

BETWEEN
-86°C

+8°C



BIOMEDICAL CATALOG

REFRIGERATORS AND FREEZERS

TABLE OF CONTENTS

3 RELIABLE BIOMEDICAL SOUTIONS

4 CERTIFICATES

5 CONTROLLER

6 OUR BENEFITS

7 REFRIGERATORS +2°C TO +15°C

AKS/G 157

AKS/G 337

AKS/G 397

AKS/G 427

AKS/G 625

AKG 1365

16 FREEZERS -25°C TO -60°C

VTS 252 Upright

VTS 625 Upright

VTS 1365 Upright

VTS 254 Upright

VT 146 Chest

VT 206 Chest

VT 306 Chest

VT 406 Chest

VT 546 Chest

VTS 256 Upright

VT 75 Chest

VT 147 Chest

VT 207 Chest

VT 307 Chest

VT 407 Chest

VT 547 Chest

24 ULTRA LOW TEMPERATURE FREEZERS -86°C

VTS 098 Upright

VT 78 Chest

VT 208 Chest

VT 308 Chest

VT 408 Chest

VTS 258 Upright

28 BLOOD BANK REFRIGERATORS +4°C

BBR 150

BBR 290

30 RELIABILITY

31 TESTIMONIA

RELIABLE BIOMEDICAL SOLUTIONS

Vestfrost Solutions – Biomedical, is a Danish manufacturer and a global supplier of high-quality customer-driven refrigerators and freezers for professional use in the health sector. We design, develop and produce our products for hospitals, health clinics, laboratories and pharmacies worldwide.

All our products are developed with our customers’ needs and priorities in mind.

Our policy is to provide the best conditions for our customers. By providing availability of spare parts for our products we ensure reliability and longer products lifetime. This enables us to achieve a high degree of service without unnecessary costs for our customers.

Acknowledging the value of short delivery time, we as a manufacturer strive to have products in stock.

On the back of more than +50 years of experience with refrigerators and freezers, we have honed our skills and expanded our knowhow all to the end of manufacturing rock solid products with stable temperature performances.

This means that you can expect our products to achieve high marks in these key temperature areas:

- Temperature Uniformity
- Temperature Stability
- Temperature Precision

Your value

Comfort and ease of mind, in knowing that your medical content is safely and reliably stored under ideal conditions in our cabinets.

More than +50 years of experience manufacturing refrigerators and freezers

MADE IN DENMARK



In this industry reliability and quality is paramount. Having both R&D as well as production situated in Denmark, we are able to deliver on those expectations.

Medical
certificates
ensures
proper
safety

CERTIFICATES

Tested to the highest standards.

Our Biomedical line is certified in accordance with the highest of EU standards. Vestfrost Solutions' Biomedical line is constantly being improved. New products are added and existing units enhanced. In order to comply with industry expectations, our biomedical line is certified to the highest medical standards.

Vestfrost Solutions is ISO 9001, 13485, 14001 and OHSAS 18001 certified giving you full assurance that our products are produced consistently in the highest quality with respect to the environment.



93/42/EEC, Class I Units produced according to EU standards for storage and preservation of medicine.

93/42/EEC, Class IIa Units produced according to EU standards for storage and preservation of blood.



ISO 13485 International standard concerning the production of Medical Devices. The standard is annually checked by 3rd party, notified body and ensures that all production processes are correct. This includes full traceability and documentation of each unit.



DIN is the official German representative in the European Committee for Standardization:

DIN 58345 Refrigerators for medicine.

DIN 58371 Refrigerations for blood.

DIN 58375 Freezers for blood plasma.



UL Listing Mark Where UL® is shown, UL has tested representative samples of the product and determined that it meets UL's requirements. These requirements are based primarily on Standards for Safety.

You will find more information on vestfrostsolutions.com.

CONTROLLER

Ideal temperature conditions for medical content and a minimization of risk, is by and large the most important value we can provide our customers.

A key feature in delivering said value is the controller. Equipped with both audible and visual alarms it will alert you if the conditions inside the cabinet is less than ideal for your medical content.

