

area Cooling Solutions



iCOOL™ CO₂

Energy-efficient,
low GWP refrigeration solution



We are AREA. Since 1986 at your side for HVAC and Refrigeration projects

Values: Innovation, sustainability and service are at the heart of everything we do.

Over 12 years experience in inverter driven applications. Remote control and preventive maintenance features.

Solutions for all types of refrigerants, including CO₂, R290 and A2L types.

We support our partners. We have developed the **Areacademy** and the **Green Tech Hub**: a competence center for CO₂ and inverter technology.

(929) 999-1770 · contact@area.es · areacooling.com/



Our production

All AREA units are designed and manufactured in our European factories.

Our units meet the highest quality standards being German TÜV certified. We also aim to complete UL certification in Q1 2023.

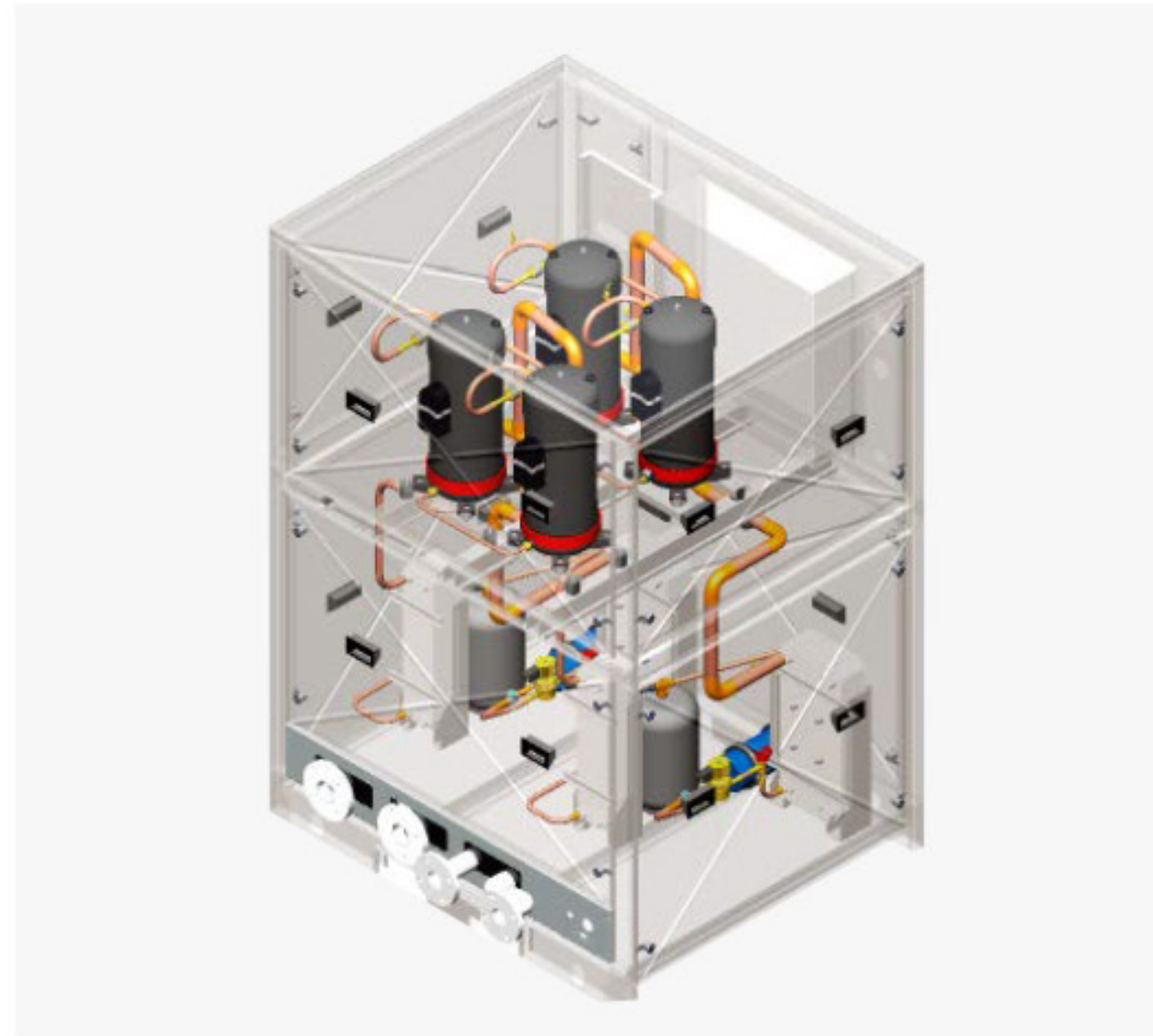
In July 2022, we launched a new facility in Poland. This expanded our manufacturing potential by an additional 7,000 pieces/year.



