

## BIOMEDICAL FREEZERS & REFRIGERATORS





# THE ARCTIKO VISION

**ARCTIKO AIMS** to be the first and best partner for delivering advanced and customized cooling and freezing solutions to the health care and life science segments globally.

**FURTHERMORE**, Arctiko is a flexible organization that is able to deliver high-quality, environmentally friendly, leading-edge and customized solutions.

Esbjerg, December 2022

**ARCTIKO**   
true cooling specialists





# TABLE OF CONTENTS

## ► INTRODUCTION

## PAGE

THE ARCTIKO VISION	2-3
TABLE OF CONTENTS	4-5
CERTIFICATES	6-7
EXPLANATION OF ICONS	8-9
CONTROLLER DESCRIPTION	10-11
SINGLE COMPRESSOR TECHNOLOGY	12
TRUE DUAL™ TECHNOLOGY	13

## ► CRYOGENIC & ULT FREEZERS

## TEMPERATURE RANGE

## PAGE

Cryogenic Freezers	-140 / -150 °C	16-17
Introduction - Integraline GG	-86 / -90 °C	18-19
ULT Freezers Upright - Integraline GG	-40 / -90 °C	20-23
ULT Freezers Compact - Integraline	-25 / -86 °C	24-25
ULT Upright Freezers - ULUF Range	-40 / -86 °C	26
ULT Compact Freezers - ULUF Range	-60 / -80 °C	27
ULT Chest Freezers - ULTF Range	-40 / -86 °C	28
Low Temperature Chest Freezers - LTF / LTFE Range	-10 / -45 °C	29





► BIOMEDICAL STORAGE SOLUTIONS	TEMPERATURE RANGE	PAGE
Introduction - Biomedical		32
Spark free / ATEX Models		33
Flexaline	-15 / -25 °C +2 / +8 °C	34-35
Basic Line	-10 / -25 °C +1 / +10 °C	36
Biomedical Freezers - Solid Door	-10 / -30 °C	37
Biomedical Combi Models	-10 / -30 °C +1 / +10 °C	38-39
Biomedical Refrigerators - Solid Door	+1 / +10 °C	40
Biomedical Refrigerators - Glass Door	+1 / +10 °C	41

► BLOOD BANK REFRIGERATORS (CE CERTIFIED)	TEMPERATURE RANGE	PAGE
Introduction - Blood Banks	+4 °C	44-45
Double Security for Blood Banks	+4 °C	46
Blood Bank Refrigerators	+4 °C	47

► ACCESSORIES   SHELVES   RACKS, BOXES & VIALS	PAGE
Accessories	50-51
Shelves, Drawers & Baskets	52-53
Racks, Boxes & Cryo vials	54-55

► ARCTIKO SERVICES	PAGE
ARCTIKO US INC.	56-57
SERVICE & SUPPORT	58-59
TECHNICAL SPECIFICATIONS	60-77
CUSTOMER REFERENCES	78-79

# CERTIFICATES

## ISO 9001

ISO 9001 is the most widely used international standard in the world. It streamlines and documents Arctiko's working processes and ensures that our products always meet the expectations of our partners concerning high quality.



## ISO 13485

ISO 13485 is a standard for the design and manufacture of medical equipment. It is an independent standard certification that is generally harmonized with ISO 9001. The standard has been prepared in accordance with the European Commission with a view to the essential requirements of EU directives for medical devices and CE marking.

For Arctiko, the ISO 13485 is a quality management system, ensuring that our products meet the EU directive 93/42/EEC for medical devices.



## ETL CERTIFICATION

Arctiko's products for the US market are approved according to the following standards:

- UL 471 issued: 2010/11/24 Ed.: 10 Rev: 2014/11/17 Commercial Refrigerators and Freezers
- CSA C22.2#120 Issued: 2013/03/01 Ed: 4 Refrigeration Equipment





## MEDICAL DEVICES DIRECTIVE

---

Arctiko offers selected products which are approved according to the EU directive 93/42/EEC for medical devices and CE marked as Class II equipment.



## CE CERTIFICATION

---

Arctiko's product ranges are CE marked stating that our products meet all legal requirements concerning essential health and machinery safety.



## FDA REGISTRATION

---

Arctiko International is FDA registered pursuant to Title 21, 807 et seq. of the United States Code of Federal Regulations.





# EXPLANATION OF ICONS



## **SINGLE COMPRESSOR SYSTEM**

The single compressor system consists of one compressor and one cooling cycle. This technology has a unique and simple structure that ensures easy maintenance, less heat dissipation, low energy

consumption and noise reduction. Arctiko manufactures a unique range, offering the best solution in the ultra-low temperature market with the single compressor system.



## **TRUE DUAL™ TECHNOLOGY**

With the independent TRUE DUAL™ technology, your samples are protected with double security. The TRUE DUAL™ technology consists of two independent cooling systems that work together. In the

event of a failure on one of the cooling systems, the freezer will maintain the temperature of at least -70°C, meaning your valuable samples always will be stored with the best possible security.



## **NOISE REDUCTION TECHNOLOGY**

Thanks to our newly developed noise reduction technology, we are able to reduce the noise level drastically. This technology helps provide a pleasant

work environment. The noise reduction is achieved by the implementation of our uniquely designed enclosure of the compressor compartment.



## **VACUUM INSULATED PANELS**

Arctiko's vacuum insulated panels are of a high-efficient quality that secures the lowest possible energy consumption. The

panels are specially developed to optimize the freezer space and to increase the efficiency and cooling performance.



## **AIRFLOW CONTROL**

Airflow control is a special new construction, which enables controlled airflow around the vital components of the

cooling system, securing maximum levels of performance and the lowest possible energy consumption.



### **FILTERLESS CONSTRUCTION**

Filterless construction prevents complications due to dust in the filter. Dust blocks the air flow through the condenser, which reduces the unit's ability to dissipate heat effectively. The air that

bypasses the clogged air filter carries dirt into the condenser, which increases the energy used in the compressor and generates additional heat for the ambient environment.



### **DIRECT COOLING**

Direct cooling features evaporator coils in each shelf to cool each compartment directly for maximum uniformity and

minimal recovery time, essentially giving you multiple small ULT freezers in one cabinet.



### **FORCED AIR COOLING**

Arctiko's forced air cooling provides superior temperature uniformity and stability. Forcing the airflow around the shelves and stored items ensure that all parts of the unit are equally cold and

avoids any cold or hot spots. Distributed by a powerful fan and open air flow areas along the sides, the air is always distributed evenly throughout the fully loaded unit.



### **ATEX/SPARK FREE UNIT**

When handling or storing flammable items in a standard biomedical refrigerator or freezer, there will be a possible ignition risk. Therefore, we at Arctiko recommend storing your flammable items in an Arctiko

ATEX approved biomedical refrigerator or freezer. The Arctiko ATEX biomedical refrigerators and freezers are approved according to EN 60079-15 category 3, zone 2, CE EX 11-/3G.



### **MEDICAL DEVICE CLASS IIA**

Depending on the purpose of the medical device and the items that will be stored inside, the classification will cover various risk products, e.g., blood.

Arctiko products are certified according to EU directive 93/42/EEC for medical devices and possess CE marking for Class II equipment.

# CONTROLLER DESCRIPTION

The customer is always in mind when we are developing new products and technologies. We always strive to focus on user-friendliness, which is reflected in our controllers. Our controllers come with a wide range of features and offer optional solutions tailored to the customer's needs.

## G214 CONTROLLER



The G214 controller is used on most of our units. It has been Arctiko's main controller for many years. With regular updates, the G214 controller has stayed ahead of the competition. The controller has all the features needed for safe storage of your valuable samples.

### MAIN FEATURES ON THE G214 CONTROLLER

- 4.3" LCD display
- USB port for easy upload of software & download of logged data
- Extensive integrated logging capabilities with access to log directly on the display
- Monitoring of multiple alarm conditions
- Integrated memory for up to 20 years of logged data
- Multiple languages available in controller
- Battery backup for alarms, logging and temperature monitoring in case of power failure
- Auto cycle in case of probe failure
- 3 levels of password protection

### OPTIONAL FEATURES \* Upon Request

#### PREPARED FOR:

- Connection of 2 additional probes
- Modbus over RS485
- Connection of GSM alarm module

#### ALARM FEATURES

- Visual and acoustic alarm
- Adjustable high/low temperature alarm
- Power failure alarm
- Probe failure alarm
- Open door alarm
- Contact for remote alarm
- Shows all alarms



# V700 / V500 CONTROLLER



With the new Arctiko controller, you will get the most user-friendly controller on the market. The new controller comes as a 7" or 5" touch screen display. The controller is upgraded with the newest technologies on the market and has all the features needed for safe storage of your valuable samples.

## MAIN FEATURES ON THE V700/V500 CONTROLLER

- Large 7" / 5" resistive touch screen display makes it easy to access all the functions
- Self-diagnostic test
- ECO mode - reducing operating costs
- Display can be operated with gloves
- Display is easy to clean - no accidental button presses
- USB port for easy upload of software & download of logged data
- Extensive integrated logging capabilities with access to detailed log directly on the display
- Monitoring of power and multiple alarm conditions
- Integrated memory for 20 years of logged data
- Multiple languages available in controller
- Battery backup for alarms, logging and temperature monitoring in case of power failure
- Auto cycle in case of probe failure
- Advanced service mode
- 3 levels of password protection
- Digital temperature graph

## OPTIONAL FEATURES \* Upon Request

### PREPARED FOR:

- Connection of one additional probe
- Electronic lock with access via RFID card
- Built-in CO<sub>2</sub> backup function
- Modbus over RS485
- Connection of GSM alarm module

### ALARM FEATURES

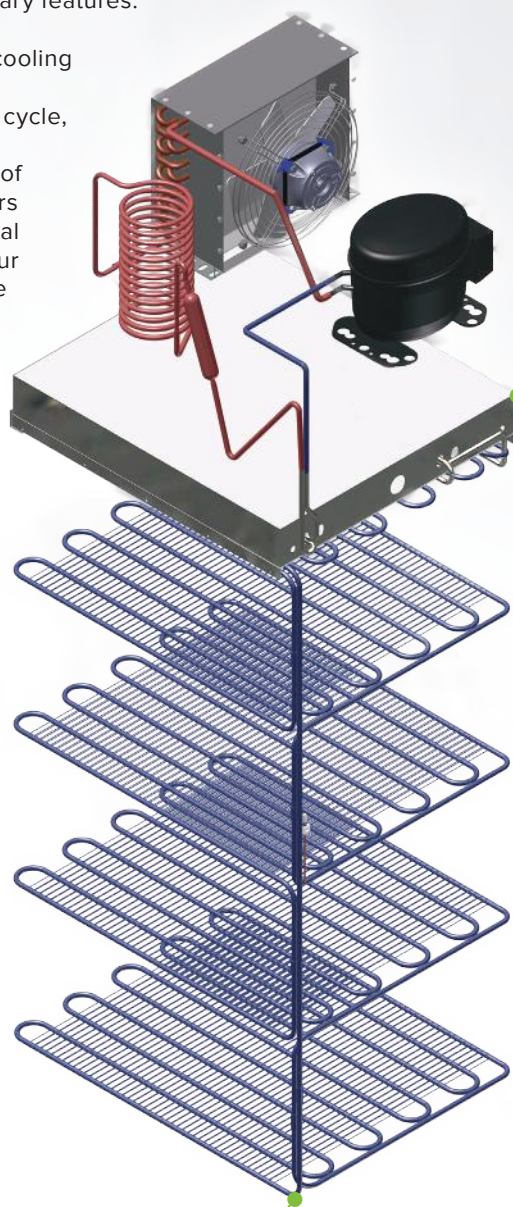
- Visual and acoustic alarm
- Compressor alarm (TRUE DUAL™)
- Adjustable high/low temperature alarm
- Power failure alarm
- Probe failure alarm
- Open door alarm
- Contact for remote alarm
- Shows all alarms

# EXCELLENT COOLING PERFORMANCE WITH SINGLE COMPRESSOR SYSTEM

Storing samples at ultra-low temperatures is always a highly sensitive process because the stored items most likely are of high value. Arctiko's single compressor system offers one of the best solutions in the ultra-low temperature market. We strive to design products that are easy to use and equipped with all the necessary features.

With our single compressor cooling system, which only uses one compressor and one cooling cycle, Arctiko has been able to manufacture a unique range of ultra-low temperature freezers with a reliable and exceptional stable temperature inside. Our true and original single-stage technology system has a unique and simple structure which impacts on less maintenance, less heat dissipation, low energy consumption and noise reduction.

Arctiko's single compressor system consists of fewer parts and has a simplified structure of the cooling system and electrical circuit, which reduces the failure rate. The compressor compartment located in the top of our upright freezers, provides many great advantages, such as easy access for service and maintenance as well as an ergonomically correct design, allowing easy access to each compartment inside.



Simple and safe +  
Single compressor  
cooling system with  
only the essential  
parts.

Direct cooling with evaporator coils  
built into the shelves - for greater  
temperature uniformity.

## ADVANTAGES OF ARCTIKO'S SINGLE COMPRESSOR SYSTEM

- Direct cooling in each chamber for greater temperature accuracy
- Low temperature difference from top to bottom
- Two single compressor systems used in our popular **TRUE DUAL™** technology - double security
- Easy maintenance - simple cooling system
- Low noise level
- Less heat generation
- Reduced maintenance of compressor compartment due to filterless construction



## WHAT'S YOUR BACK-UP PLAN, IF YOUR FREEZER FAILS?

Do not risk the safety of your samples due to the potential of a freezer breakdown. With Arctiko's TRUE DUAL™ technology, you avoid problems and headaches caused by an unexpected breakdown on your freezer. You should use the time to focus on what is most important: your valuable samples - not worrying about the laboratory equipment. Do not ignore the huge risk of losing many years of valuable research because of poor laboratory equipment.

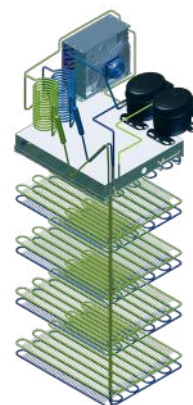
Arctiko's TRUE DUAL™ technology differs significantly from the conventional cascade refrigeration system in terms of fundamental design and operation. The TRUE DUAL™ technology consists of two independent cooling cycles. In the unlikely event of an unexpected failure or breakdown on one of the cycles, the other system will serve as a backup, guaranteeing that your samples will be protected and kept at least at -70°C. The TRUE DUAL™ technology together with the direct cooling ensures that Arctiko's Ultra-Low temperature freezers are known for their reliability and exceptional uniformity.

It is important to invest in the correct quality of laboratory equipment that meets the established regulatory standards. Arctiko's quality products will reduce the frequency of costly downtime situations, so that you can focus on the most important: your research.

### TRUE DUAL™ TECHNOLOGY

The TRUE DUAL™ technology consists of two independent cooling cycles. In the unlikely event of an unexpected failure or breakdown on one of the cycles, the other system will serve as backup, guaranteeing that your samples will be protected and kept at least at -70°C.

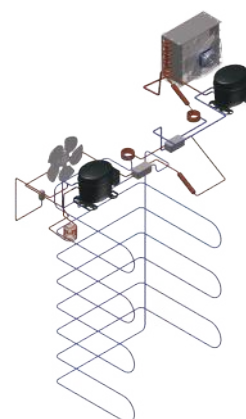
- Double security for samples
- No stress and problems involved
- No costly downtime situations
- Faster recovery after openings
- No need for backup freezer
- Longer lifespan
- Fast pull down time
- Direct cooling on shelves
- Great temperature uniformity



### CASCADE SYSTEMS

In a cascade system, the two compressors depend on each other to reach -80°C. In case of failure on one compressor, the temperature will rise and potentially destroy the samples. Samples should be moved into a backup freezer to be safe.

- No extra security
- Need of backup freezer when the system breaks down
- Extra frustrations
- No direct cooling on each shelf
- Can be costly in the long run





# CRYOGENIC & ULT FREEZERS









## UNIFORM AND STABLE CRYOGENIC FREEZER FOR **LONG TERM STORAGE**

### ENVIRONMENTALLY FRIENDLY AND ECONOMIC ALTERNATIVE

Arctiko is proud of the innovative cryogenic freezer for long-term preservation of cells, tissues and other scientific samples. In recent years, storage in mechanical cryogenic freezers has replaced cryogenic storage in LN<sub>2</sub> to avoid cross-contamination and to provide a more environmentally friendly, safe and cost-efficient alternative. A cryogenic freezer eliminates the continuous cost of LN<sub>2</sub> storage maintenance and avoids hazardous operating conditions.

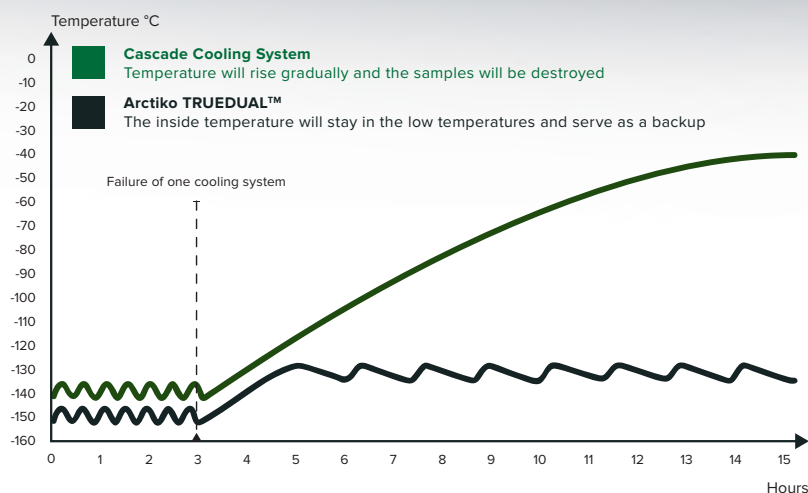
The CRYO freezers are designed for a wide variety of applications, such as research and long-term storage applications for low-temperature scientific experiments, preservation of cells, DNA, bone material, bacteria and similar samples.

### SUPERIOR COOLING PRECISION

The -150°C cryogenic freezers are among the most energy efficient compared with similar products. At less than 34 kWh/24h, no other -150°C product can come close to such a low energy consumption. The extremely low total ownership cost will with no doubt have a noticeable impact on the running costs.

Due to Arctiko's independent TRUE DUAL™ technology, security has never been better. In the unlikely event that one cooling system should fail, the second cooling system will maintain the freezer at a minimum of -130°C. The highly reliable cooling technology results in superior cooling precision and uniformity, even with multiple door openings.

