

TITAN Zero



## TITAN Zero

Air source heat pump and chiller  
with refrigerant R290

**230÷400 kW**

**WESTERN**<sup>TM</sup>  
AIRCONDITIONING  
WARMTEPOMPEN

**BlueBox**   
by Swegon

# TITAN Zero

THE POWER OF  
**NATURE**  
HAS NO  
**LIMITS**



Air source heat pump and chiller with reciprocating compressors and plate heat exchangers:

- Full Inverter Compressors
- Reliable and durable unit
- Heavy duty design philosophy
- Low Refrigerant Charge
- Eurovent certified

MISSION  
**ZERO**  
EMISSION

# 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

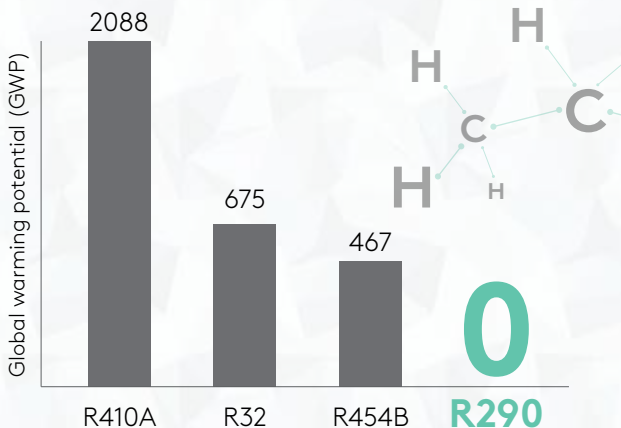
- Nearly zero Global Warming Potential (GWP≈0\*)
- No Ozone Layer impact
- Natural fluid
- Excellent thermodynamic properties
- 40% gas charge compare to R410A

## RELIABLE CHOICE

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

## SMART CHOICE

- No carbon tax or refrigerant tax
- Pushed by incentive schemes
- Future-proof natural solution



(\*) GWP (AR6), pursuant to IPCC VI, evaluated over a span of 100 years.

# TEWI

TOTAL EQUIVALENT WARMING IMPACT

TEWI [tons CO<sub>2</sub> eq.]

Direct emissions + Indirect emissions

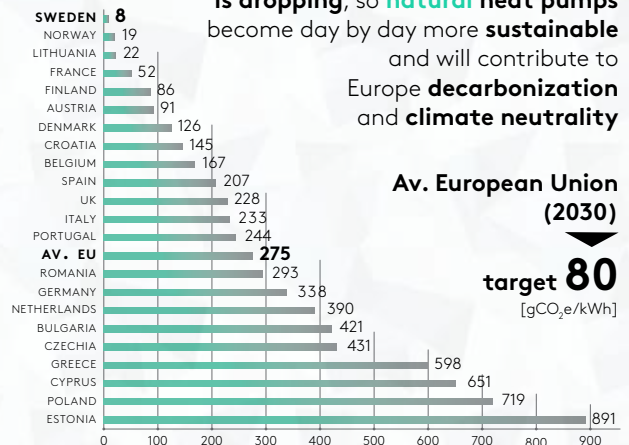
Leakage rate per year  
Service life (years)

Leftover refrigerant after disposal  
Global Warming Potential

Plant cooling / Heating load  
Efficiency

Electricity consumption  
CO<sub>2</sub> emission intensity

European electricity carbon intensity is dropping, so **natural** heat pumps become day by day more **sustainable** and will contribute to Europe **decarbonization** and **climate neutrality**



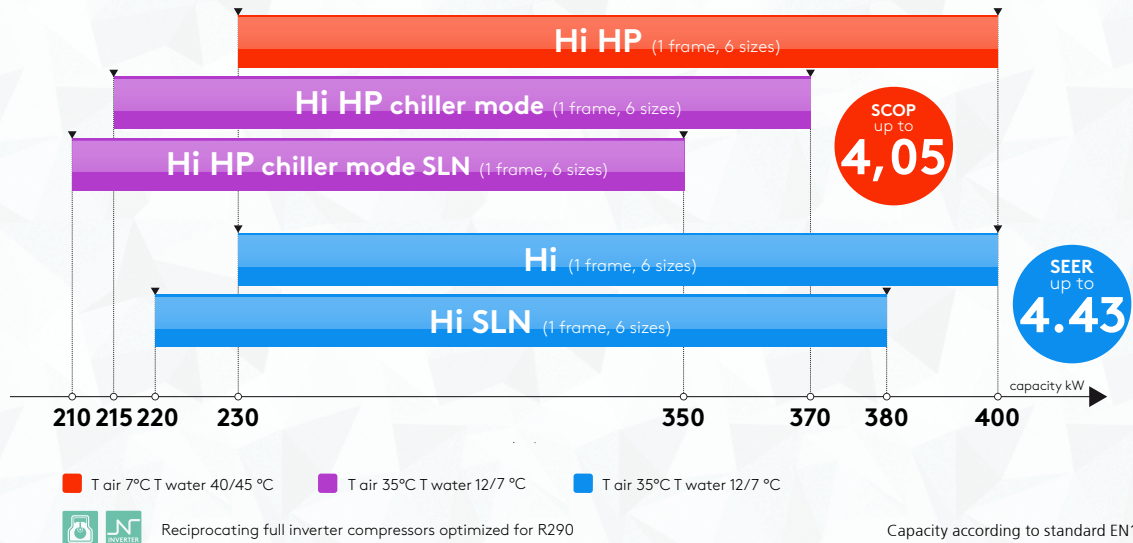
Av. European Union (2030)