What we do



REFRIGERATION UNITS



SUBCONTRACTING



COMPRESSORS AND CONTROLS

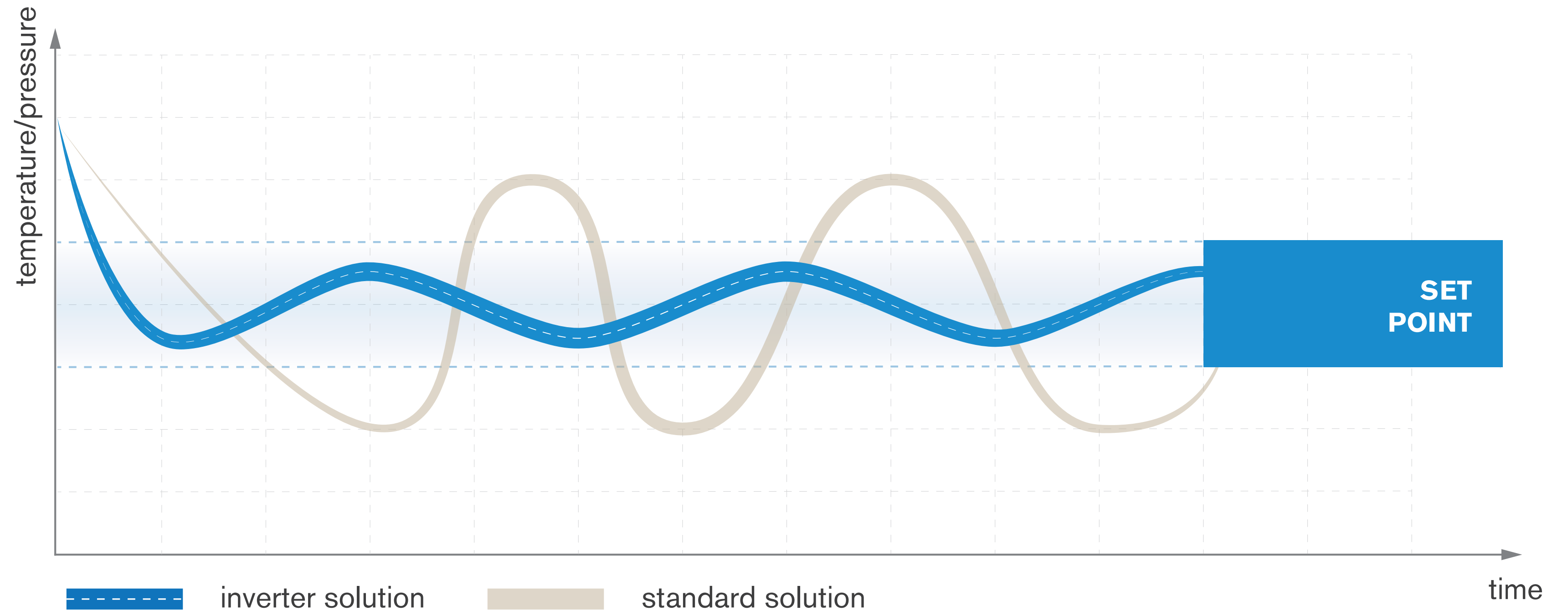


The benefits of inverter technology

With the rapid increase in energy costs, food and commercial sectors need **energy-efficient solutions**

Inverter technology offers improved energy savings with:

- better load matching
- less cycles on/off
- soft start-ups
- fewer defrost cycles



Save more than 35 % vs. on-off technology with a payback time of less than 1 year!*

*Depending on state energy cost

iCOOL™ CO₂ history

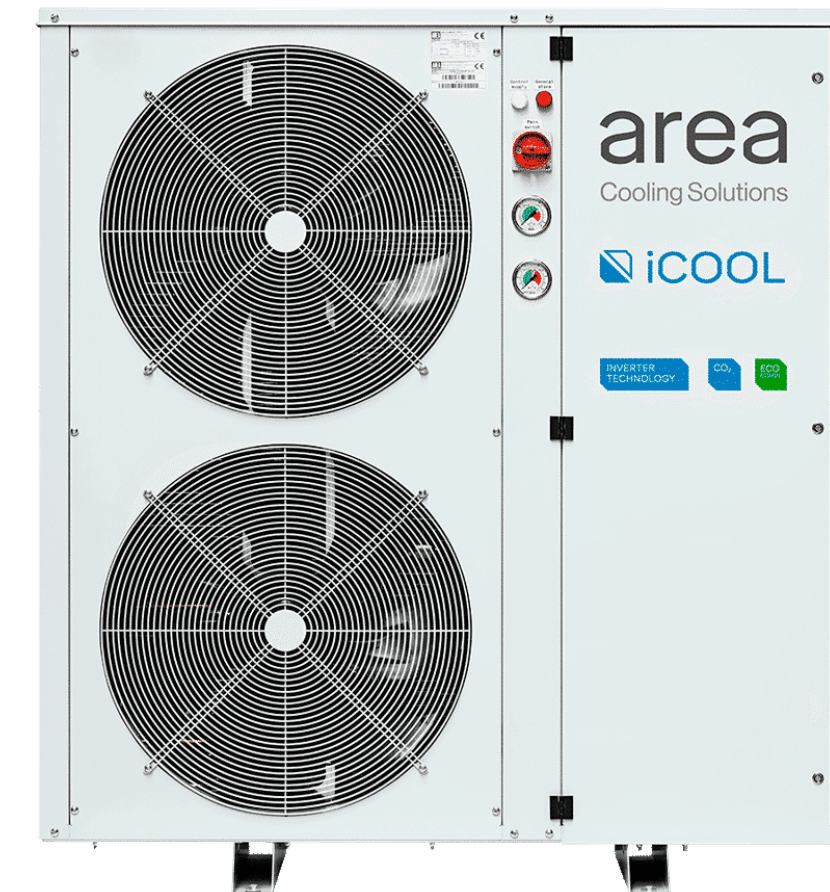
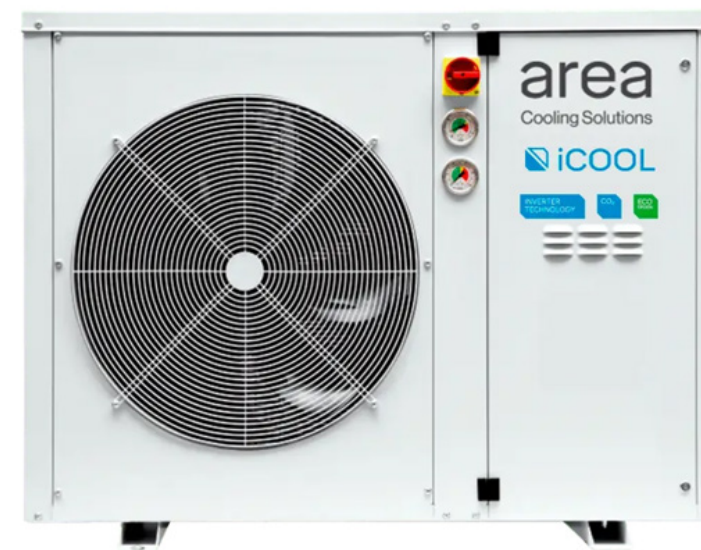
- Area has been developing inverter driven units since 2010.
- Over 12,000 iCOOL™ units are operating in various applications worldwide.
- Initial design concepts of iCOOL™ CO₂ units were completed in 2016.
- Our current portfolio contains six CO₂ models both for MT and LT applications.



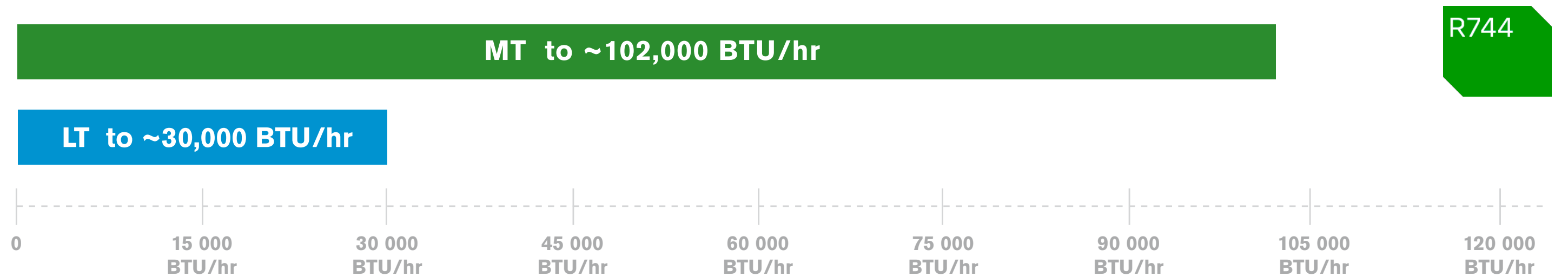
iCOOL CO₂ (R774)

- Natural refrigerant (GWP= 1)
- iCOOL™ line: energy saving, Plug&Play, low noise
- Advanced control and safety automation
- Remote control included

INVERTER TECHNOLOGY **eco** design



The first **UL approved** CO₂ unit will be a 51,000 BTU/hr available in Q1 2023.

