

TITAN SKY



TITAN SKY

Full inverter chiller and reversible
heat pump with natural refrigerant
30÷200 kW

BlueBox 
by Swegon

TITAN SKY

THE NATURAL CHOICE

THE MOST SUSTAINABLE COMMERCIAL AIR SOURCE CHILLER & HEAT PUMP

**Inverter compressor
Natural refrigerant (R290)
Lowest TEWI (Total Equivalent Warming Impact)**

Unbeatable use of Primary energy thanks to Inverter technology • No Ozone Layer impact & Nearly Zero Global warming potential • Optimized Low Refrigerant Charge design • Meets the highest seasonal efficiency standard (European Ecodesign Erp) • Eurovent certification



HEAT PUMP

30-200 kW • Max Hot water: +63°C • Min T_{air}: -20°C • SCOP: up to 4.12

CHILLER

30-200 kW • Min Cold water: -15°C • Max T_{air}: 52°C • SEER: up to 4.60



Natural refrigerant



Inverter technology



Advanced control

CLIMATE CHANGE FIGHT | EUROPEAN CLIMATE STRATEGY IS GOING TO BE UPDATED AND REINFORCED

TARGET

Reduction of **55%** Greenhouse Gas emission by **2030**

Increased **renewable energy** (above **32%**) by **2030**

Net-zero Greenhouse Gas Emission by **2050**

HOW?

F-gas regulation Regulation

Renewable Energy Directive

European Performance of Buildings Directive (**EPBD**)

Ecodesign **ERP** Directive



Keep temperature increase below **1.5°C**

Become a **climate neutral economy**

R290

NATURAL REFRIGERANT



SUSTAINABLE CHOICE

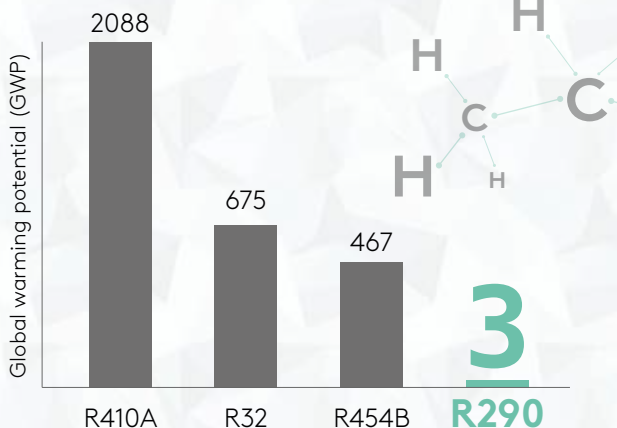
- Nearly zero Global Warming Potential (GWP=3)
- Natural fluid
- Natural non toxic refrigerant
- No Ozone Layer impact
- -40% gas charge compare to R410A

RELIABLE CHOICE

- Long run reciprocating compressor with inverter technology
- Implementation of the highest safety standard

SMART CHOICE

- No carbon tax
- Pushed by incentivation schemes
- Future-proof natural solution. On going HFC phase-out



TEWI

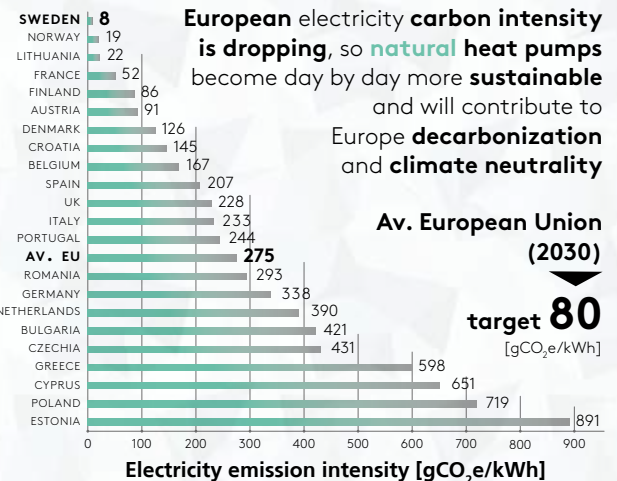
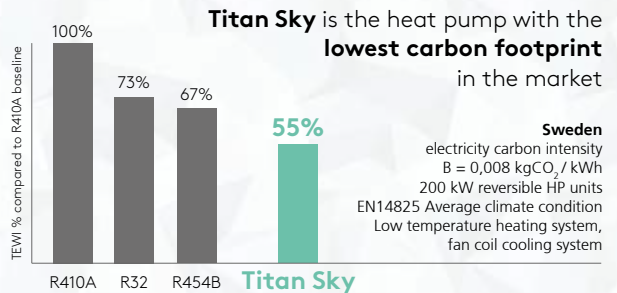
TOTAL EQUIVALENT WARMING IMPACT

TEWI [tons CO₂ eq.]