GO WITH  
TRUE DUAL™  
COOLING  
TECHNOLOGY FOR  
**EXTRA SECURITY**





# CRYOGENIC FREEZERS

## BENEFITS

**ARCTIKO** CRYO  
TRUE DUAL™ TECHNOLOGY

- Designed for long-term cryogenic preservation
- Safer and more convenient than LN<sub>2</sub> Cryotanks
- Arctiko's TRUE DUAL™ technology keeps the samples safe at all times
- Low energy consumption, less than 34 kWh/24h
- Security never been better - with the optional LN<sub>2</sub> backup system the samples are protected against power failures and unexpected problems
- Dramatically improved temperature uniformity compared to LN<sub>2</sub> cryotanks
- Eliminates the need for supply of LN<sub>2</sub> and all the associated stress
- Reduces cost of ownership compared with the LN<sub>2</sub> cryotanks
- Avoid potential cross-contaminations due to improper storage of samples



Smart and easy handle with built in lock for restricted access

Maximum storage capacity with up to 14.400 samples in Arctiko 10x10 50 mm boxes

**-150°**

CRYO 230 Features on page 60



Reaches -150 °C in less than 6 hours!



TRUE DUAL™ TECHNOLOGY



FILTERLESS CONSTRUCTION



REDUCED NOISE LEVEL\*



STORE UP TO 14.400 SAMPLES



REDUCED COST OF OWNERSHIP

MODEL	CRYO 170	CRYO 230
Item code	DAI 0197	DAI 0198
Dimensions exterior WxDxH (mm)	1580x962,5 / 1137,5**x1090	1760x962,5 / 1137,5**x1090
Capacity (L)	171	233
Temperature range (°C)	-140/-150	-140/-150
Total capacity of 50 mm boxes (pcs)	108	144
Max. no. of samples (pcs)	10.800	14.400
Controller	TTM-004	TTM-004

\* Compared with similar products on the market

\*\* Depth of 1137,5 mm includes distance fittings on back for correct air circulation



# Integraline GG

## ULT DEVELOPED FOR THE MOST CRITICAL USERS

► Our newest line is developed for the most critical users of a wide range of applications. The Integraline includes four upright cabinet models with a capacity from 381L to 815L and three compact space saving models from 7L to 88L. They include features like noise reduction technology, vacuum isolated panels and our trusted and safe **TRUE DUAL™** technology (upright models).

### ► APPLICATION

Ultra-low temperature freezers have a wide application range for both biological and biotech storage. Whether you are in the medical field, life sciences, plastics, food or electronic components industry, these freezers are perfect for your application's needs. The Integraline is specially designed for long-term storage.

The Integraline models are perfect for storing such samples as DNA/RNA, plant samples, insect artifacts, autopsy materials, blood, plasma, bones and tissues, chemicals and antibiotics, tissue, bone marrow, cord blood, specimens, stem cells and sperm.

### ► MAXIMUM SAFETY

When you choose an Arctiko product, you receive more than what you might require in terms of security, logging and alarm features. We care about your valuable samples.

In addition to all safety features, the new V700/V500 ARCTIKO controller offers an integrated data logger with memory for 20 years, different interfaces and several alarms to ensure that your requirements for documentation and safety regulations are fulfilled.

Energy consumption has a huge impact on the cost of ownership; therefore, Arctiko's newly developed

models that can operate in ECO mode and NORMAL mode.

ECO mode is developed to reduce energy consumption while maintaining optimum uniformity for the stored materials.

### ► VACUUM INSULATED PANELS

The compact space-saving cabinet design offers a reduced footprint due to the use of Arctiko's specially developed vacuum insulated panels, which ensure maximum interior volume and the Integraline models comes with one of the market's best storage per m2 ratios.

VIP panels combined with Arctiko's state-of-the-art single compressor and **TRUE DUAL™** technology provides a safe and high-quality ULT freezer. This model is ideal for the demanding standards that need a precise and uniform temperature environment.

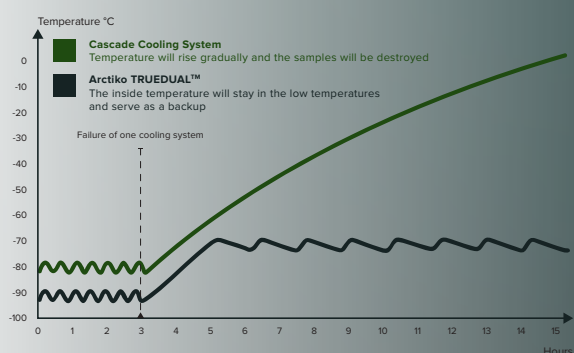
### ► EASY CLEANING AND MAINTENANCE

The interiors of our freezers are made of robust stainless steel for high sample safety and easy cleaning. The inner doors are detachable ensuring easy cleaning and defrosting.



## ► RELIABLE AND HIGHLY EFFICIENT TECHNOLOGY FOR ENHANCED SECURITY

No other manufacturer comes close to the performance of the Arctiko upright Integraline with the independent **TRUE DUAL™** technology providing the utmost security within ULT freezers worldwide. Not only is the pull-down time less than three hours, but extra security measures have been incorporated.



In the event of any failure with one of the cooling cycles, the other system will still maintain the temperature at a minimum of -70 °C. This means that your samples will not be affected by any challenges caused by an unexpected failure until service is provided.

## ► OPTIMIZED CABINET DESIGN

The Integraline has a specially designed cabinet that provides high-volume sample storage. It is suitable for most racks and storage solutions and also works with more rack systems and storage containers than offered by other brands.

In addition, the design includes solid door gaskets for greater isolation and minimum heat loss.

The Model is designed with easily accessible compartments with four removable inner doors that are individually insulated and with magnetic catch. This ensures better stability and less heat dissipation, which results in lowering the cost of ownership. This smart function also ensures easy defrosting and maintenance of the unit.

Read more on next page ►





## ULT DEVELOPED TO TARGET THE MOST CRITICAL USERS

► Your valuable samples demands a safe and stable environment leaving no room for temperature fluctuations. Some samples are quite fragile and expensive, so you clearly can't allow unreliable equipment where frequent door openings can completely damage your samples.

The Integraline GG range is characterized by the short pull down time indicating an exceptionally dominant and productive refrigeration system with robust insulation and the potent mixture of polyurethane and vacuum insulated panels. Even with continuous door

openings, it rapidly restores temperature uniformity creating a highly reliable environment that's not being affected by ambient temperature.

Therefore, it is essentially defined by amazing temperature recovery properties. The slower hold over time shows the mighty and well-insulated freezer's capability of keeping the temperature constant and the capacity of immediately restoring temperature uniformity following door openings. The range includes four upright cabinet models with an inner capacity from 385L to 819L.

### STORAGE OF SENSITIVE SAMPLES

When storing sensitive samples, the stable temperature inside is essential. Some customers need to monitor the temperature through external devices in line with higher requirements. In our Integraline GG, we have included a premade access port for an easier installation of an external probe or monitoring device. Moreover, the new Integraline GG can be connected to several optional accessories, to get exactly the unit that fulfills the needs in the laboratory, so that you can focus on your valuable research.

### APPLICATION

Ultra low-temperature freezers have a wide application range for both biological and biotech storage. Whether you are in the medical field, life sciences, plastics, food, or electronic components industry, these freezers are absolutely perfect for your application's needs. The application in the Integraline GG includes biological samples such as DNA/RNA, plant samples, insect artifacts, autopsy materials, blood, plasma, bones and tissues, chemicals and antibiotics, tissue, bone marrow, cord blood, specimens, stem cells, and sperm.

### NATURAL REFRIGERANT

► We have strongly committed ourselves to the responsible use of natural resources and clean technologies by using eco-friendly alternatives. Our natural refrigerants include extremely low GWP (Global Warming Potential) values and ODP (Zero Ozone Depletion Potential).

Our tried and tested environmentally friendly CFC-free and HCFC-free refrigerants guarantee potent and powerful system securing your valuable samples, but without compromising our Earth's safety in the process. These refrigerants don't produce harmful fumes and they are considered to be the ultimate

solution to the environmental contamination produced by synthetic refrigerants.

Even though they are environmentally friendly, they consume significantly less energy without compromising the cooling system, environment, and making it cost effective as well. Our environmentally-safe refrigerants share strong thermodynamic properties creating high performance along the way.

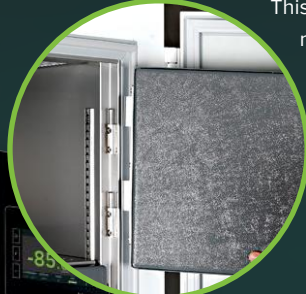
## V700 CONTROLLER

- The first-class V700 controller is equipped with all necessary alarms and features (see page 14-15). On top of everything, we developed ECO mode to reduce energy consumption while maintaining optimum uniformity for the stored materials.



## DETACHABLE INNER DOORS

- We designed the Model with easily accessible compartments including four removable inner doors that are individually insulated with magnetic catch. This smart function also guarantees easy defrosting and effortless maintenance of the unit.



## DOUBLE DOOR GASKETS WITH OPTIMAL INSULATION

- Heated door frame, insulated door and specially designed double door gaskets ensuring close tightening and prevents ice from building up.



## ONEGRIP™ HANDLE

- Ergonomic door handle enables one-handed door operations. Your security will be doubled thanks to both the integrated lock inside the handle and the RFID smart lock Card Key.



## PREMADE ACCESS PORT

- At ARCTIKO, we pay particular attention to the stability of the inside temperature for storing your sensitive samples. Some customers need to monitor the temperature through external devices in line with higher requirements. For that reason, we came up with 6 premade portholes for an easier installation of an external probe or monitoring device.



## FLEXIBLE SHELF LAYOUT

- The Integraline GG has multiple shelf configurations. Our middle shelf is equipped with direct cooling. Additionally, organizing the interior to fit your samples is now a piece of cake because of the use of existing racks or ARCTIKO's highly durable stainless steel racks, 10x10 cryoboxes, and vials.



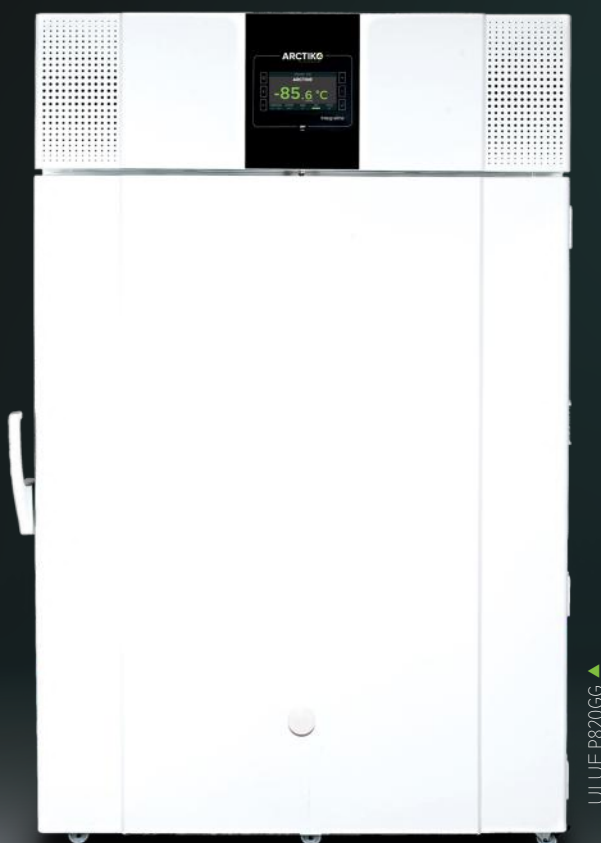
## STRONG AND DURABLE CASTORS

- Our designers at ARCTIKO have designed castors resulting in superior durability and strength. Our castors meet the highest requirements making them matchless on the market.



The new Integraline is developed to target the most critical users on the market. The Integraline features our independent **TRUE DUAL™** cooling system that consists of two independent systems offering you the best security.

In case of an unexpected failure on one of the independent cooling systems, the other will maintain the freezer temperature of at least -70°C. Thereby, your samples will not be affected by any challenge caused by an unexpected system failure, until service is provided. This is possible due to our highly reliable independent **TRUE DUAL™** technology.



MODEL	ULUF P390GG	ULUF P500GG	ULUF P610GG	ULUF P820GG
Item code	DAI 1835	DAI 1840	DAI 1845	DAI 1850
Dimensions exterior WxDxH (mm)	755x859,5/1002*x1999	895x859,5/1002*x1999	1035x859,5/1002*x1999	1285x859,5/1002*x1999
Capacity (L)	381	496	610	815
Temperature range (°C)	-40 / -86	-40 / -86	-40 / -86	-40 / -86
Total capacity of 50 mm boxes (pcs)	264	352	440	616
Max. no. of shelves (pcs)	5	5	5	5
Max. no. of samples (pcs)	26.400	35.200	44.000	61.600
Controller	V700	V700	V700	V700

\* Depth of 1002 mm includes detachable airflow management and noise reduction system



# DURABLE AND RELIABLE

## ULTRA LOW TEMPERATURE FREEZERS

Reaches -80°C  
in less than 4 hours!

-86 °C

Features on page ► 61

ULUF P610GG ▼

ULUF P390GG ▼



NATURAL  
REFRIGERANT



TRUE DUAL™  
TECHNOLOGY



VACUUM  
INSULATED  
PANELS



NOISE  
REDUCTION  
TECHNOLOGY



AIRFLOW  
CONTROL



FILTERLESS  
CONSTRUCTION



DIRECT  
COOLING

## ULT COMPACT DESIGN

The new compact Integraline is developed to target the most critical users in the market. The undercounter range will add a new dimension to your laboratory. The compact space-saving design and low noise level make it a perfect storage solution for your laboratory.

The compact Integraline undercounter models are produced with true and original single compressor technology that ensures outstanding cooling performance.

Stable at  
-86°C as well  
as -25°C



MODEL	ULUF P10	ULUF P50	ULUF P90
Item code	DAI 1820	DAI 1825	DAI 1830
Dimensions exterior WxDxH (mm)	447x709x731	657x778x836	937x778x836
Capacity (L)	7	50	88
Temperature range (°C)	-25/-86	-25/-86	-25/-86
Total capacity of 50 mm boxes (pcs)	5	30	60
Max. no. of samples (pcs)	500	3.000	6.000
Controller	V500	V500	V500

# COMPACT AND SPACE-SAVING UNDERCOUNTER MODELS

## BENEFITS

- Outstanding cooling performance with the true and original single cooling system.
- Compact space saving design makes the undercounter ULT's the perfect storage solution for laboratories with limited space.
- Single Compressor technology with a simple structure ensures easy maintenance, lower heat dissipation, low energy consumption and noise reduction for a pleasant work environment.
- Direct cooling for optimized temperature stability and uniformity, even with multiple door openings.
- Heated door frame prevents ice from building up around the gasket securing a stable and uniform temperature inside the freezer.
- Low energy consumption made possible with ECO mode and ultra-efficient Vacuum Insulated Panels.
- Built-in CO<sub>2</sub> backup controller system for extra security for your valuable samples.
- Self-diagnostic function to ensure that your alarm system is always working correctly.

Features on page ► 60



SINGLE  
COMPRESSOR  
SYSTEM



VACUUM  
INSULATED  
PANELS



NOISE  
REDUCTION  
TECHNOLOGY



AIRFLOW  
CONTROL



FILTERLESS  
CONSTRUCTION



DIRECT  
COOLING

-86 °C



# ULT UPRIGHT FREEZERS

Our ULUF upright freezers feature our single compressor system with direct cooling for higher temperature uniformity and excellent temperature stability. The ULUF -86°C series is the optimal solution for any long-term storage application.

By placing the compressor and other heat and noise generating components on the top of the unit, the heat is distributed

upwards and backwards, preventing the heat from warming up the entire room. This design also means that there is never a compartment, in which it would be difficult to locate your samples nor using fully. This all works to ensure an ergonomically correct unit that is easy and pleasant to use.

-86 °C



ULUF 750-2M

## BENEFITS

- Single Compressor Technology with a simple structure ensuring easy maintenance, lower heat dissipation, low energy consumption and noise reduction for a pleasant work environment.
- Direct cooling for optimized temperature stability and uniformity, even with multiple door openings.
- Heated vacuum release valve ensures that the doors can always open, making the unit perfect for an active work environment.
- Insulated inner doors minimize cold loss during door openings.
- Heated door frame preventing ice from building up around the gasket securing a stable and uniform temperature inside the freezer.

Features on page ► 63



FILTERLESS  
CONSTRUCTION



DIRECT  
COOLING

MODEL	ULUF 450-2M	ULUF 750-2M*
Item code	DAI 1414	DAI 1383
Dimensions exterior WxDxH (mm)	720x885x1990	1030x885x1990
Capacity (L)	393	642
Temperature range (°C)	-40/-86	-40/-86
Total capacity of 50 mm boxes (pcs)	240	400
Max. no. of shelves (pcs)	4 (fixed)	4 (fixed)
Max. no. of samples (pcs)	24.000	40.000
Controller	G 214	G 214

With  
**TRUE DUAL™  
technology\***



\* TRUE DUAL™ technology - In case of failure on one cooling cycle, the freezer will maintain an operating temperature of -70°C

# ULT COMPACT FREEZERS

The ULUF undercounter compact models will add a new dimension to your laboratory. The compact space-saving design and low noise level make it a perfect storage solution for your laboratory.

The ULUF -86°C series is produced with true and original single compressor technology, which secures outstanding cooling performance with only one compressor.

## BENEFITS

- Compact space saving design makes the undercounter ULT's the perfect storage solution for laboratories with limited space.
- Single Compressor Technology with a simple structure that ensures easy maintenance, lower heat dissipation, low energy consumption and noise reduction for a pleasant work environment.
- Direct cooling for optimized temperature stability and uniformity, even with multiple door openings.
- Heated door frame preventing ice from building up around the gasket securing a stable and uniform temperature inside the freezer.
- Perfect for a laboratory or workstation where you want to work uninterrupted without going back and forth to your storage area.

Features on page ► 62



SINGLE  
COMPRESSOR  
SYSTEM



FILTERLESS  
CONSTRUCTION



DIRECT  
COOLING

MODEL	ULUF 15	ULUF 65	ULUF 125
Item code	DAI 1390	DAI 1418	DAI 1417
Dimensions exterior WxDxH (mm)	400x630x665	600x700x810	950x725x810
Capacity (L)	7	54	94
Temperature range (°C)	-40/-86	-40/-86	-40/-86
Total capacity of 50 mm boxes (pcs)	5	30	48
Max. no. of shelves (pcs)	0	0	1
Max. no. of samples (pcs)	500	3.000	4.800
Controller	G 214	G 214	G 214

-86 °C

# ULT CHEST FREEZERS

The ULTF range shows that high performance freezing with focus on low energy consumption is the future. The range features our G214 Arctiko controller, which ensures that all alarm and data logging features are included as standard. The ULTF range is produced with true and original single compressor technology, which ensures great temperature stability for the safety of your samples.