Our controllers also feature a datalogger which will log the temperature registered by each individual probe inside the cabinet, as well as any alarm during its operation. The USB port makes it easy to extract the data for documentational purposes.



Controller with digits



Controller with temperature curves



OUR BENEFITS

Vestfrost Solutions has always developed new innovative features to be ahead of the high demand for medical cooling.



Low Noise

We realize that our products are often placed in our user's immediate work environment. That's why it is important for us to contribute to a healthy work environment by keeping our products as quiet as possible, without compromising their performance.



Environment Friendly

Keeping power consumption low is not only about reducing our customers operational costs, it's also a matter of supporting them in reducing the environmental impact. On that same note we are also proud to state that our products are 80% recyclable on average.

Additionally, Vestfrost has been using natural refrigerants for more than 15 years, which means that our products are 100% CFC and HCFC free. Consequently, they carry virtually no impact on the ozone layer or the global warming.



User Friendly

We understand that our products serve a role as facilitator for the end user. With that in mind we develop products from a user-perspective – They must be intuitive to use, easy to operate and effortless to clean, so that the user can concentrate on what's important for them.

REFRIGERATORS +2°C TO +15°C

There are many compelling reasons why a biomedical refrigerator is a superior solution to a standard fridge.

Amongst them are:

- Reduced risk exposure to your inventory
- Safeguarding patients from compromised medicine
- Reducing pharmaceutical waste
- The comfort in knowing that these products are developed specifically to biomedical needs

Return of investment is a key parameter for anyone looking to buy new appliances for Hospitals or Pharmacies, and when inventory

value in the biomedical industry can amount to upwards of 500.000\$ the relevant question is "How do I protect my patients and my inventory?"

By more accurately monitoring and managing temperatures Vestfrost Biomedical refrigerators are able to very precisely and reliably operate within temperature ranges that are ideal for medicine or sensitive inventory.

The Biomedical controller prevents temperatures from freezing and damaging the inventory, even in the event of a faulty temperature reading. It will also alert you if conditions are becoming less than ideal for your content. The operating temperatures are continuously logged for any documentation needs – even up to 48h after a power outage. This allows you to determine if the inventory can be salvaged.

A LIST OF FEATURES YOU CAN EXPECT ON ALL OUR REFRIGERATOR UNITS

- Excellent temperature: Stability, Uniformity and Accuracy
- Contact for remote alarm
- Automatic Defrost
- Forced Air Distribution
- Evaporator cover
- Castors availability
- Porthole
- LED light
- Lock
- Door reversibility

CONTROLLER FEATURES

- High/Low Temperature alarm
- Open door alarm
- Probe failure alarm

+2°C
+15°C



PHARMACIES

AKS/G 157
133 LITRES GROSS VOLUME

- Battery backup
- Safety thermostat
- Data logging with USB extraction
- Painted Aluminium inner cabinet

H: 825 mm W: 595 mm D: 645 mm

LOW NOISE
<41 dB

ENVIRONMENT FRIENDLY
Natural Refrigerant
Solid 0,4 Glass 0,5 kWh/24h

USER FRIENDLY
Plug & Play
Ergonomic door handle
Filterless construction



TECHNICAL SPECIFICATIONS	AKS/G 157
Dimensions, H x W x D, mm	825 x 595 x 645
Gross volume, Litres	133
Net volume, Litres	119
Temperature range, C°	+2 to +8
Max number of shelves	2 + bottom

AKS/G 337
288 LITRES GROSS VOLUME

- Battery backup
- Safety thermostat
- Data logging with USB extraction
- Castors are standard

H: 1550 mm W: 595 mm D: 638 mm

LOW NOISE
<41 dB

ENVIRONMENT FRIENDLY
Natural Refrigerant
Glass 0,6 Solid 0,5 kWh/24h

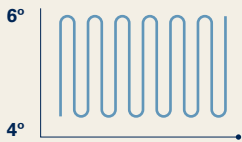
USER FRIENDLY
Plug & Play
Ergonomic door handle
Filterless construction



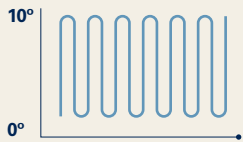
TECHNICAL SPECIFICATIONS	AKS/G 337
Dimensions, H x W x D, mm	1550 x 595 x 638
Gross volume, Litres	288
Net volume, Litres	281
Temperature range, C°	+2 to +8
Max number of shelves	6 + bottom

WHY A MEDICAL REFRIGERATOR IS NECESSARY

With no air distribution and fewer probes to accurately measure the temperature, a non-medical refrigerator will struggle to achieve temperature stability and uniformity, to the detriment of the medicine stored inside the cabinet.



