

# Ultra low temperature freezers



UF V series



# Ultra low temperature freezers

Series UF V

Page 6

---

Options and Accessories

Page 9

The spotlight is on environmentally-friendly design in the new BINDER ultra low temperature freezer. This applies particularly to the best energy efficiency in its class and the lack of refrigerants that are harmful to the climate. A multi-layered safety concept allows users to mix and match elements to suit any environment. With practical unit sizes appropriate, sophisticated options and practical accessories, users have everything they need for reliable long-term storage of highly sensitive samples.

## PRODUCT SELECTION ULTRA LOW TEMPERATURE FREEZERS

Features	Series UF V › Page 6
<b>Model</b>	
Model 500	•
Model 700	•
<b>General data</b>	
Temperature range [°C]	-86...-40
Cooling technology	Cascades compressor unit
Refrigerant	R-290 / R-170
•Standard equipment	

## ADVANTAGES AT A GLANCE



### **EXEMPLARY ENVIRONMENTAL FRIENDLINESS**

Series UFV

Demonstrated by state-of-the-art cooling technology that uses climate-neutral refrigerants, plus minimum energy consumption thanks to large vacuum-based thermal insulation.



### **CONVENIENT DOOR OPERATION**

Series UFV

The door can be opened manually using an ergonomic door latch handle or at the touch of a button using an electromechanical door locking mechanism. Electronic access control is available via the NumPad option.



### **MINIMUM BUILDUP OF ICE**

Series UFV

The innovative door gasket concept reduces the tendency for ice to build up on the door frame and, at the same time, makes it easier to remove ice.



### **DURABLE QUALITY**

Series UFV

The inner chamber, shelves, and inner doors are made entirely from stainless steel.

## Series UFV | with climate-neutral refrigerants

The BINDER ultra low temperature freezer ensures the safe storage of samples at -80 °C. It combines outstanding environmental friendliness with low energy consumption, convenient operation and an individual safety concept.



UVF 500 model

### MAIN FEATURES

- Range of temperature controller: -86 °C to -40 °C
- Lowest energy consumption in its class
- Powerful cascade compressor cooling unit
- Environmentally friendly refrigerants R-290 and R-170
- Efficient thermal insulation with vacuum insulation panels
- Innovative door gasket concept reduces buildup of ice
- Ergonomic door handle
- Rust-proof interior made completely of stainless steel
- Detachable inner doors made of stainless steel
- 3 stainless-steel shelves providing flexible placement

### AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
UFV 500	477	> <a href="https://go2binder.com/en-UFV500">go2binder.com/en-UFV500</a>
UFV 700	700	> <a href="https://go2binder.com/en-UFV700">go2binder.com/en-UFV700</a>

**i** **TIPS & TRICKS**

Benefit from our many years of experience,

Tips & Tricks: > [go2binder.com/en-tips-tricks](https://go2binder.com/en-tips-tricks)

Case Studies: > [go2binder.com/en-case-studies](https://go2binder.com/en-case-studies)

## TECHNICAL DATA

Description	UF V 500	UF V 700
<b>Outer dimensions</b>		
Width net [mm]	826	1110
Height net [mm]	1966	1966
Depth net [mm]	938	938
<b>Internal Dimensions</b>		
Width [mm]	606	890
Height [mm]	1300	1300
Depth [mm]	605	605
<b>Measures</b>		
Interior volume [L]	477	700
Net weight of the unit (empty) [kg]	247	288
permitted load [kg]	200	200
<b>Performance Data Temperature</b>		
Temperature range [°C]	-86...-40	-86...-40
Temperature variation at -80 °C [± K]	2.5	2.5
Temperature fluctuation at -80 °C [± K]	1.5	1.5
Warm-up time during power failure from -80 °C / -122 °F to -60 °C / -76 °F [min]	230	250
<b>Electrical data</b>		
Nominal power (version 120 V) [kW]	1.6	1.6
Nominal power (version 230 V) [kW]	1.6	1.6
Nominal power (version 240 V) [kW]	1.6	1.6
<b>Environment-specific data</b>		
Energy consumption at set-point -80 °C and ambient temperature = 21 °C [kWh/d]	7.9	8.1
<b>Fixtures</b>		
Number of shelves (std./max.)	3/13	3/13