The chest freezer will store your samples under optimal conditions even when opening the freezer several times throughout the day. The single compressor technology provides reliable low-temperature freezing and maximum temperature uniformity.

-86 °C

NATURAL  
REFRIGERANT

## BENEFITS

- Single compressor technology with a simple structure that ensures easy maintenance, lower heat dissipation, low energy consumption and noise reduction for a pleasant work environment.
- Insulated sub lids to minimize cold loss during door openings.
- Filterless construction prevents dust from blocking the airflow and minimizes maintenance procedures.

Features on page ► 64

ULTF 320



-80 °C  
in less than  
90 min!

-86 °C

ULTF 80



SINGLE  
COMPRESSOR  
SYSTEM



FILTERLESS  
CONSTRUCTION



NOISE  
REDUCTION  
TECHNOLOGY

Optimal storage capacity and  
overview of the stored samples  
with the stainless steel front  
rack storage system

MODEL	ULTF 80	ULTF 220	ULTF 320	ULTF 420
Item code	DAI 0200	DAI 0213	DAI 0205	DAI 0210
Dimensions exterior WxDxH (mm)	556x641x887	925x691x891	1263x691x891	1564x691x891
Capacity (L)	71	189	284	368
Temperature range (°C)	-40/-86	-40/-86	-40/-86	-40/-86
Total capacity of 50 mm boxes (pcs)	40	117	216	282
Max. no. of shelves (pcs)	-	-	-	-
Max. no. of samples (pcs)	4.000	11.700	21.600	28.200
Controller	G214	G214	G214	G214



# LOW-TEMPERATURE CHEST FREEZERS

The LTF (-60°C) and LTFE (-45°C) ranges ensure reliable low-temperature freezing and high temperature uniformity. Standard features include digital display, alarms, contact for remote alarm and castors.

The chest freezer will store your samples under optimal conditions even when opening the freezer several times throughout the day.

-30/-60 °C

## BENEFITS

- Single compressor technology with a simple structure that ensures easy maintenance and has low energy consumption.
- Filterless construction prevents dust from blocking the airflow and minimizes maintenance procedures.
- With the single compressor system, less heat is generated in the work environment, which results in a lower cost of ownership.
- Low heat dissipation ensures a pleasant work environment.
- A Low noise level provides a better work environment.

Features on page ► 65-66

▼ LTF 535 / LTFE 515



**-10/-45 °C -30/-60 °C**

▼ LTF 225 / LTFE 140



SINGLE  
COMPRESSOR  
SYSTEM



FILTERLESS  
CONSTRUCTION



NOISE  
REDUCTION  
TECHNOLOGY

LTF 85	LTF 225	LTF 325	LTF 425	LTF 535	LTFE 140	LTFE 290	LTFE 370	LTFE 515
DAI 0101	DAI 0126	DAI 0111	DAI 0116	DAI 0121	DAI 1600	DAI 1605	DAI 1610	DAI 1615
552x648x850	720x698x890	1262x698x890	1562x698x890	1662x758x932	720x698x890	1262x698x890	1562x698x890	1662x758x932
71	133	284	368	476	133	284	368	476
-30 / -60	-30 / -60	-30 / -60	-30 / -60	-30 / -60	-10 / -45	-10 / -45	-10 / -45	-10 / -45
40	117	216	282	309	84	216	282	309
2	3	12	15	15	3	12	15	15
4.000	11.700	21.600	28.200	30.900	8.400	21.600	28.200	30.900
Dixell	Dixell	Dixell	Dixell	Dixell	Dixell	Dixell	Dixell	Dixell

# BIOMEDICAL STORAGE SOLUTIONS







ARCTIKO

**ARCTIKO**  
true cooling specialists





---

## BIOMEDICAL STORAGE SOLUTIONS **WITH HIGH RELIABILITY**

Arctiko biomedical freezers and refrigerators store and secure your samples with outstanding cooling reliability and performance. Arctiko has combined the highest quality cooling performance created by forced air cooling with the many features and user-friendliness offered by the Arctiko controller G214. The results meet the more stringent requirements for lower power consumption, more precise cooling uniformity, the need for temperature and alarm surveillance, documentation and validation, making Arctiko's Biomedical range the number one solution for biomedical storage.

The Arctiko Biomedical range provides ideal solutions for the research industry and healthcare sector for storing vaccines, diagnostic samples, reagents and samples such as enzymes for genetic research, culture media and temperature testing of electrical components and precision devices.

- Lower power consumption
- Precise and stable cooling
- Temperature and alarm surveillance
- Documentation and validation

In several countries, health ministries instruct pharmaceutical companies/pharmacies to document all pharmaceutical drugs that have been stored under a certain temperature. The advantage of choosing an Arctiko product is a controller with all needed features. In particular, the data logger with memory and on-screen graphs are extremely important features needed by pharmacies.

The Arctiko Biomedical range offers a wide variety of solutions from our 55 liter undercounter models up to 1381 liters of effective capacity. Each freezer/refrigerator is pre-programmed from the factory to provide controller settings and cooling parameters for optimal, user-friendly solutions.

All products in Arctiko's biomedical range have a flexible interior so that we can meet all requirements for storage solutions! You can choose from a variety of shelf and drawer options or devise your own combination.

# SPARK FREE INTERIOR

## FLAMMABLE LIQUIDS WILL BE STORED SAFELY WITH AN ARCTIKO ATEX APPROVED REFRIGERATOR OR FREEZER

► When handling or storing flammable samples in a standard biomedical refrigerator or freezer, there will be a possible ignition risk. Therefore, we at Arctiko recommend storing your flammable samples in an Arctiko ATEX approved biomedical refrigerator or freezer.

The Arctiko ATEX biomedical refrigerators and freezers are approved according to EN 60079-15 category 3, zone 2, CE EX 11-/3G. This means that the inside of the unit is approved to store flammable, explosive or otherwise volatile substances.

Stored substances should always be kept in airtight containers, this to prevent the vapor or particles of the substances from escaping their container and ignition of non spark free items.



AVAILABLE IN ATEX

### ATEX APPROVAL IS AVAILABLE AS AN OPTION ON:

LF Range (Biomedical Freezers)	-10/-30°C
LFF Range (Biomedical Combi)	+1/+10°C / -10/-30°C
LR Range (Biomedical Refrigerator)	+1/+10°C
PR Range (Biomedical Refrigerator)	+1/+10°C



# ARCTIKO flexaline

true cooling specialists

The Flexaline series is suitable for laboratories due to the flexible interior and stable performance. The range offers forced air cooling for high-temperature stability and quick temperature recovery after door openings.

The Flexaline models are available from 55 L to 437 L in capacity. They are user-friendly with adjustable shelves and come with the most necessary alarms. The smaller models in this range are suitable for minor laboratories and offices etc. for storage of diagnostic samples, vaccines and reagents.



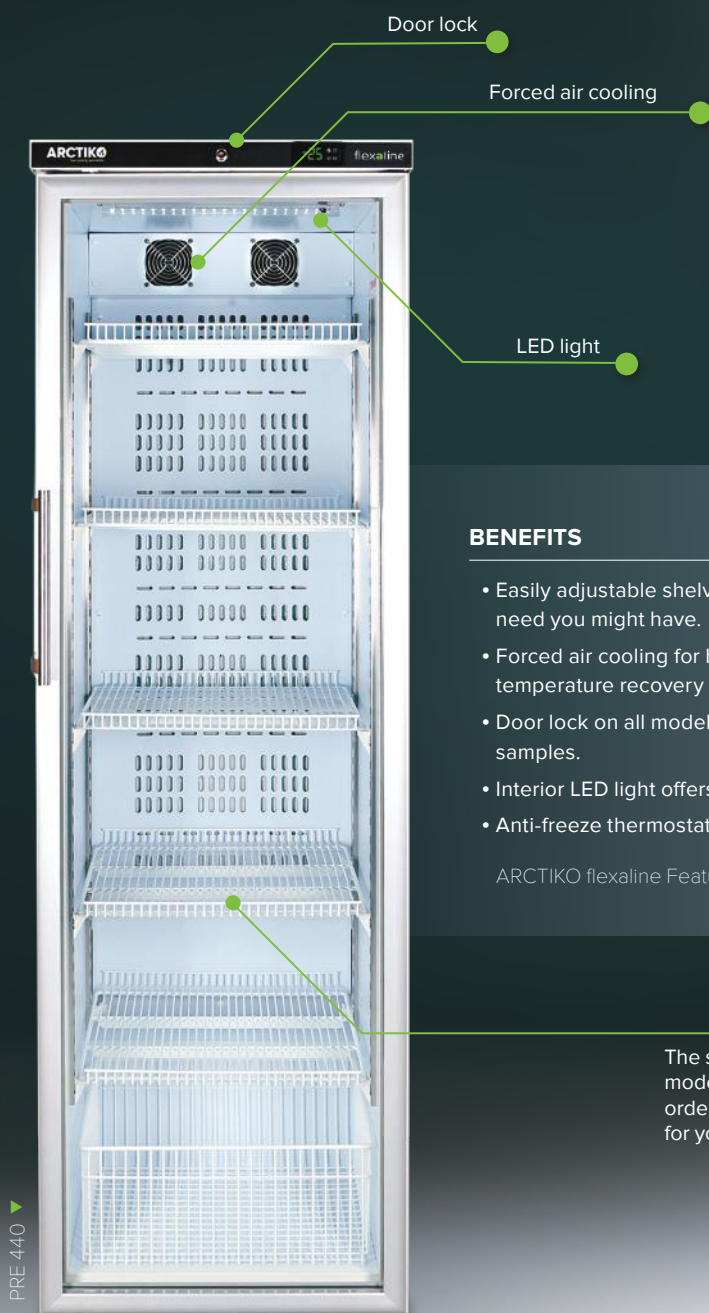
FORCED AIR  
COOLING

## MODEL

Item code
Dimensions exterior WxDxH (mm)
Capacity (L)
Temperature range (°C)
Max. no. of shelves (pcs)
Max. load per shelf (kg)
Max. no. of baskets (pcs)
Max. load per basket (kg)
Controller



# YOUR PERSONAL LAB REFRIGERATOR



+2/+8 °C -15/-25 °C

## BENEFITS

- Easily adjustable shelves to accommodate any storage need you might have.
- Forced air cooling for high-temperature stability and quick temperature recovery after door openings.
- Door lock on all models for optimal security of your samples.
- Interior LED light offers a good overview of your samples.
- Anti-freeze thermostat

ARCTIKO flexaline Features on page ► 70-71

The shelves in the new Flexaline models are easily adjustable in order to offer the best flexibility for your storage needs

PRE 440

LFE 110	LFE 360	LRE 120	LRE 440	PRE 120	PRE 440
DAI 6005	DAI 6000	DAI 6020	DAI 6025	DAI 6040	DAI 6045
600x600x835	600x700x1865	600x600x835	600x700x1865	600x600x835	600x700x1865
107	356	117	437	117	437
-15 / -25	-15 / -25	+2 / +8	+2 / +8	+2 / +8	+2 / +8
4 + 1 small	22	4 + 1 small	22	4 + 1 small	22
15 / 10	14,5	15 / 10	15	15 / 10	15
1	1	1	1	1	1
15	20	15	22	15	22
Carel	Carel	Carel	Carel	Carel	Carel

# BIOMEDICAL BASIC LINE

This range offers high-temperature stability and quick temperature recovery after door openings as well as low noise level. It is suitable for laboratories due to the flexible storage and the unique monoblock technology which ensures the samples to be stored safely. It is user-friendly with adjustable shelves and comes with the necessary alarms.

## BENEFITS

- With the monoblock technology, the defrost process has less affect on the temperature inside the unit compared to units without monoblock, ensuring the integrity of the stored samples.
- Increased insulation ensuring low energy consumption
- Door lock on all models for optimal security of your samples.
- The 700 models feature our new unique pressed side panels offering an integrated shelf guide system for high hygiene and easy cleaning.
- Forced air cooling for high-temperature stability and quick temperature recovery after door openings.

Features on page ► 69



FORCED AIR  
COOLING

+1/+10 °C -10/-25 °C

Unique monoblock  
technology



LRE 700 / LFE 700

MODEL	LFE 700	LFE 1400	LRE 700	LRE 1400
Item code	DAI 7000	DAI 7005	DAI 7010	DAI 7015
Dimensions exterior WxDxH (mm)	720x840x1995	1540x820x1995	720x840x1995	1540x820x1995
Temperature range (°C)	-10 / -25	-10 / -25	+1 / +10	+1 / +10
Capacity	519	1345	519	1345
Max. no. of shelves (pcs)	23	40	23	40
Max. load per shelf (kg)	45	45	45	45
Controller	Carel	Carel	Carel	Carel

# BIOMEDICAL FREEZERS

The biomedical range allows you to store and secure your samples with outstanding cooling reliability and performance. Arctiko has combined the high-quality cooling performance created by forced air cooling with the features and user-friendliness offered by the Arctiko G214 controller. The results meet the strictest requirements for lower power consumption, more precise cooling uniformity, temperature and alarm surveillance, documentation and validation, this making the range a perfect solution for biomedical storage.

-10/-30 °C

## BENEFITS

- The flexible interior allows you to mix shelves and drawers to accommodate any storage need you might have.
- Forced air cooling for high-temperature stability and quick temperature recovery after door openings.
- Door lock on all models for optimal security of your samples.
- Stainless steel interior for good hygiene and easy cleaning.
- Automatic defrost for high temperature stability and uniformity ensures the integrity of your samples.
- Available with ATEX approved spark-free interior to keep your flammable liquids stored safely.

Features on page ► 67-68

LF 700 / LAF 700



-10 / -30 °C

LF 100



FORCED AIR  
COOLING



AVAILABLE IN  
ATEX

Unique  
-40°C unit with  
automatic  
defrost\*

MODEL	LF 100	LF 300	LF 700	LF 1400	LAF 700*
Item code	DAI 0285	DAI 0225	DAI 0255	DAI 0275	DAI 0290
Dimensions exterior WxDxH (mm)	610x659x790	520x700x1997	720x860x1997	1440x860x1997	740x870x2017
Temperature range (°C)	94	346	618	1361	618
Capacity	-10 / -30	-10 / -30	-10 / -30	-10 / -30	-10 / -40
Max. no. of shelves (pcs)	5	23	23	46	23
Max. load per shelf (kg)	30	30	30	30	30
Controller	G214	G214	G214	G214	G214

\*Not available in ATEX / Spark free



# BIOMEDICAL COMBI

This range fits perfectly into laboratories with limited space where the need for both freezer and refrigerator exists. The unit consists of one cabinet with a refrigerator in the upper compartment and a freezer in the lower compartment.

It is designed with two completely independent cooling systems and two separate controllers. This ensures completely independent operation of the systems allowing a higher level of customization than in regular split units.

**+1/+10 °C**  
**-10/-30 °C**



LFF 270



FORCED AIR  
COOLING



AVAILABLE IN  
ATEX

MODEL	LFF 270	LFF 660
Item code	DAI 0235	DAI 0265
Dimensions exterior WxDxH (mm)	520x700x1997	720x860x1997
Capacity (L)	161 / 161	288 / 288
Temperature range (°C)	+1 / +10 -10 / -30	+1 / +10 -10 / -30
Max. no. of shelves (pcs)	16	16
Max. load per shelf (kg)	30	30
Controller	G214	G214

LFF 660 ▼



#### BENEFITS

- Combined refrigerator and freezer in one cabinet saves you floor space in your work area.
- A flexible interior allows you to mix shelves and drawers to accommodate any storage need you might have.
- Forced air cooling for high-temperature stability and quick temperature recovery after door openings.
- Door locks come on all models for optimal security of your samples.
- Stainless steel interior for high hygiene and easy cleaning.
- Automatic defrost for the best temperature stability and uniformity ensures the integrity of your samples.

Features on page ► 75

Smart space saving combi model with freezer and refrigerator combined in one cabinet

# BIOMEDICAL REFRIGERATORS

The biomedical refrigerator range includes the PR and LR range, with models from 94 L to 1381 L capacity. The LR range is equipped with solid door and the PR range with glass door, which allows a better overview of the stored items. The biomedical range stores and secures your samples with outstanding cooling reliability and performance.

Arctiko has combined the high-quality cooling performance created by forced air cooling with the features and user-friendliness offered by the Arctiko G214 controller.

+1 / +10 °C

+1 / +10 °C



LR 700



PR 500



FORCED AIR  
COOLING



AVAILABLE IN  
ATEX

MODEL	LR 100	LR 300	LR 700	LR 1400
Item code	DAI 0280	DAI 0220	DAI 0250	DAI 0270
Dimensions exterior WxDxH (mm)	610x659x790	520x700x1997	720x860x1997	1440x860x1997
Capacity (L)	94	346	618	1361
Temperature range (°C)	+1 / +10	+1 / +10	+1 / +10	+1 / +10
Max. no. of shelves (pcs)	5	23	23	46
Max. load per shelf (kg)	30	30	30	30
Controller	G214	G214	G214	G214



# BIOMEDICAL REFRIGERATORS

## BENEFITS

- A flexible interior allows you to mix shelves and drawers to accommodate any storage need you might have.
- Forced air cooling for high-temperature stability and quick temperature recovery after door openings.
- Door lock on all models for optimal security of your samples.
- Automatic defrost for the best temperature stability and uniformity ensures the integrity of your samples.
- Available with ATEX approved spark free interior to keep your flammable liquids stored safely.

Features on page ► 72-73-74

LR 100 ▼



+1 / +10 °C



PR 100 ▼



FORCED AIR  
COOLING



AVAILABLE IN  
ATEX

MODEL	PR 100	PR 300	PR 700	PR 1400
Item code	DAI 0895	DAI 0885	DAI 0860	DAI 0870
Dimensions exterior WxDxH (mm)	610x659x790	520x690x1997	720x860x1997	1440x860x1997
Capacity (L)	94	352	628	1381
Temperature range (°C)	+1 / +10	+1 / +10	+1 / +10	+1 / +10
Max. no. of shelves (pcs)	5	23	23	46
Max. load per shelf (kg)	30	30	30	30
Controller	G214	G214	G214	G214

# BLOOD BANK REFRIGERATORS

CE CERTIFIED





ed Cells

100.61.5 27164

NTRE

270





## MEDICAL DEVICE CERTIFIED BLOOD BANK REFRIGERATOR

Blood Bank refrigerators are devices intended for safe storage of whole blood and blood components at temperatures ranging from +2°C to +6°C.