A medical refrigerator always stays inside the decided temperature range. (Here 4° - 6°)



A household refrigerator has larger fluctuations as the cooling system is different, and there is no air circulation or safety thermostat.

According to the pharmaceutical industry insulin will loose effect, if product is being frozen for a short time, as protein will be destroyed

DIN 58345 INCLUDES FOLLOWING BASIC REQUIREMENTS

- Operating temperature between +2°C and +8°C.
- Refrigerator can be used in an ambient temperature between +10°C and +35°C.
- Visual and audible warning for high and low temperature alarms.
- Visual and audible warning for power failure alarms for a minimum of 12 hours.
- Dry contact for external alarm system.
- Safety thermostat to avoid temperatures below +2°C.
- Lockable door.
- Noise less than 60dB(A).
- Exterior and interior are easy to clean and disinfect.
- Interior fittings are easy to remove.
- Automatic defrosting.
- Resistance of internal fittings at least 100 kg/m2.

AKS/G 397
360 LITRES GROSS VOLUME

- Battery backup
- Safety thermostat
- Data logging with USB extraction
- Castors are standard

H: 1919 mm W: 595 mm D: 638 mm

 **LOW NOISE**
<41 dB

 **ENVIRONMENT FRIENDLY**
Natural Refrigerant
Glass 1,0 Solid 0,8 kWh/24h

 **USER FRIENDLY**
Plug & Play
Ergonomic door handle
Filterless construction

MOBILITY



With a DIN 58345 KIT our 337 & 397 models are standard equipped with our special castors with adjustable feet attached. This makes for easy mobility when installing, or cleaning, while still maintaining stability and height adjustment when the refrigerator is set

Compliant
with
DIN 58345



TECHNICAL SPECIFICATIONS	AKS/G 397
Dimensions, H x W x D, mm	1919 x 595 x 638
Gross volume, Litres	360
Net volume, Litres	351
Temperature range, C°	+2 to +8
Max number of shelves	8 + bottom



LABORATORIES & RESEARCH



AKS/G 427

353 LITRES GROSS VOLUME

- Battery backup
- Data logging with USB extraction
- Temperature graph in controller
- Painted steel inner cabinet

H: 2060 mm W: 595 mm D: 625 mm

LOW NOISE

<54 dB

ENVIRONMENT FRIENDLY

Natural Refrigerant

Glass 1,0 Solid 0,9 kWh/24h

USER FRIENDLY

Plug & Play

Ergonomic door handle

Filterless construction

SPECIAL CONTROLLER



The controller for model 427 features temperature curves



TECHNICAL SPECIFICATIONS	AKS/G 427
Dimensions, H x W x D, mm	2060 x 595 x 625
Gross volume, Litres	353
Net volume, Litres	331
Temperature range, C°	+2 to +8
Max number of shelves	10

AKS/G 625

700 LITRES GROSS VOLUME

- Anti-bacterial coating
- Automatic door closure
- Stainless steel inner cabinet

H: 2100 mm W: 750 mm D: 820 mm

LOW NOISE

<50 dB

ENVIRONMENT FRIENDLY

Natural Refrigerant

Glass 5,9 Solid 5,9 kWh/24h

USER FRIENDLY

Plug & Play

Ergonomic door handle

Filterless construction

TECHNICAL SPECIFICATIONS	AKS/G 625
Dimensions, H x W x D, mm	2100 x 750 x 820
Gross volume, Litres	700
Net volume, Litres	625
Temperature range, C°	+2 to +15
Max number of shelves	3



