targets
- **SEER SEPR - Regulation 2281/2016: chillers and large heat pumps. Mandatory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

All models comply to tier 2* SEER (LT,MT) and SEPR HT.

2021 TIER 2 ECODESIGN COMPLIANT

*= selected sizes may require EC fans

CAPACITY RANGE | EFFICIENCY



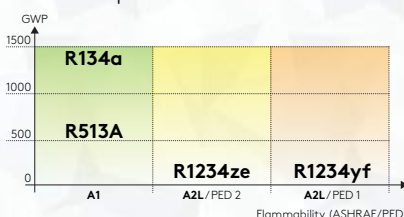
LOW GWP



- Default for full line-up
- **Smart GWP 573 (*)**
- Not subject to shortage or price hikes
- May be promoted by local incentive schemes
- R134a remains as option into pricelist



- **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.

SMART APPLICATIONS

WATER TEMPERATURE FROM -8°C TO +23°C ▼
IDEAL FOR PROCESS-TECHNOLOGICAL USES

+ 50°C*

Xi/Xh EFFICIENT VERSIONS ▼
MATCHING GREEN REQUISITES AS
LOWEST GWP & LOW NOISE

FITS TO NOWADAYS
HIGH TEMPERATURE COOLING
COMFORT UP TO 46°C OAT (WITH OPTIONS)

Si/Sh COMPACT VERSIONS ▼
UP TO 44°C OAT > COMFORT APPLICATION
IDEAL FOR REFURBISHMENT PROJECTS

*Part load operation

ECO-FRIENDLY SOLUTION

LOWEST GWP

AVAILABLE FROM | **240** kW



EXTENDED OFFER OF
LOW NOISE VERSIONS
BASE/LN /SLN INCLUDING BUILT-IN LEAK DETECTOR

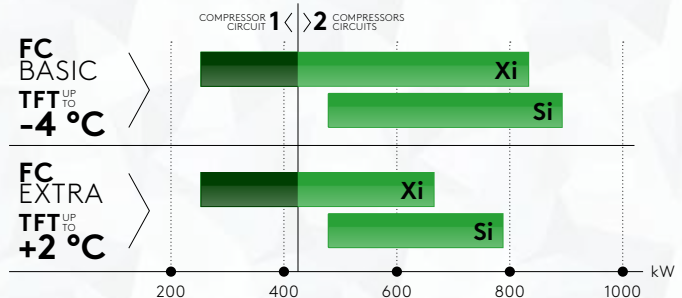


FREE COOLING VERSION

All free cooling units manufactured and shipped in a single assembly

GLYCOL FREE on user side also available

- suitable for systems where glycol mixtures are not allowed
- safe operation e.g. in case of leakages
- cost saving: circuit's filling and safety arrangements



Net cooling capacity (R513A) EN14511 A30 W15/10 gl.30%

HIGH EFFICIENCY AT PART LOAD

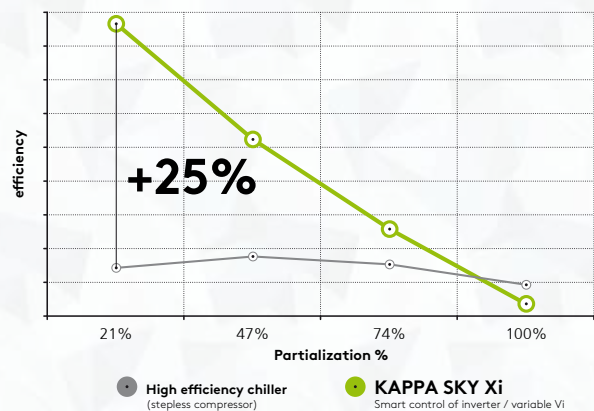
Combined benefit of:

- **INVERTER COMPRESSOR** ▼
high efficiency at part load
- **VARIABLE Vi FEATURE** ▼
Vi: suction volume / discharge volume ratio
Variable: automatically adapted based on operating conditions

EXTRA HIGH EFFICIENCY

Partialization % associated to different conditions as per SEER calculation (reference: Regulation 2016/2281).

Benefit of variable Vi, part-load efficiency values (SEER)



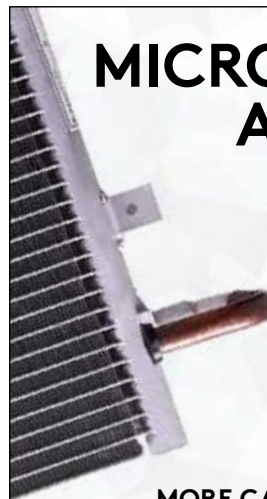
MULTIPLE LOW NOISE OPTIONS



/LN up to **-4 dB(A)**
sound power level

/XLN up to **-7 dB(A)**
sound power level (Xi-Xh model only)

MICROCHANNEL ALUMINIUM COIL



Kappa Sky chillers use the new generation of high performance microchannel aluminium coils as standard. Treatments for specific applications available.

**MORE CAPACITY / CROSS SECTION
SMART EFFICIENCY VS FOOTPRINT**

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

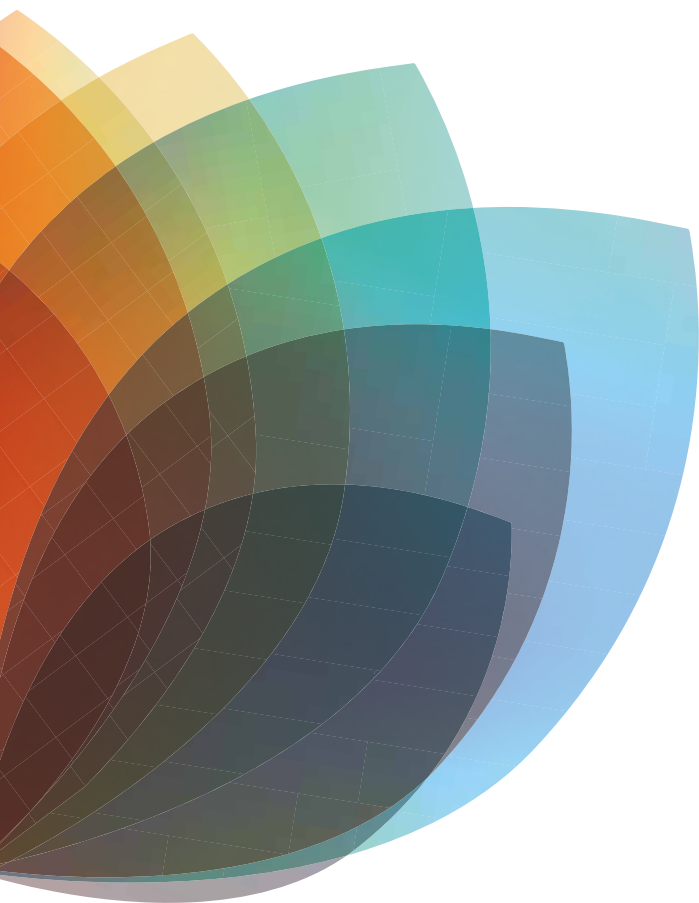
HYZER

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

Feel good **inside**



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