

# PRODUCT PORTFOLIO

BIOMEDICAL SOLUTIONS





# FLEXIBILITY THROUGH ACCESSORIES

# **ULT FREEZERS**





# REFRIGERATORS







# 

-25°C to -45°C

**CHEST FREEZERS** 



# +20°C -86°c

# **CHEST FREEZERS**

## -40°C to -60°C



# **ULT FREEZERS**

2

-20°C to -86°C

**CHEST FREEZERS** 

2



•







FREEZERS



PROFESSIONAL

PROFESSIONALS

**SOLUTIONS** 

FOR



# CONTENT

#### **VESTFROST SOLUTIONS BIOMEDICAL**

OUR PHILOSOPHY	6 - 7
I-CARE	8-9
REFRIGERATORS +2°C → +20°C 1	0 - 11
REFRIGERATORS +2°C → +10°C	2 - 13
FREEZERS $-5^{\circ}C \rightarrow -25^{\circ}C$	4 - 15
ULT FREEZERS -20°C → -86°C	6 - 19
ULT FREEZERS $-40^{\circ}C \rightarrow -90^{\circ}C$	20 - 21
CHEST FREEZERS -25°C → -45°C	22
CHEST FREEZERS $-40^{\circ}C \rightarrow -60^{\circ}C$	23
ACCESSORIES FOR REFRIGERATORS 2	
ACCESSORIES FOR ULTS	26 - 27
PRODUCT DATA	28 - 3
CERTIFICATES	38

ELEVATING THE STANDARD OF HEALTHCARE

# RELIABLE SOLUTIONS

Vestfrost Biomedical is a Danish manufacturer and a global supplier of high-quality customer driven refrigerators and freezers for professional use in the healthcare sector.

We design, develop, and produce products for Hospitals, Health Clinics, Laboratories and Pharmacies worldwide. All our products are developed with our customers' needs and priorities in mind.

# **Wide applications**

- Refrigerators +2°C  $\rightarrow$  +20°C
- Freezers 5° → -25°C
- ULT -20°C t → -86°C

- **Key areas**
- Temperature Uniformity
- Temperature Stability
- Temperature Precision



#### LOW NOISE

Our products are often placed in your immediate work environment.

That is why it is important for us to contribute to a healthy work environment by keeping our appliances as quiet as possible, without compromising their performance.



Keeping power consumption low is not only about reducing operational costs - it is also a matter of reducing the environmental impact.

Furthermore, Vestfrost Solutions only have been using green refrigerants for more than 20 years.





We develop our products from a user perspective.

Our appliances must be intuitive to use, fast to install, easy to operate and effortless to clean, so you can concentrate on what is important for you.

# OUR PHILOSOPHY

Vestfrost Biomedical have always developed new innovative features to be ahead of the high demand for medical cooling

High environmental standards have always been a cornerstone at



# **i-CARE CONTROLLER**

The i-CARE controller is an info center which gives you easy access to storage data, maintenance schedule, settings and much more.

With intuitive icons, logical menus, and snap response it has never been easier to operate your biomedical appliance.



#### Easy to use

- English, French, and German language
- 5-inch touchscreen
- Event list for quick overview of actions
- Factory reset for a clean start
- Built-in maintenance schedule
- Choose predefined profiles for a fast setup
- "Clean screen" mode, to avoid unwanted action when cleaning the screen

#### Safety & identification

- Name device
- Set password for restricted parameters

#### ( Visual & acoustic alarms

- High/low temperature
- Open door
- Probe failure

#### Customizability

- Change alarm settings
- Change temperature shown
- Lighting control
- ... And much more!

#### Datalogging & live graph

- Integrated datalogging for documentation
- Plug and play system
- Extract reports via USB
- Live graph for quick overview
- Stores data for up to 3 years



# - CARE



# **Complexity made simple**

The 5-inch touch screen display is simple to navigate with intuitive icons and the ability to customize settings to fit your specific needs. When you power up your cabinet the first time, you will be guided through an installation process where you can choose profile settings for medicine stored chilled or at room temperature.

# Adaptive Cooling Technology™

At Vestfrost we have introduced Adaptive Cooling Technology™, which has significant advantage on several key areas:

- Low noise for a comfortable work environment
- Lower energy consumption
- Fast recovery to desired temperature
- Best in class temperature stability and efficient performance

This means that your content is stored in reliable & safe conditions - always.



### Info Center

Information and documentation are key when storing sensible biomedical content. By monitoring and making the data readily available to you, we make sure that you always have the information you need about your inventory.

- CARE

R427i

- Temperature readings
- Datalogging
- Live graph
- Event list
- ... And much more

# Professional solutions for professionals

Incorrect temperatures may damage your contents stored, that is a fact. ...and cooling solutions from Vestfrost avoid this, that is a fact too.

Our refrigerators are equipped to fit your daily need for a reliable storage of your sensitive healthcare & life science applications.

Featuring the ETR-System<sup>™</sup> (Extended Temperature Range) the unit can operate within +2°C to +20°C, giving you flexibility to adjust the cooling to your specific needs, or to save energy reducing both operation costs & carbon emission.



# REFRIGERATORS

## **Reliable refrigeration with** Adaptive Cooling Technology™

Our biomedical appliances offer a reliable solution for users seeking industry leading cooling performance and high operation stability.