Blood must be stored at a consistent and stable temperature for the best results. The well-designed Arctiko Blood Bank refrigerators are the optimal choice. The features include uniform fan cooling that circulates the air around the stored blood. Polyurethane (CFC-free) insulation in cabinet walls, together with double pane glass doors, reduce the effect of the ambient environment and and promote temperature uniformity in the cabinets. Glass door and open drawer design ensures easy access to and identification of blood, which reduces the time required for door openings and results in better temperature uniformity.

Cold storage of blood is crucial in light of continuing advancements in medical science. The value of blood and blood components, coupled with stringent storage requirements, make the Arctiko Blood Bank refrigerators a major asset in risk management.

The importance of correct blood storage cannot be questioned today, with the medical industry investing millions of euros each year in laboratory procedures involving blood donation, testing, matching, preparation and so on. Many of the current medical practices around the world would not be possible without blood.

Every collection, identification and transfusion of blood must follow a protocol, so that blood transfusion remains safe for patients, donors and medical technicians. If blood is not stored properly, all of these efforts and expenses could be lost, which is why choosing Arctiko blood bank refrigerators is so important. Blood storage requires specially designed equipment to meet international standards, which is important to have in mind when purchasing your next blood bank refrigerator.

In conclusion, you can see it is very important to store blood in the correct manner, both for the health of the community and also to avoid wasting precious resources of life.

### RECOMMENDED TEMPERATURES

• Whole blood and liquid red cells	+2°C to +6°C
• Frozen Plasma	-30°C
• Red blood cells frozen in 40% glycerol	-65°C

### EXPIRATION DATES

• Whole blood in acid citrate solution	21 days
• Whole blood in citrate phosphatase dextrose asinine solution	35 days
• Whole blood in heparin	48 hours
• Red blood cells	Same as appropriate for the whole blood from which cells were taken
• Frozen red blood cells	10 years
• Leukocyte-reduced red blood cells	Same as appropriate for the whole blood from which cells were taken
• Fresh frozen plasma	12 months

*\*We disclaim responsibility for the accuracy of the above tables.*

# BLOOD BANK REFRIGERATORS

## CHART RECORDER

Continuous documentation of temperature conditions inside of cabinet together with the G214 & Dixell controller for optimum security. The valuable blood is well protected and monitored at all times.

## STAINLESS STEEL DRAWERS

Arctiko Blood Bank refrigerators are specially designed to store whole blood bags in our easy extractable stainless steel drawers.

## DOUBLE PANE GLASS DOOR

Our double pane glass door reduces heat from the ambient affecting the cabinet and promotes temperature uniformity in the chamber.



## G214 CONTROLLER

The Arctiko controller with state-of-the-art electronics to maintain temperature uniformity and stability. The features include backup battery, power failure alarms, high/low-temperature alarms, probe failure alarm, instrument failure alarm, contact for remote alarm, integrated data logger with memory for 30+ years, RS 485/232 interface and USB readout/download.

## STORAGE CAPACITY

Large storage capacity with a wide product portfolio with internal capacity from 94 L to 1381 L, meeting every customer need. Blood bag capacity from 72 to 960 pcs.

Features on Pages ► 76-77

**MDD  
CERTIFIED  
93/42/EEC  
CLASS IIA**



+4 °C





## WHAT'S YOUR BACK-UP PLAN, IF YOUR BLOOD BANK REFRIGERATOR FAILS?

Blood is an important resource and the safety of it should not be put at risk. Avoid the problems and headaches caused by an unexpected breakdown of your Blood Bank refrigerator and spend your time on what's more important, your research and treatment of humans.

Arctiko has added additional security in the form of a TRUE DUAL™ technology to the BBR-D range, so that the temperature will be maintained even in the event of an unexpected failure.

### OPTIMUM SAFETY WHEN STORING BLOOD

TRUE DUAL™ technology with two separate and independent cooling systems in combination with the advanced Arctiko controller, provides extreme security where needed. All important controller features, such as a data logger and alarms, are included as standard.

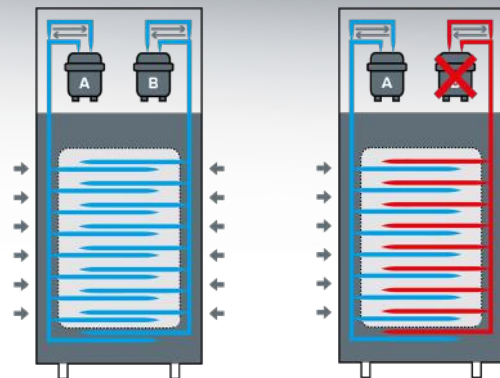
If one of the independent cooling cycles unexpectedly fails, the other system maintains a stable temperature of +4°C and the blood will stay protected.

It is important to invest in the correct quality equipment also to meet the established regulatory standards. Arctiko's quality equipment will reduce the frequency of costly downtime situations.

### BENEFITS ON BBR/BBR-D RANGE

- Medical device approved
- TRUE DUAL™ technology (-D range)
- 3-level protection (Dixel, G214 and temperature chart recorder)
- Automatic door closing and door lock
- Forced air cooling
- Telescopic drawers
- Right hand hinged reversible door
- Stainless steel interior
- White exterior

MDD  
CERTIFIED  
93/42/EEC  
CLASS IIA



Maintains stable temperature of  
+4 C and protects the blood



# BLOOD BANK REFRIGERATORS

Our Blood Bank refrigerators are the best choice for safe storage of blood due to their exceptional temperature uniformity and reliable technology. The double pane glass door offers an optimal overview of the interior and with the telescopic drawers, the blood bags are easily accessible.

The valuable blood is well protected and monitored in our Blood Bank refrigerators, ensuring the high quality of your blood bags at all times. The BBR models come with an advanced controller, an integrated non-manipulative data logger with USB read-out and a chart recorder as standard.

+4 °C

**MDD  
CERTIFIED**  
**93/42/EEC  
CLASS IIA**

## COMPLIANT WITH REGULATORY REQUIREMENTS

- Medical device Class IIA according to MDD 93/42/EEC



BBR 1400



BBR 300

**+4 °C**



FORCED AIR  
COOLING



MEDICAL  
DEVICE  
CLASS IIA



AVAILABLE WITH  
TRUE DUAL™  
TECHNOLOGY

MODEL	BBR 100 / -D	BBR 300 / -D	BBR 500 / -D	BBR 700 / -D	BBR 1400 / -D
Item code	DAI 1110	DAI 1115	DAI 1120	DAI 1125	DAI 1130
Item code with <b>TRUE DUAL™</b> technology (-D)	DAI 1135	DAI 1140	DAI 1145	DAI 1150	DAI 1155
Dimensions exterior WxDxH (mm)	610x659x790	520x690x1997	620x860x1997	720x860x1997	1440x860x1997
Capacity (L)	94	352	523	628	1381
Temperature range (°C)	+4	+4	+4	+4	+4
Max. no. of adjustable drawers (pcs)	2	8	8	8	16
Max. load per adjustable drawer (kg)	30	30	30	30	30
Max. no. of blood bags - by standard no. of adj. drawers (pcs)	72	150	240	300	600
Max. no. of blood bags - by max. no. of adj. drawers (pcs)	72	240	384	480	960

ACCESSORIES | SHELVES  
RACKS | BOXES | VIALS









# ACCESSORIES



## CO<sub>2</sub> / LN<sub>2</sub> BACKUP

A number of Arctiko products can be supplemented by a CO<sub>2</sub>/LN<sub>2</sub> backup system for optimized safety. The backup system is supplied with a heavy-duty internal battery, injection indicator and digital display with alarm functions. It injects CO<sub>2</sub>/LN<sub>2</sub> in the event that the temperature inside a freezer rises above a preset temperature value.



## TEMPERATURE CHART RECORDER

A chart recorder is a safe solution for documenting temperature conditions over a certain period of time. A replaceable pen continuously documents the temperature on a chart that circulates on either a 7- day or 24-hour basis. The chart recorder can be built in as an option in many Arctiko products.



## GSM ALARM MODULE

The module sends a text message to one or several coded telephone numbers in the event of any occurring alarms. A simple, effective and reliable alternative that provides increased safety. The GSM alarm can be connected to a group of freezers if needed.



## CRYO GLOVES

Our water resistant CRYO gloves protect your hands and prevent frostbite while you are handling frozen products in ultra cold environments down to -160°C. The gloves have multiple layers of insulation from fingertip to mid-forearm; they can also be used in very high temperatures up to +123°C. Available in different models and sizes.

### VOLTAGE STABILIZERS

The voltage stabilizer will ensure that your equipment will receive normal, stabilized power. If the voltage rises or drops, the voltage stabilizer will stabilize the output to ensure the voltage reaching your equipment remains constant at 230 V (+/- 6 %) or 115 V (+/- 6 %), within the operating range of the unit. Stabilized power is essential for refrigeration equipment in unsteady power areas to ensure long operation without damage and to ensure that the contents of the refrigeration unit are kept at the optimal temperature.



### VOLTAGE CONVERTERS

Voltage converters can be used worldwide to transform 220 V into 110 V and vice versa. The voltage converters are made of highly durable materials and feature power source indicators and toroidal transformer. Models are available from 2400 W to 8000 W. Please contact Arcitko for more information and help in choosing the correct converter for your product.



### DATALOGGER

The datalogger is a simple and safe electronic device that will record the internal temperature of the equipment over time with an external or internal sensor. The data logger is able to automatically collect data on a 24-hour basis in an automatically generated multi-level PDF report. It can easily be adjusted to the desired alarm limits and is available in various models with a range from -200 °C to +200 °C. Fully compliant with ISO standard 19005-1 Document Management industry guidelines for the long-term preservation of electronic documents (PDF/A) and FDA 21 CFR Part 11.

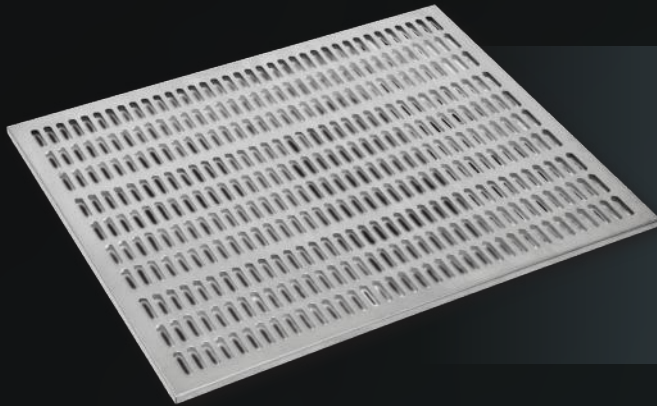


### STACKING KIT

The stacking kit offers great advantages and minimizes the footprint, which ensures maximum floor space, if space is limited. The stacking kit makes it possible to combine undercounter refrigerators and freezers as desired. It is simple, easy to install and made of highly durable steel.

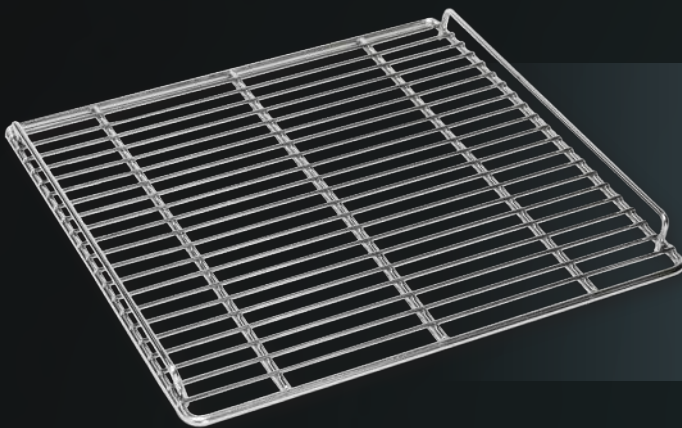


# SHELVES & DRAWERS



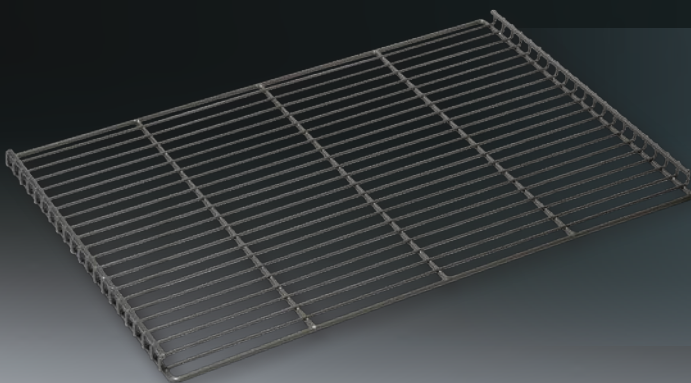
## **PERFORATED STAINLESS STEEL SHELVES**

Our perforated stainless steel shelves ensure stable storage due to their flat surface.



## **WIRE SHELVES STAINLESS STEEL**

The stainless steel wire shelves are made of high-quality stainless steel, which ensures a long life span.



## **WIRE SHELVES PLASTIC COATED**

The plastic coated wire shelves are standard equipment in our biomedical refrigerators and freezers and made of steel coated with durable plastic.



### **DRAWER SYSTEM**

The Arctiko multi-purpose drawer system offers a great way to keep your samples in order. Either to divide up the freezer for several users or just for easy access and a good overview.



### **WIRE BASKETS FOR CHEST FREEZERS**

Our wire baskets, which are available in two models, offer a great overview of your stored items.



### **STAINLESS STEEL DRAWERS**

Our stainless steel drawers can be mounted in the majority of our products. Each drawer has fixed lanes and adjustable plexiglass dividers.



# STAINLESS STEEL RACKS

## DON'T WASTE TIME SEARCHING THROUGH UNSORTED SAMPLES

Store your freezer storage boxes in organized freezer racks. Arctiko offers a large variety of stainless steel racks to optimize your freezer space. These racks are made of high-quality, strong and long-lasting stainless steel. The racks make it easy to organize the samples inside the freezer. Our range consists of racks for both chest freezers and upright freezers.

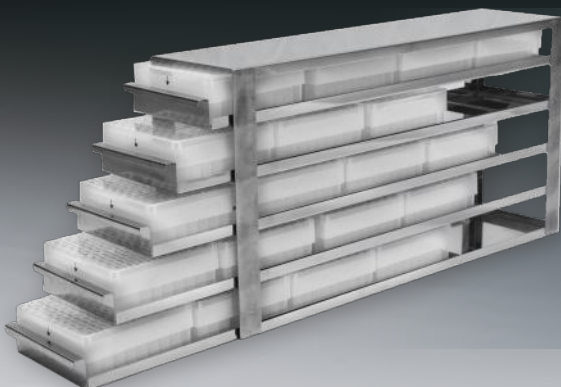


### CHEST FRONT RACK - CFR

The chest front rack is designed for optimal organization of chest freezers. The box is introduced from the front, thus ensuring a good overview. The handle at the top meanwhile ensures easy handling of the racks.

### UPRIGHT SIDE RACK - USR

The upright side rack model features individual compartments for each box, meaning that the box is introduced from the side. On the front of the rack a vertical folding handle ensures easy extraction of the rack. The rack is smart in the event you need to access more samples at the time.



### UPRIGHT DRAWER RACK - UDR

When using racks with drawers, only the relevant drawer with the freezer boxes of interest is pulled out. All other boxes stay safely in the cold interior of the ULT freezer. The drawers slide smoothly and easily, which facilitates easy introduction. The UDR rack is equipped with a smart grip, which ensures easy handling and location of necessary samples.

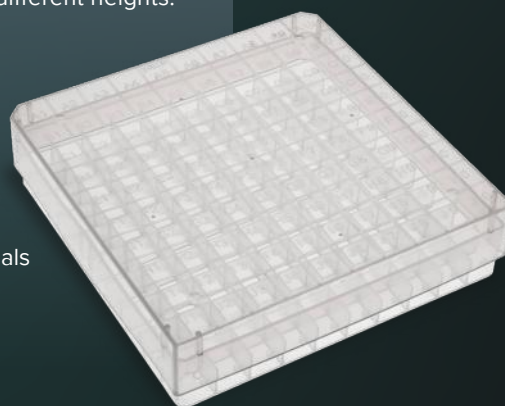
# CRYOVIALS & BOXES

## ARCTIKO BOXES

With Arctiko's cryoboxes, samples will be kept safe due to high focus on quality and many years of experience in handling strong, easy-to-use storage boxes with customers in mind.

Arctiko boxes come in two different versions: 9x9 separation and 10x10 separation, providing a storage capacity of 81 and 100 samples respectively. With the 10x10 box, the focus is to optimize the sample storage and provide more advantages when using conventional 9x9 boxes. Arctiko Cryo Boxes are available in 5 different heights: 32mm, 40mm, 50mm, 80mm and 90 mm.

- 23% increase in storage capacity compared to conventional boxes
- A click lock in the lid ensures secure handling and that samples will be stored optimally at all times
- Cryoboxes come with numerical codes for quick identification
- Standard measurements 130 x 130mm fits most rack systems
- The bottom construction enables one-handed opening of Arctiko vials without removing the vials from the box



## ARCTIKO SLIM CRYOVIALS

Arctiko Slim Cryovials are uniquely designed for safe short- and long-term storage. Combined with our popular and innovative 10x10 cryoboxes, the capacity will be optimized by more than 23%. Arctiko Slim Cryovials are available in 5 different sizes: 0.5ml, 1.0ml, 2.0ml, 4.0ml and 5.0ml

- Slim design with external thread invented for 10x10 boxes
- External thread limits sample contamination due to tight closing
- Highly resistant and withstanding temperatures of -196°C / 121°C
- Star-foot grip for easy and safe removal and fitting of the lid
- Self-standing star foot with anti-rotating bottom, compatible with various working stations
- Smart and uniquely designed lid allowing easy tightening and removal of the lid with only half a rotation
- Certified RNase-free, DNase-free, Pyrogen-free and DNA-free
- Sterilized according to ISO 11137-2:2013





# ARCTIKO US

true cooling specialists

ARCTIKO US Inc, based out of Nashville, TN, is a subsidiary to ARCTIKO International.

All our UL/ETL approved ULT freezers are designed, developed, and engineered in Denmark. Moreover, we have two distribution hubs in USA, New York, NY and Nashville, TN.