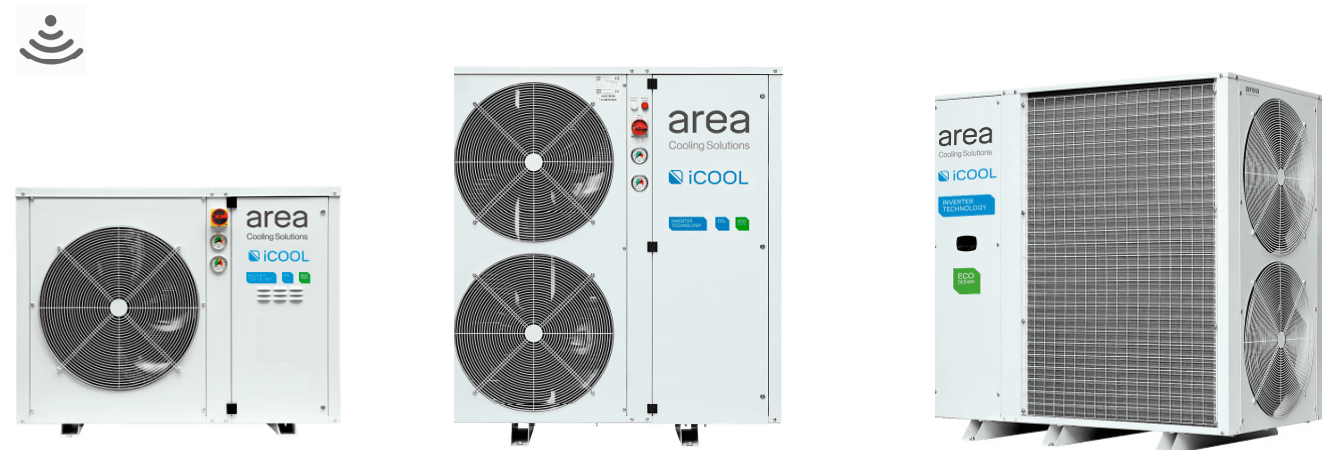


iCOOL™ CO₂ - decentralized solution

In today's commercial applications, powerpack systems (multi-compressors) are often replaced by decentralized cooling systems, resulting in more precise regulation and increased operational safety.



Remote control, parameterization and preventive maintenance system



iCOOL-15 CO2 MT/LT

- Condensing unit for the freezing chamber
- Capacity ~27,000 BTU/hr

iCOOL-15 CO2 MT/LT

- Condensing unit for the cooling chamber
- Capacity ~51,000 BTU/hr

BUFFER TANK

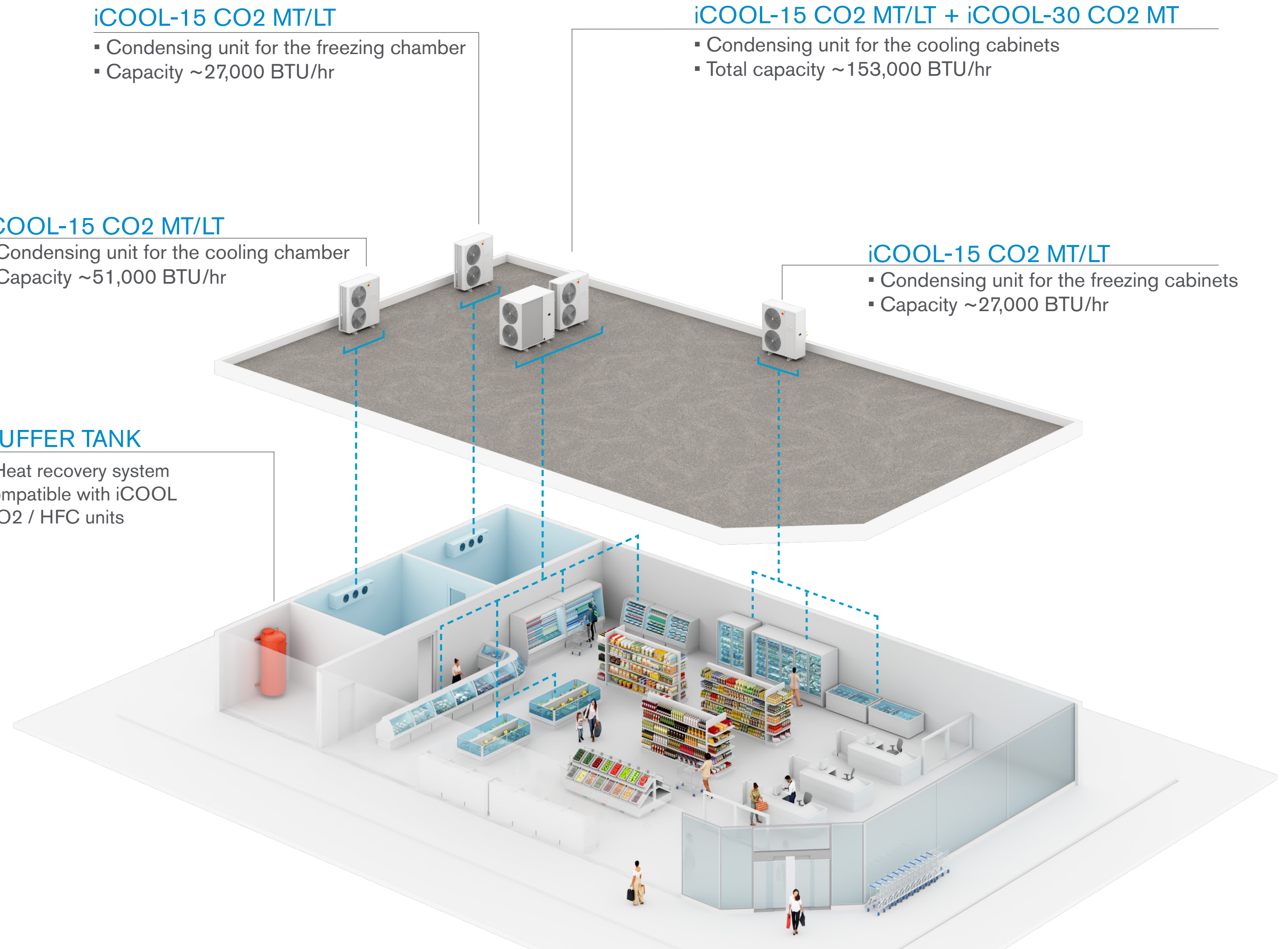
- Heat recovery system compatible with iCOOL CO₂ / HFC units

iCOOL-15 CO2 MT/LT + iCOOL-30 CO2 MT

- Condensing unit for the cooling cabinets
- Total capacity ~153,000 BTU/hr

iCOOL-15 CO2 MT/LT

- Condensing unit for the freezing cabinets
- Capacity ~27,000 BTU/hr



iCOOL™ CO₂ - low noise level

We are a good neighbor!