#### **Features**

- Wide temperature range
- Adaptive Cooling Technology™
- · Small footprint to optimize floor space
- Filterless construction minimizes maintenance

### **Standard features**

- Perforated aluminum shelves included
- Contact for remote alarm
- Dynamic air distribution
- Filterless construction
- System failure alarm
- System failure alarm
- Probe failure alarm
- Automatic defrost
- Open door alarm
- Evaporator cover
- Door reversibility
- High/Low alarm
- Porthole
- LED Light
- Lock

+2°C to +20°C

# Setting the standard for pharmacy storage

We have taken our many years of expertise and crafted a tailored solution designed specifically for pharmacies.

Focusing on quality and reliability, our appliance incorporates all of the essential features for pharmacies, omitting unnecessary complexities.



### Your safe and reliable choice

EFFECTIVE PERFORMANCE

# REFRIGERATORS ESSENTIAL LINE

### All of the essential features at an affordable price



#### Features

- Low noise level
- Low energy consumption
- Low temperature variation
- Excellent cooling performance

### **Standard features**

- Perforated aluminum shelves as an option
- Bluetooth controller
- Integrated LED light
- Peak performance
- Well known quality
- Download via app
- Battery back up
- Glass shelves
- Datalogging
- Reliability

# **Cooling with confidence**

Reliability is key for laboratory freezers, that is a fact. ...and Vestfrost laboratory freezers are reliable, that is a fact too.

Our freezers are packed with features guaranteeing safe and reliable storage of your life science applications.

Featuring the ETR-System<sup>™</sup> (Extended Temperature Range) the unit can operate within -5°C to -25°C, giving you flexibility to adjust the cooling to your specific needs, or to save energy reducing both operation costs & carbon emission.



# FREEZERS

## Reliable freezers with Adaptive Cooling Technology™

Our biomedical appliances offer a reliable solution for users seeking industry leading cooling performance and high operation stability.



#### Features

- Adaptive Cooling Technology<sup>™</sup>
- Small footprint to optimize floor space
- No-Frost system to eliminate ice propagation
- Filterless construction minimizes maintenance

#### **Standard features**

- Perforated aluminum shelves included
- Contact for remote alarm
- Filterless construction
- System failure alarm
- Power failure alarm
- Probe failure alarm
- Open door alarm
- Door reversibility
- No-Frost system
- Back up battery
- High/Low alarm
- Porthole
- LED Light
- Lock

-5°C to-25°C

# Ultra low temperature keeping samples safe

Major investments in product development are inevitable in the life science industry, and high-value samples must be stored at ultra low temperatures.

The chest design is an economical choice, that preserves cold well due to the horizontal lid.

Featuring the ETR-System<sup>™</sup> (Extended Temperature Range) the unit can operate within +2°C to +20°C, giving you flexibility to adjust the cooling to your specific needs, or to save energy reducing both operation costs & carbon emission.



-20°C to -86°C

# **ULT FREEZERS**

## Supreme stability, Reliability and User friendliness



#### Features

- Excellent performance
- Small footprint to optimize floor space
- Solutions for long & short-term storage
- Filterless construction minimizes maintenance

### **Standard features VTS**

- Alarms: Power failure, probe failure, open door & high/low
- Uses Dixell controller
- Back up battery
- Lock

## **Standard features ULT**

- Alarms: Power failure, probe failure & high/low
- Contact for remote alarm
- Filterless construction
- XR30CX controller
- Back up battery
- Porthole
- Lock

## Ideal for in-lab solutions and short-term storage

With the smallest footprint, these units are perfect for storing biomedical content in a room with limited space.

The units can be placed on a table for easy access in your work environment. Save time in your daily routines by storing your samples in the lab, eliminating the need to leave your work station to find samples stored elsewhere.

The units can operate within -20°C to -86°C giving you flexibility to adjust the cooling to your specific needs.



# Small size, big impact! REVOLUTIONARY COMPACTULTS

-20°C to -86°C

# ULTF COMPACT

### **Outstanding total cost of ownership**



### Features

- Multi voltage\*
- Inverter compressor
- Reliability / Durability
- Fast cooling / recovery

### **Standard features**

- Excellent temperature performance
- Handles voltage from 100-240 V\*
- Functions with unstable power\*
- VIP Vacuum Insulated Panels
- Works anywhere in the world\*
- Low energy consumption
- Minimal heat generation
- Live temperature graph
- Built-in datalogging
- Extended lifespan
- Service-friendly
- Low noise level
- User-friendly

### The ultimate lab freezing solution

These ultra low-temperature freezers are designed to exceed the expectations of laboratory professionals.

With a keen focus on quality and innovation, these freezers offer features that ensure reliable operation, user-friendly interface, and unparalleled safety at every level.



### Cooling with confidence

DEPENDABLE ULTF STORAGE

-40°C to -86°C

# ULTF LONG TERM Lowest energy consumption in its class

and energy star certified



### Features

- Unsurpassed robust quality
- Access control via PIN codes
- Long-lasting rust-proof interior
- Emergency cooling with temperature monitoring

### **Standard features**

- 20% lower electricity costs than market
- Individually adaptable compartments
- Long-term parameter stability
- Detachable doors average
- Heavy duty door hinges
- Fully adjustable shelves
- Optimized for racks
- Corrosion resistant
- Rust-proof interior
- Durable quality
- Low noise

.....

