

# Ultra low temperature freezers



UF V series





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Series UF V

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Options and Accessories

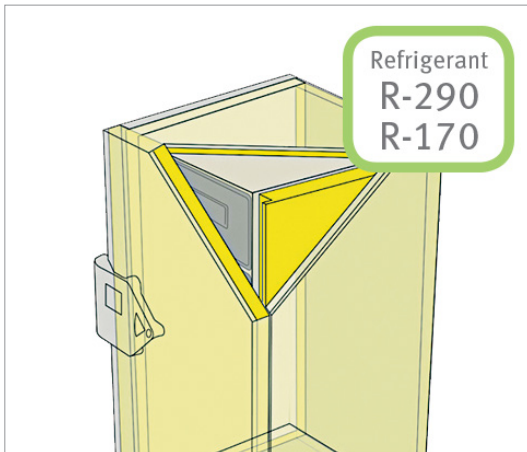
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The spotlight is on environmentally-friendly design in the new BINDER ultra low temperature freezer. This applies particularly to the best energy efficiency in its class and the lack of refrigerants that are harmful to the climate. A multi-layered 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      |
| Model                  |               |
| Model 350              | •             |
| Model 500              | •             |
| Model 700              | •             |
| General data           |               |
| Temperature range [°C] | -86...-40     |
| Cooling technology     | Cascades      |
| Refrigerant            | R-290 / R-170 |
| •Standard equipment    |               |

## ADVANTAGES AT A GLANCE



### EXEMPLARY ENVIRONMENTAL FRIENDLINESS

Series UF V

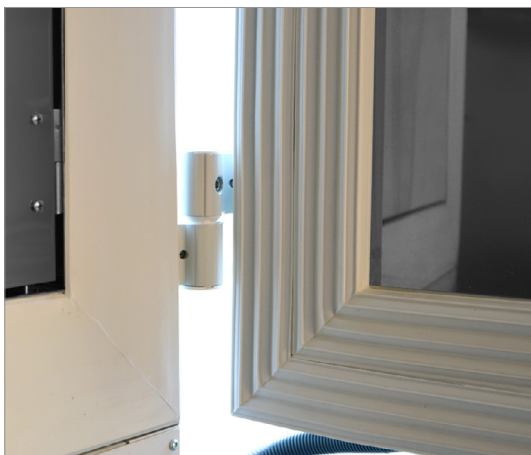
Demonstrated by state-of-the-art cooling technology that uses climate-neutral refrigerants, plus minimum energy consumption thanks to large vacuum-based thermal insulation.



### CONVENIENT DOOR OPERATION

Series UF V

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 UF V

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 UF V

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

## Series UF V | 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  |
|----------|---------------------|---|
| UF V 350 | 382                 | › <a href="https://go2binder.com/en-UFV350">go2binder.com/en-UFV350</a> |
| UF V 500 | 477                 | › <a href="https://go2binder.com/en-UFV500">go2binder.com/en-UFV500</a> |
| UF V 700 | 700                 | › <a href="https://go2binder.com/en-UFV700">go2binder.com/en-UFV700</a> |



### 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)



Find all details online  
[go2binder.com/en-UFV](https://go2binder.com/en-UFV)