Direct emissions + Indirect emissions

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

Plant cooling / Heating load
Efficiency
Electricity consumption
CO₂ emission intensity



2019 data, Source EEA

CAPACITY RANGE



TITAN SKY Hi R0 SINGLE CIRCUIT

30÷105 kW on 7 sizes

TITAN SKY Hi R0 DOUBLE CIRCUIT

105÷200 kW on 5 sizes



TITAN SKY Hi HP R0 SINGLE CIRCUIT

30÷100 kW on 5 sizes

TITAN SKY Hi HP R0 DOUBLE CIRCUIT

110÷200 kW on 4 sizes

kW 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200



Chiller and reversible heat pump with **reciprocating full inverter compressors** optimized for R290

EN14511 / EN14825

HEAT PUMP OUTSTANDING DESIGN

INDEPENDENT DEFROST MANAGEMENT

- Total aeraulic separation
- Higher supplying stability
- Reduced plant water volume



Leaving water T° ▼

63°C

at -7°C outside air T°
ideal for heating and domestic hot water production

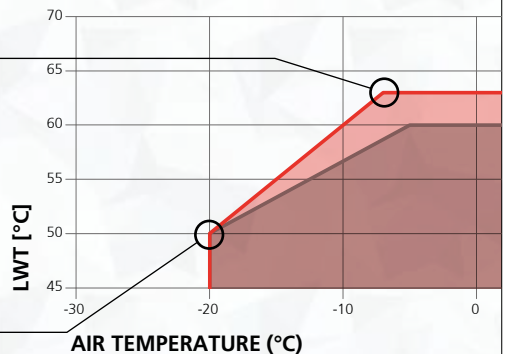
■ Titan Sky Hi HP R0

■ R290 heat pumps market

Leaving water T° ▼

50°C

at -20°C outside air T°
suitable in any climate condition



CHILLER FOR ANY APPLICATIONS



1130

PLENTY OF ROOM

for hydronics circuits and recovery exchangers below the coils

CHILLED WATER PRODUCTION

20°C

IT cooling

(server rooms, datacenter)



18°C

Comfort

(fancoils, chilled beams, radiant floor)



7°C

Process

(food and wine, plastic and chemical industry)



-15°C

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 **-55%** savings

in the energy consumption of the pumps compared to a traditional fixed flow system



HYZER

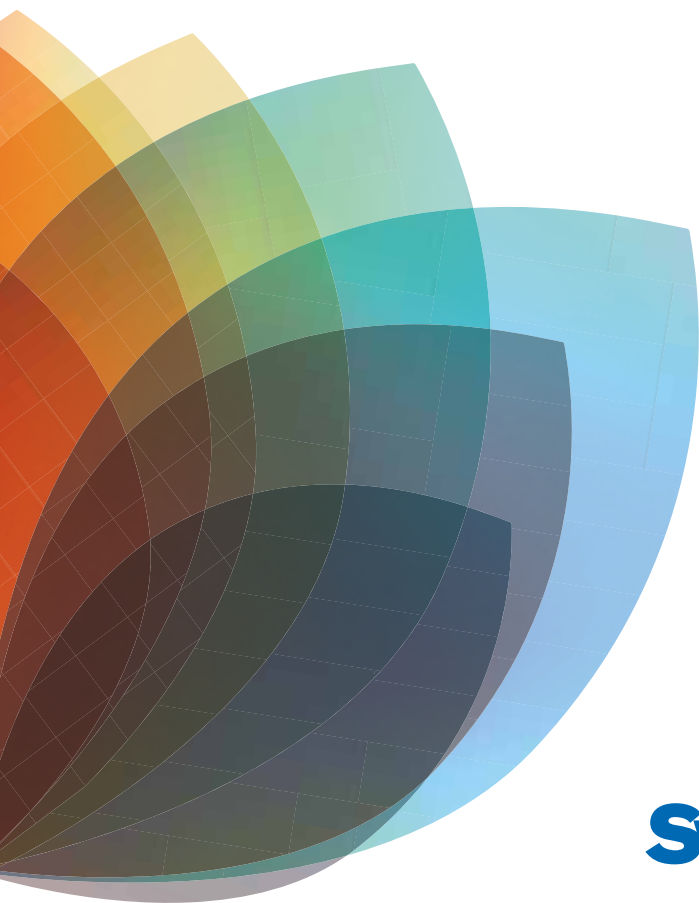
HYDRONIC OPTIMIZER

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 