

ULTRA LOW TEMPERATURE FREEZERS

Series UFV | Ultra low temperature freezers with climate-neutral refrigerants

The BINDER ultra low temperature freezer ensures the safe storage of samples at -90 °C. It combines outstanding environmental friendliness with low energy consumption, convenient operation and an individual safety concept.



Model UFV 350

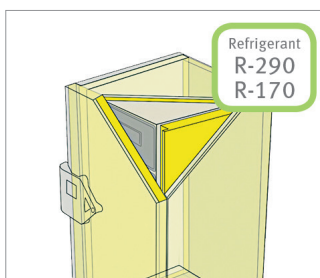
FEATURES:

- Temperature range: -90 °C to -40 °C
- Lowest energy consumption in its class
- Powerful cascade compressor cooling unit
- Environmentally friendly refrigerants R-290 and R-170
- Thermal insulation with unique long-life VIPs (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
- Stainless-steel shelves providing flexible placement
- Water cooling (depending on version)
- Zero-voltage alarm contact for in-house alarm system
- Internal data logger, measured values can be read out in open format via USB
- Ethernet interface
- 2 access ports, Ø 28 mm, rear

Sizes 382 L, 477 L, 700 L



Advantages at a glance



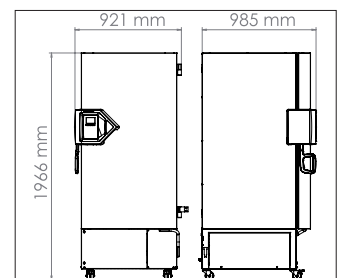
LOWEST ENERGY CONSUMPTION IN ITS CLASS WITH BEST TEMPERATURE UNIFORMITY



HIGH RELIABILITY



DURABLE QUALITY



WORKING ENVIRONMENT WITH SMALL FOOTPRINT AND LOW NOISE LEVEL

TECHNICAL DATA

Description	UFV 350	UFV 500	UFV 700
Housing dimensions not incl. fittings and connections			
Depth net [mm]	706	938	938
Height net [mm]	1966	1966	1966
Width net [mm]	938	826	1110
Internal Dimensions			
Depth net [mm]	486	605	605
Height net [mm]	1300	1300	1300
Width net [mm]	605	606	890
Measures			
Interior volume [L]	382	477	700
Net weight of the unit (empty) [kg]	226	247	289
Permitted load [kg]	160	200	200
Performance Data Temperature			
Temperature range [°C]	-90...-40	-90...-40	-90...-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	1.4	1.4
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

EXCERPT FROM OPTIONS AND ACCESSORIES



Foam-filled compartment doors with gasket



Door access system



Alarm system



Selection of racks and boxes

Specials promotion prices in 2025:

Art. No.	Designation	List price 2025	Discount	Special price
9020-0453	UFV350-230V	13.184 €	25%	9.880 €
9020-0347	UFV500-230V	13.797 €	25%	10.347 €
9020-0348	UFV700-230V	15.330 €	25%	11.497 €

Contact:

BINDER GmbH | Tuttlingen, Germany
 Tel +49 7462 2005 0 | info@binder-world.com
 www.binder-world.com



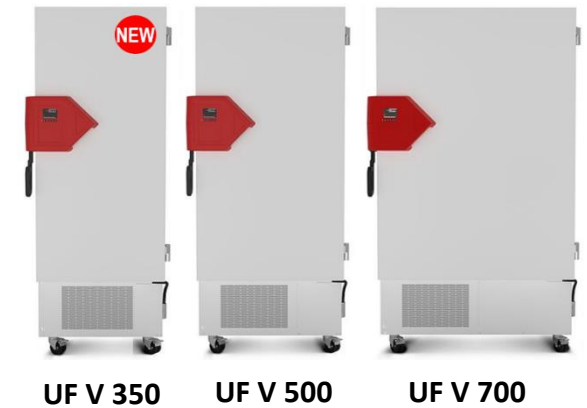
ULT FREEZERS

For reliable storage of sensitive samples

What does one expect from a ULT freezer?	Outstanding features	Sales pitch
Preservation of valuable and sensitive samples at temperatures between -40°C to -90°C	<ol style="list-style-type: none"> 1) low energy consumption 2) climate neutral refrigerants with low GWPs 3) traceability of parameters and alarm systems 	<ol style="list-style-type: none"> 1) one of the lowest energy consumption 2) green refrigerants 3) documentation as proof of performance

Series	BINDER UF V 350	BINDER UF V 500	BINDER UF V 700
Clear positioning	By footprint and number of standard boxes		
Target markets	BINDER UF V 350	BINDER UF V 500	BINDER UF V 700
Carriers and vaccination centers	●	●	●
Pharma and bioproduction	●	●	●
Food & Beverage	●	●	●
Cosmetics	●	●	●
Forensic medicine	●	●	●
Why should one go for a BINDER ULT freezer?	BINDER UF V 350	BINDER UF V 500	BINDER UF V 700
The longest warm-up time from -80 to -60 °C (min)	210	230	250
2 access ports	yes	yes	yes
One of the lowest energy consumption on the market	The lowest on the market		
Environmental-friendliness	BINDER UF V 350	BINDER UF V 500	BINDER UF V 700
Green refrigerants	propane GWP 3 /ethane GWP 6		
Produced with	100% green electricity		
Energy Star certified	n/a	yes	yes
Sound-pressure level	47 dB(A)	47 dB(A)	47 dB(A)

● Most probable match ○ Possible match – Not applicable



Safe. Reliable. Smart. Economical.



ULT FREEZERS

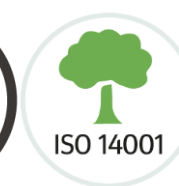
For reliable storage of sensitive samples

Competing brands/models	BINDER UF V 350	BINDER UF V 500	BINDER UF V 700
Eppendorf F570h, F740h	○	●	●
PHCbi MDF-DU302, MDF-DU502, MDF-DU702	○	●	●
Thermo TDE 30086FV, TDE 40086FV, TDE 50086FV	○	●	●
Basic specifications	BINDER UF V 350	BINDER UF V 500	BINDER UF V 700
Temperature range	-40°C to -90°C	-40°C to -90°C	-40°C to -90°C
Number of standard boxes	264	352	528
Cooling down time 22°C to -80°C in min.	210	360	450
Energy consumption in kWh/day	7,9	7,9	8,1
Refrigeration unit	air-cooled		
Top upselling opportunities	BINDER UF V 350	BINDER UF V 500	BINDER UF V 700
Water cooled refrigeration unit	n/a	variant	variant
CO ₂ back-up system	option	option	option
Numpad access	n/a	option	option
IQ, OQ, PQ and calibration	option	option	option
Top cross-selling opportunities	BINDER UF V 350	BINDER UF V 500	BINDER UF V 700
CO ₂ incubators	●	●	●
Standard incubators	●	●	●

● Most probable match ○ Possible match

Key questions (please see BINDER cheat sheet)

- 1) What size/how many standard boxes are you interested in?
- 2) Which alarms are required?
- 3) Do you need air- or water-cooled refrigeration unit?
- 4) Do you need software to send alarm messages to email?
- 5) Do you need IQ/OQ/PQ documentation or calibration?



Contact	BINDER
Name	_____
Title	_____
Phone	_____
Mail	_____@binder-world.com