NB! OUTER CABINET IS IN WHITE

AKG 1365
1500 LITRES GROSS VOLUME

- Anti-bacterial coating
- Automatic door closure
- Stainless steel inner cabinet

H: 2100 mm W: 1500 mm D: 820 mm

 **LOW NOISE**
<52 dB

 **ENVIRONMENT FRIENDLY**
Natural Refrigerant
Glass 8,5 kWh/24h

 **USER FRIENDLY**
Plug & Play
Ergonomic door handle
Filterless construction

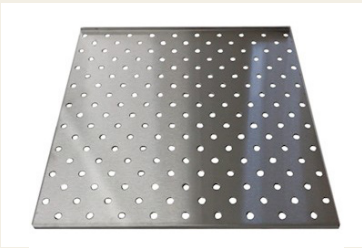


TECHNICAL SPECIFICATIONS AKS/G 1365	
Dimensions, H x W x D, mm	2100 x 1500 x 820
Gross volume, Litres	1500
Net volume, Litres	1365
Temperature range, C°	+2 to +15
Max number of shelves	6

ACCESSORIES



Wired shelves



Perforated shelves



Drawer incl. adjustable divider set

OVERVIEW



MODEL	AKS/G 157	AKS/G 337	AKS/G 397	AKS/G 427	AKS/G 625	AKG 1365
CONSTRUCTION						
Outer Dimensions, H x W x D, mm	825 x 595 x 645	1550 x 595 x 638	1919 x 595 x 637	2060 x 595 x 625	2100 x 750 x 820	2100 x 1500 x 820
Inner Dimensions, H x W x D, mm	669 x 492 x 435	1287 x 518 x 460	1587 x 518 x 460	1490 x 490 x 480	1400 x 600 x 670	1500 x 1365 x 670
Volume Gross/net, L	133 / 119	288 / 281	360 / 351	350 / 331	700 / 625	1500 / 1365
Netto weight, kg	52	87,8	100	110	165	250
Material Inner Cabinet	Painted Alu	PVC	PVC	Painted Steel	Stainless Steel	Stainless Steel
Material Outer Cabinet	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel
Insulation thickness, mm	50	35	35	50	75	75
Insulation type	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane	Polyurethane
Refrigerant	R600a	R600a	R600a	R600a	R404a	R404a
Air distribution	Mono Air Stream	Dual Air Stream	Dual Air Stream	Dual Air Stream	Mono Air Stream	Dual Air Stream
Feet, castors/legs	Feet	Feet	Feet	4 Castors	Feet	Feet
OPERATION						
Temperature range, C°	+2 to +8	+2 to +8	+2 to +8	+2 to +8	+2 to +15	+2 to +15
Noise, dB	41	41	41	54	50	52
Energy consumption 24/h, kWh	Glass 0,5 Solid 0,4	Glass 0,6 Solid 0,5	Glass 1,0 Solid 0,8	Glass 1,0 Solid 0,9	Glass 5,9 Solid 5,9	Glass 8,5
Frequency, Hz	50	50	50	50	50	50
Power supply, V	220 / 240	220 / 240	220 / 240	220 / 240	220 / 240	220 / 240
STORAGE						
Number of shelves (standard/max)	2 / 2 + bottom	4 / 7 + bottom	5 / 9 + bottom	5 / 10 + botoom	3/3 + bottom	6/6 + bottom
Max loading pr. shelf, kg	16	20	20	16	35	35
Max no. of drawers available	2	7	9	10	N/A	N/A
CONTROLLER						
Defrost	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
High/low Temp. Alarm	Yes	Yes	Yes	Yes	Yes	Yes
Open door alarm	Yes	Yes	Yes	Yes	Yes	Yes
Probe failure alarm	Yes	Yes	Yes	Yes	Yes	Yes
Power failure alarm	Yes	With DIN kit	With DIN kit	Yes	Yes	Yes
USB connection	Yes	Yes	Yes	Yes	N/A	N/A
FEATURES						
Safety thermostat	With DIN kit	With DIN kit	With DIN kit	With DIN kit	N/A	N/A
Lock, y/n	Yes	Yes	Yes	Yes	Yes	Yes
Battery Back Up for Controller, 48h	Yes	With DIN kit	With DIN kit	Yes	N/A	N/A
Porthole, y/n + spec	Yes	Yes	Yes	Yes	Yes	Yes
Dry contact, y/n	Yes	Yes	Yes	Yes	Yes	Yes
Door, glass/solid	Both	Both	Both	Both	Both	Glass
Door reversibility, y/n	Yes	Yes	Yes	Yes	N/A	N/A
ACCESSORIES						
Wired shelves	x	x	x	x		
Wired shelves w. high edges		x	x			
Perforated shelves		x	x	x		
Drawer incl. adjustable divider set	x	x	x	x		
Adjustable divider set (one drawer)	x			x		
Chart recorder	x			x		
DIN kit	x	x	x	x		