# Optimal solutions for laboratories and hospitals

Our biomedical appliances offer a reliable solution for users seeking industry leading cooling performance and high operation stability.

The VT low temperature freezers create the possibility to maintain temperatures as low as -60°C.

VT546/547

100

VT406/407

VT306/307

VT206/207

VT146/147

**VT75** 

# CHEST FREEZERS

# Flexibility to adjust the cooling to your specific needs



### **Features VT 6 series**

- Easy cleaning
- XR30CX controller
- Supreme stability
- Reliable & User-friendly



## Features VT 7 series & VT75

- Easy cleaning
- XR30CX controller
- Supreme stability
- Reliable & User-friendly

10°C to -60°C

With a multitude of storage solutions, you can choose the ones that fit your needs.

Regardless of which option you choose, they are all designed for optimal airflow inside the cabinet - ensuring an excellent temperature performance.



#### **BioChill™ Shelf**

- Perforated for excellent airflow
- Even surface, to avoid tilting products
- Made in aluminum to retain cold
- Max loading: 20kg



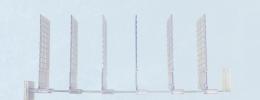
#### **BioChill™ Drawer**

- Perforated for excellent airflow
- Made in aluminum to retain cold
- Divider kit included
- Easier to reach the entire storage surface
- Max loading: 18kg



#### **Wire Shelf**

- · Polished steel coated with plastic powder
- Great airflow
- Max loading: 36kg



#### **Extra Divider Set**

Transparent plastic dividers for drawers



**Glass Shelf** 

- Perforated for excellent airflow

• 6 mm shelf in tempered glass

• Easy to clean surface

• Max loading: 25 kg

• Ensures optimal visual overview

- Made in ABS
- Max loading: 20kg

# ACCESSORIES

### For refrigerators and freezers

#### Small BioChill<sup>™</sup> Shelf



#### Small BioChill™ Drawer

#### **Small Wire Shelf**



#### **Small Glass Shelf**

- Small BioChill™ Shelf Max loading 11 kg
- Small BioChill<sup>™</sup> Drawer Max loading 10 kg
- Small Wire Shelf Max loading 18kg
- Small Glass Shelf Max loading 25 kg

#### **Stacking Kit**

- To stack table and undercounter models
- Multiple temperature ranges on the same floor space
- Optimize your floor space
- Steel frame



#### Castors

- Functional on multiple surfaces
- Brakes, for stable installation
- 4x for maximum movability

Our appliances are equipped with adjustable feet so that you can level out any unevenness at the installation location.

Further, you can add castors with brakes, to increase mobility so the appliance can be easily moved during cleaning or relocation.

### **ULT Freezer Racks**

As standard, there are two different styles of freezer racks:

**Side access** which involves removing the complete rack from the freezer before accessing samples - or - **Front access** with drawers/storage trays for quicker access to samples.



#### Upright ULTF - 20°c to - 86°c

CONSTRUCTION	Boxes per rack	Racks per shelf/freezer	Total storage capacity
ULTF-7i	5	1/1	5 (500 vials)
ULTF-37/ULTF-37i	6/5	3/6	33 (3.300 vials)
ULTF-51i	15	2/2	30 (3.000)
ULTF-91i	15	4/4	60 (60.000)
VTS 098	21	3/3	63 (6.300 vials)
VTS 258	8/10	3/15	144 (14.400 vials)
ULTF-500	20/24	4/16	352 boxes (35.200 vials)
ULTF-700	20/24	6/24	528 boxes (52.800 vials)
	Real Contraction (193		and the second second second

#### Chest ULTF - 20°c to - 86°c

CONSTRUCTION	Boxes per rack	Racks per freezer	Total torage capacity
VT 78 / ULTF-C74i	8	4	32 boxes (3.200 vials)
VT 208 / ULTF-C198i	11/6	9/3	117 boxes (11.700 vials)
VT 308 / ULTF-C296i	11/6	18/3	216 boxes (21.600 vials)
VT 408 / ULTF-C383i	11/6	24/3	282 boxes (28.200 vials)

Lists based on storing cryoboxes with 10x10 dividers, maximum cryobox size 53h x 133 x 133 mm.

Racks can be offered in lightweight anodised aluminum or stainless steel. Both materials are suited for ULT freezer racking.

# ACCESSORIES

## For ultra low temperature units - both upright and chest

Vestfrost can offer a large range of custom bespoke racking to store microtiter plates, 15ml/50ml tubes and blood bags. Coloured handles and labels available to improve sample management. Standard racks are available for 2", 3", 4" and 5" boxes.

Large storage drawers can be offerede for storage of bulky items. We also offer a wide range of cryoboxes in cardboard, plastic and aluminum.

### Why use freezer racks?

- Quicker access to samples
- Reduced door open time increases efficiency
- Increased storage capacity
- Improve organisation of samples



#### **CO2 Backup**

- To secure extra safety for your samples, our freezers can be supplemented by a CO2 backup system - totally independent system with own battery back up!
- The system is easy to install through the premade porthole, and you only need to add the CO2 bottle
- The CO2 backup system will inject CO2 if the temperature inside a freezer rises above a preset temperature value, and by that you get some extra time to secure your valuable samples.

