



**enex technologies**  
cooling and heating naturally

**Natural Refrigerant Solutions**  
to Drive Energy Transition



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# About

Enex Technologies is a transformative world leader in natural and energy efficient cooling, heating, ventilation and refrigeration equipment that began in the 1930s by producing ammonia natural refrigeration equipment, later adding CO<sub>2</sub>, water and propane as natural refrigerants with low global warming potential.

**SAMIFI  
FRANCE**  
INNOVATION AS ENERGY  
**1934**

**kobol**  
HEAT EXCHANGERS NATURALLY  
**1968**

**EMICON**  
INNOVATION AS ENERGY  
**1984**

**Arctic**  
INNOVATION AS ENERGY  
**1997**

**1948**  
**MORGANA**  
HEAT EXCHANGERS NATURALLY

**1983**  
**ROENEST**  
HEAT EXCHANGERS NATURALLY

# Pioneers and innovators in natural HVACR since the 1930s

 **enex technologies**  
cooling and heating naturally  
**2022**

 **enex**  
INNOVATION AS ENERGY  
**2004**

**2012**  
**eos**  
INNOVATION AS ENERGY

**1999**  
**ETHRATECH**  
INNOVATION AS ENERGY

**1993**  
**Hidros**  
INNOVATION AS ENERGY

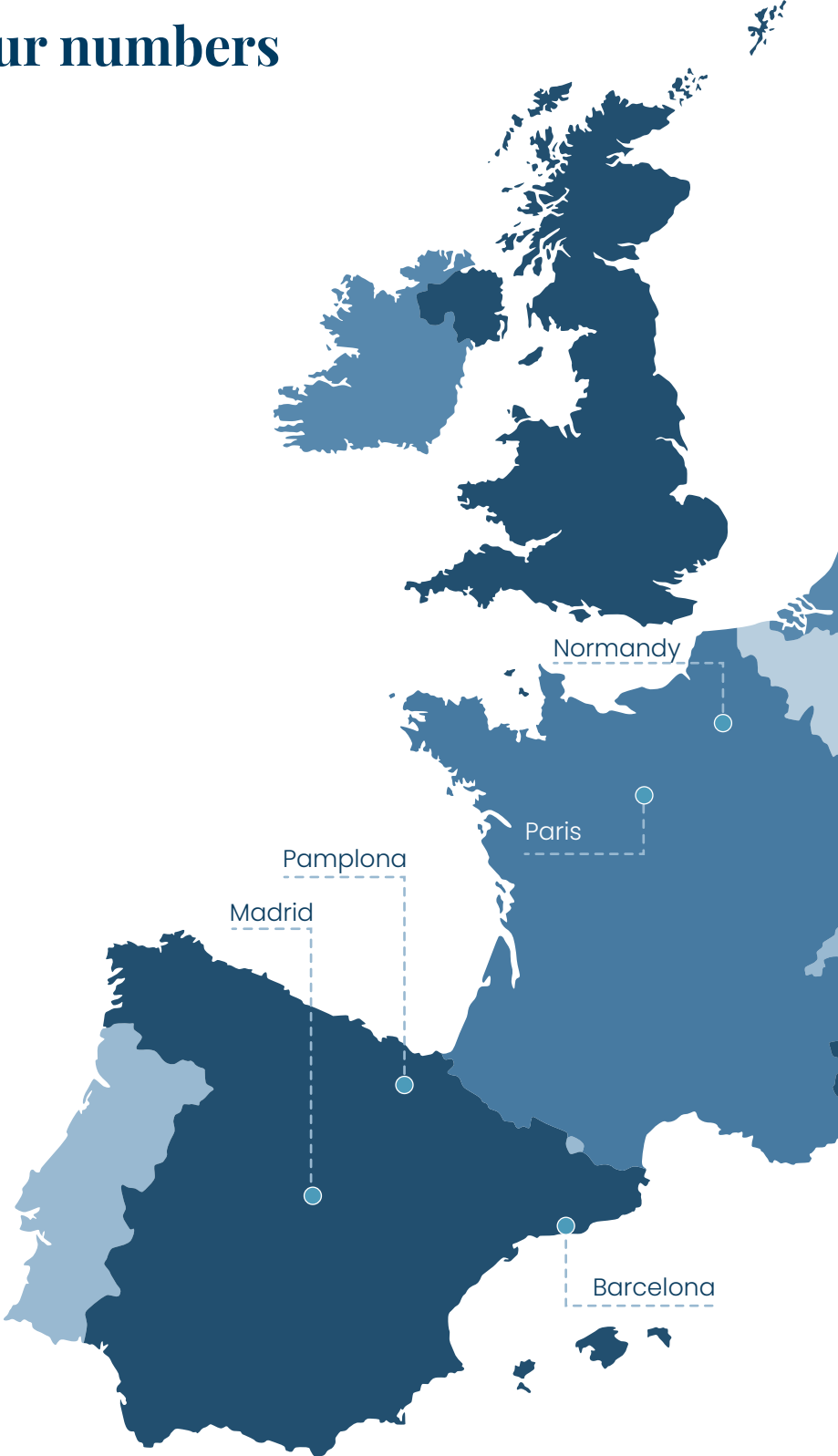
# Our numbers

**200M€**  
Revenues

**1000+**  
Employees

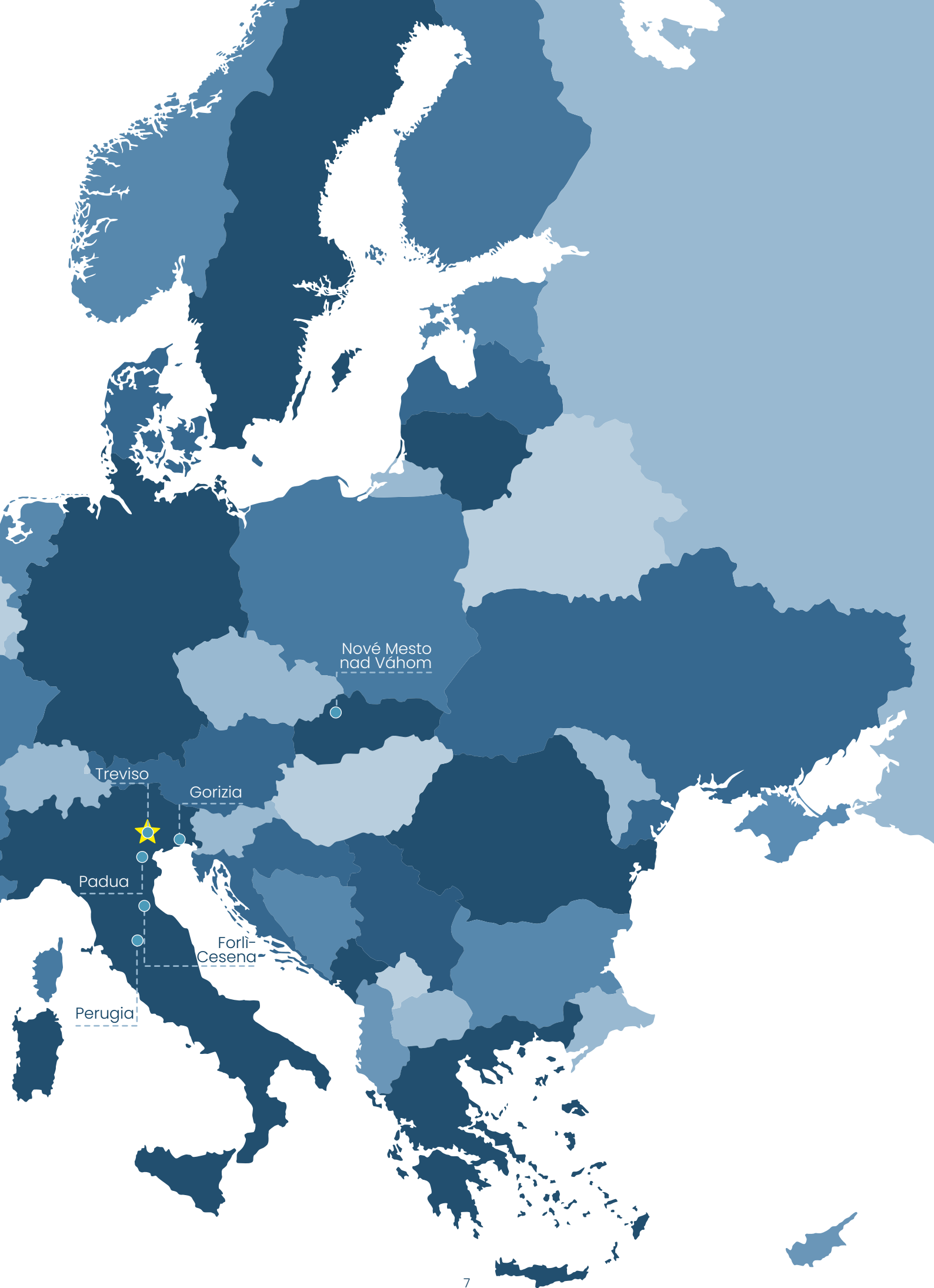
**12**  
Factories

**125**  
Countries



★ Headquarter

● Manufacturing and R&D site



Nové Mesto nad Váhom

Treviso

Gorizia

Padua

Forlì-Cesena

Perugia



# Our segments

Our leading natural refrigerant, energy efficiency and energy transition technologies transform the HVACR industry.



## COOLING

Our chillers are designed to operate efficiently with all refrigerants, generating cold water for climatization or industrial processes.



## REFRIGERATION

Our commercial and industrial refrigeration systems are designed for high performance, quality, reliability and carbon footprint reduction through the use of natural refrigerants Ammonia and CO<sub>2</sub>.



## HEATING

Our high efficiency heat pump range using natural refrigerant CO<sub>2</sub> is a simple-to use, elegant solution for applications requiring high quantities of sanitary hot water.

# We are driven by strong values to create a better and more sustainable world



## ENVIRONMENT

Buildings consume 40% of the energy used in the developed world. HVACR systems use 60% of the energy in buildings. Our high efficiency solutions are central to reducing global warming, and we strive every day to help our customers reduce their carbon footprint by using natural refrigerants.



## INNOVATION

Always leading. From pioneering the efficient and safe use of natural refrigerants to helping the industry move away from gas heat towards systems that use electricity.



## COMMUNITIES

We are a European industrial champion, building clean factories that support new jobs, growth and expansion to new markets.



## DIVERSITY & INCLUSION

At Enex Technologies we ensure that every colleague feels respected, valued and motivated to support our customers, every day.





**Our leading natural  
refrigerant, energy  
efficiency and energy  
transition technologies  
transform the HVACR  
industry**



Enex Technologies is committed to developing and improving innovative and efficient low global warming technologies in HVAC, commercial and industrial refrigeration systems that reduce energy consumption and environmental impact.

## Natural refrigerants

### **CO<sub>2</sub> (R744)**

CO<sub>2</sub> is a naturally occurring, non-ozone-depleting refrigerant that addresses today's concerns about the global warming potential (GWP) of common F-gases. With a GWP of 1, CO<sub>2</sub> is widely and effectively used in commercial and industrial refrigeration systems.

### **AMMONIA (R717)**

Ammonia is the most widely used natural refrigerant for large industrial applications. With a GWP of 0, ammonia is a cost-effective, efficient, and sustainable alternative refrigerant.

### **PROPANE (R290)**

With its excellent thermodynamic properties and a GWP of 3, Propane is an energy efficient, reliable, versatile, and cost-effective natural refrigerant.

### **WATER (R718)**

Indirect systems using pure water or brine mixtures to transfer heat are simple to install and easy to service in all applications.





# Commercial refrigeration

Enex Technologies provides a wide range of refrigeration racks and ventilated units using highly sustainable CO<sub>2</sub> as refrigerant, suitable for food retail stores of any format in all ambient climates.

Enex Technologies pioneered the development of transcritical CO<sub>2</sub> refrigeration systems, setting the standard in the food retail industry.





**Setting the standard  
for energy-saving  
and environmentally  
sustainable commercial  
refrigeration solutions**





## TAGO

### Refrigeration booster unit

Cooling capacity from 10 kW to 40 kW in **Medium Temperature**  
Cooling capacity up to 8 kW in **Low Temperature**



Remote gas cooler



Semihermetic reciprocating compressors



Low Noise



Indoor/  
Outdoor installation



Natural Refrigerant



Inverter technology



Small footprint

At a width of 800 mm, the compact and reliable TAGO refrigeration booster units from ENEX is optimized for small format retail stores. The tower design is ideal for installation in plant rooms with restricted footprint and/or where access is through narrow doors. A gravity oil return system ensures high operational safety and low maintenance requirements. Using highly sustainable R744 refrigerant, the TAGO system is available in 7 sizes with up to 2 medium temperature compressors and 1 low temperature compressor, and suitable for indoor or outdoor installation with optional cladding.

## FEATURES

- Small footprint
- Stainless steel piping
- Gravity oil return system
- Liquid receiver with PS 80 bar
- Dorin or Bitzer compressors
- Inverter on 1<sup>st</sup> compressor
- Danfoss or Carel controller
- 2 mt height max
- Patented gravity oil management

## OPTIONS

- One heat recovery exchanger for Space Heating or DHW application
- Back up controller spare
- Complete ducting of the relief valve discharge
- Differential circuit breakers 300 mA "Type A" on compressors
- Main switch with MX coil
- Housing for indoor/outdoor
- Muffler for low noise applications on compressor discharge lines (Spare)

## APPLICATION



Food retail



Food storage



Food processing





# DRAVA

## Refrigeration booster unit

Cooling capacity from 16 kW to 65 kW in **Medium Temperature**  
Cooling capacity from 12 kW to 23 kW in **Low temperature**



Remote gas cooler



Semihhermetic reciprocating compressors



Low Noise



Indoor/  
Outdoor installation



Natural Refrigerant



Inverter technology



Liquid ejector  
**enJECTOR**<sup>®</sup>

ENEX's DRAVA refrigeration booster unit is designed for small-to-medium format retail stores, with up to 3 medium temperature and 2 low temperature compressors using highly sustainable R744 refrigerant. A gravity oil return system ensures high operational safety and low maintenance requirements. Suitable for indoor or outdoor installation with optional cladding.