## ORDERING INFORMATION [Art. No.]

**Further details:** Go to [www.binder-world.com](http://www.binder-world.com) > Search > Enter Article Number

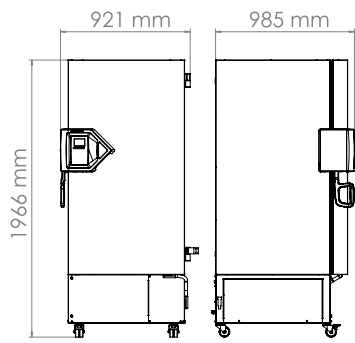
Voltage	Option model	UF V 500	UF V 700
240 V 1~ 60 Hz	Standard	9020-0353	9020-0354
230 V 1~ 50 Hz	Standard	9020-0347	9020-0348
	Water cooling	9020-0349	9020-0350
120 V 1~ 60 Hz	Standard	9020-0351	9020-0352

► You will find a selection of options, accessories and services suitable for each product on page 9

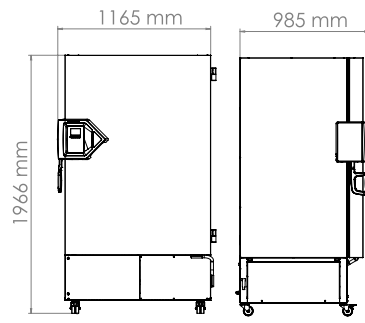
**DIMENSIONS incl. fittings and connections [mm]**

---

UFV 500



UFV 700



## EXCERPT FROM OPTIONS AND ACCESSORIES

### Foam-filled compartment doors with gasket

Ideal for applications where doors are opened frequently.  
Series UFV

### Door access system

Consisting of electromechanical door locking mechanism and electronic access control via NumPad.  
Series UFV

### Alarm system

Battery-backed system for maintaining temperature display, visual and audible alarm messages, and data communication.  
Series UFV

### Chamber racks

Large selection of racks made of aluminum or stainless steel, as well as cryoboxes.  
Series UFV

### Services

You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us. More information is available in the accessories and services chapter.  
Series UFV

### BINDER INDIVIDUAL

Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty. More information is available in the accessories and services chapter.  
Series UFV

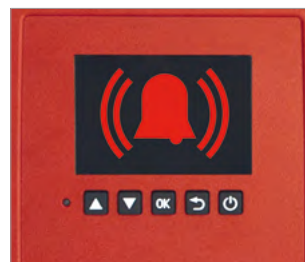
► All extras online [go2binder.com/en-options](http://go2binder.com/en-options)



Foam-filled compartment doors with gasket



Door access system



Alarm system



Selection of racks and boxes



# BINDER products

CO<sub>2</sub> incubators

Incubators

Cooling incubators

Growth chambers

Ultralow temperature freezers

Drying and heating chambers

Safety drying chambers

Vacuum drying chambers

Constant climate chambers

Dynamic climate chambers



Never miss a product novelty -  
Subscribe and keep up to speed with  
the BINDER monthly newsletter.

**Subscription**

[go2binder.com/en-newsletter-subscription](http://go2binder.com/en-newsletter-subscription)



**Best conditions for your success**

## **BINDER GmbH**

Tuttlingen, Germany

Tel +49 7462 2005 0  
Fax +49 7462 2005 100  
[info@binder-world.com](mailto:info@binder-world.com)  
[www.binder-world.com](http://www.binder-world.com)

## **BINDER Asia Pacific (Hong Kong) Ltd.**

Kowloon, Hong Kong, P.R. China

Tel +852 39070500  
Fax +852 39070507  
[asia@binder-world.com](mailto:asia@binder-world.com)  
[www.binder-world.com](http://www.binder-world.com)

## **BINDER Environmental Testing Equipment (Shanghai) Co., Ltd.**

Shanghai, P.R.China

Tel +86 21 685 808 25  
Fax +86 21 685 808 29  
[china@binder-world.com](mailto:china@binder-world.com)  
[www.binder-world.com](http://www.binder-world.com)

## **Representative Office for CIS**

Moscow, Russia

Tel +7 495 988 15 16  
Fax +7 495 988 15 17  
[russia@binder-world.com](mailto:russia@binder-world.com)  
[www.binder-world.ru](http://www.binder-world.ru)

## **BINDER Inc.**

Bohemia, NY, USA

Tel +1 631 224 4340  
Fax +1 631 224 4354  
[usa@binder-world.com](mailto:usa@binder-world.com)  
[www.binder-world.us](http://www.binder-world.us)