In North America, we offer 4 different product ranges covering temperatures from -30 °C to -86 °C. We have a truly unique product line of compact -86 °C undercounter freezers in different sizes unparalleled on the global market.

Our distribution hubs in Nashville and New York are stocked with our full product portfolio. The high inventory level makes sure we can deliver all our products fast and secure.

For any information on Arctiko International, please contact us at: [sales@arctiko.com](mailto:sales@arctiko.com)

Read more on our North American website: [www.arctiko-int.com](http://www.arctiko-int.com)

Together with our outstanding nationwide transportation and logistics partners, we make sure that the end user receives their ULT freezer as quickly as possible.

With our nationwide service network, you and your clients can rest assured that we always have a service hub nearby for fast response time to any service call.

We are acknowledged across the world for our exceptional high-quality of Ultra-Low Temperature Freezers. We believe, that at a passionate approach to every project - paired with high team spirit amongst our competent employees of true cooling experts - enables us to make a significant difference for all our customers.





# SERVICE & SUPPORT

Our service team has more than 40 years of experience and knowledge in cooling technology and controls. We are able to answer any kind of inquiries you may have regarding:

- ▶ Spare parts ordering/delivering/pricing
- ▶ Product maintenance and servicing
- ▶ Technical and after sales support
- ▶ User and service manual
- ▶ Service training sessions for dealers





## COMMON QUESTIONS

Frequently asked questions can be found directly on our website:  
**[www.arctikoservice.com](http://www.arctikoservice.com)**

As a distributor, you can use the service website to find almost any request you may have to perform service on Arctiko units. You can easily find:

- ▶ Operating instruction
- ▶ Spare part list
- ▶ Helpful video guides
- ▶ Service training dates

## CONTACT DETAILS

[www.arctikoservice.com](http://www.arctikoservice.com)  
[service@arctiko.com](mailto:service@arctiko.com)  
+45 75 17 13 34



-150 °C / -86 °C



MODEL	CRYO 170	CRYO 230	ULUF P10	ULUF P50	ULUF P90
Main specifications	Item code	DAI 0197	DAI 0198	DAI 1820	DAI 1830
	Temperature range (°C)	-140 / -150	-140 / -150	-40 / -86	-40 / -86
	Max. ambient temperature (°C)	30	30	25	25
	Capacity (L)	171	233	7	50
	Exterior dimensions WxDxH (mm)	1580x962,5/1137,5x1090	1760x962,5/1137,5x1090	447x709x731	657x778x836
	Interior dimensions WxDxH (mm)	500x500x685	680x500x685	147x142x307	357x443x307
	Weight (KG)	374	391	55	75
	Insulation (mm)	170	170	120	120
	Cooling technology	dual system / static	dual system / static	single system / static	single system / static
	Controller Model / probe type	TTM-004 / PT100	TTM-004 / PT100	V500 / PT100	V500 / PT100
Power	Power supply (V)	3 x 400	3 x 400	230	230
	Frequency (Hz)	50	50	50/60	50/60
	Power consumption (kWh/24h)	317	33.5	4.0	5.6
	AMP (A)	4.8	4.7	3.0	3.5
	Power (Watt)	1929	2021	370	400
	Horse power (HP)	2 x 1 1/2	2 x 1 1/2	3/8	1/2
Alarm functions	Alarm display as text - not codes	no	no	yes	yes
	Visual / acoustic alarm	yes / yes	yes / yes	yes / yes	yes / yes
	Power failure alarm	yes	yes	yes	yes
	Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes	yes / yes
	Open door alarm	no	no	yes	yes
	Probe failure alarm	yes	yes	yes	yes
	Low battery alarm	no	no	yes	yes
	Compressor failure alarm	no	no	no	no
	Battery backup for alarms (approx. hrs.)	48	48	72	72
Data logging & external connection	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes	yes
	Electronic data logger	no	no	yes	yes
	RS 485 port	no	no	optional	optional
	USB port for software update & data download	no	no	yes	yes
	Temperature chart recorder	optional	optional	optional (external mounting)	optional (external mounting)
Display features	Display type	LED display	LED display	5" touch screen	5" touch screen
	Number of optional reference probes	no	no	1	1
	Password protection for turning unit on / off	no	no	yes	yes
	Temperature graph on display	no	no	yes	yes
Other features	Automatic defrost	no	no	no	no
	Antifreeze function	no	no	no	no
	Vacuum release port	yes	yes	yes	yes
	Access port for external probe etc. (int. diameter mm)	20	20	12	12
	Light	no	no	no	no
	Lock with key	yes	yes	yes	yes
	Castors (total pcs) / castors with brake (pcs)	4 / 0	4 / 0	0 / optional	2 rollers / optional
	Fixed feet (pcs) / levelling feet (pcs)	0 / 2	0 / 2	0 / 4	0 / 2
	Sub lids / inner doors (pcs)	1	2	no	no
	Reversible door(s)	no	no	no	no
	Fixed shelves (pcs) / adjustable shelves (pcs)	no	no	0 / 0	0 / 0
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	no	no	0 / 0	0 / 0
	Max. load per shelf (kg)	no	no	0 / 0	0 / 0
	Adjustable drawers (pcs)	no	no	no	no
	Max. no. of adjustable drawers (pcs)	no	no	no	no
	Max. load per adjustable drawer (kg)	no	no	no	no
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no	no	no
	Baskets (pcs)	no	no	no	no
	Max. no. of baskets (pcs)	no	no	no	no
	Max. load per basket (kg)	no	no	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	108	144	5	30
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	72	96	4	18
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	45	72	3	12
Refrigeration & cabinet	Number of compressors	2	2	1	1
	Refrigerant	mix	mix	Nature R	Nature R
	Interior cabinet material	stainless steel	stainless steel	stainless steel	stainless steel
	Exterior cabinet material	painted steel	painted steel	painted steel	painted steel
	Colour (exterior cabinet)	ivory	ivory	white	white
	Foam type	polyurethane	polyurethane	polyurethane	polyurethane
	VIP vacuum insulated panels	no	no	yes	yes
Shipping	Shipping weight (KG)	538	563	82	108
	Shipping dimensions WxDxH (cm)	192x122x140	210x122x140	76x54x92	83x75x103
	Shipping volume (m³)	3,28	3,59	0,38	0,64

\*Depth of 1135 mm includes distance fittings on back for correct air circulation

-86 °C



MODEL	ULUF P390GG	ULUF P500GG	ULUF P610GG	ULUF P820GG
Main specifications	Item code	DAI 1835	DAI 1840	DAI 1845
	Temperature range (°C)	-40 / -86	-40 / -86	-40 / -86
	Max. ambient temperature (°C)	32	32	32
	Capacity (L)	385	500	614
	Exterior dimensions WxDxH (mm)	755x859,5/1002*x1999	895x859,5/1002*x1999	1035x859,5/1002*x1999
	Interior dimensions WxDxH (mm)	466x620x1320	606x620x1320	746x620x1320
	Weight (KG)	217	233	247
	Insulation (mm)	120	120	120
	Cooling technology	dual system / static	dual system / static	dual system / static
	Controller Model / probe type	V700 / PT100	V700 / PT100	V700 / PT100
Power	Power supply (V)	230	230	230
	Frequency (Hz)	50/60	50/60	50/60
	Power consumption (kWh/24h)	10,6	12,4	13,5
	AMP (A)	8,6	8,7	8,9
	Power (Watt)	1250	1320	1540
	Horse power (HP)	2 x 3/4	2 x 3/4	2 x 3/4
Alarm functions	Alarm display as text - not codes	yes	yes	yes
	Visual / acoustic alarm	yes / yes	yes / yes	yes / yes
	Power failure alarm	yes	yes	yes
	Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes
	Open door alarm	yes	yes	yes
	Probe failure alarm	yes	yes	yes
	Low battery alarm	yes	yes	yes
	Compressor failure alarm	yes	yes	yes
	Battery backup for alarms (approx. hrs.)	72	72	72
Data logging & external connection	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes
	Electronic data logger	yes	yes	yes
	RS 485 port	optional	optional	optional
	USB port for software update & data download	yes	yes	yes
	Temperature chart recorder	optional (external mounting)	optional (external mounting)	optional
Display features	Display type	7" touch screen	7" touch screen	7" touch screen
	Number of optional reference probes	0 (1 reference probe included as standard)	0 (1 reference probe included as standard)	0 (1 reference probe included as standard)
	Password protection for turning unit on / off	yes	yes	yes
	Temperature graph on display	yes	yes	yes
Other features	Automatic defrost	no	no	no
	Antifreeze function	no	no	no
	Vacuum release port	yes	yes	yes
	Access port for external probe etc. (int. diameter mm)	12	12	12
	Light	yes	yes	yes
	Lock with key	yes	yes	yes
	Castors (total pcs) / castors with brake (pcs)	4 / 2	4 / 2	4 / 2
	Fixed feet (pcs) / levelling feet (pcs)	no	no	no
	Sub lids / inner doors (pcs)	4	4	4
	Reversible door(s)	no	no	no
	Fixed shelves (pcs) / adjustable shelves (pcs)	1 / 2	1 / 2	1 / 2
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	5 / 5	5 / 5	5 / 5
	Max. load per shelf (kg)	50	50	50
	Baskets (pcs)	no	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	264	352	440
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	168	224	280
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	120	160	200
Refrigeration & cabinet	Number of compressors	2	2	2
	Refrigerant	GG20	GG20	GG20
	Interior cabinet material	stainless steel	stainless steel	stainless steel
	Exterior cabinet material	painted steel	painted steel	painted steel
	Colour (exterior cabinet)	white	white	white
	Foam type	polyurethane	polyurethane	polyurethane
	VIP vacuum insulated panels	yes	yes	yes
Shipping	Shipping weight (KG)	343	366	387
	Shipping dimensions WxDxH (cm)	87x127x225	101x127x225	115x127x225
	Shipping volume (m³)	2,49	2,89	3,29

\*Depth of 1002 mm includes detachable airflow management and noise reduction system



-86 °C



MODEL	ULUF 15	ULUF 65	ULUF 125
Item code	DAI 1390	DAI 1418	DAI 1417
Temperature range (°C)	-40 / -86	-40 / -86	-40 / -86
Max. ambient temperature (°C)	25	25	25
Capacity (L)	7	54	94
Exterior dimensions WxDxH (mm)	400x630x665	600x700x810	950x725x810
Interior dimensions WxDxH (mm)	150x143x310	360x468x320	360x493x530
Weight (KG)	38	77	98
Insulation (mm)	120	120	120
Cooling technology	single system / static	single system / static	single system / static
Controller Model / probe type	G214 / PT1000	G214 / PT1000	G214 / PT1000
Power supply (V)	230	230	230
Frequency (Hz)	50/60	50/60	50/60
Power consumption (kWh/24h)	6.5	6.9	7.0
AMP (A)	2.8	3.5	3.3
Power (Watt)	467	521	484
Horse power (HP)	3/8	5/8	5/8
Alarm display as text - not codes	yes	yes	yes
Visual / acoustic alarm	yes / yes	yes / yes	yes / yes
Power failure alarm	yes	yes	yes
Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes
Open door alarm	yes	yes	yes
Probe failure alarm	yes	yes	yes
Low battery alarm	yes	yes	yes
Compressor failure alarm	no	no	no
Battery backup for alarms (approx. hrs.)	72	72	72
Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes
Electronic data logger	yes	yes	yes
RS 485 port	yes	yes	yes
USB port for software update & data download	yes	yes	yes
Temperature chart recorder	optional (external mounting)	optional	optional
Display type	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons
Number of optional reference probes	2	2	2
Password protection for turning unit on / off	yes	yes	yes
Temperature graph on display	yes	yes	yes
Automatic defrost	no	no	no
Antifreeze function	no	no	no
Vacuum release port	no	no	no
Access port for external probe etc. (int. diameter mm)	12	12	12
Light	no	no	no
Lock with key	yes	yes	yes
Castors (total pcs) / castors with brake (pcs)	no	2 rollers / 0	2 rollers / 0
Fixed feet (pcs) / levelling feet (pcs)	0 / 4	0 / 2	0 / 2
Sub lids / inner doors (pcs)	1	1	2
Reversible door(s)	no	no	no
Fixed shelves (pcs) / adjustable shelves (pcs)	no	no	1 / 0
Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	no	no	1 / 1
Max. load per shelf (kg)	no	no	25
Adjustable drawers (pcs)	no	no	no
Max. no. of adjustable drawers (pcs)	no	no	no
Max. load per adjustable drawer (kg)	no	no	no
Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no	no
Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no	no
Baskets (pcs)	no	no	no
Max. no. of baskets (pcs)	no	no	no
Max. load per basket (kg)	no	no	no
Total capacity of 50 mm boxes 9x9 dividers (pcs)	5	30	48
Total capacity of 75 mm boxes 9x9 dividers (pcs)	3	18	36
Total capacity of 96 mm boxes 9x9 dividers (pcs)	2	12	32
Number of compressors	1	1	1
Refrigerant	EP88	EP88	EP88
Interior cabinet material	stainless steel	stainless steel	stainless steel
Exterior cabinet material	painted steel	painted steel	painted steel
Colour (exterior cabinet)	white	white	white
Foam type	polyurethane	polyurethane	polyurethane
VIP vacuum insulated panels	no	no	no
Shipping weight (KG)	54	99	129
Shipping dimensions WxDxH (cm)	77x48x89	81x69x103	103x81x103
Shipping volume (m³)	0,33	0,58	0,86

Individual ULUF units may vary and power consumption depends on loading and operating conditions.  
Freezer set point -80°C, ambient temp. 20-23°C, unloaded, 230V 50Hz power supply.

-86 °C



MODEL		ULUF 450-2M	ULUF 750-2M
Main specifications	Item code	DAI 1414	DAI 1383
	Temperature range (°C)	-40 / -86	-40 / -86
	Max. ambient temperature (°C)	25	25
	Capacity (L)	393	642
	Exterior dimensions WxDxH (mm)	720x885x1990	1030x885x1990
	Interior dimensions WxDxH (mm)	480x608x1345	790x608x1345
	Weight (KG)	175	242
	Insulation (mm)	120	120
	Cooling technology	single system / static	dual system* / static
	Controller Model / probe type	G214 / PT1000	G214 / PT1000
Power	Power supply (V)	230	230
	Frequency (Hz)	50**	50/60
	Power consumption (kWh/24h)	14.6	19.5
	AMP (A)	4.4	8.7
	Power (Watt)	773	1359
	Horse power (HP)	1 1/4	3/4
Alarm functions	Alarm display as text - not codes	yes	yes
	Visual / acoustic alarm	yes / yes	yes / yes
	Power failure alarm	yes	yes
	Adjustable high / low temperature alarm	yes / yes	yes / yes
	Open door alarm	yes	yes
	Probe failure alarm	yes	yes
	Low battery alarm	yes	yes
	Compressor failure alarm	no	yes
	Battery backup for alarms (approx. hrs.)	72	72
Data logging & external connection	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes
	Electronic data logger	yes	yes
	RS 485 port	yes	yes
	USB port for software update & data download	yes	yes
	Temperature chart recorder	optional	optional
Display features	Display type	4,3" with touch buttons	4,3" with touch buttons
	Number of optional reference probes	2	2
	Password protection for turning unit on / off	yes	yes
	Temperature graph on display	yes	yes
Other features	Automatic defrost	no	no
	Antifreeze function	no	no
	Vacuum release port	yes	yes
	Access port for external probe etc. (int. diameter mm)	12	12
	Light	yes	yes
	Lock with key	yes	yes
	Castors (total pcs) / castors with brake (pcs)	4 / 2	4 / 2
	Fixed feet (pcs) / levelling feet (pcs)	no	no
	Sub lids / inner doors (pcs)	5	5
	Reversible door(s)	no	no
	Fixed shelves (pcs) / adjustable shelves (pcs)	4 / 0	4 / 0
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	4 / 4	4 / 4
	Max. load per shelf (kg)	30	25
	Adjustable drawers (pcs)	no	no
	Max. no. of adjustable drawers (pcs)	no	no
	Max. load per adjustable drawer (kg)	no	no
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no
	Baskets (pcs)	no	no
	Max. no. of baskets (pcs)	no	no
	Max. load per basket (kg)	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	240	400
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	180	200
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	120	200
Refrigeration & cabinet	Number of compressors	1	2
	Refrigerant	EP88	EP88
	Interior cabinet material	stainless steel	stainless steel
	Exterior cabinet material	painted steel	painted steel
	Colour (exterior cabinet)	white	white
	Foam type	polyurethane	polyurethane
	VIP vacuum insulated panels	no	no
Shipping	Shipping weight (KG)	244	388
	Shipping dimensions WxDxH (cm)	84x104x231	114x108x231
	Shipping volume (m³)	2,02	2,84

\*In case of failure on one cooling cycle, the freezer will maintain an operating temperature of -70°C