### FEATURES

- Stainless steel piping
- Dorin or Bitzer compressors
- Inverter on 1st compressor
- Danfoss or Carel controller (others on request)
- Liquid receiver with PS 60 bar
- Patented gravity oil management

### OPTIONS

- Back up cooling Unit\*
- Heat Recovery
- Enex exclusive Liquid Enjector® module
- Double electronic valves (as back up/no double control)
- Ducting of relief valves
- Cladding for indoor/outdoor use
- Pressure rating HP side PS=140 bar

\*If NO LT, IF NO Heating Recovery

### APPLICATION



Food retail



Food storage



Food processing



# SENNA

## Refrigeration booster unit

Nominal cooling capacity from 70 kW to 390 kW in **Medium Temperature**  
Nominal cooling capacity from 4 kW to 200 kW in **Low Temperature**



Remote gas cooler



Semihermetic reciprocating compressors



Low Noise



Indoor/  
Outdoor installation



Natural Refrigerant



Inverter technology



Liquid ejector  
**enJECTOR**<sup>®</sup>

Compact and simple to use, the SENNA refrigeration booster unit from ENEX is designed for high reliability in medium and large format retail stores, with up to 6 medium temperature and 5 low temperature compressors using highly sustainable R744 refrigerant. The system can be configured as a plug & play monoblock unit, mounted on a skid with an integral gas cooler and complete with refrigerant piping and electrical connections. Suitable for indoor or outdoor installation with optional cladding.

### FEATURES

- Stainless steel piping
- Oil separator
- Dorin or Bitzer compressors
- Inverter on 1st compressor
- Danfoss or Carel controller (others on request)
- Liquid receiver with PS 60 bar
- Patented gravity oil management (up to 100 kW)

### OPTIONS

- LSPM Compressors
- Up to 2 heat recovery exchangers for Space Heating or/and DHW application
- Double electronic valves/Double control
- Double mechanical valves
- Backup cooling unit (spare)
- Ducting of relief valves
- High level sensor
- Enex exclusive Lliquid Enjector® module
- Mechanical subcooler
- Liquid subcooler
- Cladding for indoor/outdoor
- CO<sub>2</sub> evaporator inside cladding
- Unit in 3 pieces
- Detachable electrical panel
- Liquid receiver with PS 80 bar
- Pressure rating HP side PS=140 bar

### APPLICATION



Food retail



Food storage



Food processing





## SENNA P

### Refrigeration booster unit

Nominal cooling capacity from 90 kW to 410 kW in **Medium Temperature**  
Nominal cooling capacity from 4 kW to 200 kW in **Low Temperature**



Remote gas cooler



Semihermetic reciprocating compressors



Low Noise



Indoor/  
Outdoor installation



Natural Refrigerant



Inverter technology



Liquid ejector  
**enJECTOR**<sup>®</sup>



Vapor ejector

ENEX's SENNA P refrigeration booster unit is designed to combine simplicity, compactness and high reliability with parallel compressor and an optional vapor ejector to enhance performance in high outdoor ambient temperature settings. The SENNA P system is ideal for medium and large format retail stores, with up to 4 medium temperature, 2 parallel and 5 low temperature compressors using highly sustainable R744 refrigerant. It can also be configured as a plug & play monoblock version, mounted on a skid with an integral gas cooler, complete with refrigerant piping and electrical connections. Suitable for indoor or outdoor installation with optional cladding.

## FEATURES

- Stainless steel piping
- Oil separator
- Dorin or Bitzer compressors
- Inverter on 1st compressor
- Danfoss or Carel controller (others on request)
- Liquid receiver with PS 60 bar
- Parallel compression

## OPTIONS

- LSPM Compressors
- UP to 2 x Heat recovery exchangers for Space Heating or/and DHW application
- Double electronic valves/Double control
- Double mechanical valves
- Backup cooling unit (spare)
- Ducting of relief valves
- High level sensor
- Enex exclusive Liquid Enjector® and/or vapour ejector
- Mechanical subcooler
- Liquid subcooler
- Cladding for indoor/outdoor
- CO<sub>2</sub> evaporator inside cladding
- Unit in 3 pieces
- Detachable electrical panel
- Liquid receiver with PS 80 bar
- Pressure rating HP side PS=140 bar

## APPLICATION



Food retail



Food storage



Food processing



# NEVA

## Refrigeration booster unit

Nominal cooling capacity from 70 kW to 800 kW in **Medium Temperature**  
Nominal cooling capacity from 4 kW to 200 kW in **Low Temperature**



Remote gas cooler



Semihermetic reciprocating compressors



Low Noise



Indoor/  
Outdoor installation



Natural Refrigerant



Inverter technology



Liquid ejector  
**enJECTOR**<sup>®</sup>

Designed for medium and large format retail stores with industrial specifications, the NEVA refrigeration booster units from ENEX are highly customizable, with up to 8 medium temperature and 5 low temperature compressors using highly sustainable R744 refrigerant. Suitable for indoor or outdoor installation with optional cladding.

## FEATURES

- Industrial specifications
- Shut-off valves on each section
- Stainless steel piping
- Oil separator
- Mechanical backup valves
- Dorin or Bitzer compressors
- Inverter on 1st compressor
- Danfoss or Carel controller (others on request)
- Large liquid receiver with PS 60 bar
- Fully customizable

## OPTIONS

- LSPM Compressors
- UP to 2 x Heat recovery exchangers for Space Heating or/and DHW application
- Double electronic valves/Double control
- Double mechanical valves
- Backup cooling unit
- Ducting of relief valves
- High level sensor
- Enex exclusive Liquid Enjector® module
- Mechanical subcooler
- Liquid subcooler
- Cladding for indoor/outdoor
- CO<sub>2</sub> evaporator inside cladding
- Unit in 3 pieces
- Detachable electrical panel
- Liquid receiver with PS 80 bar
- Pressure rating HP side PS=140 bar

## APPLICATION



Food retail



Food storage



Food processing



## Flat gas cooler

GM/GN/GO/GP: Flat gas coolers with axial fans for outdoor use

Cooling capacity from 15 kW to 900 kW



Low Noise



Outdoor installation



Floating pack system



EC Axial fan



Remote gas cooler



Natural Refrigerant



High efficiency



ENEX's flat gas coolers with axial fans for outdoor use, are suitable for application in highly sustainable R744 transcritical systems. Offering low sound levels and a wide range of capacities to exactly match system requirements. 140 bar pressure rating to allow operation at high pressures and increase cycle performance.

### FEATURES

- **Finned coil:** Built with 7mm copper tubes and louvered aluminium fins. Designed with 'Floating pack system', which allows the coil to levitate to avoid leaks
- **Headers:** Stainless steel + K65
- **Fans:** Equipped as standard with EC fan motors. Axial fans with external rotor (380-480V III 50/60Hz) Compliant with ErP Directive - Ø 450, 630, 800, 910 mm
- **Casing:** Pre-painted aluminum
- Wide choice of noise level
- **Design pressure: PS=140bar PT=200bar**

### OPTIONS

#### FIN MATERIAL

- Copper Fins
- Coated Fins
- Other not standard fin material

#### CASING

- Stainless steel AISI304
- Anti dampers

#### ELECTRICAL OPTIONS

- AC fans
- Shielded Wiring
- Service switch (80V each fan)
- Speed controller
- Fan diffuser

- Wiring into centralized box + magnetothermic switches (included with EC fans)

#### OTHER

- AquaAero treatment
- Blygold treatment
- Spray adiabatic system

### APPLICATION



Food retail



Food storage



Food processing



Ice rink



Winery & Brewery



## V-shaped gas cooler

KGR: V-shaped gas coolers with centrifugal fans for indoor use

Cooling capacity from 25 kW to 560 kW



Air Condensed



Indoor installation



Floating pack system



EC fans



V shape coils



High efficiency



Natural Refrigerant

ENEX's V-shaped gas coolers with centrifugal fans for indoor use are suitable for application in highly sustainable R744 transcritical systems when the gas cooler must be located in the plant room. The centrifugal fans provide adequate external static pressure to install a duct on the air discharge. Available in a wide range of capacities to exactly match system requirements.

### FEATURES

- **Finned coil:** Built with grooved K65 copper tubes and corrugated aluminium fins. Designed with 'Floating pack system', which allows the coil to levitate to avoid leaks
- **Headers:** Stainless steel + K65
- **Fans:** Equipped as standard with EC fan motors. Radial / centrifugal fans (380-480V III 50/60Hz) Compliant with ErP Directive Ø 400, 630 mm. Up to 200 Pa external static pressure
- **Casing:** galvanised steel painted with epoxy-polyester, and then baked and cured at 180°C giving it a high protection against corrosion even in extreme environmental conditions
- **Design pressure: PS=130bar PT=186bar**

### OPTIONS

#### FIN MATERIAL

- Copper Fins
- Coated Fins

#### CASING

- Painted
- Excessive Pressure Dampers

#### ELECTRICAL OPTIONS

- Switch on/off

#### OTHER

- Blygold
- Acoustic Isolation

### APPLICATION



Food retail



Food storage



Food processing



Ice rink



Winery & Brewery



## Cubic unit cooler

OC/BC: Cubic CO<sub>2</sub> and brine unit coolers

Cooling capacity from 2 kW to 20 kW



AC fans



Natural Refrigerant



All fluids ready



High efficiency

ENEX's cubic units are ideal for small and medium cold rooms for cooling and freezing applications. They can be used with a highly sustainable R744 direct expansion system or a brine loop.

### FEATURES

- **Finned coil:** Built with grooved copper tubes (3/8" Ø), and corrugated aluminium fins, manufactured according to CUPROCLIMA® specifications
- **Fans:** Equipped as standard with AC fan motors. Axial single-phase motors (230V I 50/60Hz). Compliant with ErP Directive. Ø 250/350 mm
- **Casing:** Pre-painted aluminum, for high protection against corrosion even in extreme environmental conditions. Casing complies with the most stringent food hygiene standards
- **Design pressure: PS=60-80bar PT=86-115bar**

### OPTIONS

#### FIN MATERIAL

- Copper Fins
- Epoxy Fins
- Other material

#### CASING

- Stainless Steel

#### DEFROST

- Hot gas defrost
- Hot gas defrost in coil and electric in tray
- Electric defrost
- Fan ring heaters

#### OTHER

- AquaAero
- Blygold
- High Efficiency Fans / EC fans
- Electronic control

### APPLICATION



Food retail



Food storage



Industry



Marine refrigeration



Winery & Brewery





## Dual discharge unit cooler

OD/BD: Dual discharge CO<sub>2</sub> and brine unit coolers

Cooling capacity from 2 kW to 20 kW



AC fans



Natural Refrigerant



All fluids ready



High efficiency

ENEX's dual discharge units are ideal for small and medium cold rooms for cooling or freezing applications. Designed especially for working areas (food preparation rooms, corridors) and temperature sensitive products (meat, fish, fruits, etc.) where indirect air flow is preferred. They can be used with a highly sustainable R744 direct expansion system or a brine loop.

### FEATURES

- **Finned coil:** Built with grooved copper tubes (3/8" Ø), and corrugated aluminium fins, manufactured according to CUPROCLIMA® specifications
- **Fans:** Equipped as standard with AC fan motors. Axial single-phase motors (230V | 50/60Hz). Compliant with ErP Directive Ø 250, 350 mm
- **Casing:** Pre-painted aluminum, for a high protection against corrosion even in extreme environmental conditions. Casing complies with the most stringent food hygiene standards
- **Design pressure: PS=60-80bar PT=86-115bar**

### OPTIONS

#### FIN MATERIAL

- Copper Fins
- Epoxy Fins
- Other material

#### CASING

- Stainless Steel

#### DEFROST

- Hot gas defrost
- Hot gas defrost in coil and electric in tray
- Electric defrost
- Fan ring heaters

#### OTHER

- AquaAero
- Blygold
- High Efficiency Fans / EC fans
- Electronic control

### APPLICATION



Food storage



Food processing



Industry



Marine refrigeration



Winery & Brewery



## Slim unit cooler

MR/MC: Slim compact CO<sub>2</sub> and brine unit coolers

Cooling capacity from 0,5 KW to 5 kW



AC fans



Natural Refrigerant



All fluids ready



High efficiency

ENEX's slim compact units are ideal for small cold rooms designed for cooling or freezing applications. They can be used with a highly sustainable R744 direct expansion system or a brine loop.

### FEATURES

- **Finned coil:** Built with grooved copper tubes (3/8" Ø for MR serie and 1/2" Ø for MC series), and corrugated aluminium fins, manufactured according to CUPROCLIMA® specifications
- **Fans:** Equipped as standard with AC fan motors. Axial single-phase motors (230V I 50/60Hz). Compliant with ErP Directive Ø 250 mm
- **Casing:** Aluminium-magnesium alloy (97.5% Al - 2.5% Mg) for high protection against corrosion even in extreme environmental conditions. Casing complies with the most stringent food hygiene standards

### OPTIONS

#### FIN MATERIAL

- Copper Fins
- Coated Fins

#### CASING

- Aluminium
- Painted
- Stainless Steel

#### DEFROST

- Hot gas defrost
- Hot gas defrost in coil and electric in tray (only for MC)
- Electric defrost
- Fan ring heaters

#### OTHER

- AquaAero
- Blygold
- High Efficiency Fans
- Electronic control

### APPLICATION



Food retail



Food storage



Food processing



Marine refrigeration



Winery & Brewery






# Industrial refrigeration

Enex Technologies provides a wide range of industrial equipment such as chillers, refrigeration racks and ventilated units, all using natural refrigerants such as propane, CO<sub>2</sub> and ammonia.

Applications range from cold storage to food processing, blast freezing, ice rinks, wineries and district cooling. With more than 400 years of combined experience, Enex Technologies has the expertise to always recommend the best natural refrigerant for the application.





