



TITAN Zero



Air source heat pump and chiller
with refrigerant R290
230÷420 kW

versatile
Heating · Cooling · Ventilation

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

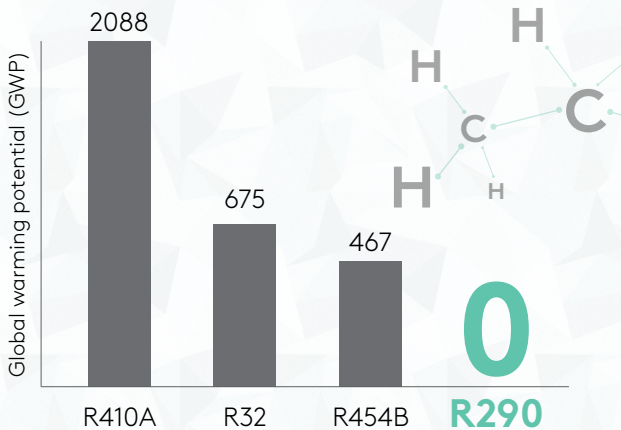
- Nearly zero Global Warming Potential (GWP≈0*)
- No Ozone Layer impact
- Natural fluid
- Excellent thermodynamic properties
- 40% gas charge compare to R410A

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

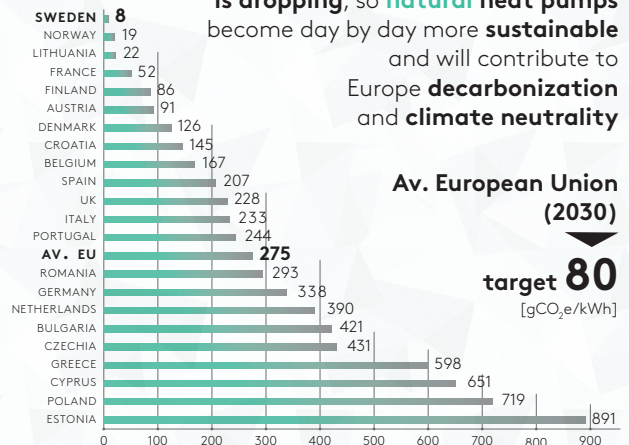
TEWI [tons CO₂ eq.]

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

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**

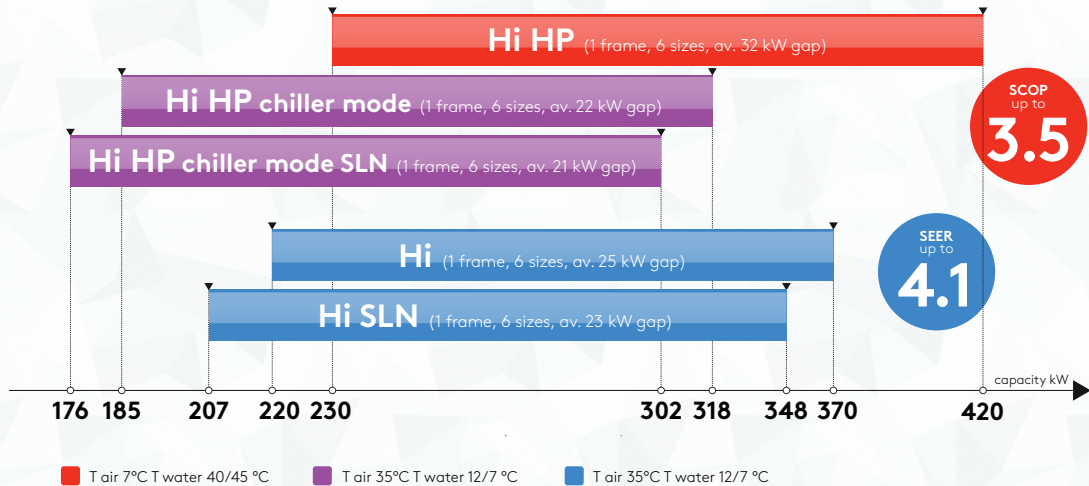


Av. European Union (2030) target **80** [gCO₂e/kWh]

Electricity emission intensity [gCO₂e/kWh], 2019 data, Source EEA

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

CAPACITY RANGE/EFFICIENCY



Reciprocating full inverter compressors optimized for R290

Capacity according to standard EN14511

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

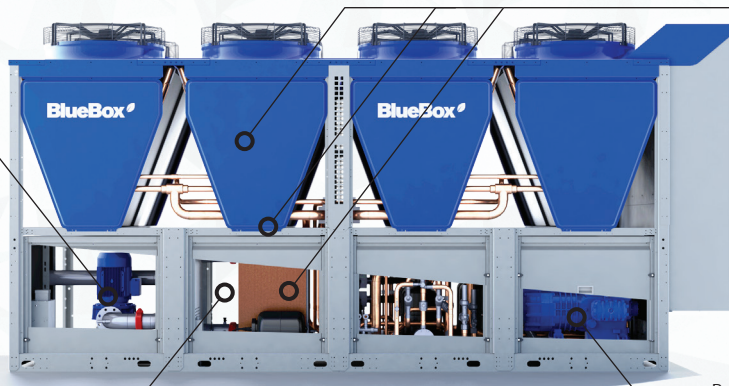
suitable for any climate condition

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

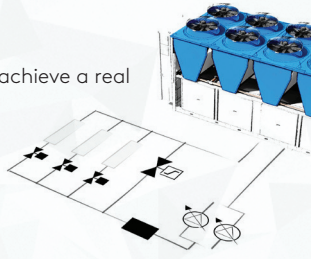


FLOWZER




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

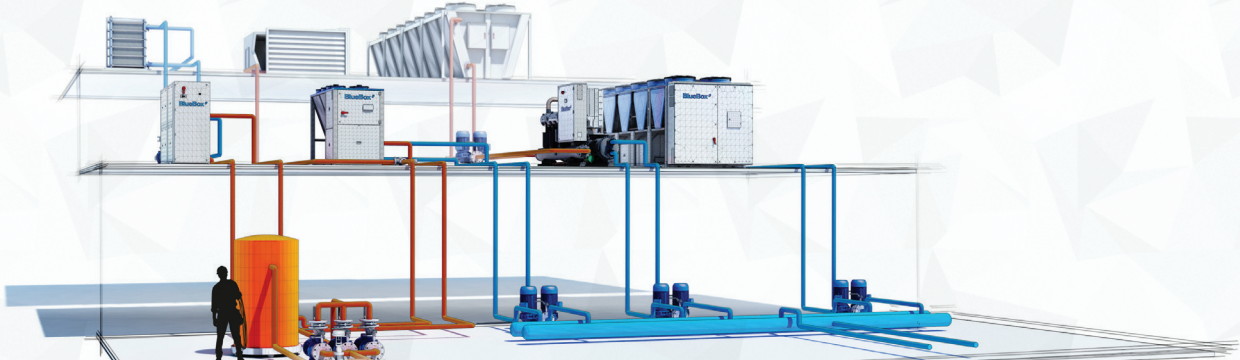


HYZER

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





versatile

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