FREEZERS

-25°C TO -60°C

The need for efficient and reliable storage of biological samples, reagents, plasma and other fragile material, is ever present in the laboratory and research field.

Whether the content is part of a grand project or used for daily testing & research, it is important that the freezer does not affect the reliability of the research.

As many man-hours can be put into testing biological samples, their underlying value quickly rise, and as such it is important that the freezers consistently operate within the predefined range, ensuring ideal test conditions. At Vestfrost we understand this responsibility, and

we are committed to crafting quality freezers suited for the user and their needs. Amongst other things this means that our biomedical grade freezers have excellent performance in these key areas:

- Temperature Uniformity
- Temperature Stability
- Temperature Precision

And like our refrigerators, they are equipped with all the relevant alarms warning you if temperatures rise or fall below the desired levels, giving you time to solve the issue.

A LIST OF FEATURES YOU CAN EXPECT ON ALL OUR FREEZER UNITS

- Lock
- LED light
- Porthole
- Contact for remote alarm
- Stainless steel inner cabinet

CONTROLLER FEATURES

- High/Low Temperature alarm
- Open door alarm
- Probe failure alarm

FREEZERS -25°C



VTS 252

256 LITRES GROSS VOLUME

- Temperature graph in controller
- Data logging with USB extraction
- Battery backup

H: 2060 mm W: 595 mm D: 633 mm

 **LOW NOISE**
<57 dB

 **ENVIRONMENT FRIENDLY**
Natural Refrigerant
Only 1,9 kWh/24h

 **USER FRIENDLY**
Plug & Play
Ergonomic door handle
Filterless construction

CASTORS



Castors are equipped as standard on models 252, 254, 256, and ensures easy mobility

TECHNICAL SPECIFICATIONS	VTS 252
Dimensions, H x W x D, mm	2060 x 595 x 698
Gross volume, Litres	256
Net volume, Litres	256
Temperature range, C°	-15 to -30
Max number of shelves	5



VTS 625
700 LITRES GROSS VOLUME

- Forced air distribution
- Automatic Defrost
- Anit-freezing evaporator

H: 2100 mm W: 750 mm D: 820 mm

 **LOW NOISE**
<50 dB

 **ENVIRONMENT FRIENDLY**
Natural Refrigerant
Only 8,1 kWh/24h

 **USER FRIENDLY**
Plug & Play
Ergonomic door handle
Filterless construction

TECHNICAL SPECIFICATIONS	VTS 625	VTS 1365
Dimensions, H x W x D, mm	2100 x 750 x 820	2100 x 1500 x 820
Gross volume, Litres	700	1500
Net volume, Litres	625	1.365
Temperature range, C°	-5 to -25	-5 to -25
Max number of shelves	13	13



VTS 1365
1500 LITRES GROSS VOLUME

- Forced air distribution
- Automatic Defrost
- Anit-freezing evaporator

H: 2100 mm W: 1500 mm D: 820 mm

 **LOW NOISE**
<52 dB

 **ENVIRONMENT FRIENDLY**
Natural Refrigerant
Only 9,5 kWh/24h

 **USER FRIENDLY**
Plug & Play
Ergonomic door handle
Filterless construction

FREEZERS -45°C

VTS 254
256 LITRES GROSS VOLUME

- Temperature graph in controller
- Data logging with USB extraction
- Battery backup