\*\*60Hz available as option

-86 °C



MODEL		ULTF 80	ULTF 220	ULTF 320	ULTF 420
Main specifications	Item code	DAI 0200	DAI 0213	DAI 0205	DAI 0210
	Temperature range (°C)	-40 / -86	-40 / -86	-40 / -86	-40 / -86
	Max. ambient temperature (°C)	25	20	20	20
	Capacity (L)	71	189	284	368
	Exterior dimensions WxDxH (mm)	556x641x887	925x691x891	1263x691x891	1564x691x891
	Interior dimensions WxDxH (mm)	390x390x450	760x440x630	1100x440x630	1400x440x630
	Weight (KG)	53	64	76	88
	Insulation (mm)	80	80	80	80
	Cooling technology	single system / static	single system / static	single system / static	single system / static
	Controller Model / probe type	G214 / PT1000	G214 / PT1000	G214 / PT1000	G214 / PT1000
Power	Power supply (V)	230	230	230	230
	Frequency (Hz)	50	50	50	50
	Power consumption (kWh/24h)	5.5	5.9	7.5	8.5
	AMP (A)	2.7	2.7	2.5	2.6
	Power (Watt)	366	353	466	490
	Horse power (HP)	3/4	3/4	3/4	3/4
Alarm functions	Alarm display as text - not codes	yes	yes	yes	yes
	Visual / acoustic alarm	yes / yes	yes / yes	yes / yes	yes / yes
	Power failure alarm	yes	yes	yes	yes
	Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes	yes / yes
	Open door alarm	yes	yes	yes	yes
	Probe failure alarm	yes	yes	yes	yes
	Low battery alarm	yes	yes	yes	yes
	Compressor failure alarm	no	no	no	no
Data logging & external connection	Battery backup for alarms (approx. hrs.)	72	72	72	72
	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes	yes
	Electronic data logger	yes	yes	yes	yes
	RS 485 port	yes	yes	yes	yes
	USB port for software update & data download	yes	yes	yes	yes
Display features	Temperature chart recorder	optional	optional	optional	optional
	Display type	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons
	Number of optional reference probes	2	2	2	2
	Password protection for turning unit on / off	yes	yes	yes	yes
	Temperature graph on display	yes	yes	yes	yes
Other features	Automatic defrost	no	no	no	no
	Antifreeze function	no	no	no	no
	Vacuum release port	no	no	no	no
	Access port for external probe etc. (int. diameter mm)	12	12	12	12
	Light	no	no	no	no
	Lock with key	yes	yes	yes	yes
	Castors (total pcs) / castors with brake (pcs)	opt. rollers on metal frame / no	4 / optional	4 / optional	4 / optional
	Fixed feet (pcs) / levelling feet (pcs)	4 / 0	no	no	no
	Sub lids / inner doors (pcs)	1	3	3	4
	Reversible door(s)	no	no	no	no
	Fixed shelves (pcs) / adjustable shelves (pcs)	no	no	no	no
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	no	no	no	no
	Max. load per shelf (kg)	no	no	no	no
	Adjustable drawers (pcs)	no	no	no	no
	Max. no. of adjustable drawers (pcs)	no	no	no	no
	Max. load per adjustable drawer (kg)	no	no	no	no
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no	no	no
	Baskets (pcs)	no	no	no	no
	Max. no. of baskets (pcs)	no	no	no	no
	Max. load per basket (kg)	no	no	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	40	117	216	282
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	25	84	156	204
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	20	54	99	129
Refrigeration & cabinet	Number of compressors	1	1	1	1
	Refrigerant	Nature R	Nature R	Nature R	Nature R
	Interior cabinet material	painted steel	painted steel	painted steel	painted steel
	Exterior cabinet material	painted steel	painted steel	painted steel	painted steel
	Colour (exterior cabinet)	white	white	white	white
	Foam type	polyurethane	polyurethane	polyurethane	polyurethane
Shipping	VIP vacuum insulated panels	no	no	no	no
	Shipping weight (KG)	83	104	114	132
	Shipping dimensions WxDxH (cm)	68x64x116	102x76x106	136x76x106	166x76x106
	Shipping volume (m³)	0,51	0,82	1,10	1,34



-60 °C



	MODEL	LTF 85	LTF 225	LTF 325	LTF 425	LTF 535
Main specifications	Item code	DAI 0101	DAI 0126	DAI 0111	DAI 0116	DAI 0121
	Temperature range (°C)	-30 / -60	-30 / -60	-30 / -60	-30 / -60	-30 / -60
	Max. ambient temperature (°C)	25	25	25	25	25
	Capacity (L)	71	133	284	368	476
	Exterior dimensions WxDxH (mm)	552x648x850	720x698x890	1262x698x890	1562x698x890	1662x758x932
	Interior dimensions WxDxH (mm)	390x390x465	560x440x635	1100x440x635	1400x440x635	1500x500x675
	Weight (KG)	48	55	76	88	107
	Insulation (mm)	80	80	80	80	80
	Cooling technology	static	static	static	static	static
Power	Controller Model / probe type	Dixell / PT1000	Dixell / PT1000	Dixell / PT1000	Dixell / PT1000	Dixell / PT1000
	Power supply (V)	230	230	230	230	230
	Frequency (Hz)	50	50	50	50	50/60
	Power consumption (kWh/24h)	5.1	6.0	6.9	8.3	6.9
	AMP (A)	2.0	1.9	2.8	2.8	2.5
	Power (Watt)	297	281	375	434	438
	Horse power (HP)	1/2	1/2	3/4	3/4	3/4
Alarm functions	Alarm display as text - not codes	no	no	no	no	no
	Visual / acoustic alarm	yes / yes	yes / yes	yes / yes	yes / yes	yes / yes
	Power failure alarm	no	no	no	no	no
	Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes	yes / yes	yes / yes
	Open door alarm	no	no	no	no	no
	Probe failure alarm	yes	yes	yes	yes	yes
	Low battery alarm	no	no	no	no	no
	Compressor failure alarm	no	no	no	no	no
Data logging & external connection	Battery backup for alarms (approx. hrs.)	no	no	no	no	no
	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes	yes	yes
	Electronic data logger	no	no	no	no	no
	RS 485 port	no	no	no	no	no
	USB port for software update & data download	no	no	no	no	no
Display features	Temperature chart recorder	optional	optional	optional	optional	optional
	Display type	LED display	LED display	LED display	LED display	LED display
	Number of optional reference probes	no	no	no	no	no
	Password protection for turning unit on / off	no	no	no	no	no
	Temperature graph on display	no	no	no	no	no
Other features	Automatic defrost	no	no	no	no	no
	Antifreeze function	no	no	no	no	no
	Vacuum release port	no	no	no	no	no
	Access port for external probe etc. (int. diameter mm)	12	12	12	12	12
	Light	no	no	no	no	no
	Lock with key	yes	yes	yes	yes	yes
	Castors (total pcs) / castors with brake (pcs)	4 / optional	4 / optional	4 / optional	4 / optional	4 / optional
	Fixed feet (pcs) / levelling feet (pcs)	no	no	no	no	no
	Sub lids / inner doors (pcs)	no	no	no	no	no
	Reversible door(s)	no	no	no	no	no
	Fixed shelves (pcs) / adjustable shelves (pcs)	no	no	no	no	no
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	no	no	no	no	no
	Max. load per shelf (kg)	no	no	no	no	no
	Adjustable drawers (pcs)	no	no	no	no	no
	Max. no. of adjustable drawers (pcs)	no	no	no	no	no
	Max. load per adjustable drawer (kg)	no	no	no	no	no
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no	no	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no	no	no	no
	Baskets (pcs)	1	1	3	4	3
	Max. no. of baskets (pcs)	2	3	12	15	15
	Max. load per basket (kg)	11	14.5	14.5	14.5	18
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	40	117	216	282	309
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	25	84	156	204	207
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	20	54	99	129	153
Refrigeration & cabinet	Number of compressors	1	1	1	1	1
	Refrigerant	Nature R	Nature R	Nature R	Nature R	Nature R
	Interior cabinet material	painted steel	painted steel	painted steel	painted steel	painted steel
	Exterior cabinet material	painted steel	painted steel	painted steel	painted steel	painted steel
	Colour (exterior cabinet)	white	white	white	white	white
	Foam type	polyurethane	polyurethane	polyurethane	polyurethane	polyurethane
Shipping	VIP vacuum insulated panels	no	no	no	no	no
	Shipping weight (KG)	76	85	114	132	131
	Shipping dimensions WxDxH (cm)	68x64x116	81x76x109	136x76x106	166x76x106	172x80x115
	Shipping volume (m³)	0,51	0,82	1,10	1,34	1,58

-45 °C



MODEL		LTFE 140	LTFE 290	LTFE 370	LTFE 515
Main specifications	Item code	DAI 1600	DAI 1605	DAI 1610	DAI 1615
	Temperature range (°C)	-10 / -45	-10 / -45	-10 / -45	-10 / -45
	Max. ambient temperature (°C)	25	25	25	25
	Capacity (L)	133	284	368	476
	Exterior dimensions WxDxH (mm)	720x698x890	1262x698x890	1562x698x890	1662x758x932
	Interior dimensions WxDxH (mm)	560x440x635	1100x440x635	1400x440x635	1500x500x675
	Weight (KG)	55	76	88	107
	Insulation (mm)	80	80	80	80
	Cooling technology	static	static	static	static
	Controller Model / probe type	Dixell / PT1000	Dixell / PT1000	Dixell / PT1000	Dixell / PT1000
Power	Power supply (V)	230	230	230	230
	Frequency (Hz)	50	50	50	50
	Power consumption (kWh/24h)	2.5	4.7	5.6	6.4
	AMP (A)	1.9	2.8	3.2	3.1
	Power (Watt)	187	276	307	325
	Horse power (HP)	1/2	3/4	3/4	3/4
Alarm functions	Alarm display as text - not codes	no	no	no	no
	Visual / acoustic alarm	yes / yes	yes / yes	yes / yes	yes / yes
	Power failure alarm	no	no	no	no
	Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes	yes / yes
	Open door alarm	no	no	no	no
	Probe failure alarm	yes	yes	yes	yes
	Low battery alarm	no	no	no	no
	Compressor failure alarm	no	no	no	no
	Battery backup for alarms (approx. hrs.)	no	no	no	no
Data logging & external connection	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes	yes
	Electronic data logger	no	no	no	no
	RS 485 port	no	no	no	no
	USB port for software update & data download	no	no	no	no
	Temperature chart recorder	optional	optional	optional	optional
Display features	Display type	LED display	LED display	LED display	LED display
	Number of optional reference probes	no	no	no	no
	Password protection for turning unit on / off	no	no	no	no
	Temperature graph on display	no	no	no	no
Other features	Automatic defrost	no	no	no	no
	Antifreeze function	no	no	no	no
	Vacuum release port	no	no	no	no
	Access port for external probe etc. (int. diameter mm)	12	12	12	12
	Light	no	no	no	no
	Lock with key	yes	yes	yes	yes
	Castors (total pcs) / castors with brake (pcs)	4 / optional	4 / optional	4 / optional	4 / optional
	Fixed feet (pcs) / levelling feet (pcs)	no	no	no	no
	Sub lids / inner doors (pcs)	no	no	no	no
	Reversible door(s)	no	no	no	no
	Fixed shelves (pcs) / adjustable shelves (pcs)	no	no	no	no
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	no	no	no	no
	Max. load per shelf (kg)	no	no	no	no
	Adjustable drawers (pcs)	no	no	no	no
	Max. no. of adjustable drawers (pcs)	no	no	no	no
	Max. load per adjustable drawer (kg)	no	no	no	no
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no	no	no
	Baskets (pcs)	1	1	1	3
	Max. no. of baskets (pcs)	3	12	15	15
	Max. load per basket (kg)	14.5	14.5	14.5	18
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	84	216	282	309
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	60	156	204	207
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	39	99	129	153
Refrigeration & cabinet	Number of compressors	1	1	1	1
	Refrigerant	R290	R290	R290	R290
	Interior cabinet material	painted steel	painted steel	painted steel	painted steel
	Exterior cabinet material	painted steel	painted steel	painted steel	painted steel
	Colour (exterior cabinet)	white	white	white	white
	Foam type	polyurethane	polyurethane	polyurethane	polyurethane
Shipping	VIP vacuum insulated panels	no	no	no	no
	Shipping weight (KG)	85	116	136	131
	Shipping dimensions WxDxH (cm)	81x76x109	136x76x106	166x76x106	172x80x115
	Shipping volume (m³)	0,67	1,10	1,34	1,58

-30 °C



MODEL		LF 100	LF 300
Main specifications	Item code	DAI 0285	DAI 0225
	Temperature range (°C)	-10 / -30	-10 / -30
	Max. ambient temperature (°C)	25	25
	Capacity (L)	94	346
	Exterior dimensions WxDxH (mm)	610x659x790	520x700x1997
	Interior dimensions WxDxH (mm)	490x440x434	400x575x1505
	Weight (KG)	65	103
	Insulation (mm)	60	60
	Cooling technology	forced air	forced air
	Controller Model / probe type	G214 / PT1000	G214 / PT1000
Power	Power supply (V)	230*	230*
	Frequency (Hz)	50/60	50/60
	Power consumption (kWh/24h)	10.1	8.4
	AMP (A)	3.7	3.7
	Power (Watt)	559	562
	Horse power (HP)	3/8	1/2
Alarm functions	Alarm display as text - not codes	yes	yes
	Visual / acoustic alarm	yes / yes	yes / yes
	Power failure alarm	yes	yes
	Adjustable high / low temperature alarm	yes / yes	yes / yes
	Open door alarm	yes	yes
	Probe failure alarm	yes	yes
	Low battery alarm	yes	yes
	Compressor failure alarm	yes	yes
	Battery backup for alarms (approx. hrs.)	72	72
Data logging & external connection	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes
	Electronic data logger	yes	yes
	RS 485 port	yes	yes
	USB port for software update & data download	yes	yes
	Temperature chart recorder	optional	optional
Display features	Display type	4,3" with touch buttons	4,3" with touch buttons
	Number of optional reference probes	2	2
	Password protection for turning unit on / off	yes	yes
	Temperature graph on display	yes	yes
Other features	Automatic defrost	yes	yes
	Antifreeze function	no	no
	Vacuum release port	no	no
	Access port for external probe etc. (int. diameter mm)	optional	12
	Light	no	no
	Lock with key	yes	yes
	Castors (total pcs) / castors with brake (pcs)	2 rollers / 0	4 / 2
	Fixed feet (pcs) / levelling feet (pcs)	0 / 2	no
	Sub lids / inner doors (pcs)	no	no
	Reversible door(s)	no	yes
	Fixed shelves (pcs) / adjustable shelves (pcs)	0 / 2	0 / 3
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	5 / 3	23 / 11
	Max. load per shelf (kg)	30	30
	Adjustable drawers (pcs)	optional	optional
	Max. no. of adjustable drawers (pcs)	2	8
	Max. load per adjustable drawer (kg)	30	30
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no
	Baskets (pcs)	no	no
	Max. no. of baskets (pcs)	no	no
	Max. load per basket (kg)	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no
Refrigeration & cabinet	Number of compressors	1	1
	Refrigerant	R290	R290
	Interior cabinet material	stainless steel	stainless steel
	Exterior cabinet material	painted steel	painted steel
	Colour (exterior cabinet)	white	white
	Foam type	polyurethane	polyurethane
	VIP vacuum insulated panels	no	no
Shipping	Shipping weight (KG)	87	143
	Shipping dimensions WxDxH (cm)	81x69x103	83x67x220
	Shipping volume (m³)	0,58	1,22

\* 110V/60Hz available as option



-30 °C



MODEL		LF 700	LAF 700	LF 1400
Main specifications	Item code	DAI 0255	DAI 0290	DAI 0275
	Temperature range (°C)	-10 / -30	-10 / -40	-10 / -30
	Max. ambient temperature (°C)	25	25	25
	Capacity (L)	618	618	1361
	Exterior dimensions WxDxH (mm)	720x860x1997	740x870x2017	1440x860x1997
	Interior dimensions WxDxH (mm)	600x685x1505	600x685x1505	1320x685x1505
	Weight (KG)	133	138	195
	Insulation (mm)	60	70	60
	Cooling technology	forced air	forced air	forced air
	Controller Model / probe type	G214 / PT1000	G214 / PT1000	G214 / PT1000
Power	Power supply (V)	230*	230*	230*
	Frequency (Hz)	50/60	50/60	50/60
	Power consumption (kWh/24h)	9.8	14.9	18.1
	AMP (A)	4.0	4.1	4.9
	Power (Watt)	550	735	964
	Horse power (HP)	5/8	1	1 1/4
Alarm functions	Alarm display as text - not codes	yes	yes	yes
	Visual / acoustic alarm	yes / yes	yes / yes	yes / yes
	Power failure alarm	yes	yes	yes
	Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes
	Open door alarm	yes	yes	yes
	Probe failure alarm	yes	yes	yes
	Low battery alarm	yes	yes	yes
	Compressor failure alarm	yes	no	no
Data logging & external connection	Battery backup for alarms (approx. hrs.)	72	72	72
	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes
	Electronic data logger	yes	yes	yes
	RS 485 port	yes	yes	yes
	USB port for software update & data download	yes	yes	yes
Display features	Temperature chart recorder	optional	optional	optional
	Display type	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons
	Number of optional reference probes	2	2	2
	Password protection for turning unit on / off	yes	yes	yes
	Temperature graph on display	yes	yes	yes
Other features	Automatic defrost	yes	yes	yes
	Antifreeze function	no	no	no
	Vacuum release port	no	no	no
	Access port for external probe etc. (int. diameter mm)	12	no	12
	Light	no	no	no
	Lock with key	yes	yes	yes
	Castors (total pcs) / castors with brake (pcs)	4 / 2	4 / 2	5 / 3
	Fixed feet (pcs) / levelling feet (pcs)	no	no	no
	Sub lids / inner doors (pcs)	no	no	no
	Reversible door(s)	yes	yes	yes
	Fixed shelves (pcs) / adjustable shelves (pcs)	0 / 3	0 / 3	0 / 6
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	23 / 11	23 / 11	46 / 22
	Max. load per shelf (kg)	30	30	30
	Adjustable drawers (pcs)	optional	optional	optional
	Max. no. of adjustable drawers (pcs)	8	8	16
	Max. load per adjustable drawer (kg)	30	30	30
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no	no
	Baskets (pcs)	no	no	no
	Max. no. of baskets (pcs)	no	no	no
	Max. load per basket (kg)	no	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no	no
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no	no
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no	no
Refrigeration & cabinet	Number of compressors	1	1	1
	Refrigerant	R290	R290	R290
	Interior cabinet material	stainless steel	stainless steel	stainless steel
	Exterior cabinet material	painted steel	painted steel	painted steel
	Colour (exterior cabinet)	white	white	white
	Foam type	polyurethane	polyurethane	polyurethane
Shipping	VIP vacuum insulated panels	no	no	no
	Shipping weight (KG)	194	208	278
	Shipping dimensions WxDxH (cm)	102x84x220	102x84x220	156x101x220
	Shipping volume (m³)	1.88	1.88	2.96