Innovative industrial  
refrigeration and  
process cooling  
solutions







## ELBA

### Refrigeration booster unit

Cooling capacity from 100 kW to 400 kW in **Medium Temperature**  
up to 950 kW for industrial version  
Cooling capacity from 35 kW to 200 kW in **Low temperature**  
up to 500 kW for industrial version



Remote  
gas cooler



Semihermetic  
reciprocating  
compressors



Low  
Noise



Indoor/  
Outdoor  
installation



Natural  
Refrigerant



Inverter  
technology



Liquid ejector  
**enJECTOR**<sup>®</sup>



Vapor  
ejector

The ELBA refrigeration booster unit from ENEX is designed for industrial specifications and is highly customizable, with parallel compression and optional vapor ejector to enhance performance especially at high outdoor ambient temperatures. The ELBA system is ideal for large format retail stores and distribution centres, with up to 5 medium temperature, 3 parallel and 5 low temperature compressors using highly sustainable R744 refrigerant. Suitable for indoor or outdoor installation with optional cladding. Chilled water and heat pump functionality can be incorporated to provide an integral refrigeration + HVAC solution.

### FEATURES

- Industrial specifications
- Shut-off valves on each section
- Stainless steel piping
- Oil separator
- Mechanical backup valves
- Dorin or Bitzer compressors
- Inverter on 1st compressor
- Danfoss or Carel controller (others on request)
- Large liquid receiver with PS 60 bar
- Parallel compression
- Fully customizable

### OPTIONS

- LSPM Compressors
- UP to 2 x Heat recovery exchangers for Space Heating or/and DHW application
- Double electronic valves/Double control
- Double mechanical valves
- Backup cooling unit
- Ducting of relief valves
- High level sensor
- Enex exclusive Liquid Enjector® module / Vapour Ejector
- Mechanical subcooler
- Liquid subcooler
- Cladding for indoor/outdoor
- CO<sub>2</sub> evaporator inside cladding
- Unit in 3 pieces
- Detachable electrical panel
- Heat pump function
- Flooded evaporator for chilled water
- Liquid receiver with PS 80 bar
- Pressure rating HP side PS=140 bar

### APPLICATION



Food retail



Food storage



Food processing



Industry





# Blast freezer Rack

AT: Refrigeration booster low temperature unit

Cooling capacity up to 600 kW LT



Remote gas cooler



Semihermetic reciprocating compressors



Low Noise



Plate exchangers



Indoor/Outdoor installation



Natural Refrigerant



Inverter technology

The AT refrigeration booster low temperature unit from ENEX is suitable for blast freezing and other industrial applications at low temperature, using highly sustainable R744 refrigerant.

## FEATURES

- Industrial specifications
- Shut-off valves on each section
- Stainless steel piping
- Oil separator
- Mechanical backup valves
- Dorin or Bitzer compressors
- Inverter on 1st compressor
- Danfoss or Carel controller (others on request)
- Large liquid receiver with PS 60 bar

## OPTIONS

- LSPM Compressors
- UP to 2 x Heat recovery exchangers for Space Heating or/and DHW application
- Double electronic valves/Double control
- Double mechanical valves
- Backup cooling unit
- Ducting of relief valves
- High level sensor
- Mechanical subcooler
- Liquid subcooler
- Cladding for indoor/outdoor
- CO<sub>2</sub> evaporator inside cladding
- Unit in 3 pieces
- Detachable electrical panel
- Liquid receiver with PS 80 bar
- Pressure rating HP side PS=140 bar

## APPLICATION



Food processing



Food storage



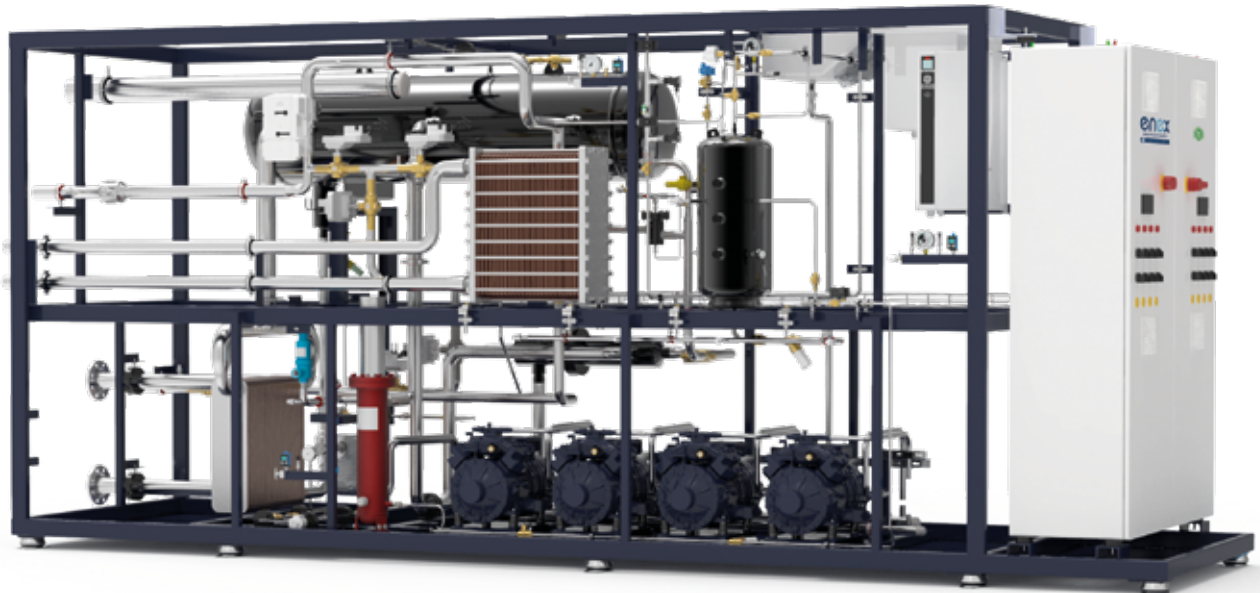
Industry



## YUKON B

Split air-cooled reciprocating chiller with remote gas cooler

**Brine:** Cooling Capacity from 20 kW to 560 kW



Remote gas cooler



Water-cooled (option)



Semihermetic reciprocating compressors



Plate exchangers



Flooded evaporator



Low Noise



Indoor/Outdoor installation



Inverter technology



Natural Refrigerant



Connectivity



High hot water temperature

ENEX's YUKON B split air-cooled reciprocating chiller with remote gas cooler is ideal for medium temperature process applications. The system is based on a transcritical CO<sub>2</sub> cycle and features a gravity fed flooded evaporator. Suitable for use with a non toxic/non flammable refrigerant such as highly sustainable R744 is preferred, and when the installation is split, for noise or other requirements, and when heat recovery at high temperatures (up to 80°C) is needed.

### FEATURES

- Welded steel frame
- Gravity fed flooded evaporator
- Reciprocating compressors
- Stainless steel piping
- Proprietary control software
- Mechanical backup valves
- Frequency converter on first compressor
- Ducting of relief valves
- Connectivity via Modbus TCP/IP
- Energy meter
- Remote monitoring
- Gas cooler bypass (LT kit for low ambient)
- Liquid receiver with PS 80 bar
- Pressure rating HP side PS=130 bar

### OPTIONS

- Up to 2 heat recovery exchangers for low, medium or high  $\Delta T$
- Cladding for outdoor use & noise reduction
- Remote gas cooler (standard and low noise)
- Pressure rating HP side PS=140 bar

### APPLICATION



Food retail



Food storage



Food processing



Ice rink



Industry

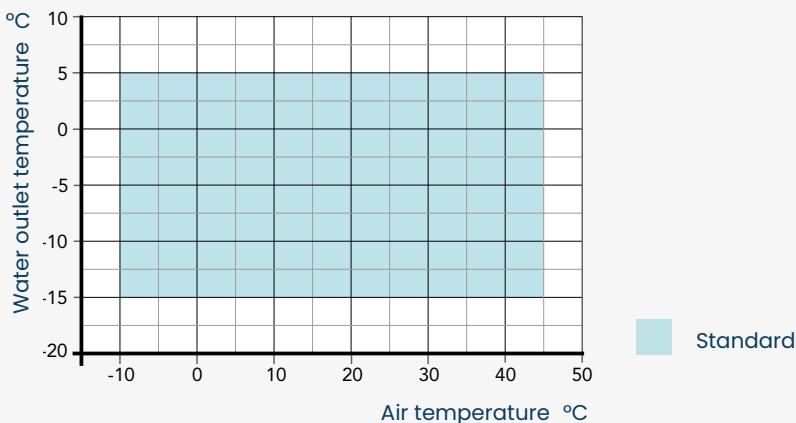


Marine refrigeration



Winery & Brewery

### Operating range





# CO<sub>2</sub> Subcritical

## Refrigeration subcritical units

Cooling capacity from 10 kW to 400 kW



Semihermetic  
reciprocating  
compressors



Indoor  
installation



Natural  
Refrigerant



ENEX's CO<sub>2</sub> subcritical refrigeration units can be water, brine or refrigerant cooled, including with highly sustainable R744 refrigerant.

Ideal for retail, food processing and other industrial applications where an existing water or brine loop is available, or in cascade with a high stage NH<sub>3</sub> cycle to achieve outstanding performance, especially in warm climates.

## FEATURES

- Fully customizable
- Condensation in a plate exchanger in cascade with another refrigerant (NH<sub>3</sub>, HFC/HFO) or via a brine loop
- Wide choice of reciprocating compressors brand (Bitzer, Dorin, Copeland)
- Electrical panel on board or remote

## OPTIONS

- Multiple temperature levels
- Remote electrical panel
- Cladding with / without acoustic insulation
- Shell & tube condenser
- Heat recovery
- Desuperheater
- Backup cooling unit
- Frequency inverter

## APPLICATION



Food retail



Food storage



Food processing



Industry



## Cubic industrial unit cooler

OC/BC: Cubic CO<sub>2</sub> and brine unit coolers

Cooling capacity from 10 kW to 275 kW



AC fans



High efficiency



Natural Refrigerant



All fluids ready

ENEX's OC/BC cubic units are ideal for medium and large cold rooms requiring cooling and freezing applications. They can be used with a highly sustainable R744 direct expansion system or a brine loop.

### FEATURES

- **Finned coil:** Built with grooved copper tubes (3/8" & 12mm Ø), and corrugated aluminium fins, manufactured according to CUPROCLIMA® specifications
- **Fans:** Equipped as standard with AC fan motors. Axial single-phase motors (230V I 50/60Hz). Compliant with ErP Directive. Ø 500, 630, 800, 910 mm
- **Casing:** Pre-painted aluminum, for high protection against corrosion even in extreme environmental conditions. Casing complies with the most stringent food hygiene standards
- **Design pressure: PS=60-80bar PT=86-115bar**

### OPTIONS

#### FIN MATERIAL

- Copper Fins
- Epoxy Fins
- Other material

#### CASING

- Stainless Steel

#### DEFROST

- Hot gas defrost
- Hot gas defrost in coil and electric in tray
- Electric defrost
- Fan ring heaters

#### OTHER

- AquaAero
- Blygold
- High Efficiency Fans / EC fans
- Electronic control

### APPLICATION



Food retail



Food storage



Industry



Marine refrigeration



Winery & Brewery



## Dual discharge industrial unit cooler

OD/BD: Dual discharge CO<sub>2</sub> and brine unit coolers

Cooling capacity from 2 kW to 160 kW



AC fans



Natural Refrigerant



All fluids ready



High efficiency

ENEX's OD/BD dual discharge units are ideal for medium and large cold rooms requiring cooling or freezing applications. Designed especially for working areas (food preparation rooms, corridors) and temperature sensitive products (meat, fish, fruits etc.) where indirect air flow is preferred. They can be used with a highly sustainable R744 direct expansion system or a brine loop.

### FEATURES

- **Finned coil:** Built with grooved copper tubes (3/8" Ø), and corrugated aluminium fins, manufactured according to CUPROCLIMA® specifications
- **Fans:** Equipped as standard with AC fan motors. Axial single-phase motors (230V | 50/60Hz). Compliant with ErP Directive Ø 500, 630 mm
- **Casing:** Pre-painted aluminum, for high protection against corrosion even in extreme environmental conditions. Casing complies with the most stringent food hygiene standards
- **Design pressure: PS=60-80bar PT=86-115bar**

### OPTIONS

#### FIN MATERIAL

- Copper Fins
- Epoxy Fins
- Other material

#### CASING

- Stainless Steel

#### DEFROST

- Hot gas defrost
- Hot gas defrost in coil and electric in tray
- Electric defrost
- Fan ring heaters

#### OTHER

- AquaAero
- Blygold
- High Efficiency Fans / EC fans
- Electronic control

### APPLICATION



Food storage



Food processing



Industry



Marine refrigeration



Winery & Brewery





## Brine reciprocating chiller

RAS MC VB Kp: Packaged air-cooled reciprocating chillers for outdoor use

Cooling capacity from 31 kW to 250 kW



Air  
Condensed



AC Axial fans



Semihermetic  
reciprocating  
compressors



Plate  
exchangers



Microchannel  
aluminium coils



EC Axial fans  
(Option)



Outdoor  
installation



Inverter  
technology



Natural  
Refrigerant



High efficiency  
(Option)

EMICON's propane packaged air-cooled reciprocating chillers for outdoor use, are suitable for medium temperature process cooling applications, with minimal charge of highly sustainable R290 refrigerant thanks to the microchannel condenser coils.

### FEATURES

- 1 or 2 independent cooling circuits equipped with 1 or 2 compressors for each circuit.
- Possibility to interface to BMS system.
- Leak sensor turns off the compressors and activate the extraction fan in case a refrigerant leak.
- Operation in cooling mode with fresh air temperature down to  $-20^{\circ}\text{C}$ .
- Outlet water temperature production down to  $-14^{\circ}\text{C}$ .

### OPTIONS

- Soundproof compressor cabinet with thickener material.
- EC fans.
- Partial heat recovery.
- Electronic thermostatic valve.
- Part-winding compressor start-up system
- Advanced Cascade system - up to n.6 units.
- BACNET or TCP/IP Protocol serial interface with RS 485.
- Inverter for pump.
- Hiweb supervision system.