H: 2060 mm W: 595 mm D: 633 mm

 **LOW NOISE**
<58 dB

 **ENVIRONMENT FRIENDLY**
Natural Refrigerant
Only 4,8 kWh/24h

 **USER FRIENDLY**
Plug & Play
Ergonomic door handle
Filterless construction



TECHNICAL SPECIFICATIONS	VTS 254
Dimensions, H x W x D, mm	2060 x 595 x 633
Gross volume, Litres	256
Net volume, Litres	256
Temperature range, C°	-25 to -45
Max number of shelves	5

CHEST FREEZERS -45 °C



VT 146
140L



VT 206
198L



VT 306
296L



VT 406
383L



VT 546
495L



FREEZERS -60°C

VTS 256

256 LITRES GROSS VOLUME

- Temperature graph in controller
- Data logging with USB extraction
- Battery backup

H: 2060 mm W: 595 mm D: 633 mm

LOW NOISE
<60 dB

ENVIRONMENT FRIENDLY
Natural Refrigerant
Only 6,1 kWh/24h

USER FRIENDLY
Plug & Play
Ergonomic door handle
Filterless construction



VTS 256

CHEST FREEZERS -60 °C



VT 75
74L



VT 147
140L



VT 207
198L



VT 307
296L



VT 407
383L



VT 547
495L

TECHNICAL SPECIFICATIONS	VTS 256
Dimensions, H x W x D, mm	2060 x 595 x 633
Gross volume, Litres	256
Net volume, Litres	237
Temperature range, C°	-40 to -60
Max number of shelves	5

OVERVIEW

[illegible][illegible]

ULTRA LOW TEMPERATURE FREEZERS -86°C

At Life Science & Molecular Biology laboratories, biological samples like DNA, RNA, cell extracts, proteins and reagents are frequently used for clinical trials.

These kinds of samples are best kept at ultra low temperatures to avoid the risk of sample damage. At extreme temperatures of -80°C to -86°C the energy consumption of freezers is considerable, and attention should be paid to Total Cost of Ownership.

A freezer utilizing a large part of its combined capacity requires less energy to maintain the

desired temperature level – this means that you should also consider how much storage capacity you actually need.

At Vestfrost we specialize in energy efficient products with a small footprint which can be placed at, or close to, your work bench. This reduces travel time when samples are being stored or retrieved, and also minimizes the time samples are exposed to room temperature. The size of our cabinets can offer a great alternative to larger units, both in terms of direct & indirect costs.

A LIST OF FEATURES YOU CAN EXPECT ON ALL OUR ULTRA LOW TEMPERATURE FREEZER UNITS

- Lock
- LED light
- Porthole
- Contact for remote alarm
- Lid vaccume release

CONTROLLER FEATURES

- High/Low temperature alarm
- Open door alarm
- Power failure alarm
- Probe failure alarm

-86°C

FREEZERS -86°C

VTS 098 92 LITRES GROSS VOLUME

- Small footprint
- Data logging with USB extraction
- Door vacuume release

H: 825 mm W: 595 mm D: 645 mm



LOW NOISE
<57 dB



ENVIRONMENT FRIENDLY
Natural Refrigerant
Only 6,7 kWh/24h



USER FRIENDLY
Plug & Play
Ergonomic door handle
Filterless construction



TECHNICAL SPECIFICATIONS	VTS 098
Dimensions, H x W x D, mm	825 x 595 x 645
Gross volume, Litres	92
Net volume, Litres	92
Temperature range, C°	-60 to -86
Max number of shelves	2

CHEST FREEZERS -86 °C



VT 78
74L



VT 208
198L



VT 308
296L



VT 408
383L

VTS 258
253 LITRES GROSS VOLUME

- Dual compressor system
- Temperature graph in controller
- Data logging with USB extraction
- Castors as standard

