

# Vacuum drying chambers

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Both BINDER vacuum drying chamber models enable effective drying without residue or damaging the material being dried. With their proven technological features, they excellently address the strict requirements of industrial and scientific laboratories.

Samples and similar materials incorporating flammable and non-flammable solvents can be dried, depending on the individual use. The chambers use a unique safety design that, together with accustomed outstanding performance, sets the bar in terms of quality and safety.

## PRODUCT SELECTION VACUUM DRYING CHAMBERS

Features	VD	VDL
	› Page 138	› Page 140
<b>Model</b>		
Model 23	•	•
Model 53	•	•
Model 115	•	•
<b>General data</b>		
Temperature range 15 °C above ambient temperature to [°C]		200
RS 422 interface	•	•
<b>Controller and timer functions</b>		
Controller display		LED
Ramp function	•	•
Time delayed OFF	•	•
Time delayed ON	•	•
Temperature dependent delayed OFF	•	•
Programming option	•	•
Weekly program function	•	•
Real-time clock	•	•
Class 2 independent adjustable temperature safety device	•	•
Temperature alarm, visual	•	•
•Standard equipment		

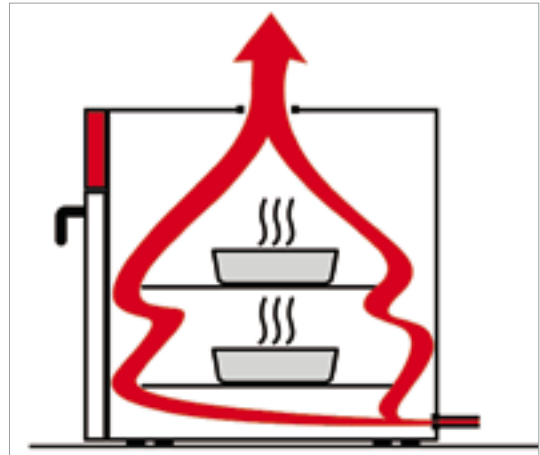
## ADVANTAGES AT A GLANCE



### UNIQUE SAFETY CONCEPT

Series VDL

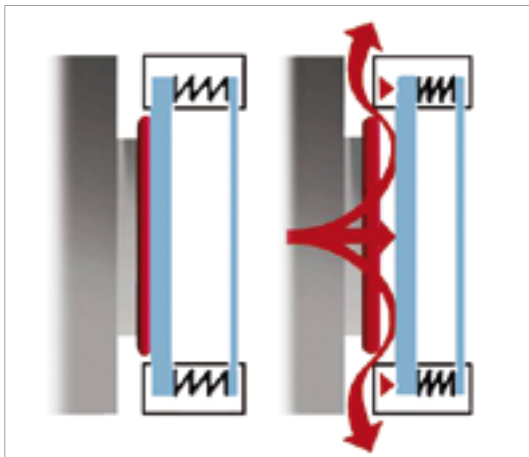
The safety concept provides flame protection gasket, pressure control device for heating activation, and the ATEX-tested interior EX II -/3G c IIB T3-T1 Gc X



### INERT GAS CONNECTION

Series VD, VDL

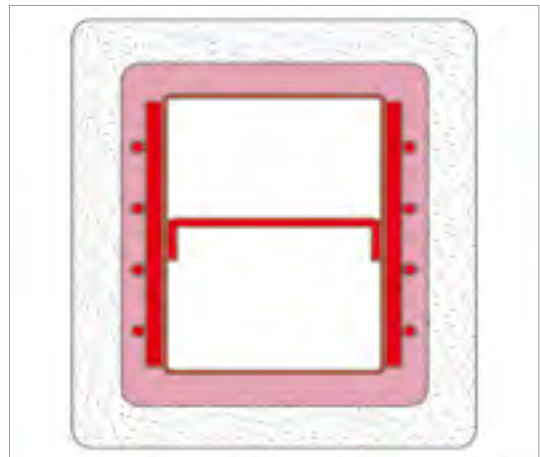
Cross Flow Technology provides even flow throughout the interior from bottom to top.