ACCESSORIES





BIOMEDICAL

CONSTRUCTION	R-90i	R-138i	R-427i
Outer Dimensions, HxWxD	672x595x642	825x595x642	2002x595x642
Inner Dimensions, HxWxD	481x475x425	676x475x425	1850x475x425
Weight Gross/Net, kg	48 / 38	56 / 45	88 / 74
Material Inner Cabinet	ABS	ABS	ABS
Material Outer Cabinet	Painted Steel	Painted Steel	Painted Steel
Insulation Thickness, mm	50	50	50
Insulation Type	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane
Air Distribution	Dynamic	Dynamic	Dynamic
Mobility	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors
Refrigerant, Type / gram	R600a / 39	R600a / 47	R600a / 60
Variable Speed Compressor	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology
Number of Probes	4	4	4
STORAGE			
Volume, Gross/net, L	90 / 76	138 / 117	427 / 361
Shelves, Full/half	1/1	2/1	5/1
Shelf material	Perforated Alu	Perforated Alu	Perforated Alu
Max Loading pr. Shelf, kg	20	20	20
PERFORMANCE & OPERA	TION		
Temperature Range, C°	+2 to +20	+2 to +20	+2 to +20
Voltage, V	230	230	230
Frequence, Hz	50 / 60	50 / 60	50 / 60
Max Ambient, °C	35	35	35
Max Humidity, °C	75	75	75
Noise, dB	46	44	40
Energy Consumption, kWh / 24h	0,290	0,334	0,438
Instant Power Consumption	PD 0,064 / Stable 0,025	PD 0,080 / Stable 0,025	PD 0,075 / Stable 0,025
Heat Rejection	40	46	61
U-value	0,58	0,59	0,44
Defrost	Automatic	Automatic	Automatic

#### **SHARED ABILITIES**

FEATURES	
Lock	Yes
LED Light	Yes
Battery Backup for Controller, 24h	Yes
Safety Thermostat	Yes
Porthole	Yes - Ø 20mm
Dry Contact	Yes
Reference bottle	Yes
Door	Solid
Door Features	Automatic: Closure < 90° - Hold > 90°
Door Reversibility	Yes

CONTROLLER & ALARMS	
Controller	i-Care, Touch screen
Controller language	EN, DE, FR
USB Connection	Yes
Logging	Data, Alarms & Events
Temperature Graph	Yes
High/Low Temp. Alarm	Yes
Open Door Alarm	Yes
Probe Failure Alarm	Yes
Power Failure Alarm	Yes

28





3277	Protection
	C € (5) II 3G

CONSTRUCTION	R-90i Glass	R-138i Glass	R-427i Glass
Outer Dimensions, HxWxD	672x595x642	825x595x642	2002x595x642
Inner Dimensions, HxWxD	481x475x425	676x475x425	1850x475x425
Weight Gross/Net, kg	52 / 42	59 / 48	100 / 86
Material Inner Cabinet	ABS	ABS	ABS
Material Outer Cabinet	Painted Steel	Painted Steel	Painted Steel
Insulation Thickness, mm	50	50	50
Insulation Type	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane
Air Distribution	Dynamic	Dynamic	Dynamic
Mobility	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors
Refrigerant, Type / gram	R600a / 39	R600a / 47	R600a / 60
Variable Speed Compressor	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology
Number of Probes	4	4	4
STORAGE			
Volume, Gross/net, L	90 / 76	138 / 117	427 / 361
Shelves, Full/half	1/1	2/1	5/1
Shelf material	Perforated Alu	Perforated Alu	Perforated Alu
Max Loading pr. Shelf, kg	20	20	20
PERFORMANCE & OPERA	TION		
Temperature Range, C°	+2 to +20	+2 to +20	+2 to +20
Voltage, V	230	230	230
Frequence, Hz	50 / 60	50 / 60	50 / 60
Max Ambient, °C	32	32	32
Max Humidity, °C	65	65	65
Noise, dB	46	44	40
Energy Consumption, kWh / 24h	0,336	0,433	0,499
Instant Power Consumption	PD 0,068 / Stable 0,028	PD 0,082 / Stable 0,028	PD 0,08 / Stable 0,025
Heat Rejection	50	55	83
U-value	0,69	0,69	0,70
Defrost	Automatic	Automatic	Automatic

#### **SHARED ABILITIES**

FEATURES	
Lock	Yes
LED Light	Yes
Battery Backup for Controller, 24h	Yes
Safety Thermostat	Yes
Porthole	Yes - Ø 20mm
Dry Contact	Yes
Reference bottle	Yes
Door	Glass
Door Features	Automatic: Closure < 90° - Hold > 90°
Door Reversibility	Yes

#### CONTROLLER & ALARMS

Controller	i-Care, Touch screen
Controller language	EN, DE, FR
USB Connection	Yes
Logging	Data, Alarms & Events
Temperature Graph	Yes
High/Low Temp. Alarm	Yes
Open Door Alarm	Yes
Probe Failure Alarm	Yes
Power Failure Alarm	Yes