## TECHNICAL DATA

| Description  | UFV 350   | UFV 500   | UFV 700   |
|--|-----------|-----------|-----------|
| Outer dimensions   |           |           |           |
| Width net [mm]   | 706       | 826       | 1110      |
| Height net [mm]  | 1966      | 1966      | 1966      |
| Depth net [mm]   | 938       | 938       | 938       |
| Internal Dimensions  |           |           |           |
| Width [mm]   | 486       | 606       | 890       |
| Height [mm]  | 1300      | 1300      | 1300      |
| Depth [mm]   | 605       | 605       | 605       |
| Measures   |           |           |           |
| Interior volume [L]  | 382       | 477       | 700       |
| Net weight of the unit (empty) [kg]  | 226       | 247       | 288       |
| permitted load [kg]  | 160       | 200       | 200       |
| Performance Data Temperature   |           |           |           |
| Temperature range [°C]   | -90...-40 | -86...-40 | -86...-40 |
| Temperature variation at -80 °C [± K]  | 3,5       | 2.5       | 2.5       |
| Temperature fluctuation at -80 °C [± K]  | 3,5       | 1.5       | 1.5       |
| Warm-up time during power failure from -80 °C / -122 °F to -60 °C / -76 °F [min] | 170       | 230       | 250       |
| Electrical data  |           |           |           |
| Nominal power (version 120 V) [kW]   | 1,4       | 1.6       | 1.6       |
| Nominal power (version 230 V) [kW]   | 1,6       | 1.6       | 1.6       |
| Nominal power (version 240 V) [kW]   | 1,6       | 1.6       | 1.6       |
| Environment-specific data  |           |           |           |
| Energy consumption at set-point -80 °C and ambient temperature = 21 °C [kWh/d]   | 7,9       | 7.9       | 8.1       |
| Fixtures   |           |           |           |
| Number of shelves (std./max.)  | 3/13      | 3/13      | 3/13      |

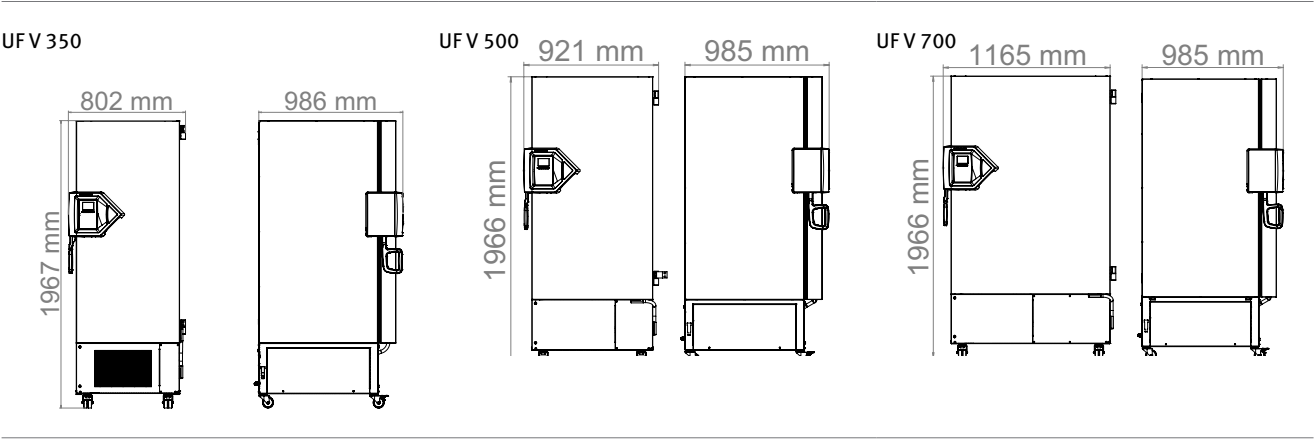
## ORDERING INFORMATION [Art. No.]

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

| Voltage        | Option model  | UFV 350   | UFV 500   | UFV 700   |
|----------------|---------------|-----------|-----------|-----------|
| 240 V 1~ 60 Hz | Standard      | 9020-0455 | 9020-0353 | 9020-0354 |
| 230 V 1~ 50 Hz | Standard      | 9020-0453 | 9020-0347 | 9020-0348 |
|                | Water cooling |           | 9020-0349 | 9020-0350 |
| 120 V 1~ 60 Hz | Standard      | 9020-0454 | 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]





## EXCERPT FROM OPTIONS AND ACCESSORIES

### Foam-filled compartment doors with gasket

Ideal for applications where doors are opened frequently.  
Series UF V

### Door access system

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

### Alarm system

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

### Chamber racks

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

### 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 UF V

### 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 UF V

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

Battery test chambers

Walk-in-chambers

Multi Management Software



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