\* 110V/60Hz available as option

-25/+10 °C



MODEL	LFE 700	LFE 1400	LRE 700	LRE 1400
Main specifications	Item code	DAI 7000	DAI 7005	DAI 7010
	Temperature range (°C)	-10 / -25	-10 / -25	+1 / +10
	Max. ambient temperature (°C)	25	25	43
	Capacity (L)	519	1345	519
	Exterior dimensions WxDxH (mm)	720x840x1995	1540x820x1995	720x840x1995
	Interior dimensions WxDxH (mm)	513x702x1440	1370x682x1440	513x702x1440
	Weight (KG)	111	203	105
	Insulation (mm)	91.5	85	91.5
	Cooling technology	forced air	forced air	forced air
	Controller Model / probe type	Carel / NTC	Carel / NTC	Carel / NTC
Power	Power supply (V)	230	230	230
	Frequency (Hz)	50	50	50
	Power consumption (kWh/24h)	3.8	7.0	1.7
	AMP (A)	2.9	3.9	0.9
	Power (Watt)	540	630	200
	Horse power (HP)	3/4	1	1/4
Alarm functions	Alarm display as text - not codes	no	no	no
	Visual / acoustic alarm	yes / yes	yes / yes	yes / yes
	Power failure alarm	no	no	no
	Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes
	Open door alarm	yes	yes	yes
	Probe failure alarm	yes	yes	yes
	Low battery alarm	no	no	no
	Compressor failure alarm	no	no	no
	Battery backup for alarms (approx. hrs.)	no	no	no
Data logging & external connection	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes
	Electronic data logger	no	no	no
	RS 485 port	no	no	no
	USB port for software update & data download	no	no	no
	Temperature chart recorder	optional	optional	optional
Display features	Display type	LED display w/ touch buttons	LED display w/ touch buttons	LED display w/ touch buttons
	Number of optional reference probes	no	no	no
	Password protection for turning unit on / off	no	no	no
	Temperature graph on display	no	no	no
Other features	Automatic defrost	yes	yes	yes
	Antifreeze function	no	no	no
	Vacuum release port	no	no	no
	Access port for external probe etc. (int. diameter mm)	12	12	12
	Light	no	no	no
	Lock with key	yes	yes	yes
	Castors (total pcs) / castors with brake (pcs)	4 / 2	5 / 2	4 / 2
	Fixed feet (pcs) / levelling feet (pcs)	no	no	no
	Sub lids / inner doors (pcs)	no	no	no
	Reversible door(s)	yes	yes	yes
	Fixed shelves (pcs) / adjustable shelves (pcs)	0 / 3	0 / 6	0 / 3
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	23 / 11	40 / 20	23 / 11
	Max. load per shelf (kg)	45	45	45
	Adjustable drawers (pcs)	no	no	no
	Max. no. of adjustable drawers (pcs)	no	no	no
	Max. load per adjustable drawer (kg)	no	no	no
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no	no
	Baskets (pcs)	no	no	no
	Max. no. of baskets (pcs)	no	no	no
	Max. load per basket (kg)	no	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no	no
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no	no
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no	no
Refrigeration & cabinet	Number of compressors	1	1	1
	Refrigerant	R290*	R290*	R290*
	Interior cabinet material	stainless steel	stainless steel	stainless steel
	Exterior cabinet material	coated steel	coated steel	coated steel
	Colour (exterior cabinet)	white	white	white
	Foam type	polyurethane	polyurethane	polyurethane
	VIP vacuum insulated panels	no	no	no
Shipping	Shipping weight (KG)	130	238	124
	Shipping dimensions WxDxH (cm)	89x74x221	156x87x221	89x74x221
	Shipping volume (m³)	1.46	3	1.46

\* Available with R290 from 4th quarter 2019

-25/-15 °C



MODEL		LFE 110	LFE 360
Main specifications	Item code	DAI 6005	DAI 6000
	Temperature range (°C)	-15 / -25	-15 / -25
	Max. ambient temperature (°C)	32	32
	Capacity (L)	107	356
	Exterior dimensions WxDxH (mm)	600x600x835	600x700x1865
	Interior dimensions WxDxH (mm)	460x410/230x680	440x500/311x1690
	Weight (KG)	45	86
	Insulation (mm)	60	80
	Cooling technology	static	forced air
Power	Controller Model / probe type	Carel / NTC	Carel / NTC
	Power supply (V)	230	230
	Frequency (Hz)	50/60	50/60
	Power consumption (kWh/24h)	1.1	3.2
	AMP (A)	0.5	3.4
	Power (Watt)	67	365
Alarm functions	Horse power (HP)	1/6	3/8
	Alarm display as text - not codes	no	no
	Visual / acoustic alarm	yes / yes	yes / yes
	Power failure alarm	no	no
	Adjustable high / low temperature alarm	yes / yes	yes / yes
	Open door alarm	yes	yes
	Probe failure alarm	yes	yes
	Low battery alarm	no	no
	Compressor failure alarm	no	no
Data logging & external connection	Battery backup for alarms (approx. hrs.)	no	no
	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes
	Electronic data logger	no	no
	RS 485 port	no	no
	USB port for software update & data download	no	no
Display features	Temperature chart recorder	no	no
	Display type	LED display w/ touch buttons	LED display w/ touch buttons
	Number of optional reference probes	no	no
	Password protection for turning unit on / off	no	no
Other features	Temperature graph on display	no	no
	Automatic defrost	no	no
	Antifreeze function	no	no
	Vacuum release port	no	no
	Access port for external probe etc. (int. diameter mm)	12	12
	Light	no	no
	Lock with key	yes	yes
	Castors (total pcs) / castors with brake (pcs)	no	4 rollers / no
	Fixed feet (pcs) / levelling feet (pcs)	0 / 4	0 / 2
	Sub lids / inner doors (pcs)	no	no
	Reversible door(s)	yes	yes
	Fixed shelves (pcs) / adjustable shelves (pcs)	0 / 2 + 1 small	0 / 5
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	4 + 1 small / 2 + 1 small	22 / 11
	Max. load per shelf (kg)	15 / 10 (small shelf)	14,5
	Adjustable drawers (pcs)	no	no
	Max. no. of adjustable drawers (pcs)	no	no
	Max. load per adjustable drawer (kg)	no	no
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no
	Baskets (pcs)	1	1
	Max. no. of baskets (pcs)	1	1
	Max. load per basket (kg)	15	20
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no
Refrigeration & cabinet	Number of compressors	1	1
	Refrigerant	R600a	R290
	Interior cabinet material	coated steel	coated steel
	Exterior cabinet material	coated steel	coated steel
	Colour (exterior cabinet)	white	white
	Foam type	polyurethane	polyurethane
Shipping	VIP vacuum insulated panels	no	no
	Shipping weight (KG)	56	107
	Shipping dimensions WxDxH (cm)	80x61x100	73x62x203
Shipping volume (m³)		0.49	0.92



+2/+8 °C



MODEL	LRE 120	PRE 120	LRE 440	PRE 440
Item code	DAI 6020	DAI 6040	DAI 6025	DAI 6045
Temperature range (°C)	+2 / +8	+2 / +8	+2 / +8	+2 / +8
Max. ambient temperature (°C)	32	32	32	32
Capacity (L)	117	117	437	437
Exterior dimensions WxDxH (mm)	600x600x835	600x600x835	600x700x1865	600x700x1865
Interior dimensions WxDxH (mm)	480x410/240x690	480x410/240x690	475x500/341x1723	475x500/365x1723
Weight (KG)	51	51	93	105
Insulation (mm)	50	50	50	50
Cooling technology	forced air	forced air	forced air	forced air
Controller Model / probe type	Carel / NTC	Carel / NTC	Carel / NTC	Carel / NTC
Power supply (V)	230	230	230	230
Frequency (Hz)	50/60	50/60	50/60	50/60
Power consumption (kWh/24h)	0.9	1.2	1.9	2.3
AMP (A)	0.5	0.5	0.9	0.9
Power (Watt)	107	107	168	170
Horse power (HP)	1/6	1/6	1/4	1/4
Alarm display as text - not codes	no	no	no	no
Visual / acoustic alarm	yes / yes	yes / yes	yes / yes	yes / yes
Power failure alarm	no	no	no	no
Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes	yes / yes
Open door alarm	yes	yes	yes	yes
Probe failure alarm	yes	yes	yes	yes
Low battery alarm	no	no	no	no
Compressor failure alarm	no	no	no	no
Battery backup for alarms (approx. hrs.)	no	no	no	no
Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes	yes
Electronic data logger	no	no	no	no
RS 485 port	no	no	no	no
USB port for software update & data download	no	no	no	no
Temperature chart recorder	no	no	no	no
Display type	LED display w./ touch buttons	LED display w./ touch buttons	LED display w./ touch buttons	LED display w./ touch buttons
Number of optional reference probes	no	no	no	no
Password protection for turning unit on / off	no	no	no	no
Temperature graph on display	no	no	no	no
Automatic defrost	yes	yes	yes	yes
Antifreeze function	yes	yes	yes	yes
Vacuum release port	no	no	no	no
Access port for external probe etc. (int. diameter mm)	12	12	12	12
Light	yes	yes	yes	yes
Lock with key	yes	yes	yes	yes
Castors (total pcs) / castors with brake (pcs)	no	no	4 rollers / no	4 rollers / no
Fixed feet (pcs) / levelling feet (pcs)	0 / 4	0 / 4	0 / 2	0 / 2
Sub lids / inner doors (pcs)	no	no	no	no
Reversible door(s)	yes	yes	yes	yes
Fixed shelves (pcs) / adjustable shelves (pcs)	0 / 2 + 1 small	0 / 2 + 1 small	0 / 5	0 / 5
Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	4 + 1 small / 2 + 1 small	4 + 1 small / 2 + 1 small	22 / 11	22 / 11
Max. load per shelf (kg)	15 / 10 (small shelf)	15 / 10 (small shelf)	15	15
Adjustable drawers (pcs)	no	no	no	no
Max. no. of adjustable drawers (pcs)	no	no	no	no
Max. load per adjustable drawer (kg)	no	no	no	no
Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no	no	no
Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no	no	no
Baskets (pcs)	1	1	1	1
Max. no. of baskets (pcs)	1	1	1	1
Max. load per basket (kg)	15	15	22	22
Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no	no	no
Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no	no	no
Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no	no	no
Number of compressors	1	1	1	1
Refrigerant	R600a	R600a	R600a	R600a
Interior cabinet material	coated steel	coated steel	coated steel	coated steel
Exterior cabinet material	coated steel	coated steel	coated steel	coated steel
Colour (exterior cabinet)	white	white	white	white
Foam type	polyurethane	polyurethane	polyurethane	polyurethane
VIP vacuum insulated panels	no	no	no	no
Shipping weight (KG)	59	59	103	115
Shipping dimensions WxDxH (cm)	80x61x100	80x61x100	73x62x203	73x62x203
Shipping volume (m³)	0.49	0.49	0.92	0.92

+1/+10 °C



MODEL		LR 100	LR 300
Main specifications	Item code	DAI 0280	DAI 0220
	Temperature range (°C)	+1 / +10	+1 / +10
	Max. ambient temperature (°C)	43	43
	Capacity (L)	94	346
	Exterior dimensions WxDxH (mm)	610x659x790	520x700x1997
	Interior dimensions WxDxH (mm)	490x440x434	400x575x1505
	Weight (KG)	61	98
	Insulation (mm)	60	60
	Cooling technology	forced air	forced air
	Controller Model / probe type	G214 / PT1000	G214 / PT1000
Power	Power supply (V)	230*	230*
	Frequency (Hz)	50/60	50/60
	Power consumption (kWh/24h)	2.0	2.3
	AMP (A)	1.4	1.4
	Power (Watt)	206	199
	Horse power (HP)	1/8	1/8
Alarm functions	Alarm display as text - not codes	yes	yes
	Visual / acoustic alarm	yes / yes	yes / yes
	Power failure alarm	yes	yes
	Adjustable high / low temperature alarm	yes / yes	yes / yes
	Open door alarm	yes	yes
	Probe failure alarm	yes	yes
	Low battery alarm	yes	yes
	Compressor failure alarm	yes	yes
Battery backup for alarms (approx. hrs.)	72	72	
Data logging & external connection	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes
	Electronic data logger	yes	yes
	RS 485 port	yes	yes
	USB port for software update & data download	yes	yes
	Temperature chart recorder	optional	optional
Display features	Display type	4,3" with touch buttons	4,3" with touch buttons
	Number of optional reference probes	2	2
	Password protection for turning unit on / off	yes	yes
	Temperature graph on display	yes	yes
Other features	Automatic defrost	yes	yes
	Antifreeze function	no	no
	Vacuum release port	no	no
	Access port for external probe etc. (int. diameter mm)	optional	12
	Light	no	no
	Lock with key	yes	yes
	Castors (total pcs) / castors with brake (pcs)	2 rollers / 0	4 / 2
	Fixed feet (pcs) / levelling feet (pcs)	0 / 2	no
	Sub lids / inner doors (pcs)	no	no
	Reversible door(s)	no	yes
	Fixed shelves (pcs) / adjustable shelves (pcs)	0 / 2	0 / 3
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	5 / 3	23 / 11
	Max. load per shelf (kg)	30	30
	Adjustable drawers (pcs)	optional	optional
	Max. no. of adjustable drawers (pcs)	2	8
	Max. load per adjustable drawer (kg)	30	30
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no
	Baskets (pcs)	no	no
	Max. no. of baskets (pcs)	no	no
	Max. load per basket (kg)	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no
Refrigeration & cabinet	Number of compressors	1	1
	Refrigerant	R290	R290
	Interior cabinet material	stainless steel	stainless steel
	Exterior cabinet material	painted steel	painted steel
	Colour (exterior cabinet)	white	white
	Foam type	polyurethane	polyurethane
Shipping	VIP vacuum insulated panels	no	no
	Shipping weight (KG)	83	143
	Shipping dimensions WxDxH (cm)	81x69x103	83x67x220
	Shipping volume (m³)	0.58	1.22

\* 110V/60Hz available as option

+1/+10 °C



MODEL		LR 700	LR 1400
Main specifications	Item code	DAI 0250	DAI 0270
	Temperature range (°C)	+1 / +10	+1 / +10
	Max. ambient temperature (°C)	43	43
	Capacity (L)	618	1361
	Exterior dimensions WxDxH (mm)	720x860x1997	1440x860x1997
	Interior dimensions WxDxH (mm)	600x685x1505	1320x685x1505
	Weight (KG)	131	195
	Insulation (mm)	60	60
	Cooling technology	forced air	forced air
	Controller Model / probe type	G214 / PT1000	G214 / PT1000
Power	Power supply (V)	230*	230*
	Frequency (Hz)	50/60	50/60
	Power consumption (kWh/24h)	2.6	6.5
	AMP (A)	2.0	3.9
	Power (Watt)	311	653
	Horse power (HP)	1/3	1/2
Alarm functions	Alarm display as text - not codes	yes	yes
	Visual / acoustic alarm	yes / yes	yes / yes
	Power failure alarm	yes	yes
	Adjustable high / low temperature alarm	yes / yes	yes / yes
	Open door alarm	yes	yes
	Probe failure alarm	yes	yes
	Low battery alarm	yes	yes
	Compressor failure alarm	yes	yes
	Battery backup for alarms (approx. hrs.)	72	72
Data logging & external connection	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes
	Electronic data logger	yes	yes
	RS 485 port	yes	yes
	USB port for software update & data download	yes	yes
	Temperature chart recorder	optional	optional
Display features	Display type	4,3" with touch buttons	4,3" with touch buttons
	Number of optional reference probes	2	2
	Password protection for turning unit on / off	yes	yes
	Temperature graph on display	yes	yes
Other features	Automatic defrost	yes	yes
	Antifreeze function	no	no
	Vacuum release port	no	no
	Access port for external probe etc. (int. diameter mm)	12	12
	Light	no	no
	Lock with key	yes	yes
	Castors (total pcs) / castors with brake (pcs)	4 / 2	5 / 3
	Fixed feet (pcs) / levelling feet (pcs)	no	no
	Sub lids / inner doors (pcs)	no	no
	Reversible door(s)	yes	yes
	Fixed shelves (pcs) / adjustable shelves (pcs)	0 / 3	0 / 6
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	23 / 11	46 / 22
	Max. load per shelf (kg)	30	30
	Adjustable drawers (pcs)	optional	optional
	Max. no. of adjustable drawers (pcs)	8	16
	Max. load per adjustable drawer (kg)	30	30
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no
	Baskets (pcs)	no	no
	Max. no. of baskets (pcs)	no	no
	Max. load per basket (kg)	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no
Refrigeration & cabinet	Number of compressors	1	1
	Refrigerant	R290	R290
	Interior cabinet material	stainless steel	stainless steel
	Exterior cabinet material	painted steel / stainless steel	painted steel
	Colour (exterior cabinet)	white / stainless steel	white
	Foam type	polyurethane	polyurethane
	VIP vacuum insulated panels	no	no
Shipping	Shipping weight (KG)	196	278
	Shipping dimensions WxDxH (cm)	102x84x220	156x101x220
	Shipping volume (m³)	1.88	2.96

\* 110V/60Hz available as option



+1/+10 °C



MODEL	PR 100	PR 300	PR 700	PR 1400
Item code	DAI 0895	DAI 0885	DAI 0860	DAI 0870
Temperature range (°C)	+1 / +10	+1 / +10	+1 / +10	+1 / +10
Max. ambient temperature (°C)	32	32	32	32
Capacity (L)	94	352	628	1381
Exterior dimensions WxDxH (mm)	610x659x790	520x690x1997	720x860x1997	1440x860x1997
Interior dimensions WxDxH (mm)	490x440x434	400x585x1505	600x695x1505	1320x695x1505
Weight (KG)	61	103	138	209
Insulation (mm)	60	60	60	60
Cooling technology	forced air	forced air	forced air	forced air
Controller Model / probe type	G214 / PT1000	G214 / PT1000	G214 / PT1000	G214 / PT1000
Power supply (V)	230*	230*	230*	230*
Frequency (Hz)	50/60	50/60	50/60	50/60
Power consumption (kWh/24h)	4.2	3.4	4.1	8.1
AMP (A)	1.6	1.4	1.9	3.8
Power (Watt)	254	228	318	618
Horse power (HP)	1/8	1/8	1/3	1/3
Alarm display as text - not codes	yes	yes	yes	yes
Visual / acoustic alarm	yes / yes	yes / yes	yes / yes	yes / yes
Power failure alarm	yes	yes	yes	yes
Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes	yes / yes
Open door alarm	yes	yes	yes	yes
Probe failure alarm	yes	yes	yes	yes
Low battery alarm	yes	yes	yes	yes
Compressor failure alarm	no	no	no	no
Battery backup for alarms (approx. hrs.)	72	72	72	72
Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes	yes
Electronic data logger	yes	yes	yes	yes
RS 485 port	yes	yes	yes	yes
USB port for software update & data download	yes	yes	yes	yes
Temperature chart recorder	optional	optional	optional	optional
Display type	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons
Number of optional reference probes	2	2	2	2
Password protection for turning unit on / off	yes	yes	yes	yes
Temperature graph on display	yes	yes	yes	yes
Automatic defrost	yes	yes	yes	yes
Antifreeze function	no	no	no	no
Vacuum release port	no	no	no	no
Access port for external probe etc. (int. diameter mm)	optional	12	12	12
Light	yes	yes	yes	yes
Lock with key	yes	yes	yes	yes
Castors (total pcs) / castors with brake (pcs)	2 rollers / 0	4 / 2	4 / 2	5 / 3
Fixed feet (pcs) / levelling feet (pcs)	0 / 2	no	no	no
Sub lids / inner doors (pcs)	no	no	no	no
Reversible door(s)	no	yes	yes	yes
Fixed shelves (pcs) / adjustable shelves (pcs)	0 / 2	0 / 3	0 / 3	0 / 6
Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	5 / 3	23 / 11	23 / 11	46 / 22
Max. load per shelf (kg)	30	30	30	30
Adjustable drawers (pcs)	optional	optional	optional	optional
Max. no. of adjustable drawers (pcs)	2	8	8	16
Max. load per adjustable drawer (kg)	30	30	30	30
Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no	no	no
Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no	no	no
Baskets (pcs)	no	no	no	no
Max. no. of baskets (pcs)	no	no	no	no
Max. load per basket (kg)	no	no	no	no
Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no	no	no
Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no	no	no
Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no	no	no
Number of compressors	1	1	1	1
Refrigerant	R290	R290	R290	R290
Interior cabinet material	stainless steel	stainless steel	stainless steel	stainless steel
Exterior cabinet material	painted steel	painted steel	painted steel	painted steel
Colour (exterior cabinet)	white	white	white	white
Foam type	polyurethane	polyurethane	polyurethane	polyurethane
VIP vacuum insulated panels	no	no	no	no
Shipping weight (KG)	83	160	203	292
Shipping dimensions WxDxH (cm)	81x69x103	83x67x220	102x84x220	156x101x220
Shipping volume (m³)	0,58	1,22	1,88	3,47