CONSTRUCTION	R-281 Essential	R-350 Essential
Outer Dimensions, HxWxD	1560x595x595	1860x595x595
Inner Dimensions, HxWxD	1282x500x415	1550x500x415
Weight Gross/Net, kg	ד / 33 / דו	81 / 79
Material Inner Cabinet	White/PS	White/PS
Material Outer Cabinet	Painted steel	Painted steel
Insulation Thickness, mm	42	42
Insulation Type	Polyurethane with cyclopentane	Polyurethane with cyclopentane
Air Distribution	Dual Air Stream	Dual Air Stream
Mobility	2 feet front, 2 wheels back	2 feet front, 2 wheels back
Refrigerant, Type / gram	R600a / 50g	R600a / 50g
Variable Speed Compressor	No	No
Number of Probes	2	2
STORAGE		
Volume, Gross/net, L	281 / 193	350 / 255
Shelves, Full/half	4Full / 1Half	5Full / 1Half
Shelf material	Glass	Glass
Max Loading pr. Shelf, kg	25	25
PERFORMANCE & OPERATION		
Temperature Range, C°	+2 to +10 °C	+2 to +10°C
Voltage, V	230 V	230 V
Frequence, Hz	50 Hz	50 Hz
Max Ambient, °C	32°C	32°C
Max Humidity, °C	65%	65%
Noise, dB	45 dB	45 dB
Energy Consumption, kWh/24h	0,826kWh/24h set 5°C	0,962kWh/24h set 5°C
Instant Power Consumption	PD 0,2 /Stable 0,18	PD 0,18 /Stable 0,16
Heat Rejection	-	-
Defrost	Yes - automatic	Yes - automatic

### **SHARED ABILITIES**

FEATURES	
Lock	Yes
LED Light	Yes
Battery Backup for Controller, 24h	Yes
Safety Thermostat	No
Porthole	Yes - Ø 12,7 mm
Dry Contact	No
Reference bottle	No
Door	Glass
Door Closure	Yes
Door Reversibility	Yes

CONTROLLER & ALARMS	
Controller	Danfoss
Controller language	No language. only 3 digits
USB Connection	No
Logging	-
Temperature Graph	No
High/Low Temp. Alarm	Yes
Open Door Alarm	Yes
Probe Failure Alarm	Yes
Power Failure Alarm	-

ווח

13277





CONSTRUCTION	F-90i	F-138i	F-427i
Outer Dimensions, HxWxD	672x595x642	825x595x642	2002x595x642
Inner Dimensions, HxWxD	481x475x425	676x475x425	1680x475x425
Weight Gross/Net, kg	54 / 44	60 / 49	99 / 85
Material Inner Cabinet	ABS	ABS	ABS
Material Outer Cabinet	Painted Steel	Painted Steel	Painted Steel
Insulation Thickness, mm	50	50	50
Insulation Type	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane
Air Distribution	Dynamic	Dynamic	Dynamic
Mobility	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors
Refrigerant, Type / gram	R600a / 38	R600a / 43	R290 / 80
Variable Speed Compressor	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology
Number of Probes	2	2	2
STORAGE			
Volume, Gross/net, L	90 / 76	138 / 117	427 / 335
Shelves, Full/half	1/1	2/1	5/1
Shelf material	Perforated Alu	Perforated Alu	Perforated Alu
Max Loading pr. Shelf, kg	20	20	20
PERFORMANCE & OPERA	TION		
Temperature Range, C°	-5 to -25	-5 to -25	-5 to -25
Voltage, V	230	230	230
Frequence, Hz	50 / 60	50 / 60	50 / 60
Max Ambient, °C	35	35	30
Max Humidity, °C	65	65	65
Noise, dB	40	45	50
Energy Consumption, kWh/24h	l,1	1,419	3,773
Instant Power Consumption	PD 0,120 / Stable 0,046	PD 0,120 / Stable 0,052	PD 0,220 / Stable 0,150
Heat Rejection	110	120	260
U-value	0,59	0,59	0,44
Defrost	Automatic	Automatic	Automatic

#### **SHARED ABILITIES**

FEATURES	
Lock	Yes
LED Light	Yes
Battery Backup for Controller, 24h	Yes
No-Frost System™	Yes
Perimeter Heater	Hot gas
Porthole	Yes - Ø 20mm
Dry Contact	Yes
Reference bottle	No
Door	Standard: Solid
Door Features	Automatic: Closure < 90° - Hold > 90°
Door Reversibility	Yes

#### **CONTROLLER & ALARMS**

Controller	i-Care, Touch screen
Controller language	EN, DE, FR
USB Connection	Yes
Logging	Data, Alarms & Events
Temperature Graph	Yes
High/Low Temp. Alarm	Yes
Open Door Alarm	Yes
Probe Failure Alarm	Yes
Power Failure Alarm	Yes