We designed our units to be extremely quiet, even at high-speed operations.

- The inverter parameters are optimized to avoid areas of operation conducive to high noise and vibrations.
- We use large diameter EC fans, turning at a very low speed.
- Efficient noise reduction lining covers the interior of the housing panels, as well as the compressor.



Noise level for iCOOL 5 CO₂ MT: **37 dB(A)** @ 33 ft
Noise level for iCOOL 15 CO₂ MT/LT: **39 dB(A)** @ 33 ft

iCOOL™ CO₂ - remote control



Remote diagnostics

Preview of unit parameters

Preview of system/cabinets operation



Visualization of monitored values

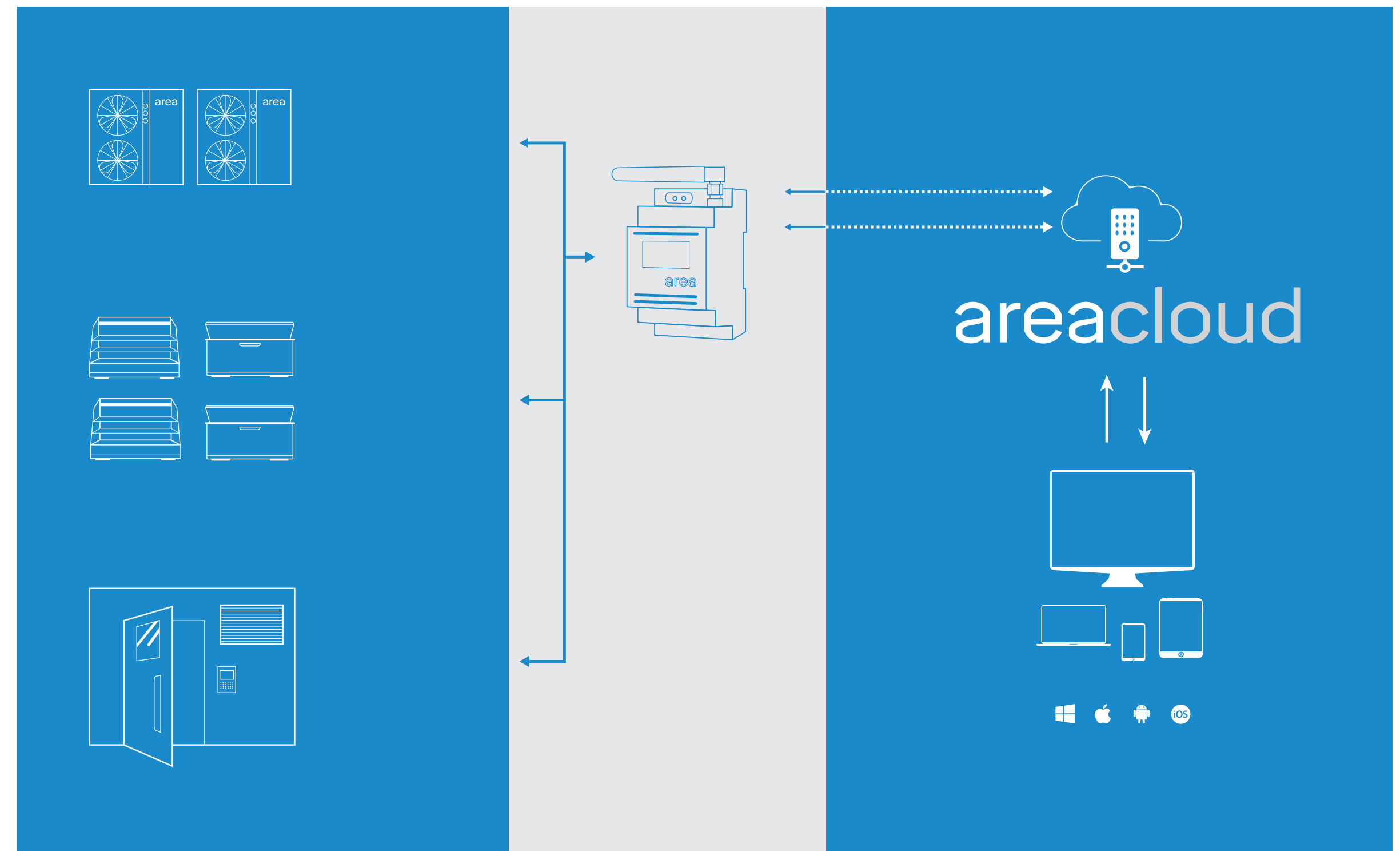


Alarms



Remote parameter change

Next step - preventive maintenance

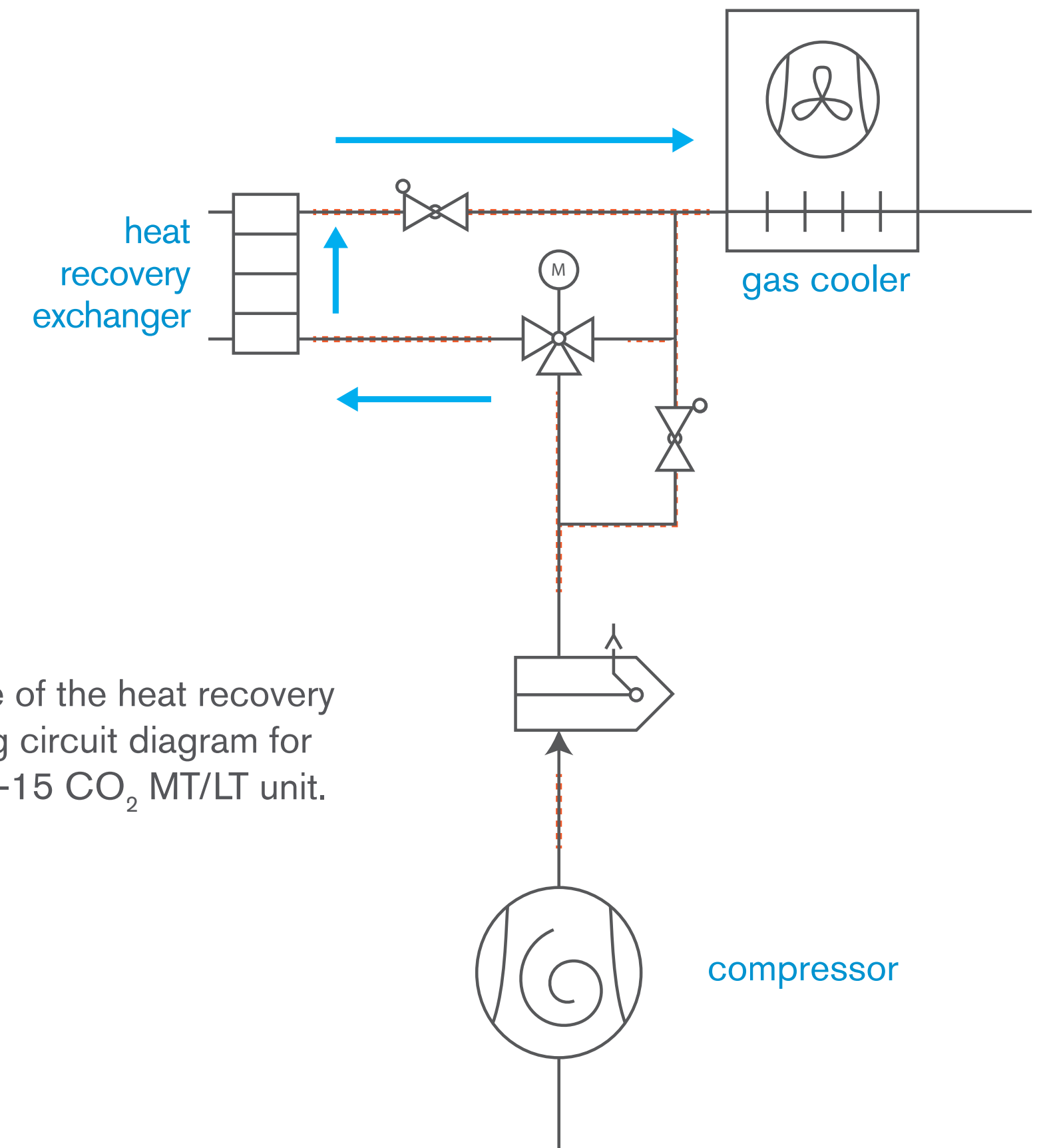


iCOOL™ CO₂ - heat recovery option