### APPLICATION



Food retail



Food storage



Food processing



Ice rink

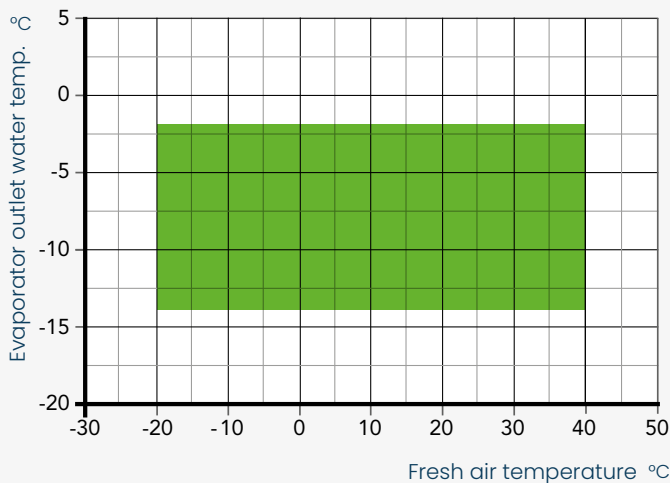



Industry



Winery & Brewery

### Operating range



 Cooling mode with glycol



## Brine screw chiller

RAH MC VS U Kp: Packaged air-cooled screw chillers for outdoor use

Cooling capacity from 390 kW to 790 kW



Air  
Condensed



AC Axial fans



Screw  
compressors



Plate  
exchangers



Microchannel  
aluminium coils



EC Axial fans  
(Option)



Outdoor  
installation



Inverter  
technology



Natural  
Refrigerant



High efficiency

EMICON's propane packaged air-cooled screw chillers for outdoor use, are suitable for process cooling applications. With a minimal charge of highly sustainable R290 refrigerant and increased safety thanks to a modular concept with one compressor per circuit and microchannel coils. Optional inverter compressor provides excellent seasonal efficiency and temperature control accuracy.

### FEATURES

- Two compressors / two circuits
- Low ambient temperature operation (down to -20°C)
- Soundproof compressor cabinet
- Leak sensor turns off the compressors and activate the extraction fan in case a refrigerant leak occurs
- Electronic thermostatic valve

### OPTIONS

- Axial fans with electronic commutated motor (EC fans)
- BACNET or TCP/IP Protocol serial interface with RS 485
- Enhanced microprocessor board
- Remote display
- Advanced Cascade system
- Inverter for pumps
- Fan diffuser

### APPLICATION



Food retail



Food storage



Food processing



Ice rink

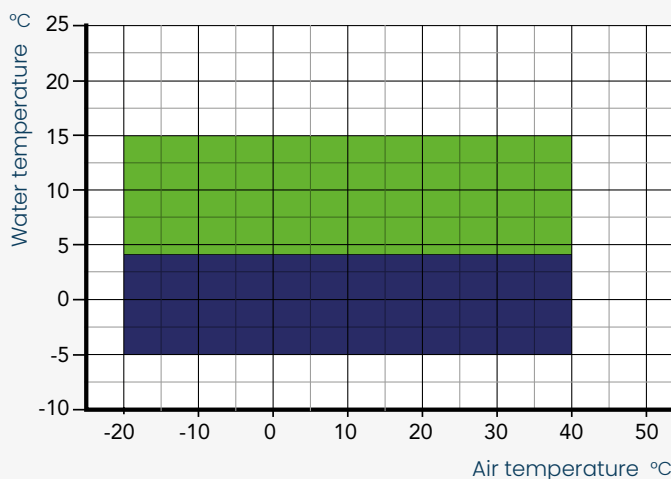


Industry



Winery & Brewery

### Operating range



- Cooling mode
- Cooling mode with glycol



## Flat dry cooler

D: Flat dry coolers with axial fans for outdoor use

Cooling capacity from 7 kW to 630 kW



Outdoor installation



Low Noise



AC fans



High efficiency



Natural Refrigerant



Floating pack system



ROEN EST's flat dry coolers with axial fans are suitable for outdoor applications, using highly sustainable R718 refrigerant water and brines. Configurable for low noise levels and capacities to exactly match system requirements. Compared to cooling towers and wet systems, our flat dry coolers require low maintenance and are highly effective in preventing Legionella contamination.

### FEATURES

- **Finned coil:** Built with 1/2" copper tubes and louvered aluminium fins. Designed with 'Floating pack system', which allows the coil to levitate to avoid leaks
- **Fans:** Equipped as standard with AC fan motors. Axial fans with external rotor (380-480V III 50/60Hz) Compliant with ErP Directive Ø 630, 910 mm
- **Casing:** Galvanised steel painted with epoxy-polyester, and then baked and cured at 180°C giving it a high protection against corrosion even in extreme environmental conditions
- **Design pressure: PS=30bar PT=43bar**

### OPTIONS

#### FIN MATERIAL

- Copper Fins
- Coated Fins
- Other not standard fin material

#### CASING

- Extended legs
- Stainless steel AISI304
- Anti dampers

#### ELECTRICAL OPTIONS

- AC fans
- Speed controller
- Wiring into centralized box (included with EC Fans)

- Service switch
- Motor protection
- Fan diffuser

#### OTHER

- AquaAero
- Blygold
- Spray adiabatic system
- Pads adiabatic system (coming soon)

### APPLICATION



Data Centre



Industry



Oil & Gas



## V-Shaped dry cooler

DV/DX: V-Shaped dry coolers with axial fans for outdoor use

Cooling capacity from 90 kW to 1200 kW



Outdoor installation



Low Noise



AC fans



High efficiency



Natural Refrigerant



Floating pack system

ROEN EST's V-shaped dry coolers with axial fans are suitable for outdoor applications, using highly sustainable R718 refrigerant and brines. Configurable for low noise levels and capacity to exactly match system requirements. Compared to cooling towers and wet systems, our V-shaped dry coolers require little maintenance and are highly effective in preventing Legionella contamination. The V-shape is ideal for remote installations where footprint is limited.

### FEATURES

- Use H<sub>2</sub>O natural refrigerant and brine
- **Finned coil:** Built with 1/2" copper tubes and louvered aluminum fins. Designed with 'Floating pack system', which allows the coil to levitate to avoid leaks
- **Fans:** Equipped as standard with AC fan motors. Axial fans with external rotor (380-480V III 50/60Hz) Compliant with ErP Directive Ø 800, 910 mm
- **Casing:** Pre-painted aluminum
- **Design pressure: PS=30bar PT=43bar**

### OPTIONS

#### FIN MATERIAL

- Copper Fins
- Coated Fins
- Other not standard fin material

#### CASING

- Anti dampers

#### ELECTRICAL OPTIONS

- EC fans
- Speed controller
- Wiring into centralized box (included with EC Fans)
- Service switch

Wiring + Magnetothermics

#### OTHER

- AquaAero
- Blygold
- Spray adiabatic system
- Pads adiabatic system (coming soon)
- Fan diffuser

### APPLICATION



Data Centre



Industry



Oil & Gas



## Orca

Packaged air-cooled screw chillers  
for outdoor use

Cooling capacity from 200 kW to 2500 kW



Air  
Condensed



Outdoor  
installation



Microchannel  
aluminium coils



EC axial  
fans



Screw  
compressors



Natural  
Refrigerant



ENEX INDUSTRIAL's packaged air-cooled screw chillers are ideal for outdoor use and suitable for HVAC and process cooling applications at high, medium and low temperatures. The system's modular concept and microchannel coils require a minimal charge of highly sustainable R717 refrigerant, increasing safety and shortening authorization processes.

### FEATURES

- Compact design
- Low NH<sub>3</sub> charge: down to 65 g/kW
- Modular design (up to 6 modules)
- Suitable for high ambient temperature
- Robust structure to avoid vibrations and leaks
- Easy maintenance
- High efficiency
- EC fans
- Semiwelded PHE evaporator
- Air-cooled oil cooler
- Electronic expansion and liquid injection valves
- Proprietary control logic (Siemens industrial PLC)
- Frequency inverters for compressor motors
- NH<sub>3</sub> leak detection unit

### OPTIONS

- Wide choice of compressor brands (semihermetic or open type) Mycom, Bitzer, Srmtec, GEA
- Sequence controller to manage multiple modules from the same control panel
- Dual temperature (evaporating from -40°C to -8°C with the same unit, Flex-Chiller)
- Total or partial heat recovery

### APPLICATION



Food storage



Food processing



Ice rink



Industry



Winery & Brewery



Oil & Gas



District cooling



## Mega

Custom packaged refrigeration system  
for outdoor use

Swept Volume from 80 m<sup>3</sup>/h to 4000 m<sup>3</sup>/h



Air  
Condensed



Outdoor  
installation



Screw  
compressors



Natural  
Refrigerant

The MEGA custom packaged refrigeration system from ENEX INDUSTRIAL is suitable for outdoor use. Using highly sustainable R717 refrigerant, the MEGA system can be configured for air-cooled, water-cooled or cooled by evaporative condenser with a flooded chiller, direct expansion or pumped. Ideal for industrial applications where no indoor plant room is available.

### FEATURES

- 1 to 3 compressors in parallel
- Wide range of evaporating temperature (one or two levels)
- Bespoke walk-in enclosure for ease of maintenance
- ATEX extraction fan to dissipate the heat generated by the motors (temperature controlled)
- Air intake vent
- NH<sub>3</sub> leak detection unit
- Painted steel drip tray
- Stainless steel 304L piping for water/brine circuit
- Common pressure relief valve headers with flanges on the enclosure wall
- Insulation of cold parts by injection of polyurethane foam under aluminum cladding
- Electrical cabinet with industrial PLC

### OPTIONS

- Multiple Compressor brand: Mycom, Bitzer, Srmtec, GEA, Howden, Vilter
- High efficiency motor
- **Condensing options:**
  - Dry air condenser
  - Adiabatic condenser
  - Evaporative condenser
  - Water condenser with dry cooler and pump skids
- **Cooling options:**
  - Flooded evaporator for fluid cooling
  - NH<sub>3</sub> pumping system
  - Direct expansion
- **Heat recovery options:**
  - Heat recovery oil cooler
  - Heat recovery desuperheater
  - Heat recovery condenser

### APPLICATION



Food storage



Food processing



Ice rink



Industry



Winery & Brewery



Oil & Gas



District cooling



## SC single

Custom single compressor pack for indoor use

Swept volume from 80 m<sup>3</sup>/h to 7600 m<sup>3</sup>/h



Indoor installation



Screw compressors



Natural Refrigerant

ENEX INDUSTRIAL's SC single compressor package unit is suitable for indoor use with integral oil separator and oil management system. Available with a wide choice of compressor brands using highly sustainable R717 refrigerant, the SC unit is ideal for very large industrial refrigeration systems, such as food processing and storage, where multiple single compressor units are preferred.

### FEATURES

- 1 screw compressor
- Wide range of evaporating and condensing temperatures
- Capacity and speed adapted to customer needs
- High efficiency horizontal or vertical oil separator
- Oil cooling system

### OPTIONS

- Multiple Compressor brand: Mycom, Bitzer, Srmtec, GEA, Howden, Vilter
- High efficiency motor
- **Oil cooler options:**
  - Thermosiphon
  - Water-cooled
- **Heat recovery options:**
  - Heat recovery oil cooler
  - Heat recovery desuperheater

### APPLICATION



Food storage



Food processing



Ice rink



Industry



Oil & Gas



District cooling





## SC rack

Custom multi-compressor rack for indoor use

Swept volume from 400 m<sup>3</sup>/h to 4000 m<sup>3</sup>/h



Indoor  
installation



Screw  
compressors



Natural  
Refrigerant

ENEX INDUSTRIAL's SC custom compressor rack is ideal for indoor use with multiple compressors, integral oil separator and oil management system. Available with a wide choice of compressor brands using highly sustainable R717 refrigerant and suitable for large industrial refrigeration systems such as food processing and storage.

## FEATURES

- 2 to 4 screw compressors
- Wide range of evaporating and condensing temperatures
- Capacity and speed adapted to customer needs
- High efficiency horizontal or vertical oil separator
- Oil cooling system

## OPTIONS

- Multiple Compressor brand: Mycom, Bitzer, Srmtec, GEA, Howden, Vilter
- High efficiency motor
- **Oil cooler options:**
  - Thermosiphon
  - Water-cooled
- **Heat recovery options:**
  - Heat recovery oil cooler
  - Heat recovery desuperheater

## APPLICATION



Food storage



Food processing



Ice rink



Industry



## NH<sub>3</sub> Cooling unit

W: Custom refrigeration system for indoor use

Swept Volume from 1000 m<sup>3</sup>/h to 12000 m<sup>3</sup>/h



Indoor installation



Screw compressors



Natural Refrigerant

The W custom refrigeration system from ENEX INDUSTRIAL is ideal for indoor use. Air-cooled with remote dry or evaporative condenser, water or brine cooled. Highly sustainable NH<sub>3</sub>/CO<sub>2</sub> cascade option provides outstanding efficiency especially in warm climates. Available with a pumped system option and suitable for large industrial refrigeration systems such as food processing and storage.

### FEATURES

- 2 to 4 compressors in parallel
- Wide range of evaporating temperature (one or two levels)
- Painted steel drip tray
- Stainless steel 304L piping for water/brine circuit

### OPTIONS

- Multiple Compressor brand: Mycom, Bitzer, Srmtec, GEA, Howden, Vilter
- High efficiency motor
- **Condensing options:**
  - Remote dry air condenser
  - Remote adiabatic condenser
  - Remote evaporative condenser
  - Water/brine cooled condenser with remote dry cooler and pump skid
  - NH<sub>3</sub>/CO<sub>2</sub> cascade system
- **Cooling options:**
  - Flooded evaporator for fluid cooling
  - NH<sub>3</sub> pumping system
  - Direct expansion
- **Heat recovery options:**
  - Heat recovery oil cooler
  - Heat recovery desuperheater
  - Heat recovery condenser
  - Insulation of cold parts by injection of polyurethane foam under aluminum cladding
  - Electrical cabinet with industrial PLC

### APPLICATION



Food storage



Food processing



Ice rink



Industry



District cooling



## Flat NH<sub>3</sub> condenser

CAP: Flat NH<sub>3</sub> condenser

Cooling capacity from 50 kW to 1100 kW



Outdoor installation



Low Noise



AC fans



High efficiency



Natural Refrigerant



ENEX INDUSTRIAL'S CAP flat NH<sub>3</sub> condenser with axial fans for outdoor use is ideal for industrial refrigeration applications. Compared to cooling towers and wet systems, the CAP system requires low maintenance is highly effective in preventing Legionella contamination. Stainless steel tubes offer compatibility with highly sustainable R717 refrigerant and maximum protection in aggressive environments.