### TESTED SAFETY

Series VD, VDL

Shatterproof, spring-mounted safety glass panel, inert gas connection for interior flushing, and electronic components decoupled from the interior provide safety for users.



### DIRECT HEAT TRANSFER

Series VD, VDL

Patented expansion racks provide flexible placement for homogeneous temperature distribution.

## Series VD | for non-flammable solvents

A BINDER vacuum drying oven VD series gently dries materials with homogeneous temperature distribution. The patented expansion shelf technology from BINDER ensures optimal heat transfer. The shelves are easy to position where required and the inner chamber of the vacuum drying oven is easy to clean.



VD 53 model

### MAIN FEATURES

- Temperature range: room temperature plus 15 °C to 200 °C
- APT.line™ preheating chamber technology
- Controller with time-segment and real-time programming
- 2 aluminum expansion racks
- Inert gas connection
- Shatterproof, spring-mounted safety glass panel
- Class 2 independent adjustable temperature safety device (DIN 12880) with visual alarm
- Computer interface: RS 422
- 2 relay outputs, 24 V DC (max. 0.4 A)

### AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
VD 23	23	› <a href="https://go2binder.com/en-VD23">go2binder.com/en-VD23</a>
VD 53	53	› <a href="https://go2binder.com/en-VD53">go2binder.com/en-VD53</a>
VD 115	115	› <a href="https://go2binder.com/en-VD115">go2binder.com/en-VD115</a>



### TIPS & TRICKS

Benefit from our many years of experience, as demonstrated in our technical papers:

Tips & Tricks: › [go2binder.com/en-tips-tricks](https://go2binder.com/en-tips-tricks)  
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Find all details online  
[go2binder.com/en-VD](https://go2binder.com/en-VD)

## TECHNICAL DATA

Description	VD 23	VD 53	VD 115
<b>Measures - Outer dimensions</b>			
Width net [mm]	515	635	740
Height net [mm]	665	775	900
Depth net [mm]	500	550	670
<b>Measures - Internal Dimensions</b>			
Width [mm]	285	400	506
Height [mm]	285	400	506
Depth [mm]	295	340	460
<b>Measures</b>			
Interior volume [L]	23	53	115
Net weight of the unit (empty) [kg]	63	95	153
permitted load [kg]	35	45	65
Load per rack [kg]	20	20	20
<b>Performance Data Temperature</b>			
Temperature range 15 °C above ambient temperature to [°C]	200	200	200
Temperature variation at 100 °C [± K]	1.5	2	3.5
Temperature fluctuation [± K]	0.1	0.1	0.1
Heating-up time to 100 °C [min]	65	80	95
<b>Electrical data</b>			
Nominal power (Version 120 V) [kW]	0.8	1.2	1.7
Nominal power (Version 230 V) [kW]	0.8	1.2	1.7
<b>Fixtures</b>			
Number of shelves (std./max.)	2/4	2/5	2/6

## ORDERING INFORMATION [Art. No.]

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

Voltage	Option model	VD 23	VD 53	VD 115
230 V 1~ 50/60 Hz	Standard	9030-0029	9030-0030	9030-0031
120 V 1~ 60 Hz	Standard	9030-0035	9030-0036	9030-0037

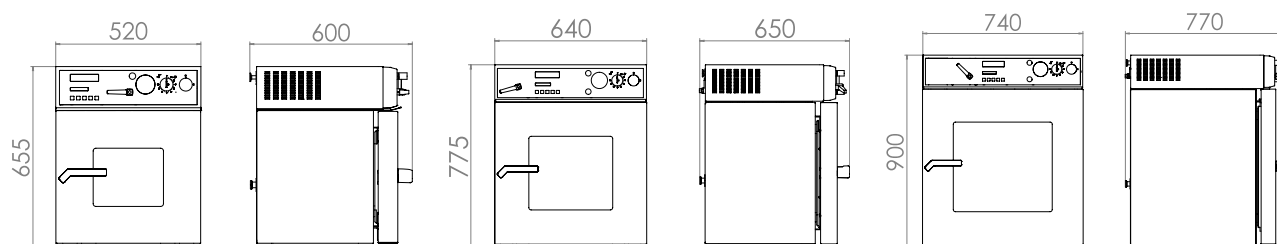
► You will find a selection of options, accessories and services suitable for each product on page 142