Reduce energy costs by reclaiming the heat from a high-pressure cooling system for processing hot water and central heating.

⊕ Main features

- Optimally selected heat exchanger for recovery, built into the device.
- Heat recovery process is managed by the unit.
- Smooth regulation of the reclaimed heat.



Example of the heat recovery cooling circuit diagram for iCOOL-15 CO₂ MT/LT unit.

iCOOL™ CO₂ - benefits for the contractor



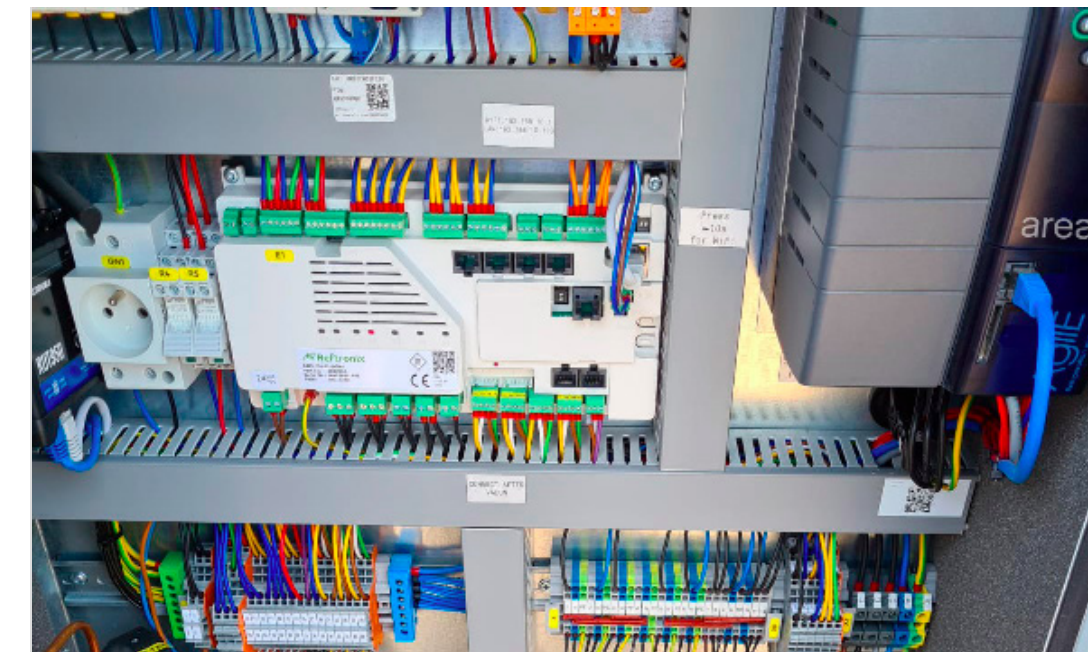
Easy selection

- Online selection program.
- Team to help you find the best solution for any application.



Easy installation

- Compact dimensions and low unit weight.
- Plug&Play - integrated equipment straight from the factory.



Easy commissioning

- Comprehensive functionality test before delivery.
- Quick and easy unit start-up using factory pre-configuration.