### FEATURES

- **Finned coil:** Built with 5/8" stainless steel tubes and corrugated alu-minium fins
- **Fans:** Equipped as standard with AC fan motors. Axial fans with external rotor (380-480V III 50/60Hz) Compliant with ErP Directive Ø 800, 910, 1000 mm
- **Casing:** Galvanised steel painted with epoxy-polyester, and then baked and cured at 180°C giving it a high protection against corrosion even in extreme environmental conditions. Stainless steel screws
- **Design pressure: PS=30bar PT=43bar**

### OPTIONS

#### FIN MATERIAL

- AL-MG Fins
- Coated Fins

#### CASING

- Stainless steel

#### ELECTRICAL OPTIONS

- EC fans
- Service switch
- 60Hz fans

#### OTHER

- Circuits for sub-cooling
- Folding fans for inspection and cleaning of the finned package

### APPLICATION



Food storage



Food processing



Ice rink



Industry



# NH<sub>3</sub> Evaporative condenser

NCX: NH<sub>3</sub> evaporative condenser

Cooling capacity from 250 kW to 2500 kW



EC fans



Outdoor installation



Low Noise



Ultra compact coil



Easy access for maintenance



Natural Refrigerant



High efficiency

ENEX INDUSTRIAL's NCX evaporative condenser with axial fans for outdoor use is ideal for industrial refrigeration systems where efficiency must be optimized. Stainless steel tubes offer compatibility with highly sustainable R717 and maximum protection in aggressive environments. Designed with a small volume coil with minimal refrigerant charge for increased safety.

### FEATURES

- **Coil:** hot-dip galvanised in batch process according to UNE-EN ISO 1461:2010. Ultra compact design
- **Fans:** Equipped as standard with axial EC fan motors, with the latest generation of EC technology (integrated controller). Compliant with ErP Directive. Low noise level fans
- **Casing:** GRP (glass fibre reinforced polyester)  
Stainless steel screws  
Stainless steel anti-cavitation filter as standard

### OPTIONS

#### COIL

- Multicircuit
- Coil entirely made of stainless steel, AISI304L or AISI316L

#### CASING

- Perimeter maintenance ladder and walkways made exclusively of GRP
- Customisable colour

#### ELECTRICAL OPTIONS

- Electronic level control to replace the mechanical float valve
- Warning light

#### OTHER

- Heater installed in the recirculation water basin
- E-CARE water quality control system
- Reserve pump fitted with non-return valve
- 5-year extended Premium warranty with 24-hour after-sales service

### APPLICATION



Food storage



Food processing



Ice rink



Industry



# NH<sub>3</sub> V-shaped condenser

CAV: NH<sub>3</sub> V-shaped condenser

Cooling capacity from 180 kW to 1500 kW



AC fans



Outdoor installation



High efficiency



Low Noise



Natural Refrigerant

ENEX INDUSTRIAL's CAV V-shaped condenser with axial fans for outdoor use is ideal for industrial refrigeration applications. Stainless steel tubes offer compatibility with highly sustainable R717 refrigerant and maximum protection in aggressive environments. The V-shape is suitable for remote installations where footprint is limited. Optional adiabatic panels increase efficiency particularly in warm climates.

### FEATURES

- **Finned coil:** Built with 5/8" stainless steel tubes and corrugated aluminium fins
- **Fans:** Equipped as standard with AC fan motors. Axial fans with external rotor (380-480V III 50/60Hz) Compliant with ErP Directive Ø 800, 910, 1000 mm
- **Casing:** Galvanised steel painted with epoxy-polyester, and then baked and cured at 180°C giving it a high protection against corrosion even in extreme environmental conditions. Stainless steel screws
- **Design pressure: PS=30bar PT=43bar**

### OPTIONS

#### FIN MATERIAL

- AL-MG Fins
- Coated Fins

#### CASING

- Stainless steel

#### ELECTRICAL OPTIONS

- EC fans
- Service switch
- 60Hz fans

#### OTHER

- Circuits for sub-cooling
- Folding fans for inspection and cleaning of the finned package.
- Panel adiabatic system
- Spray adiabatic system

### APPLICATION



Food storage



Food processing



Ice rink



Industry





## NH<sub>3</sub> Cubic unit cooler

EC: Cubic NH<sub>3</sub> & brine unit coolers

Cooling capacity from 3 kW to 550 kW



AC fans



All fluids ready



Natural Refrigerant



High efficiency

ENEX INDUSTRIAL's EC cubic unit coolers for small to large cold rooms, are ideal for cooling and freezing applications. Specifically designed for pumped and gravity-fed flooded systems using highly sustainable R717 refrigerant. Stainless steel tubes offer NH<sub>3</sub> compatibility and maximum protection in aggressive environments.

### FEATURES

- **Finned coil:** Built with stainless steel tubes AISI 304 of 5/8" Ø square geometry & 7/8" Ø staggered geometry, and aluminium fins
- **Fans:** Equipped as standard with AC fan motors. Axial three-phase motors (380-480V III 50Hz). Compliant with ErP Directive. Ø 350, 450, 500, 560, 630, 800, 910 mm
- **Casing:** Galvanized painted aluminum, creates high protection against corrosion even in extreme environmental conditions; in addition, this casing complies with the most stringent food hygiene standards
- **Insulated tray:** with polyurethane as standard to avoid condensation. Tray made entirely of GRP (fiberglass reinforced polyester), a light and resistant material, rigid, resistant to corrosion and a good thermal, acoustic and electrical insulator
- **Design pressure: PS=30bar PT=43bar**

### OPTIONS

#### FIN MATERIAL

- AL-MG Fins
- Coated Fins

#### CASING

- Stainless Steel

#### DEFROST

- Hot gas defrost
- Hot gas defrost in coil and electric in tray
- Electric defrost
- Water defrost
- Fan ring heaters

#### OTHER

- Connection to textile sleeves
- Shut-up System
- EOS Streamer Plus
- Suction hoppers
- Discharge hoppers with over-pressure dampers for defrosting optimization
- EC fans
- Impellent fans
- Centrifugal fans
- Adjustable support legs

### APPLICATION



Food processing



Food storage



Industry



# NH<sub>3</sub> dual discharge unit cooler

ED: Dual discharge NH<sub>3</sub> & brine unit coolers

Cooling capacity from 4 kW to 250 kW



AC fans



All fluids ready



Natural Refrigerant



High efficiency

ENEX INDUSTRIAL's ED dual discharge unit coolers for small to large cold rooms are ideal for cooling and freezing applications. Specifically designed for pumped and gravity-fed flooded systems using highly sustainable R717 refrigerant. Stainless steel tubes offer NH<sub>3</sub> compatibility and maximum protection in aggressive environments. Suitable for working areas (food preparation rooms, corridors) and temperature sensitive products (meat, fish, fruits etc.) where indirect air flow is preferred.

### FEATURES

- **Finned coil:** Built with stainless steel tubes AISI 304 of 5/8" Ø square geometry & 7/8" Ø staggered geometry, and aluminium fins
- **Fans:** Equipped as standard with AC fan motors. Axial three-phase motors (380-480V III 50Hz) Compliant with ErP Directive Ø 350, 450, 500, 560, 630, 800, 910 mm
- **Casing:** Galvanized painted aluminum, creates high protection against corrosion even in extreme environmental conditions; in addition, this casing complies with the most stringent food hygiene standards
- **Insulated tray:** with polyurethane as standard to avoid condensation. Tray made entirely of GRP (fiberglass reinforced polyester), a light and resistant material, rigid, resistant to corrosion and a good thermal, acoustic and electrical insulator
- **Design pressure: PS=30bar PT=43bar**

### OPTIONS

#### FIN MATERIAL

- AL-MG Fins
- Coated Fins

#### CASING

- Stainless Steel

#### DEFROST

- Hot gas defrost
- Hot gas defrost in coil and electric in tray

- Electric defrost

Water defrost

- Fan ring heaters

#### OTHER

- EC fans

### APPLICATION



Food processing



Food storage



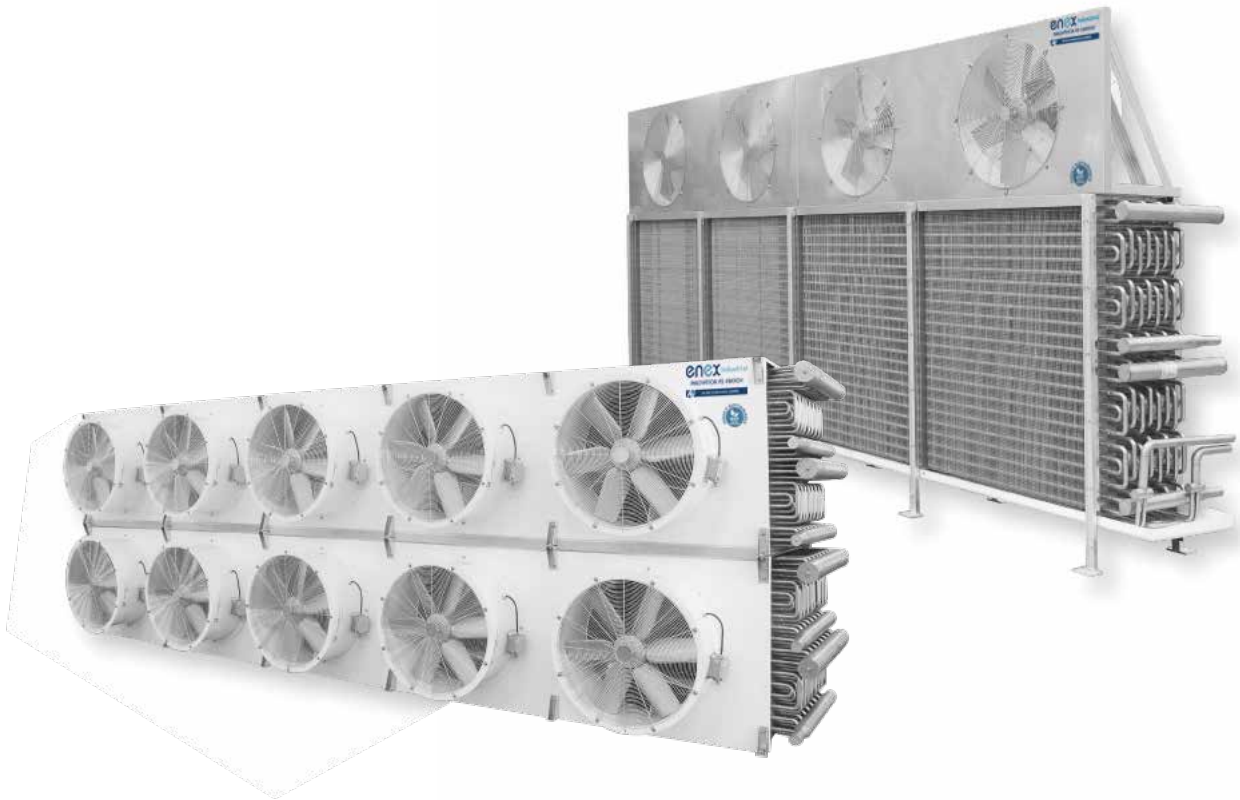
Industry



# NH<sub>3</sub> Blast freezer

BTV/BF/SBF/ECT: NH<sub>3</sub> & brine blast freezers

Cooling capacity from 15 kW to 550 kW



AC fans



All fluids ready



Natural Refrigerant



High efficiency



ENEX INDUSTRIAL's NH<sub>3</sub> and brine blast freezer units are designed for fast cooling and freezing applications, requiring a uniform air distribution in the cold room. Engineered for a fast and homogeneous process that causes the formation of small ice crystals, which allows the food cells to retain their organoleptic properties. Stainless steel tubes offer compatibility with highly sustainable R717 refrigerant and maximum protection in aggressive environments.

### FEATURES

- **Finned coil:** Built with stainless steel tubes AISI 304 of 5/8" Ø square geometry & 7/8" Ø staggered geometry, and aluminium fins
- **Fans:** Equipped as standard with AC fan motors. Axial three-phase motors (380–480V III 50Hz) Compliant with ErP Directive Ø 630, 800, 910 mm
- **Casing:** Galvanized painted aluminum, creates a high protection against corrosion even in extreme environmental conditions. In addition, this casing complies with the most stringent food hygiene standards
- **Insulated tray:** with polyurethane as standard to avoid condensation. Tray made entirely of GRP (fiberglass reinforced polyester), a light and resistant material, rigid, resistant to corrosion and a good thermal, acoustic and electrical insulator
- **Design pressure: PS=30bar PT=43bar**

### OPTIONS

#### FIN MATERIAL

- AL-MG Fins
- Coated Fins

#### CASING

- Stainless Steel

#### DEFROST

- Hot gas defrost
- Hot gas defrost in coil and electric in tray
- Electric defrost
- Water defrost
- Fan ring heaters

#### OTHER

- High pressure fans for >200Pa (ESP)
- EC fans
- Impellent fans
- Centrifugal fans
- Adjustable support legs

### APPLICATION



Food processing



Food storage



Industry



# CO<sub>2</sub> Blast freezer

KEB/KEV: CO<sub>2</sub> & brine blast freezers

Cooling capacity from 15 kW to 95 kW



AC fans



High pressure fans



All fluids ready



High efficiency



Natural Refrigerant

ENEX's CO<sub>2</sub> and brine blast freezer units are designed for fast cooling and freezing applications that require a uniform air distribution in the cold room and are compatible with highly sustainable R744 refrigerant. Engineered for a fast and homogeneous process that causes the formation of small ice crystals, which allows the food cells to retain their organoleptic properties.