BIOMEDICAL

	<u> </u>	<b>M</b>	<b>M</b>	
CONSTRUCTION	ULTF-7i	ULTF-37i	ULTF-51i	ULTF-91i
Outer Dimensions, HxWxD	732x457x650	631x630x675	836x699x720	836x947x720
Outer Depth, incl. handle	720	745	790	790
Inner Dimensions, HxWxD	310x150x145	433x439x271	310x360x445	310x640x445
Weight Gross/Net, kg	83 / 63	70 / 59	108 / 82	137 / 102
Material Inner Cabinet	Stainless steel	Stainless Steel	Stainless steel	Stainless steel
Material Outer Cabinet	Painted Steel	Painted Steel	Painted Steel	Painted Steel
Insulation Thickness, mm	120	80	120	120
Insulation Type	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane
Air Distribution	Yes	No	Yes	No
Mobility	4 x adjustable feet	Standard: Adjustable Feet Option: Castors	2 x adjustable feet, 2 x castors	3 x adjustable feet, 3 x castors
Refrigerant, Type / gram	Nature R	Nature R2 / 96	Nature R	Nature R
Variable Speed Compressor	Yes	Yes - Adaptive Cooling Technology	Yes	Yes
Internal Air Distribution	Static	Static	Static	Static
Number of Probes	2	2	2	2
STORAGE				
Volume, L	7	37	50	88
PERFORMANCE & OPERA	TION			
Temperature Range, C°	-20 to -86	-20 to -86	-20 to -86	-20 to -86
Voltage, V	230V	230V	230V	230V
Frequence, Hz	50 / 60	50/60	50/60	50 / 60
Max Ambient, °C	43	43	43	43
Max Humidity, °C	65	65	65	65
Noise, dB	< 48	46	< 48	< 48
Energy Consumption, kWh / 24h	2,94 kWh/24h Set -80	3,251 kWh/24h Set -82	4,34 kWh/24h Set -80	5,22 kWh/24h Set -80
Instant Power Consumption	PD 0,300/Stable 0,190	PD 0,550/Stable 0,270	PD 0,600/Stable 0,280	PD 0,650/Stable 0,280
Heat Rejection	N/A	306	N/A	N/A
U-Value	N/A	0,19	N/A	N/A
Defrost	No	Manual	No	No

#### **SHARED ABILITIES**

FEATURES	
Lock	Yes
LED Light	No
Battery Backup for Controller, 24h	Yes
VIP (Vaccuum Insulated Panel)	Yes
Perimeter Heater	Electric
Porthole	Yes - Ø 20mm
Dry Contact	Yes
Vacuum Valve	Yes
Door	Solid
Door Reversibility	No

CONTROLLER & ALARMS		
Controller	i-Care, Touch screen	
Controller language	EN, DE, FR	
USB Connection	Yes	
Logging	Data & Alarms	
Temperature Graph	Yes	
High/Low Temp. Alarm	Yes	
Open Door Alarm	Yes	
Probe Failure Alarm	Yes	
Power Failure Alarm	Yes	
Condenser Fan Alarm	Yes	

.....







CONSTRUCTION	ULTF-500	ULTF-700
Outer Dimensions, HxWxD	1966x826x938	1966x1110x938
Inner Dimensions, HxWxD	1300x606x605	1300x890x605
Weight Gross/Net, kg	247	289
Material Inner Cabinet	Stainless steel	Stainless steel
Permitted load [kg]	200	200
Permitted load of individual compartment (kg)	50	50
Wall clearance back [mm]	100	100
Wall clearance sidewise [mm]	250	250
Mobility	4 wheels, 2 w. lock	4 wheels, 2 w. lock
Refrigerant, Type	R290/R170	R290/R170
STORAGE		
Volume, Gross/net, L	477	700
Shelves included/max. no. of shelves	3/13	3/13
PERFORMANCE & OPERATION		
Temperature Range, C°	-90 to -40	-90 to -40
Voltage, V	230	230
Frequence, Hz	50	50
Nominal power, kW	1,6	1,6
Unit fuse, A	10	10
Noise, dB	47	47
Energy Consumption, kWh / 24h	7,9	8,1
Power plug standard	2m C13 CEE 7/7	2m C13 CEE 7/7

### **SHARED ABILITIES**

FEATURES	
Compressor cooling	cascade
Innovative door gasket	reduce ice built-up
Detachable inner doors	stainless steel
Zero-voltage alarm contact	in-house alarm system
Internal data logger	USB read out
Ethernet interface	yes
Access ports	2x Ø28mm rear
Shipping pallet	without forklift
Packaging	Recyclable
Powder-coating	Solvent free

Also available in 110 V / 60 Hz, UL standards.



	A REAL PROPERTY AND A REAL		and the second	1		
CONSTRUCTION	VT146	VT206	VT306	VT406	VT546	
Outer Dimensions, HxWxD	885x725x605	885x923x605	885x1265x605	885x1562x605	932x1664x665	
Inner Dimensions, HxWxD	635x560x440	635x760x440	635x1100x440	635x1400x440	670x1500x500	
Weight Gross/Net, kg	55,4 / 51,4	63,4 / 58,4	76,8 / 71,1	83,2 / 77,2	92,4 / 108	
Material Inner Cabinet	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel	
Material Outer Cabinet	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel	
Insulation Thickness, mm	80	80	80	80	80	
Insulation Type	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane	
Mobility / Castors	Yes	Yes	Yes	Yes	Yes	
Refrigerant, Type	R290	R290	R290	R290	R290	
Number of compressors	1	1	1	1	1	
Internal Air Distribution	Static	Static	Static	Static	Static	
Number of Probes	1	1	1	1	1	
STORAGE						
Volume, Gross/net, L	140	198	296	384	495	
Baskets	1	1	1	1	3	
Basket material	Steel coated with plastic powder	Steel coated with plastic powder	Steel coated with plastic powder	Steel coated with plastic powder	Steel coated with plastic powder	
Inner lids	No	No	No	No	No	
PERFORMANCE & OPERATION						
Temperature Range, C°	-25 to -45	-25 to -45	-25 to -45	-25 to -45	-25 to -45	
Frequence, Hz	50	50	50	50	50	
Max Ambient, °C	30	30	30	30	30	
Max Humidity, °C	55	55	55	55	55	
Energy Consumption, kWh/24h	v. 20 °C, 1,865	v. 20 °C, 3,14		v. 26 °C, 4,09	v. 20 °C, 4,158	
Defrost	No	No	No	No	No	