target **80**  
[gCO<sub>2</sub>e/kWh]

Electricity emission intensity [gCO<sub>2</sub>e/kWh], 2019 data, Source EEA

**TITAN Zero** HAS  
**MINIMUM CARBON FOOTPRINT**  
THANKS TO ITS  
**HIGH EFFICIENCY**  
AND  
**LOW CHARGE OF PROPANE**

# CAPACITY RANGE/EFFICIENCY



# DURABLE UNIT FOR ANY APPLICATIONS



chilled water production

from **20°C**  
down to **-15°C**

ideal for heating and hot water production

**63°C @ -7°C**  
**50°C @ -20°C**

suitable for any climate condition

## PLUG-IN HYDRONIC MODULE OPTIONS

- 1P / 2P**  
1 / 2 standars pumps with or without tank
- 1Pr / 2Pr**  
1 / 2 downsized pumps with or without tank
- 1Pg / 2Pg**  
1 / 2 pumps for high glycol with or without tank

## R290 SAFETY CHAIN

- Refrigerant leak detector
- Extraction fan

## IDEAL FOR COLD CLIMATES

- Total aeraulic and refrigerant circuits separation (Redundancy)
- Smart Defrost Logic
- Anti-freeze options as standard



## RECIPROCATING FULL INVERTER COMPRESSORS

- Reliable and robust design
- Wide operating range
- Easy maintenance

# 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

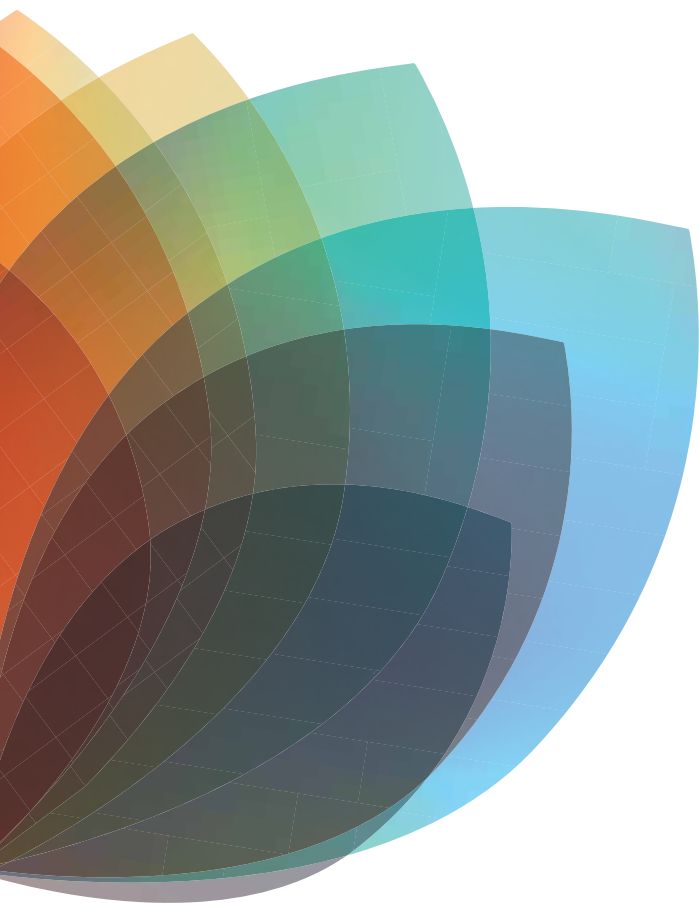
HYDRONIC OPTIMIZER

**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**



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