### FEATURES

- **Finned coil:** Built with grooved copper tubes 5/8" Ø, and corrugated aluminium fins, manufactured according to CUPROCLIMA® specifications
- **Fans:** Equipped as standard with AC fan motors. Axial motors (380-480V III 50Hz). Compliant with ErP Directive. Ø 500, 630 mm
- **Casing:** galvanised steel painted with epoxy-polyester, and then baked and cured at 180°C creates high protection against corrosion even in extreme environmental conditions. In addition, this casing complies with the most stringent food hygiene standards
- **Design pressure: PS=60bar PT=86bar**

### OPTIONS

#### FIN MATERIAL

- Copper Fins (only fin spacing 7mm)
- Coated Fins

#### CASING

- Stainless Steel
- Side protections
- Separate ventilation kit (Only KEV range)

#### DEFROST

- Hot gas defrost
- Hot gas defrost in coil and electric in tray
- Electric defrost
- Water defrost
- Fan ring heater

#### OTHER

- AquaAero
- Blygold
- 60Hz Fans

### APPLICATION



Food processing



Food storage



Industry

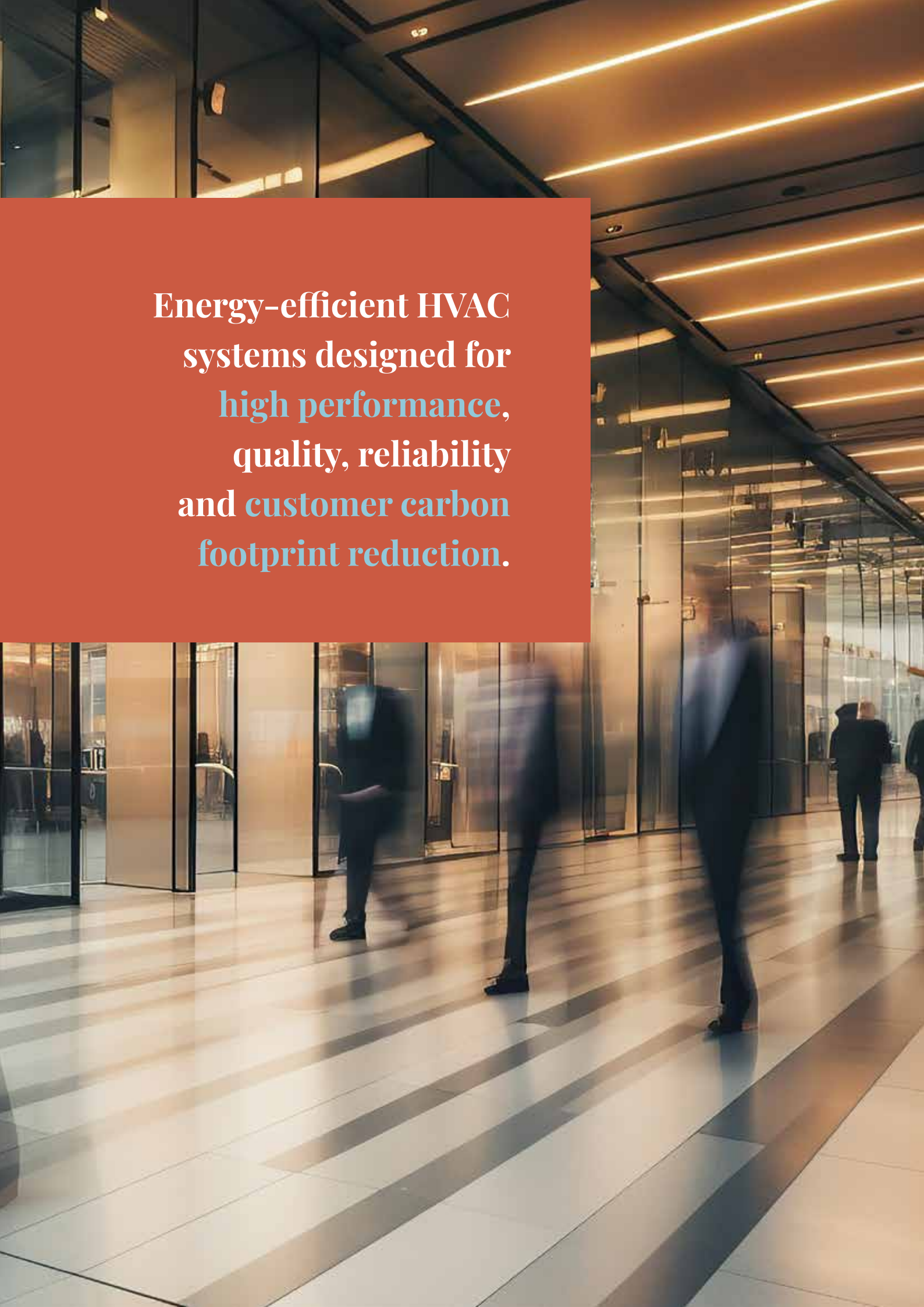


# HVAC

Enex Technologies provides a wide range of chillers, heat pumps and multi-pipe units using natural refrigerants such as propane and CO<sub>2</sub> for space cooling, space heating and domestic hot water, and suitable for office buildings, hotels, shopping malls, hospitals, data centres and other industrial applications. Enex Technologies is a pioneer in the use of propane and CO<sub>2</sub> refrigerants in HVAC and has the expertise to always recommend the best natural refrigerant for the application.







**Energy-efficient HVAC  
systems designed for  
high performance,  
quality, reliability  
and customer carbon  
footprint reduction.**



## Air-cooled reciprocating chiller

RAS MC Kp: Packaged air-cooled reciprocating chillers for outdoor use

Cooling capacity from 54 kW to 350 kW



Air  
Condensed



AC Axial fans



Semihermetic  
reciprocating  
compressors



Plate  
exchangers



Microchannel  
aluminium coils



EC Axial fans  
(Option)



Outdoor  
installation



Inverter  
technology



Natural  
Refrigerant



High efficiency  
(Option)



## HVAC

### R290 chillers

EMICON's propane packaged air-cooled reciprocating chillers for outdoor use, suitable for HVAC and high temperature process cooling applications. Microchannel condenser coils mean only a minimal charge of highly sustainable R290 refrigerant is required.

## FEATURES

- 1 or 2 independent cooling circuits equipped with 1 or 2 compressors for each circuit
- Possibility to interface to BMS system
- Leak sensor turns off the compressors and activates the extraction fan in case of a refrigerant leak

## OPTIONS

- Operation in cooling mode down to  $-10^{\circ}\text{C}$  (Opt. BT) or  $-20^{\circ}\text{C}$  (Opt. BF)
- Soundproofed compressors cabinet with higher thickness material
- Partial heat recovery
- Electronic thermostatic valve
- Part-Winding compressor start-up system
- Advanced Cascade system - up to n.6 units
- BACNET or TCP/IP Protocol serial interface with RS 485
- Inverter for pump
- Hiweb supervision system

## APPLICATION



Hospitality



Office building



Healthcare



Shopping mall



Data Centre



Airport



Sports & Leisure



Food processing

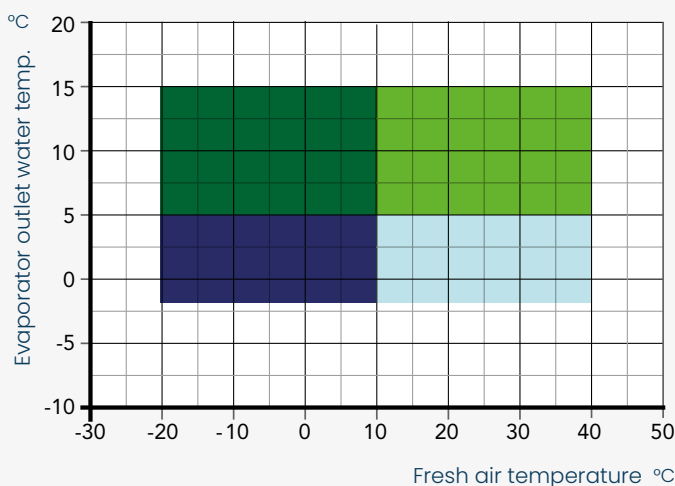


Industry



District cooling

## Operating range



- Cooling mode with condensing pressure control
- Cooling mode
- Cooling mode with condensing pressure control and glycol
- Cooling mode with glycol



## Free cooling chiller

RAS F Kp: Packaged air-cooled reciprocating chillers for outdoor use with free cooling

Cooling capacity from 54 kW to 350 kW



Air  
Condensed



AC Axial fans



Semihermetic  
reciprocating  
compressors



Plate  
exchangers



Microchannel  
aluminium coils



EC Axial fans  
(Option)



Outdoor  
installation



Free  
Cooling



Natural  
Refrigerant



High efficiency  
(Option)



Inverter  
technology

## HVAC

### R290 chillers

EMICON's propane packaged air-cooled reciprocating chillers for outdoor use with free cooling, using highly sustainable R290 refrigerant, are suitable for high temperature process cooling applications, data centres and in general where cooling is required all year round. When the outdoor ambient temperature is sufficiently low, the integral free cooling coils allow cooling without operating the compressors.

## FEATURES

- 1 or 2 independent cooling circuits equipped with 1 or 2 compressors for each circuit
- Possibility to interface to BMS system
- Leak sensor turns off the compressors and activates the extraction fan in case of a refrigerant leak
- Integrated free-cooling section allows for partial or total recovery of cooling capacity from external air with low energy consumption

## OPTIONS

- Soundproof compressor cabinet with higher thickness material
- Axial fans with electronic commutated motor
- Partial heat recovery
- Electronic thermostatic valve
- Part-Winding compressor start-up system
- Advanced Cascade system - up to n.6 units
- BACNET or TCP/IP Protocol serial interface with RS 485
- Inverter for pump and compressor

## APPLICATION



Data Centre



Food processing

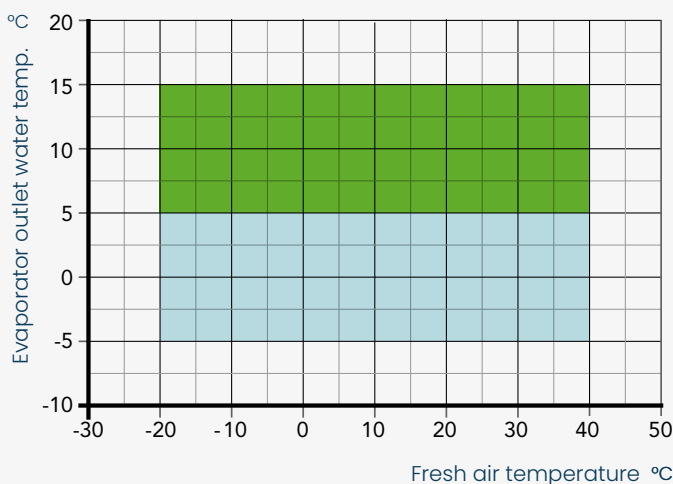


Industry



District cooling

## Operating range





# Water-cooled reciprocating chiller

RWS Kp: Packaged water-cooled reciprocating chillers for indoor and outdoor use

Cooling capacity from 60 kW to 390 kW



Water Condensed



Semihhermetic reciprocating compressors



Inverter technology



Plate exchangers



Natural Refrigerant



Indoor installation

## HVAC

### R290 chillers

EMICON's propane packaged water-cooled reciprocating chillers for indoor and outdoor use, using highly sustainable R290 refrigerant, are suitable for HVAC and high temperature process cooling applications.

## FEATURES

- 1, 2 or 4 independent cooling circuits equipped with 1 compressor for each circuit
- Soundproof compressor cabinet with higher thickness material
- Possibility to interface to BMS system
- Leak sensor turns off the compressors and activates the extraction fan in case of a refrigerant leak

## OPTIONS

- User connections on top
- Part-winding compressor start-up system
- Partial heat recovery
- Electronic thermostatic valve
- BACNET or TCP/IP Protocol serial interface with RS 485
- Advanced Cascade system
- Hiweb supervision system

## APPLICATION



Hospitality



Office building



Healthcare



Shopping mall



Data Centre



Airport



Sports & Leisure



Food processing

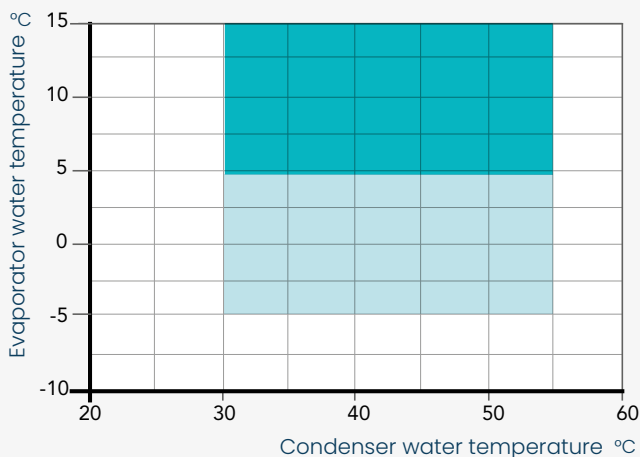




Industry



District cooling

## Operating range



-  Cooling mode
-  Cooling mode with glycol



## Everest<sup>290</sup> heat pump

PAE/PAE WA Kp: Modular packaged air-to-water reversible scroll heat pump for outdoor use

Cooling capacity from 66 kW / Heating capacity from 88 kW



Air Condensed



Scroll compressors



Plate exchangers



High efficiency



EC Axial fans (Option)



Outdoor installation



Natural Refrigerant



Easy access for maintenance



## HVAC

### R290 Heat pumps – 2 pipe

EMICON's Everest<sup>290</sup> packaged air-to-water reversible scroll propane heat pump for outdoor use, incorporates a fully modular concept that ensures an extremely low charge of highly sustainable R290 refrigerant per circuit, providing maximum safety. Suitable for all HVAC applications and capable of producing hot water up to 70°C. The latest generation scroll compressors guarantee outstanding efficiencies and wide operating limits, down to -20°C outdoor ambient in heating mode. Heating-optimized and cooling-optimized versions.