\* 110V/60Hz available as option

-30/+10 °C



MODEL	LFF 270	LFF 660
<b>Main specifications</b>		
Item code	DAI 0235	DAI 0265
Temperature range (°C)	+1 / +10 -10 / -30	+1 / +10 -10 / -30
Max. ambient temperature (°C)	32	32
Capacity (L)	161 / 161	288 / 288
Exterior dimensions WxDxH (mm)	520x700x1997	720x860x1997
Interior dimensions WxDxH (mm)	2x(400x575x700)	2x(600x685x700)
Weight (KG)	120	163
Insulation (mm)	60	60
Cooling technology	forced air	forced air
Controller Model / probe type	G214 / PT1000	G214 / PT1000
<b>Power</b>		
Power supply (V)	230*	230*
Frequency (Hz)	50/60	50/60
Power consumption (kWh/24h)	11.4	11.3
AMP (A)	5.8	5.1
Power (Watt)	728	749
Horse power (HP)	1/10 + 1/8	1/3 + 1/2
<b>Alarm functions</b>		
Alarm display as text - not codes	yes	yes
Visual / acoustic alarm	yes / yes	yes / yes
Power failure alarm	yes	yes
Adjustable high / low temperature alarm	yes / yes	yes / yes
Open door alarm	yes	yes
Probe failure alarm	yes	yes
Low battery alarm	yes	yes
Compressor failure alarm	no	no
Battery backup for alarms (approx. hrs.)	72	72
<b>Data logging &amp; external connection</b>		
Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes
Electronic data logger	yes	yes
RS 485 port	yes	yes
USB port for software update & data download	yes	yes
Temperature chart recorder	optional	optional
<b>Display features</b>		
Display type	4,3" with touch buttons	4,3" with touch buttons
Number of optional reference probes	2	2
Password protection for turning unit on / off	yes	yes
Temperature graph on display	yes	yes
<b>Other features</b>		
Automatic defrost	yes	yes
Antifreeze function	no	no
Vacuum release port	no	no
Access port for external probe etc. (int. diameter mm)	optional	optional
Light	no	no
Lock with key	yes	yes
Castors (total pcs) / castors with brake (pcs)	4 / 2	4 / 2
Fixed feet (pcs) / levelling feet (pcs)	no	no
Sub lids / inner doors (pcs)	no	no
Reversible door(s)	yes	yes
Fixed shelves (pcs) / adjustable shelves (pcs)	0 / 4	0 / 4
Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	16 / 8	16 / 8
Max. load per shelf (kg)	30	30
Adjustable drawers (pcs)	optional	optional
Max. no. of adjustable drawers (pcs)	6	6
Max. load per adjustable drawer (kg)	30	30
Max. no. of blood bags - by standard no. of adj. drawers (pcs)	no	no
Max. no. of blood bags - by max. no. of adj. drawers (pcs)	no	no
Baskets (pcs)	no	no
Max. no. of baskets (pcs)	no	no
Max. load per basket (kg)	no	no
Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no
Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no
Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no
<b>Refrigeration &amp; cabinet</b>		
Number of compressors	2	2
Refrigerant	R290	R290
Interior cabinet material	stainless steel	stainless steel
Exterior cabinet material	painted steel	painted steel
Colour (exterior cabinet)	white	white
Foam type	polyurethane	polyurethane
VIP vacuum insulated panels	no	no
<b>Shipping</b>		
Shipping weight (KG)	175	218
Shipping dimensions WxDxH (cm)	83x67x220	102x84x220
Shipping volume (m³)	1,22	1,88

\* 110V/60Hz available as option

+4 °C



	MODEL	BBR 100	BBR 300	BBR 500	BBR 700	BBR 1400
Main specifications	Item code	DAI 1110	DAI 1115	DAI 1120	DAI 1125	DAI 1130
	Temperature range (°C)	+4	+4	+4	+4	+4
	Max. ambient temperature (°C)	32	32	32	32	32
	Capacity (L)	94	352	523	628	1381
	Exterior dimensions WxDxH (mm)	610x659x790	520x690x1997	620x860x1997	720x860x1997	1440x860x1997
	Interior dimensions WxDxH (mm)	490x440x434	400x585x1505	500x695x1505	600x695x1505	1320x695x1505
	Weight (KG)	71	133	148	163	198
	Insulation (mm)	60	60	60	60	60
	Cooling technology	forced air	forced air	forced air	forced air	forced air
	Controller Model / probe type	G214 / PT1000	G214 / PT1000	G214 / PT1000	G214 / PT1000	G214 / PT1000
Power	Power supply (V)	230	230	230	230	230
	Frequency (Hz)	50/60	50/60	50/60	50/60	50/60
	Power consumption (kWh/24h)	4.4	5.2	6.2	5.8	11.6
	AMP (A)	1.9	2.0	2.4	2.4	4.6
	Power (Watt)	307	382	401	413	826
	Horse power (HP)	1/10	1/8	1/4	1/4	1/2
Alarm functions	Alarm display as text - not codes	yes	yes	yes	yes	yes
	Visual / acoustic alarm	yes / yes	yes / yes	yes / yes	yes / yes	yes / yes
	Power failure alarm	yes	yes	yes	yes	yes
	Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes	yes / yes	yes / yes
	Open door alarm	yes	yes	yes	yes	yes
	Probe failure alarm	yes	yes	yes	yes	yes
	Low battery alarm	yes	yes	yes	yes	yes
	Compressor failure alarm	no	no	no	no	no
	Battery backup for alarms (approx. hrs.)	72	72	72	72	72
Data logging & external connection	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes	yes	yes
	Electronic data logger	yes	yes	yes	yes	yes
	RS 485 port	yes	yes	yes	yes	yes
	USB port for software update & data download	yes	yes	yes	yes	yes
	Temperature chart recorder	yes	yes	yes	yes	yes
Display features	Display type	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons
	Number of optional reference probes	2	2	2	2	2
	Password protection for turning unit on / off	yes	yes	yes	yes	yes
	Temperature graph on display	yes	yes	yes	yes	yes
Other features	Automatic defrost	yes	yes	yes	yes	yes
	Antifreeze function	no	no	no	no	no
	Vacuum release port	no	no	no	no	no
	Access port for external probe etc. (int. diameter mm)	optional	12	12	12	12
	Light	yes	yes	yes	yes	yes
	Lock with key	yes	yes	yes	yes	yes
	Castors (total pcs) / castors with brake (pcs)	2 rollers / 0	4 / 2	4 / 2	4 / 2	5 / 3
	Fixed feet (pcs) / levelling feet (pcs)	0 / 2	no	no	no	no
	Sub lids / inner doors (pcs)	no	no	no	no	no
	Reversible door(s)	no	yes	yes	yes	yes
	Fixed shelves (pcs) / adjustable shelves (pcs)	no	no	no	no	no
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	no	no	no	no	no
	Max. load per shelf (kg)	no	no	no	no	no
	Adjustable drawers (pcs)	2	5	5	5	10
	Max. no. of adjustable drawers (pcs)	2	8	8	8	16
	Max. load per adjustable drawer (kg)	30	30	30	30	30
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	72	150	240	300	600
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	72	240	384	480	960
	Baskets (pcs)	no	no	no	no	no
	Max. no. of baskets (pcs)	no	no	no	no	no
	Max. load per basket (kg)	no	no	no	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no	no	no	no
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no	no	no	no
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no	no	no	no
Refrigeration & cabinet	Number of compressors	1	1	1	1	1
	Refrigerant	R290	R290	R290	R290	R290
	Interior cabinet material	stainless steel	stainless steel	stainless steel	stainless steel	stainless steel
	Exterior cabinet material	painted steel	painted steel	painted steel	painted steel	painted steel
	Colour (exterior cabinet)	white	white	white	white	white
	Foam type	polyurethane	polyurethane	polyurethane	polyurethane	polyurethane
	VIP vacuum insulated panels	no	no	no	no	no
Shipping	Shipping weight (KG)	93	202	228	250	324
	Shipping dimensions WxDxH (cm)	81x69x103	74x83x220	106x74x220	109x84x220	156x108x220
	Shipping volume (m³)	0.58	1.35	1.73	2.01	3.71



+4 °C



MODEL	BBR 100-D	BBR 300-D	BBR 500-D	BBR 700-D	BBR 1400-D
Main specifications	Item code	DAI 1135	DAI 1140	DAI 1145	DAI 1150
	Temperature range (°C)	+4	+4	+4	+4
	Max. ambient temperature (°C)	32	32	32	32
	Capacity (L)	94	352	523	628
	Exterior dimensions WxDxH (mm)	610x659x790	520x690x1997	620x860x1997	720x860x1997
	Interior dimensions WxDxH (mm)	490x440x434	400x585x1505	500x695x1505	600x695x1505
	Weight (KG)	86	148	163	178
	Insulation (mm)	60	60	60	60
	Cooling technology	forced air	forced air	forced air	forced air
Power	Controller Model / probe type	G214 / PT1000	G214 / PT1000	G214 / PT1000	G214 / PT1000
	Power supply (V)	230	230	230	230
	Frequency (Hz)	50/60	50/60	50/60	50/60
	Power consumption (kWh/24h)	4.3	6.4	7.7	8.5
	AMP (A)	1.7	2.3	2.6	4.2
	Power (Watt)	264	376	468	474
Alarm functions	Horse power (HP)	2 x 1/10	2 x 1/8	2 x 1/4	2 x 1/2
	Alarm display as text - not codes	yes	yes	yes	yes
	Visual / acoustic alarm	yes / yes	yes / yes	yes / yes	yes / yes
	Power failure alarm	yes	yes	yes	yes
	Adjustable high / low temperature alarm	yes / yes	yes / yes	yes / yes	yes / yes
	Open door alarm	yes	yes	yes	yes
	Probe failure alarm	yes	yes	yes	yes
	Low battery alarm	yes	yes	yes	yes
Data logging & external connection	Compressor failure alarm	yes	yes	yes	yes
	Battery backup for alarms (approx. hrs.)	72	72	72	72
	Voltage free contact for remote alarm (e.g. GSM alarm module)	yes	yes	yes	yes
	Electronic data logger	yes	yes	yes	yes
	RS 485 port	yes	yes	yes	yes
Display features	USB port for software update & data download	yes	yes	yes	yes
	Temperature chart recorder	yes	yes	yes	yes
	Display type	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons	4,3" with touch buttons
	Number of optional reference probes	2	2	2	2
Other features	Password protection for turning unit on / off	yes	yes	yes	yes
	Temperature graph on display	yes	yes	yes	yes
	Automatic defrost	yes	yes	yes	yes
	Antifreeze function	no	no	no	no
	Vacuum release port	no	no	no	no
	Access port for external probe etc. (int. diameter mm)	optional	12	12	12
	Light	yes	yes	yes	yes
	Lock with key	yes	yes	yes	yes
	Castors (total pcs) / castors with brake (pcs)	2 rollers / 0	4 / 2	4 / 2	5 / 3
	Fixed feet (pcs) / levelling feet (pcs)	0 / 2	no	no	no
	Sub lids / inner doors (pcs)	no	no	no	no
	Reversible door(s)	no	yes	yes	yes
	Fixed shelves (pcs) / adjustable shelves (pcs)	no	no	no	no
	Max. no. of shelves (pcs) / recommended max. no. of shelves (pcs)	no	no	no	no
	Max. load per shelf (kg)	no	no	no	no
	Adjustable drawers (pcs)	2	5	5	10
	Max. no. of adjustable drawers (pcs)	2	8	8	16
	Max. load per adjustable drawer (kg)	30	30	30	30
	Max. no. of blood bags - by standard no. of adj. drawers (pcs)	72	150	240	300
	Max. no. of blood bags - by max. no. of adj. drawers (pcs)	72	240	384	480
	Baskets (pcs)	no	no	no	no
	Max. no. of baskets (pcs)	no	no	no	no
	Max. load per basket (kg)	no	no	no	no
	Total capacity of 50 mm boxes 9x9 dividers (pcs)	no	no	no	no
	Total capacity of 75 mm boxes 9x9 dividers (pcs)	no	no	no	no
	Total capacity of 96 mm boxes 9x9 dividers (pcs)	no	no	no	no
Refrigeration & cabinet	Number of compressors	2	2	2	2
	Refrigerant	R290	R290	R290	R290
	Interior cabinet material	stainless steel	stainless steel	stainless steel	stainless steel
	Exterior cabinet material	painted steel	painted steel	painted steel	painted steel
	Colour (exterior cabinet)	white	white	white	white
	Foam type	polyurethane	polyurethane	polyurethane	polyurethane
Shipping	VIP vacuum insulated panels	no	no	no	no
	Shipping weight (KG)	108	217	243	265
	Shipping dimensions WxDxH (cm)	81x69x103	83x74x220	106x74x220	109x84x220
	Shipping volume (m³)	0.58	1.35	1.73	2.01
					3.71

# CUSTOMER LIST

Our customers include leading companies in the health and life science industry as well as universities and research Institutes. Here is a short extract from our customer list:



**AMGEN**<sup>®</sup>

**NOVARTIS**

*Johnson & Johnson*

ARCTIKO DISTRIBUTION HUB



**JOHNS HOPKINS**  
SCHOOL *of* MEDICINE



**Abbott**  
A Promise for Life



**SANOFI**



**novo nordisk**<sup>®</sup>



**INSTITUTO  
BUTANTAN**



ARCTIKO DISTRIBUTION HUB



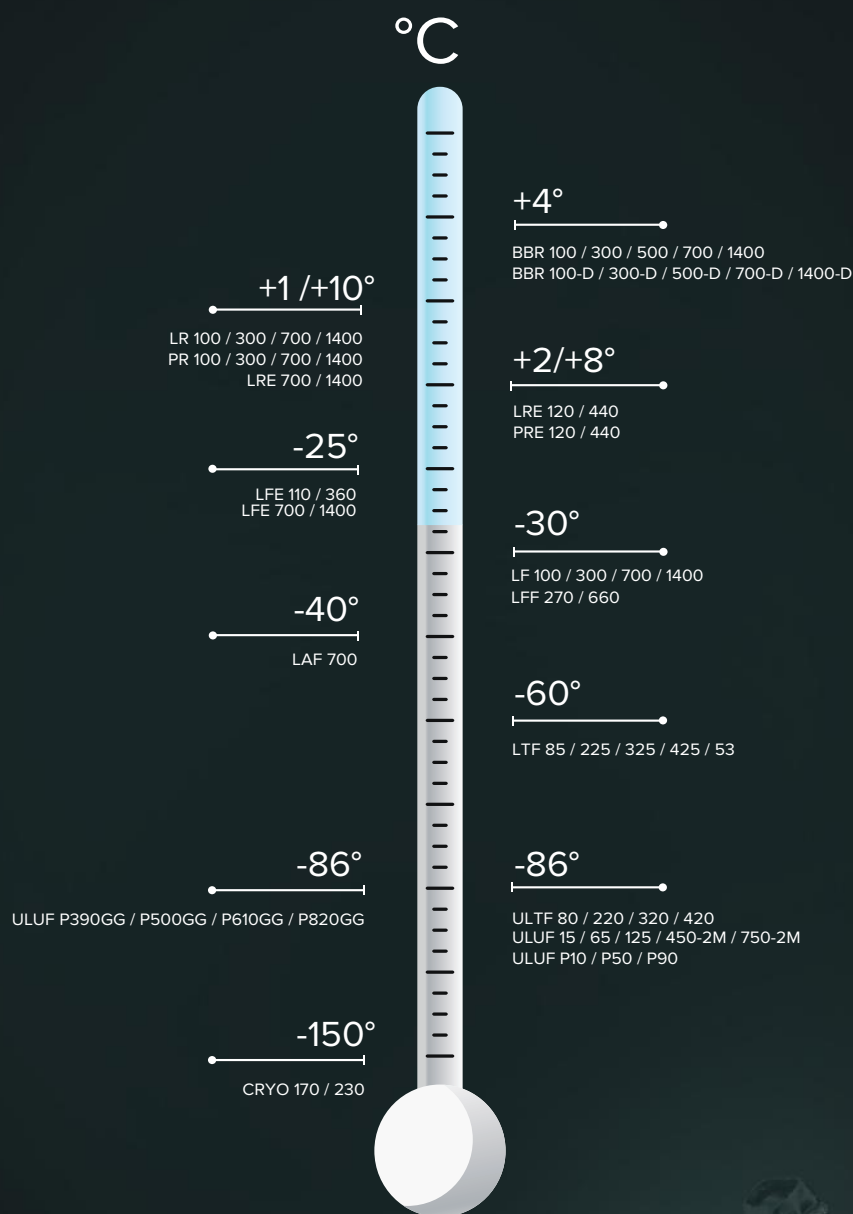
ARCTIKO DISTRIBUTION HUB

**AIRBUS**





## PRODUCT OVERVIEW



Follow us on:



**ARCTIKO A/S** | Oddesundvej 39 | 6715 Esbjerg N | Denmark  
+45 70 20 03 28 | [www.arctiko.com](http://www.arctiko.com) | [sales@arctiko.com](mailto:sales@arctiko.com)

We reserve the right to change specifications without notice.  
Subject to confirmation, availability and errors. Check our website for further technical information.