## DIMENSIONS INCL. FITTINGS AND CONNECTIONS [MM]

VD 23

VD 53

VD 115



## Series VDL | for flammable solvents

A BINDER safety vacuum drying oven of the VDL series ensures maximum safety when drying organic solvents standard with TÜV/GS. The inner chamber of the VDL safety vacuum drying oven is designed according to ATEX guidelines 2014/34/EU Ex II -/3G c IIB T3-T1 Gc X.



VDL 115 model



### MAIN FEATURES

- Temperature range: room temperature plus 15 °C to 200 °C
- ATEX compliance chamber's interior: Ex II -/3G c IIB T3-T1 Gc X
- APT.line™ preheating chamber technology
- Controller with time-segment and real-time programming
- 2 aluminum expansion racks
- Inert gas connection
- Shatterproof, spring-mounted safety glass panel
- Pressurized instrument panel with compressed air connection
- Pressure control device for heating activated < 125 mbar
- Flame protection gasket

### AVAILABLE SIZES

Model	Interior volume [L]	Online data sheets
VDL 23	23	› <a href="https://go2binder.com/en-VDL23">go2binder.com/en-VDL23</a>
VDL 53	53	› <a href="https://go2binder.com/en-VDL53">go2binder.com/en-VDL53</a>
VDL 115	115	› <a href="https://go2binder.com/en-VDL115">go2binder.com/en-VDL115</a>



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

## TECHNICAL DATA

Description	VDL 23	VDL 53	VDL 115
<b>Measures - Outer dimensions</b>			
Width net [mm]	515	635	740
Height net [mm]	655	775	900
Depth net [mm]	500	545	670
<b>Measures - Internal Dimensions</b>			
Width [mm]	285	400	506
Height [mm]	285	400	506
Depth [mm]	295	340	460
<b>Measures</b>			
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Heating-up time to 100 °C [min]	65	80	95
<b>Electrical data</b>			
Nominal power (Version 230 V) [kW]	0.8	1.2	1.9
<b>Fixtures</b>			
Number of shelves (std./max.)	2/4	2/5	2/6

## ORDERING INFORMATION [Art. No.]

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Voltage	Option model	VDL 23	VDL 53	VDL 115
230 V 1~ 50/60 Hz	Standard	9030-0038	9030-0039	9030-0040

► You will find a selection of options, accessories and services suitable for each product on page 142

## DIMENSIONS INCL. FITTINGS AND CONNECTIONS [MM]

VDL 23	VDL 53	VDL 115

## EXCERPT FROM OPTIONS AND ACCESSORIES

### Vacuum module

For receiving vacuum pumps, with switchable power socket.

Series VD, VDL

### Vacuum module with vacuum pump

Consists of module and vacuum pump. The module allows the pump to be installed below the vacuum chamber. This reduces the noise level by 50% and makes it considerably easier to access the vacuum chamber. Our range of membrane pumps, chemical membrane pumps, or speed-controlled chemical membrane pumps are perfectly matched to the BINDER vacuum chambers in question.

Series VD, VDL

### Pt 100 temperature sensor

Additional sensor with flexible cable for performing measurements directly on the sample.

Series VD, VDL

### Electric access port

For vacuum-tight access port for measuring lines.

Series VD, VDL

### 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 VD, VDL

### 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 VD, VDL

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



Vacuum module



Vacuum module with vacuum pump



Pt 100 temperature sensor



Electric access port