

# Additional Options

## Buffer tank



### DESCRIPTION

Refra Galaxy Chillers can be integrated with an additional buffer tank to enhance system performance. **Additional Refra buffer tank is installed within the same frame as the chiller, creating a single, unified machine for easier installation and operation.**

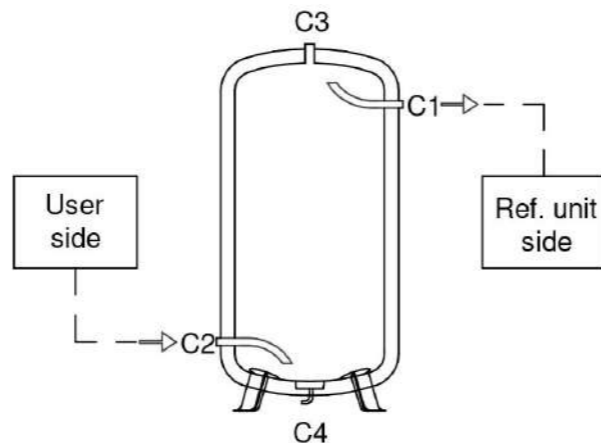
Refra offers buffer tanks with glycol, which provide enhanced freeze protection and greater temperature stability. Glycol buffer tanks ensure reliable system operation in cold environments by preventing freezing and downtime. With an operating pressure of 6 to 10 bar, these buffer tanks increase the liquid capacity within the system and ensure stable operation.

Designed to optimize refrigeration systems, these additional buffer tanks are available in 500 or 800 liter capacities to help maintain a constant cooling cycle, thus stabilizing chiller performance and preventing fluctuations in water temperature. Made from a durable S235JR carbon steel and externally insulated with ArmaFlex insulation, the tank provides superior thermal protection and efficiency, contributing to a consistent and reliable refrigeration cycle.

The additional buffer tank is housed in a closed-type protective frame, integrating seamlessly with the chiller to create a unified system in a single machine. **Note that when selecting an integrated buffer tank, additional rock wool insulation for ultra-quiet operation (30 mm) cannot be applied.**

### MAIN CHARACTERISTICS

- Sizes available for 500 liters or 800 liters
- Housed in a Half Box or a Full Box
- Designed for glycol
- Made from S235JR carbon steel
- 32 mm of ArmaFlex insulation



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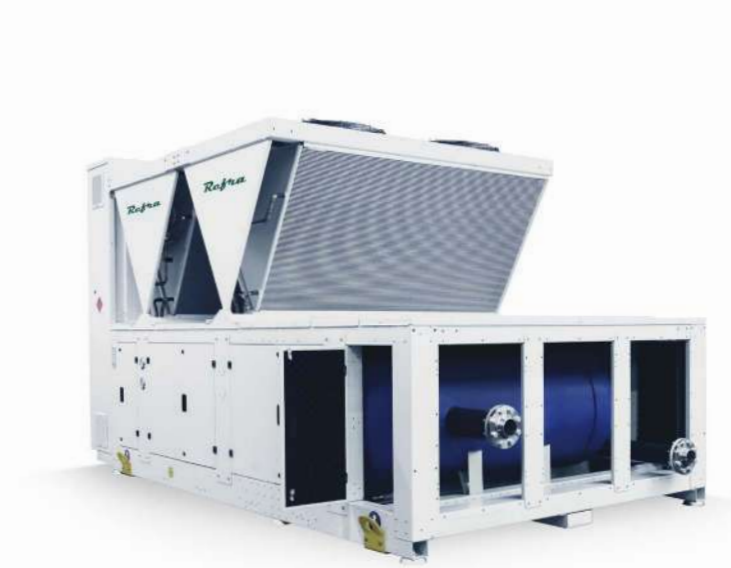
## Half Box | 500 L

The Half Box is a closed-type protective frame, designed to house a 500-liter buffer tank, integrating seamlessly with the chiller to create a unified system. The additional frame is constructed from galvanized steel, powder-coated for durability, and features standard insulation that ensures effective protection and noise reduction.

### DIMENSIONS:

- Length: 1205mm
- Height: 1070mm
- Width: 2203mm

When selecting a buffer tank as an additional feature, each chiller is fitted with an extra frame box. Note that this added length extends the overall size of the unit, which should be carefully considered during installation, especially in spaces where length is a key factor. **For more specific sizing details, please refer to the Technical Parameters of the selected chiller model.**



## Full Box | 800 L

The Full Box is a closed-type protective frame designed to house an 800-liter buffer tank, integrating seamlessly with the chiller to create a unified system. The additional frame is constructed from galvanized steel, powder-coated for durability, and features standard insulation that ensures effective protection and noise reduction.

### DIMENSIONS:

- Length: 1205mm
- Height: 2355mm
- Width: 2203mm

When selecting a buffer tank as an additional feature, each chiller is fitted with an extra frame box. Note that this added length extends the overall size of the unit, which should be carefully considered during installation, especially in spaces where length is a key factor. **For more specific sizing details, please refer to the Technical Parameters of the selected chiller model.**



# Additional Options



## Pump on/off 10m head

Designed for pumping of water or glycol mixtures without abrasive substances. "On/Off" function is used in applications where the pump only needs to operate when there is a demand for fluid flow.