#### **SHARED ABILITIES**

Yes

No

No

No

Solid

N/A

Yes - Ø 12 mm

CONTROLLER & ALARMS	
Controller	XR30CX
Controller language	No language - only 3 digits
USB Connection	No
Logging	No
Temperature Graph	No
High/Low Temp. Alarm	Yes
Open Door Alarm	No
Probe Failure Alarm	Yes
Power Failure Alarm	No

-25°C to -45°C

**FEATURES** 

Battery Backup for Controller, 24h

Lock

LED Light

Porthole Dry Contact

**Door Reversibility** 

Door



**CHEST FREEZERS** 



	U
BIO	MEDICAL

-					
VT75	VT147	VT207	VT307	VT407	VT547
870x555x555	885x725x605	885x923x605	885x1265x605	885x1562x605	932x1664x665
465x390x390	635x560x440	635x760x440	635x1100x440	635x1400x440	670x1500x500
48,2 / 42,2	59,8 / 55,8	62 / 57	75,8 / 70,8	86,4 / 80,4	92,4 / 108
Painted Steel					
Painted Steel					
80	80	80	80	80	80
Polyurethane with cyclopentane					
No	Yes	Yes	Yes	Yes	Yes
Nature R					
1	1	1	1	1	1
Static	Static	Static	Static	Static	Static
1	1	1	1	1	1
74	140	198	296	384	495
1	1	1	3	4	3
Steel coated with plastic powder					
No	No	No	No	No	No
-40 to -60					
50	50	50	50	50	50
30	30	30	30	30	30
55	55	55	55	55	55
	v. 20 °C, 3,707	v. 20 °C, 3,12	v. 20 °C, 5,562	v. 20 °C, 7,077	v. 20 °C, 5,775
No	No	No	No	No	No

#### **SHARED ABILITIES**

FEATURES		
Lock	Yes	
LED Light	No	
Battery Backup for Controller, 24h	No	
Porthole	Yes - Ø 12 mm	
Dry Contact	No	
Door	Solid	
Door Reversibility	N/A	

CONTROLLER & ALARMS		
Controller	XR30CX	
Controller language	No language - only 3 digits	
USB Connection	No	
Logging	No	
Temperature Graph	No	
High/Low Temp. Alarm	Yes	
Open Door Alarm	No	
Probe Failure Alarm	Yes	
Power Failure Alarm	No	





BIOMEDICAL

		•	۵	
CONSTRUCTION	ULTF-C74i	ULTF-C198i	ULTF-C296i	ULTF-C383i
Outer Dimensions, HxWxD Inner Dimensions, HxWxD	921x550x550 450x390x390	831x920x608 624x760x440	831x1260x608 624x1100x440	831x1560x608 624x1400x440
Weight Gross/Net, kg	450X590X590 73 / 50	80 / 63	100 / 78	112 / 86
Material Inner Cabinet	Painted Steel	Painted Steel	Painted Steel	Painted Steel
Material Outer Cabinet	Painted Steel	Painted Steel	Painted Steel	Painted Steel
Insulation Thickness, mm	80	80	80	80
	Polyurethane with	Polyurethane with	Polyurethane with	Polyurethane with
Insulation Type	Cyclopentane	Cyclopentane	Cyclopentane	Cyclopentane
Air Distribution	N/A	N/A	N/A	N/A
Mobility	Standard: 4xCasters with brakes	Standard: 4xCasters with brakes	Standard: 4xCasters with brakes	Standard: 4xCasters with brakes
Refrigerant, Type / gram	Nature R2 / 121	Nature R2 / 90	Nature R2 / 143	Nature R2 / 161
Variable Speed Compressor	No	No	No	No
Internal Air Distribution	Static	Static	Static	Static
Number of Probes	1	1	1	1
STORAGE				
Volume, Gross/net, L	74 / 71	198 / 189	296 / 284	383 / 368
Cryobox "2 capacity	40	117	216	282
2 ml vials capacity	4.000	11.700	21.600	28.200
Inner lids	Yes	Yes	Yes	Yes
PERFORMANCE & OP	ERATION			
Temperature Range, C°	-20 to -86	-20 to -86	-20 to -86	-20 to -86
Voltage, V	230	230	230	230
Frequence, Hz	50	50	50	50
Max Ambient, °C	30	25	25	25
Max Humidity, °C	65	65	65	65
Noise, dB	54	55	55	55
Energy Consumption, kWh / 24h	5,325	5,994	9,855	9,957
Instant Power Consumption	PD 0,540-0,370/ Stable 0,340	PD 0,370-0,320 /Stable 0,300	PD 0,710-0,550 /Stable 0,520	PD 0,810-0,600 /Stable 0,532
Heat Rejection	370	375	642	670
U-Value	0,19	0,2	0,2	0,2
Defrost	Manual	Manual	Manual	Manual