## FEATURES

- **Capacity expansion:** up to a maximum of 10 units
- **Extensibility:** possibility to extend the installation whenever necessary, even after start-up
- **High efficiency even at partial loads**
- **Minimal refrigerant charge** for each unit, in modular configuration. Additionally, each refrigerant circuit is isolated, thus reducing waste to the minimum in case of refrigerant leakage
- **Operation continuity** with the 'Master in rotation' logic that allows one of the modules to be excluded for ordinary or extraordinary maintenance or for any other customer requirement, with no interruption to the operation of all other units
- **Easy maintenance** thanks to the 'slide in-slide out' system
- **Accessibility:** Main components are accessible from the front for easy maintenance

## APPLICATION



Hospitality



Office building



Healthcare



Shopping mall



Apartment building

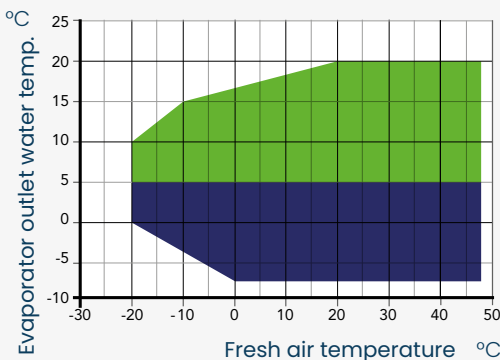


Airport



Sports & Leisure

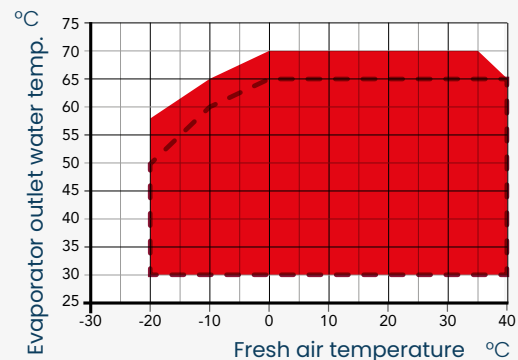
## Operating range



Cooling mode



Cooling mode with glycol



Heating mode PAE Kp



Heating mode PAE WA Kp



# Air-to-water reciprocating heat pump

PAS Kp: packaged air-to-water reversible reciprocating heat pump for outdoor use

Cooling capacity from 36 kW to 297 kW  
Heating capacity from 43 kW to 335 kW



Air Condensed



AC Axial fans



Semihermetic reciprocating compressors



Plate exchangers



Microchannel aluminium coils



EC Axial fans (Option)



Inverter technology



Outdoor installation



Natural Refrigerant



High efficiency (Option)

## HVAC

### R290 Heat pumps – 2 pipe

EMICON's propane packaged air-to-water reversible reciprocating heat pump, using highly sustainable R290 refrigerant, is suitable for outdoor use, in all HVAC applications.

## FEATURES

- 1 or 2 independent cooling circuits equipped with 1 or 2 compressors for each circuit.
- Possibility to interface to BMS system.
- Leak sensor turns off the compressors and activates the extraction fan in case of a refrigerant leak.
- Operation in cooling mode down to  $-10^{\circ}\text{C}$

## OPTIONS

- Operation in cooling mode down to  $-20^{\circ}\text{C}$  (Opt. BF)
- Soundproof compressor cabinet with higher thickness material
- Partial heat recovery
- Electronic thermostatic valve
- Part-winding compressor start-up system
- Advanced Cascade system – up to n.6 units
- BACNET or TCP/IP Protocol serial interface with RS 485
- Inverter for pump
- Hiweb supervision system

## APPLICATION



Hospitality



Office building



Healthcare



Shopping mall

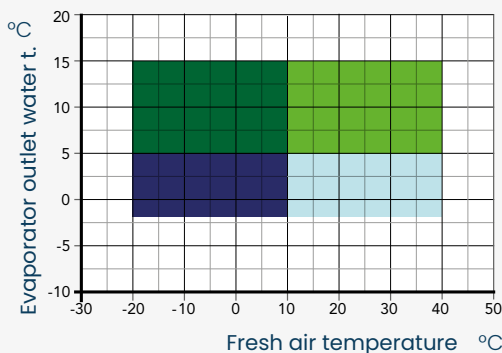


Airport

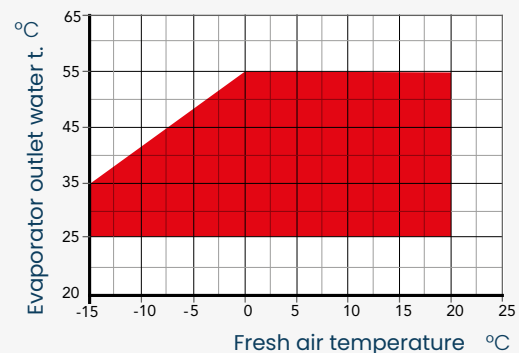


Sports & Leisure

## Operating range



- Cooling mode with condensing pressure control
- Cooling mode
- Cooling mode with condensing pressure control and glycol



- Cooling mode with glycol
- Heating mode



## Everest<sup>290</sup> 4-Pipe

GPE Kp: Modular packaged air-to-water reversible scroll multi-pipe unit for outdoor use

Cooling capacity from 72 kW / Heating capacity from 101 kW



Air  
Condensed



Scroll  
compressors



Plate  
exchangers



High efficiency



EC Axial fans  
(Option)



Outdoor  
installation



R290  
Natural  
Refrigerant

## HVAC

### R290 Heat pumps – 4 pipe

EMICON's Everst<sup>290</sup> propane packaged air-to-water reversible scroll multi-pipe unit for outdoor use, incorporates a fully modular concept that ensures an extremely low charge of highly sustainable R290 refrigerant per circuit, providing maximum safety. Suitable for all HVAC applications where simultaneous or independent production of chilled and hot water is required, such as hotels and buildings with glass facades. The latest generation scroll compressors provide outstanding efficiencies and wide operating limits, down to  $-20^{\circ}\text{C}$  in heating mode and  $+48^{\circ}\text{C}$  outdoor ambient in cooling mode. Heating-optimized and cooling-optimized versions.

## FEATURES

- **Capacity expansion:** up to a maximum of 10 units
- **Extensibility:** possibility to extend the installation whenever necessary, even after start-up
- **High efficiency even at partial loads**
- **Minimal refrigerant charge** for each unit, in modular configuration. Additionally, each refrigerant circuit is isolated, thus reducing waste to the minimum in case of refrigerant leakage
- **Operation continuity** with the 'Master in rotation' logic that allows one of the modules to be excluded for ordinary or extraordinary maintenance or for any other customer requirement, with no interruption to the operation of all other units
- **Easy maintenance** thanks to the 'slide in-slide out' system
- **Accessibility:** Main components are all accessible from the front for easy maintenance

## APPLICATION



Hospitality



Office building



Healthcare



Shopping mall

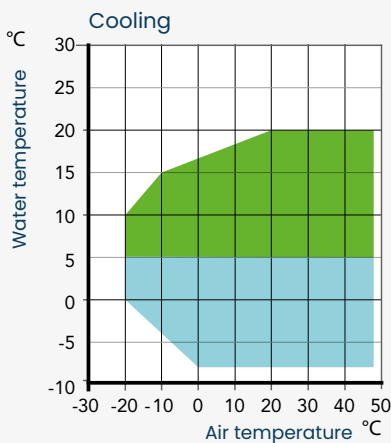


Airport

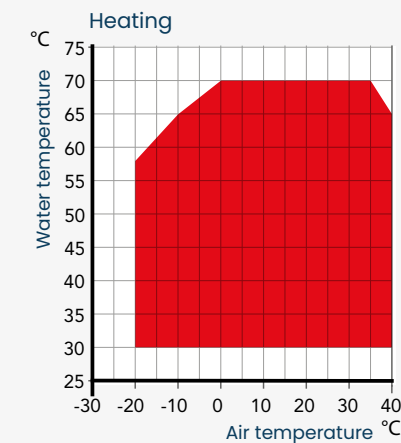


Sports & Leisure

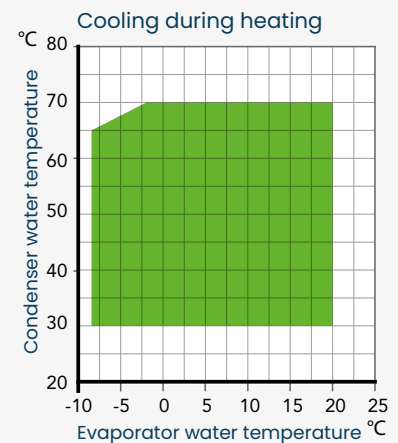
## Operating range



Cooling mode



Cooling with glycol



Heating mode



# Air-to-water reciprocating 4-Pipe

GPS Kp: Packaged air-to-water reversible reciprocating multi-pipe unit for outdoor use

Cooling capacity from 49 kW to 285 kW  
Heating capacity from 58 kW to 325 kW



Air Condensed



AC Axial fans



Semihhermetic reciprocating compressors



Plate exchangers



EC Axial fans (Option)



Outdoor installation



Inverter technology (Option)



High efficiency (Option)



Natural Refrigerant



## HVAC

### R290 Heat pumps – 4 pipe

EMICON's propane packaged air-to-water reversible reciprocating multi-pipe unit for outdoor use, using highly sustainable R290 refrigerant, is suitable for all HVAC applications where simultaneous or independent production of chilled and hot water is required, such as hotels and buildings with glass facades.

## FEATURES

- 1 or 2 independent cooling circuits equipped with 1 or 2 compressors for each circuit
- Possibility to interface to BMS system
- Leak sensor which turns off the compressors and activates the extraction fan in case of a refrigerant leak

## OPTIONS

- **GPS VS HE Kp** - high efficiency version
- Axial fans with electronic commutated motor (EC fans)
- BACNET or TCP/IP Protocol serial interface with RS 485
- Enhanced microprocessor board
- Remote display
- Advanced Cascade system
- Hi.Pro Web software
- Copper/Copper coil
- Pumps kit
- Inverter on compressors (**VS** version)
- Brine Version

## APPLICATION



Hospitality



Office building



Healthcare



Shopping mall

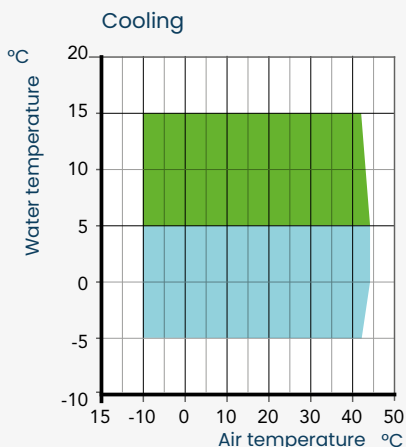


Airport

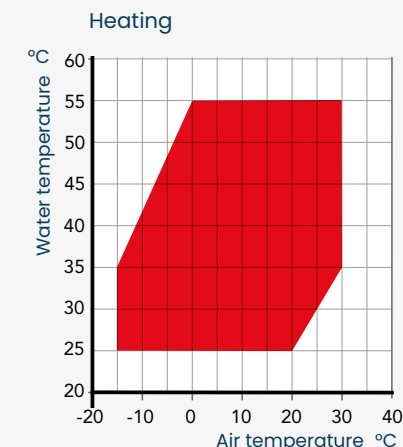


Sports & Leisure

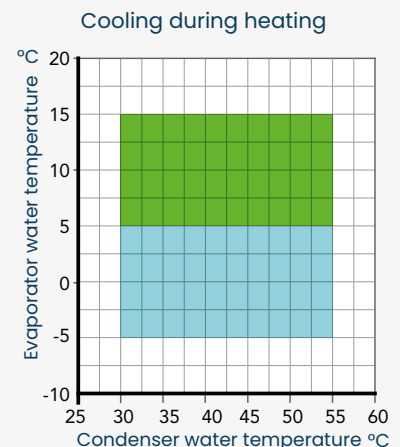
## Operating range



Cooling mode



Cooling with glycol



Heating mode



## Air-to-water screw 4-Pipe

GPH S Kp: Packaged air-to-water reversible screw multi-pipe unit for outdoor use

Cooling capacity from 340 kW to 600 kW  
Heating capacity from 390 kW to 676 kW



Air  
Condensed



AC Axial fans



Screw  
compressors



Plate  
exchangers



Low  
Noise



EC Axial fans  
(Option)



Outdoor  
installation



Inverter  
technology  
(Option)



Natural  
Refrigerant



High efficiency  
(Option)

## HVAC

### R290 Heat pumps – 4 pipe

EMICON's propane packaged air-to-water reversible screw multi-pipe unit for outdoor use, using highly sustainable R290 refrigerant, is suitable for all HVAC applications where simultaneous or independent production of chilled and hot water is required, such as hotels and buildings with glass facades.

## FEATURES

- 2 independent cooling circuits equipped with 1 or 2 compressors for each circuit
- Possibility to interface to BMS system
- Leak sensor turns off the compressors and activates the extraction fan in case of a refrigerant leak

## OPTIONS

- **GPV VS HES Kp** - High efficiency version (Full inverter)
- Axial fans with electronic commutated motor (EC fans)
- BACNET or TCP/IP Protocol serial interface with RS 485
- Enhanced microprocessor board
- Remote display
- Advanced Cascade system
- Hi.Pro Web software
- Copper/Copper coil
- Pumps kit

## APPLICATION



Hospitality



Office building



Healthcare



Shopping mall

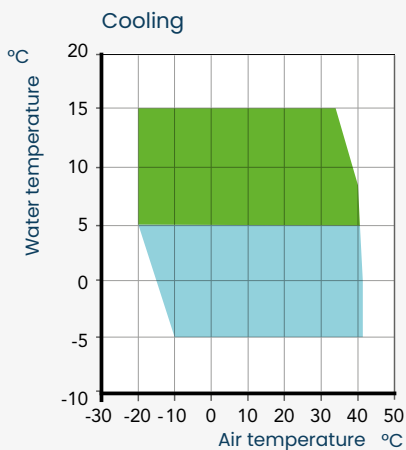


Airport

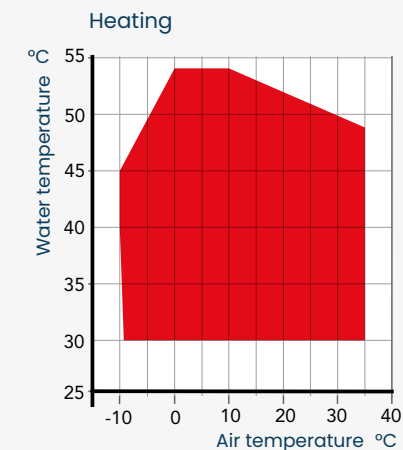



Sports & Leisure

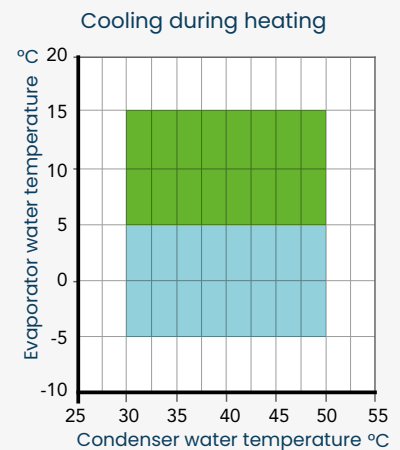
## Operating range



 Cooling mode



 Cooling with glycol



 Heating mode



# YUKON C

Split air-cooled reciprocating chiller with remote gas cooler

Cooling capacity from 35 kW to 940 kW



Remote gas cooler



Water-cooled (option)



Semihermetic reciprocating compressors



Plate exchangers



Flooded evaporator



Low Noise



Indoor/Outdoor installation



Inverter technology



Natural Refrigerant



Connectivity



High hot water temperature

ENEX's YUKON C split air-cooled reciprocating chiller with remote gas cooler, using highly sustainable R744 refrigerant, is ideal for HVAC and high temperature process applications. Based on a transcritical CO<sub>2</sub> cycle and featuring a gravity fed flooded evaporator, it is suitable when a non toxic/non flammable refrigerant is preferred, when the installation is split, for example for noise requirements, and when heat recovery at high temperature (up to 80°C) is required.