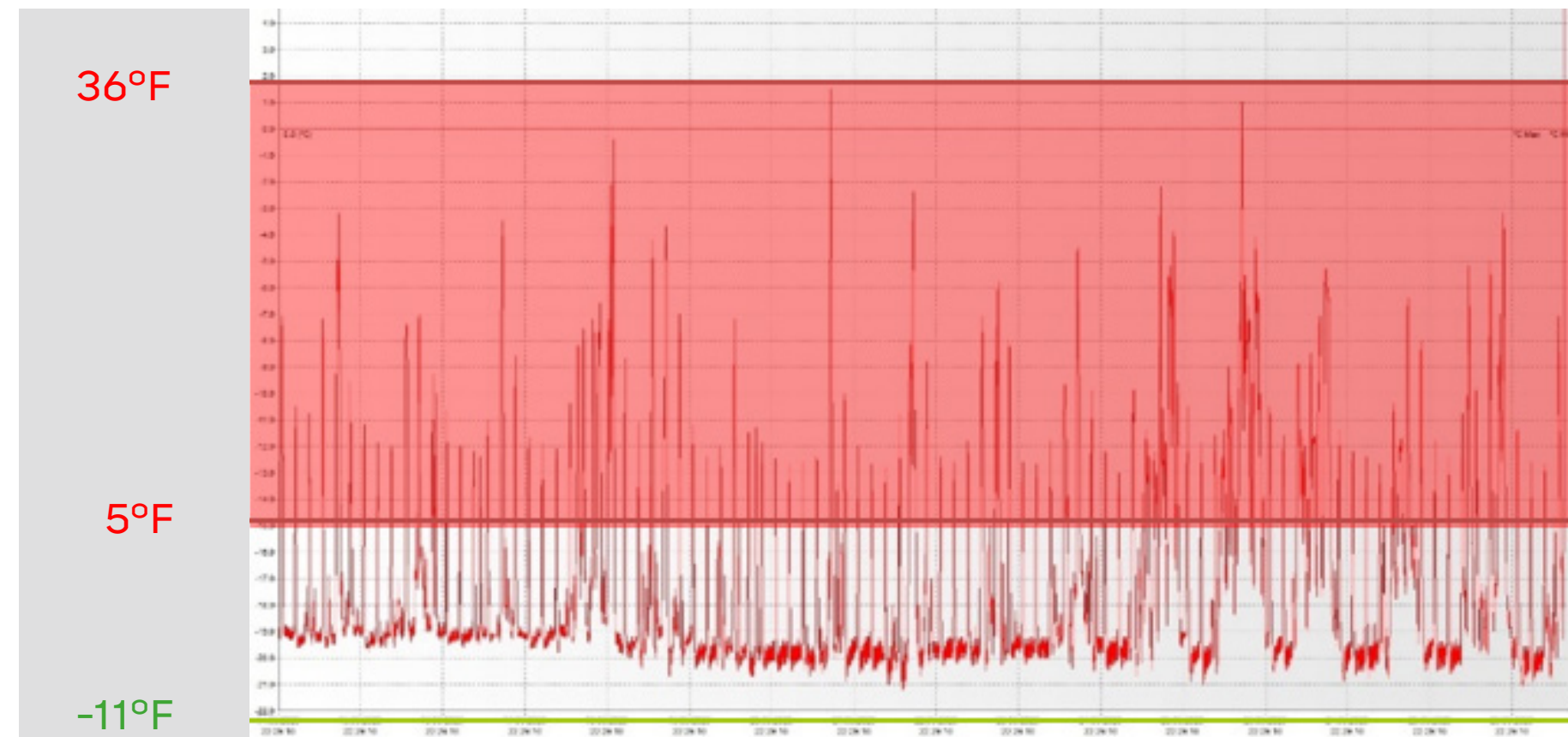


Easy to service

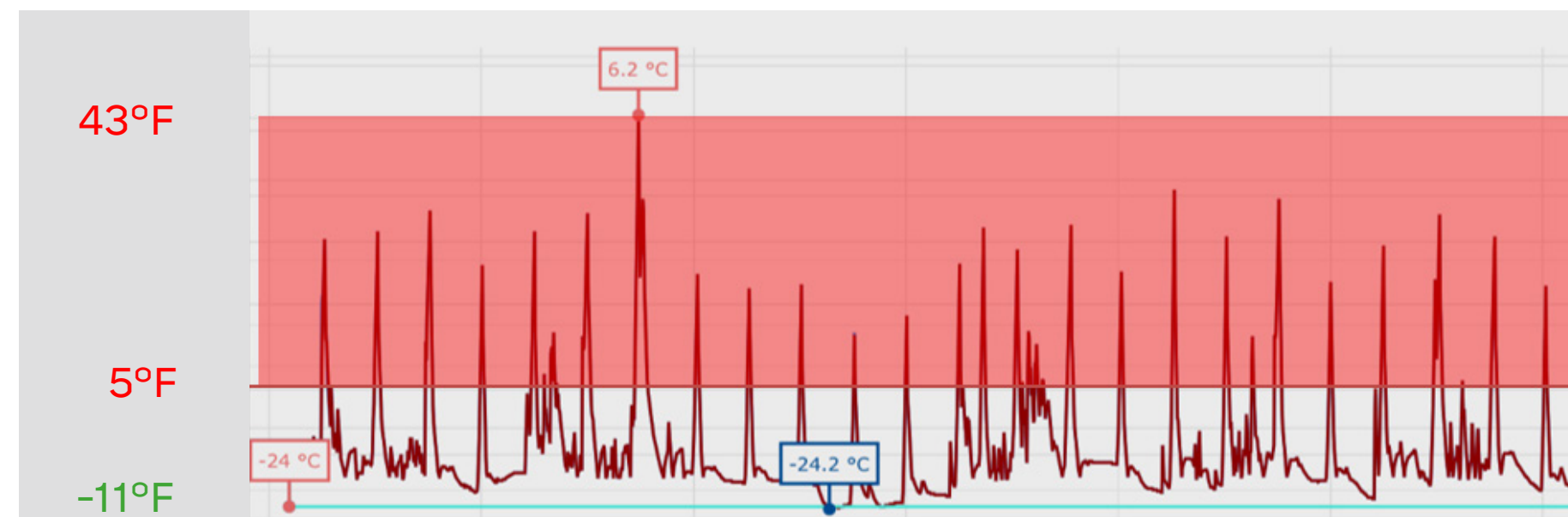
- 180° access to each component.
- Remote control/monitoring are included.