## Pump on/off 20m head

Designed for pumping of water or glycol mixtures without abrasive substances. "On/Off" function is used in applications where the pump only needs to operate when there is a demand for fluid flow.



## Pump inverter 10m head

Designed for pumping of water or glycol mixtures without abrasive substances. Integrated inverter provides precise control over the flow rate of the fluid and ensures energy-efficient operation.



## Pump inverter 20m head

Designed for pumping of water or glycol mixtures without abrasive substances. Integrated inverter provides precise control over the flow rate of the fluid and ensures energy-efficient operation.



## Twin Pump on/off 20m head

Double pump setup, designed for pumping of water or glycol mixtures without abrasive substances. One pump serves as the base-load pump, while the second pump can serve as a reserve in the event of a fault.



## Twin Pump inverter 20m head

Double pump setup, designed for pumping of water or glycol mixtures without abrasive substances, ensures reliable operation in case of an emergency and precise control over the fluid flow rate.

# Additional Options



## Flow switch

Detects the flow of liquid medium in HVAC systems. Used as a safety device to ensure there is an adequate flow of the fluid, and to trigger an alarm or shut down the system in case of low flow.



## Flow meter

Utilises ultrasonic transit-time technology to provide accurate and repeatable water-flow measurement and insures the correct measured flow. Monitors the performance and efficiency of the system, ensures the adequate flow of fluid.



## Check valve

Allows fluid to flow in one direction only, and prevents backflow in the opposite direction. Recommended for systems with more than one heat pump, to prevent backflow and ensure proper fluid flow.



## Desuperheater

Utilizes the high-temperature energy of the superheated refrigerant gas to heat water. By using the waste heat generated during the cooling process, desuperheater can improve the overall energy efficiency of the system.



## Thick insulation frame

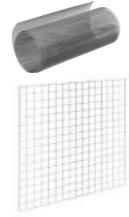
Additional 30 mm rock wool material for a super silent unit operation with double insulation reduces the sound level and strengthens the frame construction. **Not possible with additional buffer tank.**



## Antivibration mounts

Reduces and isolates the transmission of vibrations from the unit by using a rubber element with a metal casing.

# Additional Options



## Coil guard

Shields coils from physical damage, environmental debris and dust build-up, preserving heat exchange efficiency and extending equipment lifespan. Woven aluminum mesh and grid frame provide robust protection, reduce maintenance efforts and minimize the risk of system malfunctions.



## Aqua Aero

Helps to lower energy consumption by reducing airside fouling in cooling coils, thus improving the overall energy efficiency of the system. The hydrophobic coating acts as a barrier which prevents corrosive agents from infiltrating the underlying metal surface.



## Siemens cloud + modem GSM

This kit provides remote access to the unit controller. The cloud provides all relevant equipment data and allows to evaluate and control it efficiently using leading IoT analytics tools. **Customers who purchase Siemens Cloud option receive 2-year free cloud connection and a full 2-year warranty on Refra unit.**



## Smart Grid (SG) Ready

Allows the controller to communicate with smart grid infrastructure, responding to signals from the grid to optimize energy usage. It supports demand response, energy management, and grid stabilization by enabling real-time monitoring, automated load adjustments, and integration with energy systems.



## Keypad

Offers data point access and system configuration for Climatix controllers, featuring 240x128 dpi resolution display and 6 easy-to-use keys. Equipped with Alarm, Info, and Cancel functions, it supports multiple languages and local HMI settings.



## Touch screen

High-resolution, 7-inch touch display offers an intuitive operator interface, quick connection to controllers via Ethernet or RS485/422. It minimizes engineering, lifecycle costs and commissioning, ensuring local control in production, process, and building automation.

# Additional Options



## Electric energy meter

Monitors and records active, reactive, and apparent energy consumption, displaying the data with real-time visualization. Integrates seamlessly with power monitoring systems via Modbus and calculates average consumption over time.



## Thermal energy meter

Measures heat energy in heating and cooling systems by combining an electric energy meter and an ultrasonic flow meter. Utilizes transit-time technology for accurate, repeatable water flow measurement, ensuring precise energy monitoring, optimal system performance, and efficiency.



## Trace heating

Maintains or raises the temperature of pipes and vessels through specially engineered cables to protect it from freezing at sub-zero temperatures. **Not possible with additional buffer tank.**



## Low-Noise Fan

Utilizes biomimetic fine air dividing technology to significantly reduce acoustic levels by up to 4 dB, ensuring quieter operation. **Delivers reliable, high-performance cooling with reduced environmental impact without compromising the technical performance of the unit.**



## Vacon inverter

Intelligent frequency inverter that controls AC motors efficiently and intelligently, allowing for precise speed regulation.



## Varipack

Intelligent frequency inverter that controls AC motors efficiently and intelligently, allowing for precise speed regulation.

Register the Varipack product code along with the Bitzer compressor code and get a 2-year compressor warranty!