## FEATURES

- Welded steel frame
- Gravity fed flooded evaporator
- Reciprocating compressors
- Stainless steel piping
- Proprietary control software
- Mechanical backup valves
- Frequency converter on first compressor
- Ducting of relief valves
- Connectivity via Modbus TCP/IP
- Energy meter
- Remote monitoring
- Liquid receiver with PS 80 bar
- Pressure rating HP side PS=130 bar

## OPTIONS

- Up to 2 heat recovery exchangers for low, medium or high  $\Delta T$
- Cladding for outdoor use & noise reduction
- Ejector (on some models)
- Gas cooler bypass (LT kit for low ambient)
- Remote gas cooler (standard and low noise)
- Pressure rating HP side PS=140 bar

## APPLICATION



Hospitality



Office building



Healthcare



Shopping mall



Data Centre



Airport



Sports & Leisure

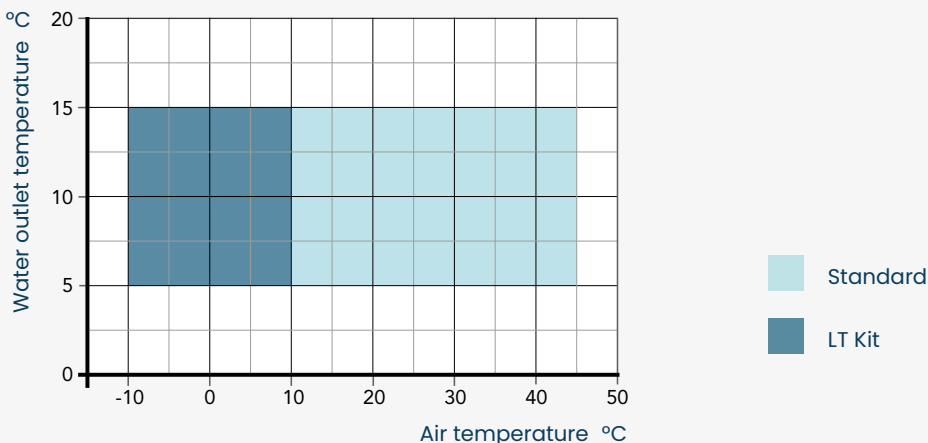


Industry



District cooling

## Operating range





# YUKON R

Split air-to-water reciprocating 4-Pipe unit with remote reversible gas cooler

Cooling Capacity from 34 kW to 570 kW  
Heating Capacity from 34 kW to 545 kW



Remote gas cooler



Water-cooled (option)



Semihermetic reciprocating compressors



Plate exchangers



Flooded evaporator



Low Noise



Indoor/Outdoor installation



Inverter technology



Natural Refrigerant



Connectivity



High hot water temperature



## HVAC

### CO<sub>2</sub> Heat pumps - 4 pipe

ENEX's YUKON R split air-to-water reciprocating multi-purpose unit with remote reversible gas cooler, using highly sustainable R744 refrigerant, is ideal for all HVAC applications where simultaneous or independent production of chilled and hot water is required, such as hotels and buildings with glass facades. Based on a transcritical CO<sub>2</sub> cycle and featuring a gravity fed flooded evaporator, it is suitable when a non toxic/non flammable refrigerant is preferred, when the installation is split, for example for noise requirements, and when heat recovery at high temperature (up to 80°C) is required.

## FEATURES

- Welded steel frame
- Gravity fed flooded evaporator
- Reciprocating compressors
- Stainless steel piping
- Proprietary control software
- Mechanical backup valves
- Frequency converter on first compressor
- Ducting of relief valves
- Connectivity via Modbus TCP/IP
- Energy meter
- Remote monitoring
- Liquid receiver with PS 80 bar
- Pressure rating HP side PS=130 bar
- $\Delta T$  up to 70K in heating mode

## OPTIONS

- Up to 2 heat recovery exchangers for low, or high  $\Delta T$
- Cladding for outdoor use & noise reduction
- Ejector (on some models)
- Gas cooler bypass (LT kit for low ambient in cooling mode)
- Remote reversible gas cooler (standard and low noise)
- Pressure rating HP side PS=140 bar

## APPLICATION



Hospitality



Office building



Healthcare



Shopping mall

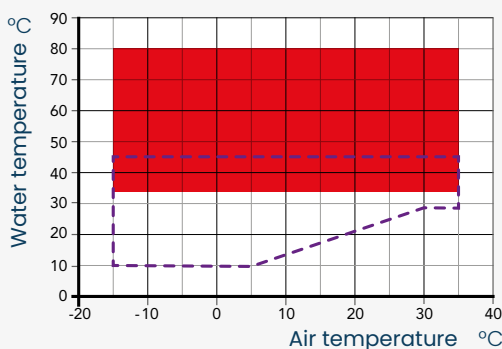


Airport

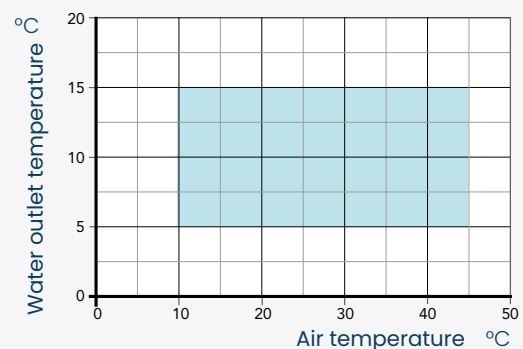


Sports & Leisure

## Operating range



- Heating mode - Water outlet
- Heating mode - Water inlet



- Cooling mode



## AIRHEAT

Packaged air-to-water reciprocating heat pump for outdoor use, for domestic hot water production

Heating capacity from 10 kW to 100 kW for **domestic hot water** production applications or **process heating** with high delta temperature, up to 90 °C



EC Axial fans



Semihhermetic reciprocating compressors



Plate exchangers



Low Noise



Outdoor installation



Natural Refrigerant



Connectivity



Plug & play



High hot water temperature

## HVAC

### CO<sub>2</sub> Heat pumps

ENEX's packaged air-to-water reciprocating heat pump for outdoor use, with highly sustainable R744 refrigerant, is suitable for domestic hot water production, in hotels, laundries, hospitals, gyms and in general where large quantities of DHW are required. Capable of heating hot water from 10 to 90°C in one pass with outstanding efficiency, as a result of the advantageous characteristics of the CO<sub>2</sub> transcritical cycle.

## FEATURES

- Finned pack evaporator
- Stainless steel piping
- Hot gas defrost
- Electronic expansion valve
- Proprietary control software
- Variable speed water pump
- Remote monitoring
- Connectivity via Modbus TCP/IP
- $\Delta T$  up to 85K

## OPTIONS

- Double wall heat exchanger
- Water pump suitable for domestic hot water
- Soft starter
- Low noise
- Cold recovery
- Coil enhanced corrosion protection
- Energy meter

## APPLICATION



Hospitality



Healthcare



Apartment building



Swimming pool

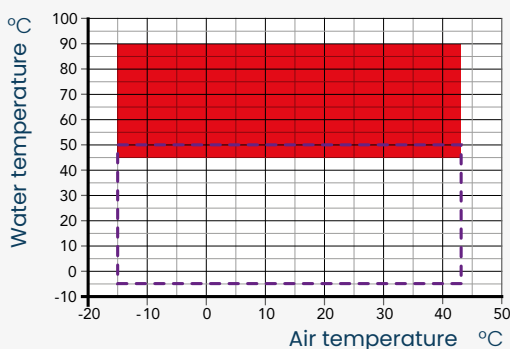


Laundry



Sports & Leisure

## Operating range



$\Delta T$  min = 20K



## GEOHEAT

Packaged water-to-water reciprocating heat pump for indoor use, for domestic hot water production

Heating capacity from 10 kW to 100 kW for **domestic hot water** production applications or **process heating** with high delta temperature, up to 90 °C



Semihermetic reciprocating compressors



Plate exchangers



Low Noise



Indoor installation



Natural Refrigerant



Plug & play



Connectivity



High hot water temperature

## HVAC

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Hospitality



Healthcare



Apartment building



Swimming pool

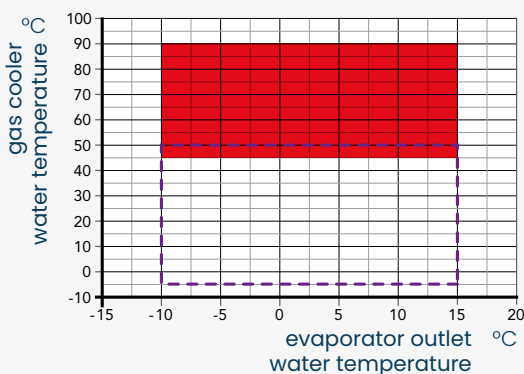


Laundry





Sports & Leisure

## Operating range



$\Delta T \text{ min} = 20K$

-  Heating mode - Water outlet
-  Heating mode - Water inlet



# District Heating

Enex Technologies provides a wide range of industrial heat pumps using natural refrigerants including CO<sub>2</sub> and ammonia, suitable for district heating, industrial processes and for boosting low-grade waste heat to high temperature, in applications such as steam generation preheating, injection into district networks and domestic hot water production.





Natural refrigerant  
solutions to **decarbonize**  
district heating  
networks and recover  
industrial waste heat





## YUKON D

Split air-to-water heating only reciprocating heat pump with remote evaporator

Heating capacity from 36 kW to 560 kW



Remote evaporator



Water-cooled (option)



Semihermetic reciprocating compressors



Plate exchangers



Low Noise



Indoor/Outdoor installation



Inverter technology



High hot water temperature



Natural Refrigerant



Connectivity

## District Heating

### CO<sub>2</sub> heat pump

The YUKON D split air-to-water heating only reciprocating heat pump with remote evaporator from ENEX uses highly sustainable R744 refrigerant. It is based on a transcritical CO<sub>2</sub> cycle, and is the ideal choice when water must be heated at high temperatures (up to 80°C) with a large  $\Delta T$ , such as in district heating applications, and when a non toxic/non flammable refrigerant is preferred.

## FEATURES

- Welded steel frame
- Reciprocating compressors
- Stainless steel piping
- Proprietary control software
- Mechanical backup valves
- Frequency converter on first compressor
- Ducting of relief valves
- Connectivity via Modbus TCP/IP
- Energy meter
- Remote monitoring
- $\Delta T$  up to 70K in heating mode
- Liquid receiver with PS 80 bar
- Pressure rating HP side PS=130 bar

## OPTIONS

- Up to 2 heat recovery exchangers for low, medium or high  $\Delta T$
- Cladding for outdoor use & noise reduction
- Remote evaporator (standard and low noise)

## APPLICATION



Industry

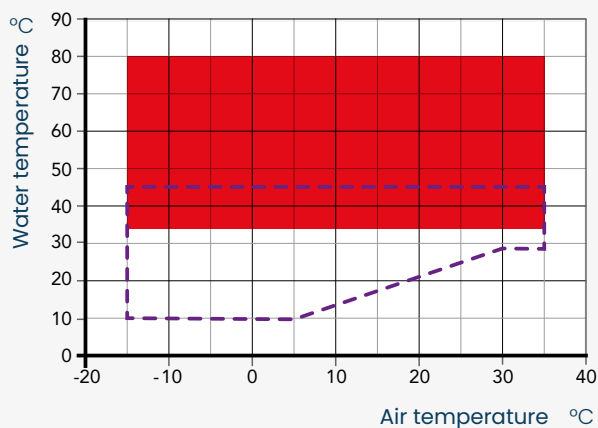


District heating



Hospitality

## Operating range



■ Heating mode - Water outlet

□ Heating mode - Water inlet





# NH<sub>3</sub> Industrial heat pump

WH: Custom heat pump for indoor use

Cooling capacity adapted to needs



Indoor installation



Screw compressors



Natural Refrigerant

ENEX INDUSTRIAL's WH custom heat pump for indoor use with air source via a remote evaporator or water / brine source uses highly sustainable R717 refrigerant. It is the ideal choice in very large district heating applications and for boosting low grade waste heat to high temperature. A refrigerant booster version uses the condensation of the low stage as the evaporator for the high stage, producing water at high temperature with outstanding efficiency, and it is applicable in large industrial refrigeration systems where very hot water is also required.

## FEATURES

- 1 to 4 compressors in parallel
- Wide range of evaporating and condensing temperature
- Painted steel drip tray
- Stainless steel 304L piping for water/brine circuit

## OPTIONS

- Multiple Compressor brand: Mycom, Bitzer, Srmtec, GEA, Howden, Vilter
- High efficiency motor
- **Evaporator options:**
  - Remote air evaporator
  - Water / brine source
- Refrigerant booster version
- Polyurethane foam injected under aluminum cladding for insulation of cold components
- Electrical cabinet with industrial PLC

## APPLICATION



Industry



District heating



Food processing

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