iCOOL™ CO₂ - field experience

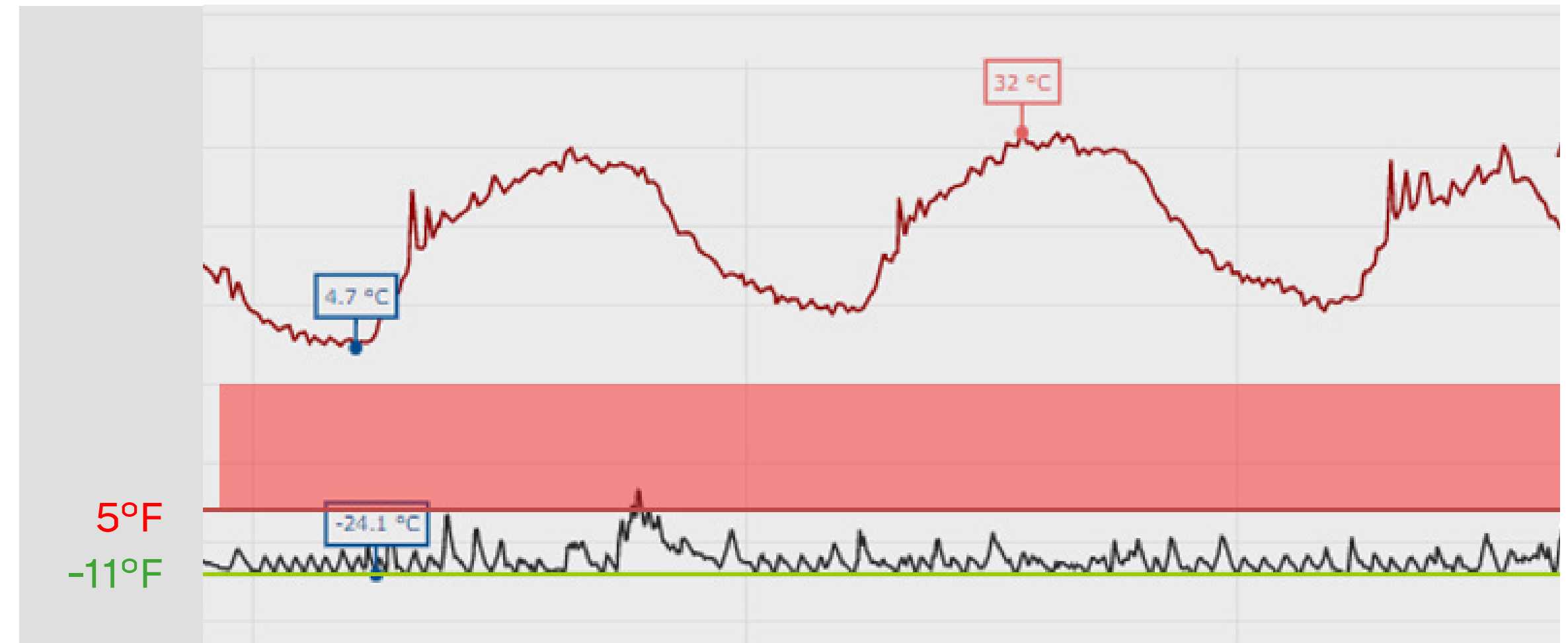
On/Off R404A CU



Other CO₂ solution



iCOOL™ CO₂ solution



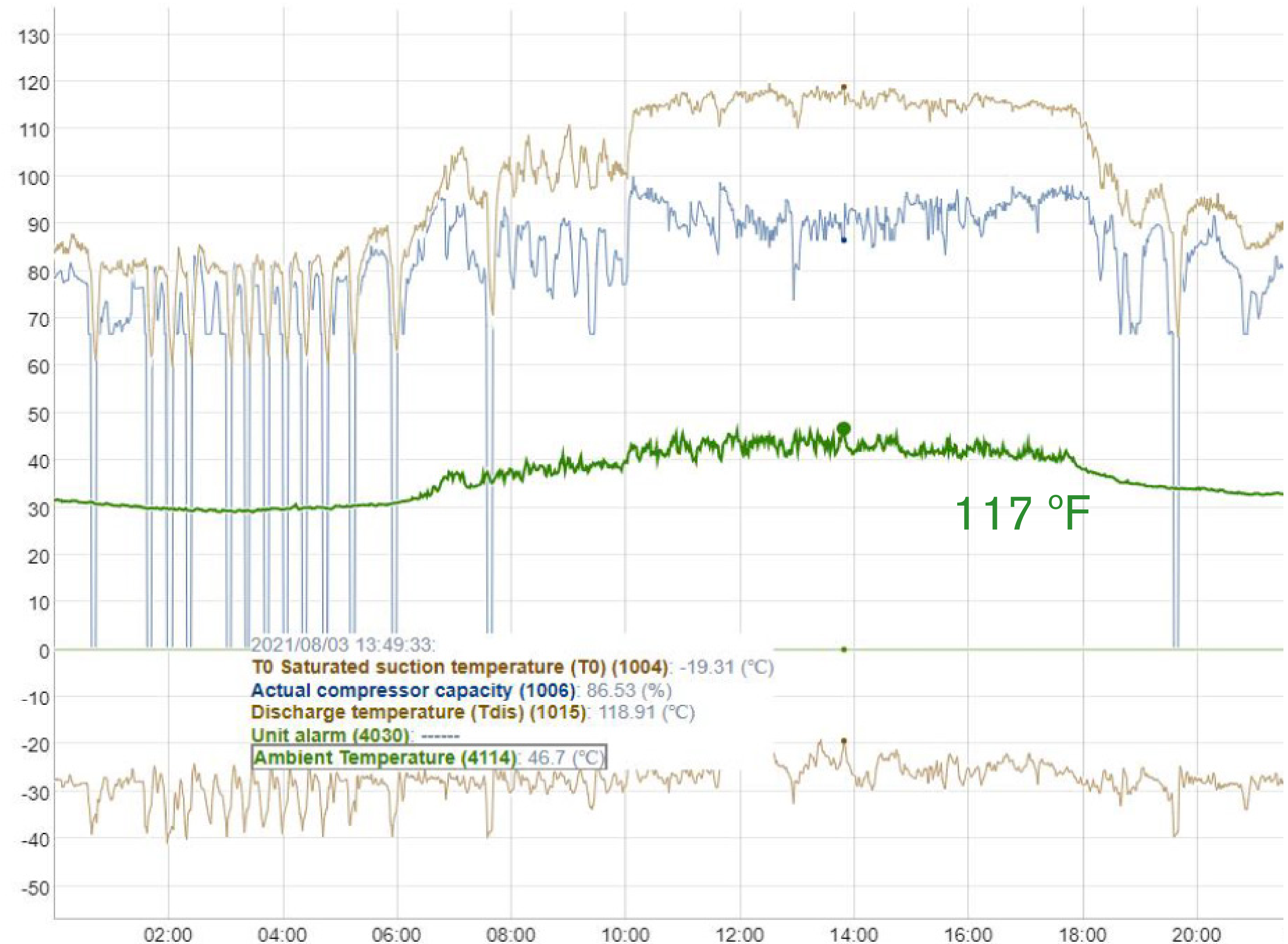
Improvement of temperature stability inside the freezing chamber even under high ambient temperatures.

iCOOL™ CO₂ - field experience

Designed for 110 °F ambient temperature.
Integrated, oversized gas-cooler.

Seamless and alarm-free operation even during heat waves (image presents remote control recording with 117 °F during summer 2021*).

*This does not constitute an endorsement from the manufacturer to approve an operation in ambient temperatures above 110 °F!



areacademy

Training: interactive training and support center

Our experts will provide you with the required training regarding the key benefits, the principle of operation, proper selection, installation, start-up, and maintenance of our units.