#### **SHARED ABILITIES**

FEATURES		
Lock	Yes	
LED Light	No	
Battery Backup for Controller, 24h	Yes	
VIP (Vaccuum Insulated Panel)	No	
Perimeter Heater	No	
Porthole	Ø 12,5 mm	
Dry Contact	Yes	
Vacuum Valve	No	
Door	Solid	
Door Reversibility	N/A	

CONTROLLER & ALARMS		
Controller	i-Care	
Controller language	EN, DE, FR	
USB Connection	Yes	
Logging	Data, Alarms & Events	
Temperature Graph	Yes	
High/Low Temp. Alarm	Yes	
Open Door Alarm	No	
Probe Failure Alarm	Yes	
Power Failure Alarm	Yes	

.....





CONSTRUCTION	VTS 098	
Outer Dimensions, HxWxD	830x595x585	
Inner Dimensions, HxWxD	675x430x425	
Weight Gross/Net, kg	87 / 61	
Material Inner Cabinet	Stainless Steel	
Material Outer Cabinet	Painted Steel	
Insulation Thickness, mm	80	
Insulation Type	Polyurethane with Cyclopentane	
Air Distribution	N/A	
Mobility	Standard: 4xAdjustable feet	
Refrigerant, Type / gram	Nature R2 / 109	
Variable Speed Compressor	No	
Internal Air Distribution	Static	
Number of Probes	1	
STORAGE		
Volume, Gross/net, L	92 / 92	
Shelves	3	
Cryobox "2 capacity	63	
2 ml vials capacity		
Inner lids	No	
PERFORMANCE & OPERATION		
Temperature Range, C°	-20 to -86	
Voltage, V	230	
Frequence, Hz	50	
Max Ambient, °C	25	
Max Humidity, °C	65	
Noise, dB		
Energy Consumption, kWh / 24h	6,562	
Instant Power Consumption	PD 0,750-0,4/Stable 0,330	
Heat Rejection	393	
U-Value	0,18	
Defrost	Manual	

FEATURES		
Lock	Yes	
LED Light	Yes	
Battery Backup for Controller, 24h	Yes	
VIP (Vaccuum Insulated Panel)	Yes	
Perimeter Heater	No	
Porthole	Ø 14,5 mm	
Dry Contact	Yes	
Vacuum Valve	Yes	
Door	Solid	
Door Reversibility	N/A	

CONTROLLER & ALARMS		
Controller	Dixell	
Controller language	No language - only 3 digits	
USB Connection	Yes	
Logging	Data, Alarms & Events	
Temperature Graph	No	
High/Low Temp. Alarm	Yes	
Open Door Alarm	Yes	
Probe Failure Alarm	Yes	
Power Failure Alarm	Yes	

# CERTIFICATES

As a supplier to the Biomedical industry, we commit ourselves to offer a thoroughly tested and approved solution.

On top of our own rigorous quality requirements and assurances, our appliances are either certified or in conformance to below standards:



All our products are manufactured in accordance to CE standards



All of our biomedical appliances fulfill internal ATEX Category 3 zone 2

ISO 14001

ISO 45001



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

DIN 13277 Refrigerators for storage of Medicine

"We hereby certify that the refrigerants & blowing agent for thermal insulation of Vestfrost Freezers & Refrigerators manufactured in Denmark are environmentally friendly and do not destroy the ozone layer. They are produced according to the Montreal Protocol and do not contain CFC-based components"



"These products may be manufactured in Denmark and exported without any approval from the Danish Medicines Agency" COLD CHAIN EQUIPMENT

# Safe and reliable storage of vaccines

On top of our Biomedical expertise, we are a world leading manufacturer of Cold Chain appliances for vaccine storage.

We have been a UNICEF supplier for over 35 years with WHO PQS approved products, all +43°C hot zone approved, and we sell to more than 100 Ministries of Health in third-world countries.

Our Cold Chain appliances guarantee constant temperature, even in the most unreliable conditions, to ensure no damaged vaccines and full vaccine potency.

#### **CCE SOLUTIONS:**

- MF series
- Icelined Combi series
- Icelined Refrigerator series
- <u>True Combi series</u>
- Solar Freezer series
- Solar Combi series
- Solar Refrigerator series
- Solar Panel kits
- EMS (Equipment Monitoring System)

Reliability is a key feature, with an extended hold-over time to withstand power cuts or limited solar radiation.

The right appliances save more than vaccines - they save lives

# QUALITY BIOMEDICAL **APPLIANCES**



**Vestfrost Solutions** 

Falkevej 12 6705 Esbjerg Ø Denmark

+45 79 14 22 22 biomedical@vestfrostsolutions.com



Please see our website for more information: www.vestfrostsolutions.com



in www.linkedin.com/company/vestfrostsolutions

www.youtube.com/@vestfrostsolutionsDK