H: 2060 mm W: 595 mm D: 633 mm



LOW NOISE

<64 dB



ENVIRONMENT FRIENDLY

Natural Refrigerant

Only 10,3 kWh/24h



USER FRIENDLY

Plug & Play

Ergonomic door handle

Filterless construction

INNER LIDS



The two inner lids helps to reduce exposure when the door is opened

TECHNICAL SPECIFICATIONS		VTS 258
Dimensions, H x W x D, mm		2060 x 595 x 633
Gross volume, Litres		256
Net volume, Litres		237
Temperature range, C°		-60 to -86
Max number of shelves		5



OVERVIEW



MODEL	VTS 098	VT 78	VT 208	VT 308	VT 408	VTS 258
CONSTRUCTION						
Outer Dimensions, H x W x D, mm	825 x 595 x 645	870 x 555 x 555	885 x 923 x 605	885 x 1265 x 605	885 x 1562 x 605	2060 x 595 x 633
Inner Dimensions, H x W x D, mm	625 x 425 x 428	466 x 387 x 387	650 x 755 x 437	650 x 1100 x 437	650 x 1392 x 437	1439 x 440 x 405
Volume Gross/net, L	92 / 92	74 / 71	198 / 189	296 / 284	383 / 368	256 / 237
Netto weight, kg	87	49,6	69,8	76,8	85,6	153,3
Material Inner Cabinet	Stainless Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Stainless Steel
Material Outer Cabinet	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel
Insulation thickness, mm	80	80	80	80	80	80
Insulation type	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane
Refrigerant	Nature R	Nature R	Nature R	Nature R	Nature R	Nature R
Air distribution	No	No	No	No	No	No
Feet, castors/legs	Feet	Feet	Castors	Castors	Castors	Castors
OPERATION						
Temperature range, C°	-60 to -86	-60 to -86	-60 to -86	-60 to -86	-60 to -86	-60 to -86
Noise, dB	57	N/A	N/A	N/A	N/A	64
Energy consumption 24/h, kWh	6,7	5,0	5,3	8,0	9,0	10,3
Frequency, Hz	50	50	50	50	50	50
Power supply, V	220 / 240	220 / 240	220 / 240	220 / 240	220 / 240	220 / 240
STORAGE						
Number of shelves (standard/max)	2	None	None	None	None	5
Inner lids	None	1	3	3	4	2
Max loading pr. shelf	16	N/A	N/A	N/A	N/A	16
Storage capacity (2" boxes)	63	28	117	216	282	144
CONTROLLER						
Defrost	Manual	Manual	Manual	Manual	Manual	Manual
High/low Temp. Alarm	Yes	Yes	Yes	Yes	Yes	Yes
Open door alarm	Yes	No	No	No	No	Yes
Probe failure alarm	Yes	Yes	Yes	Yes	Yes	Yes
Power failure alarm	Yes	Yes	Yes	Yes	Yes	Yes
USB connection	Yes	No	No	No	No	Yes
Temperature graph	N/A	N/A	N/A	N/A	N/A	Yes
FEATURES						
Lock, y/n	Yes	Yes	Yes	Yes	Yes	Yes
Battery Back Up for Controller, 48h	Yes	Yes	Yes	Yes	Yes	Yes
Porthole, y/n + spec	Yes	Yes	Yes	Yes	Yes	Yes
Dry contact, y/n	Yes	Yes	Yes	Yes	Yes	Yes

BLOOD BANK REFRIGERATORS

+4°C

Donations of human blood, whole blood, provide the basis for a wide range of essential, often life-saving, therapies. Their quality and safety must be guaranteed to prevent any transmission of infection or disease.

Agencies, like the Food and Drug Administration (FDA) or EU Declaration of conformity (CE), are amongst other things charged to guarantee that blood products are safe and effective. They attempt to assure safety by enforcing standards for temperature regulation and alarm systems for storage of blood. It is required that whole blood must be stored at a temperature range between 2°C and 6°C to maintain the optimal viability and to prevent bacterial over growth.

The goal for blood preservation is to provide viable and functional blood components for patients requiring blood transfusion.