Hands-on training



Virtual training



Digital training materials



Articles, technical materials

Visit our website! areacooling.com/areacademy

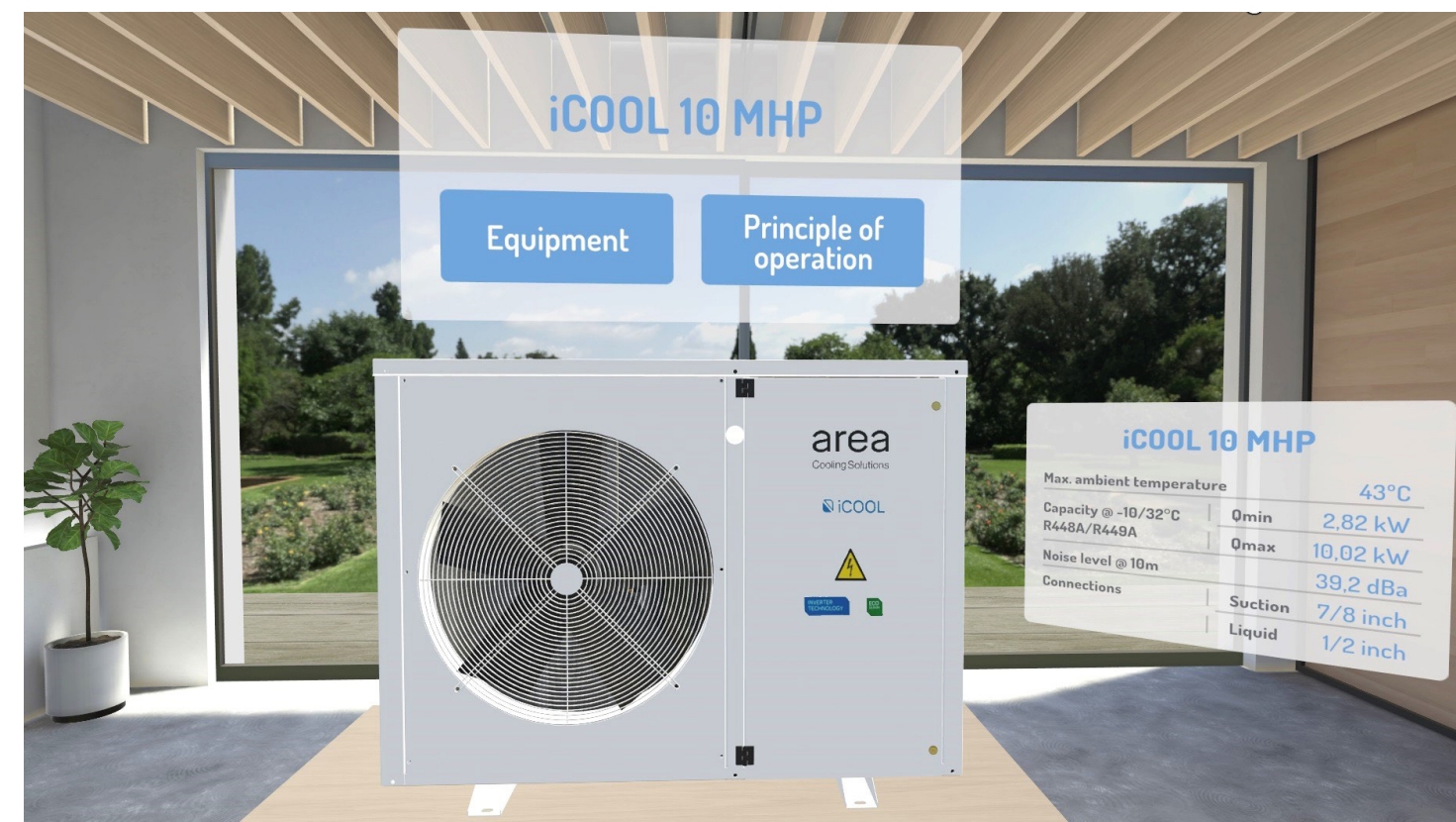
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areacademy

Explore our virtual showroom - download it for free at Areacademy website!

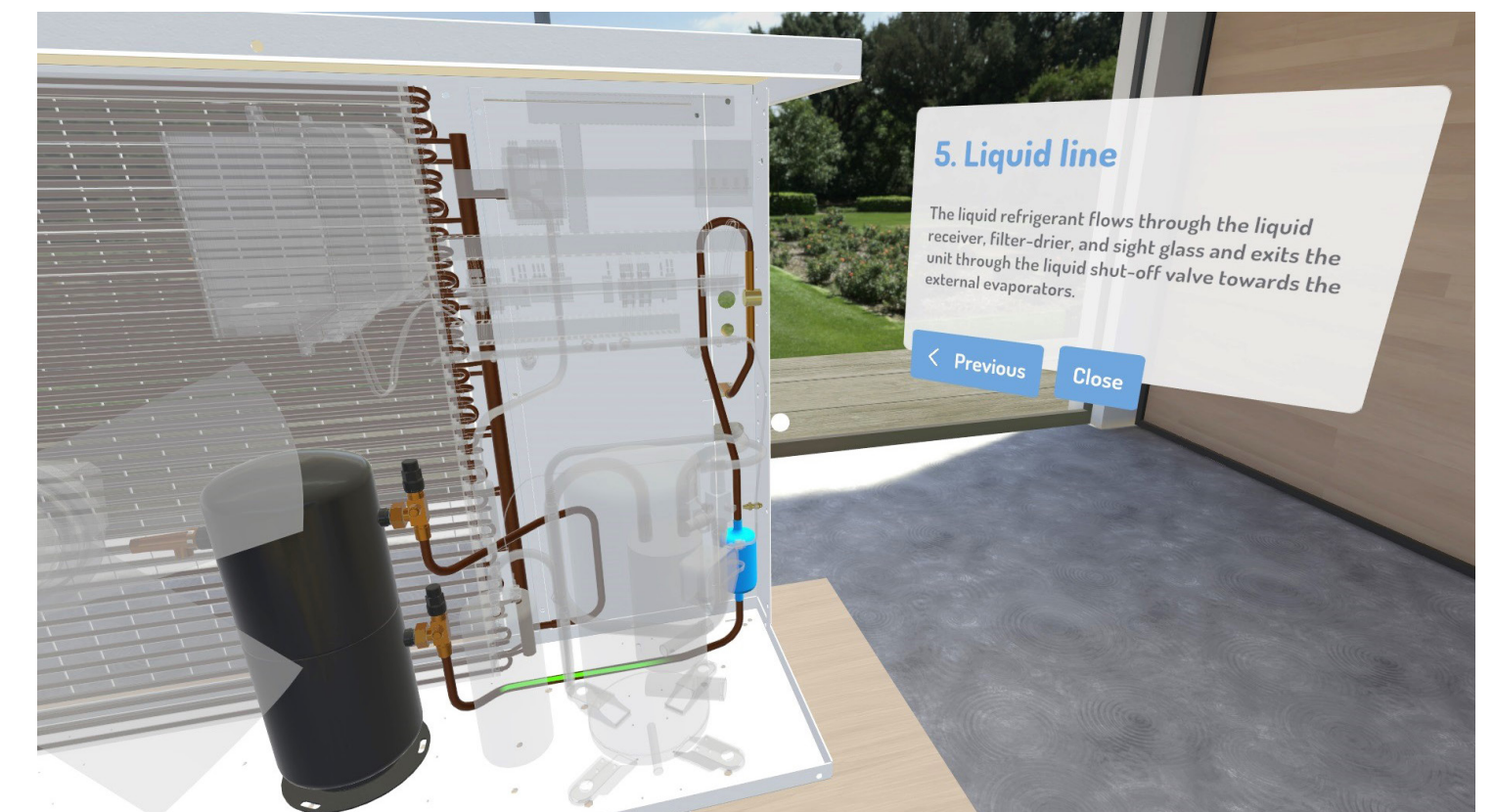
This immersive experience will take you on a journey to learn more about Area, the inverter technology and other innovations inside our iCOOL™ units.



Discover the principle operation of our iCOOL™ inverter units



Go inside our iCOOL™ unit to check the components with virtual reality and a voiceover description



Examine the refrigerant flow path in each process

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Contact

At this time, we are beginning to create sales, technical support, and training center in the US.

For questions regarding our products, their technical specifications, and purchasing, please contact:



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ventura@area.es

Our US phone support:
(929) 999-1770