Vestfrost blood bank refrigerators are designed to fulfil this goal. Our products are specially developed to meet the international standards for blood storage. Features include reliable cold storage environment with glass doors and open drawer design for easy identification and access of blood. The controller provides essential features such as battery backup, temperature monitoring via an integrated data logger with memory, alarms for high/low temperature and power failure.

A LIST OF FEATURES YOU CAN EXPECT ON ALL OUR BLOOD BANK REFRIGERATOR UNITS

- Lock
- LED light
- Porthole
- Contact for remote alarm
- Stainless steel inner cabinet
- Automatic door closure
- Data logging with USB extraction
- Reference bottle
- Forced air distribution
- Automatic Defrost

CONTROLLER FEATURES

- High/Low temperature alarm
- Open door alarm
- Power failure alarm
- Probe failure alarm

+4°C

EXCLUSIVELY FOR MARKETS OUTSIDE THE EUROPEAN UNION



BBR 150
133 LITRES GROSS VOLUME

- Safety thermostat
- Small footprint

H: 825 mm W: 595 mm D: 645 mm

LOW NOISE

<41 dB

ENVIRONMENT FRIENDLY

Natural Refrigerant

Only 0,5 kWh/24h

USER FRIENDLY

Plug & Play

Ergonomic door handle

Filterless construction

TECHNICAL SPECIFICATIONS	BBR 150	BBR 290
Dimensions, H x W x D, mm	825 x 595 x 645	2060 x 595 x 625
Gross volume, Litres	133	350
Net volume, Litres	119	328
Temperature range, C°	+2 to +6	+2 to +6



BBR 290
350 LITRES GROSS VOLUME

- Temperature graph in controller
- Castors
- Chart recorder available as option

H: 2060 mm W: 595 mm D: 625 mm

LOW NOISE

<55 dB

ENVIRONMENT FRIENDLY

Natural Refrigerant

Only 2,2 kWh/24h

USER FRIENDLY

Plug & Play

Ergonomic door handle

Filterless construction

RELIABILITY

Through 50 years of experience with refrigeration & freezer and having always worked with continuous improvements, we have accumulated the skills and the knowledge to create quality products with great reliability.

This reliability is a result of extensive testing of performance in different and difficult conditions and converting the knowledge into incremental improvements and innovations.

This also holds true for our procedures, which allow us to thoroughly test new products in our laboratory before they are introduced to the market, and subsequently each produced unit will undergo a 24-hour test to make sure they perform as expected.

But the smaller things matter as well, and that is why our hinges are tested to open and close up to 400.000 times.

We make sure that due diligence is done to the product throughout our value chain, so that you can rest easy knowing that your inventory is stored safely in our products.



24h test being performed before shipment



Picture of 427 model on the assembly line

TESTED TO THE HIGHEST STANDARDS

- Test facilities and laboratories ensure high standards in deliveries.
- 24h standard test of each unit.
- Serial number tracking.
- Additional testing of randomly picked units.
- Stress testing to determine performance and accelerated lifetime test of exposed and vital parts.
- Performance, transportation & ‘what if’ tests of units before release.
- Safety tests and certifications according to the highest standards.

All our products are made in Denmark



STATE OF THE ART FACILITY



Our new state of the art Biomedical production line features a multitude of modern production robots to ensure a standardized high quality. Our in-house manufacturing of many of the subcomponents that goes into the final product, is a tangible value that sets us apart in the industry.

ISO 9001,
13485, 14001 &
18001 OHSAS
Certified

PROFESSIONAL SOLUTIONS

Vestfrost Solutions is a global developer and manufacturer of innovative and efficient refrigerators and freezers for the professional market. With more than 50 years' experience, we have strong records within manufacturing supplied to the global professional industry, where temperatures must be reliable and precise at all times. We employ numerous initiatives to reduce costs of product usage and to minimize environmental impact.

The continuously expanding product line is based on extensive research and thoroughly tested technology; all products honoring the highest requirements in terms of safety, quality and usability.

For more information, please visit our website:
www.vestfrostsolutions.com



ISO 13485
Management System Certification
BUREAU VERITAS
Certification Denmark A/S

