

◆ VACUUM DRYING OVENS

Series VD: Vacuum drying chambers for non-flammable solvents

A vacuum drying oven VD series gently dries materials with homogeneous temperature distribution. The patented expansion shelf technology 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.

● **Features:**

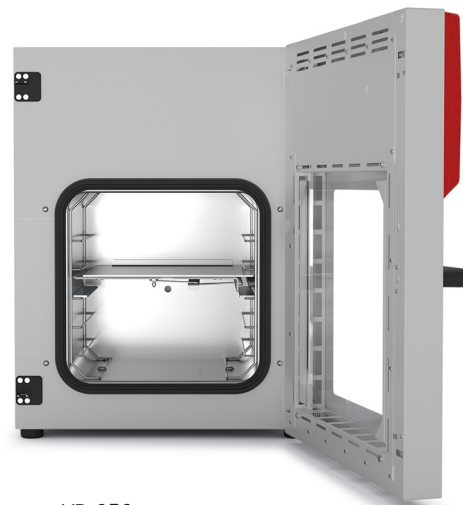
- Temperature range: room temperature +9 °C to 220 °C
- Controller with digital display of pressure and temperature
- Program-controlled drying monitoring with automatic ventilation at end of process
- Internal data logger, measured values can be read out in open format via USB
- 1 aluminum expansion rack, can be custom-positioned
- Inert gas connection
- Universal access port DN 16
- Shatterproof, spring-mounted safety glass panel
- Large viewing window with option of interior lighting
- Computer interface: Ethernet
- 2 relay outputs, 24 V DC (max. 0.4 A)

● **Optional equipment:**

- Touchscreen Controller - Graphical display of main process parameter
- Expansion racks - Choice of aluminum or stainless steel racks depending on the application requirements
- Analogue output for temperature and pressure signals - for external monitoring and evaluation of the process parameters, integration into in-house systems is possible
- Universal ventilation - Selection of different ventilation by air or inert gas
- Universal access port DN 40
- Multi Management Software APT-COM - Manage, record and document device parameters



VD 056



VD 056

Technical data:

| | VD023 | VD056 | VD115 |
|---|-----------|-----------|-----------|
| | 230V * | 230V * | 230V * |
| Article Number | 9630-001 | 9630-0002 | 9630-0003 |
| Performance Data Temperature | | | |
| Temperature range 9 °C above ambient temperature to [°C] | 220 | 220 | 220 |
| Temperature variation at 100 °C [± K] | 1,0 | 1,2 | 2,9 |
| Temperature fluctuation [± K] | 0,1 | 0,1 | 0,1 |
| Heating-up time to 100 °C [min] | 80 | 80 | 130 |
| Vacuum Data | | | |
| Leak rate [bar/h] | 0,01 | 0,01 | 0,01 |
| Electrical data | | | |
| Rated Voltage [V] | 200...230 | 200...230 | 200...230 |
| Power frequency [Hz] | 50/60 | 50/60 | 50/60 |
| Nominal power [kW] | 0,9 | 1,4 | 1,6 |
| Unit fuse [A] | 6,3 | 8 | 10 |
| Phase (Nominal voltage) [ph] | 1~ | 1~ | 1~ |
| Connections | | | |
| Compressed air connection for pressure-encapsulation [NW] | 5 | 5 | 5 |
| Vacuum connection with small flange [DN mm] | 16 | 16 | 16 |
| Measuring access port with small flange [DN mm] | 16 | 16 | 16 |
| Inert gas connection with flow limiter (RP") | 3/8 | 3/8 | 3/8 |
| Outer dimensions | | | |
| Width net [mm] | 523 | 638 | 743 |
| Height net [mm] | 698 | 815 | 942 |
| Depth net [mm] | 413 | 461 | 581 |
| Wall clearance back [mm] | 100 | 100 | 100 |
| Wall clearance sidewise [mm] | 70 | 70 | 70 |
| Viewing window width [mm] | 305 | 420 | 525 |
| Viewing window height [mm] | 305 | 420 | 468 |
| Doors | | | |
| Unit doors | 1 | 1 | 1 |
| Internal Dimensions | | | |
| Width [mm] | 285 | 400 | 506 |
| Height [mm] | 285 | 400 | 506 |
| Depth [mm] | 295 | 343 | 460 |
| Further Dimension | | | |
| Interior volume [L] | 24 | 55 | 119 |
| Net weight of the unit (empty) [kg] | 64 | 95 | 146 |
| permitted load [kg] | 50 | 60 | 70 |
| Load per rack [kg] | 20 | 20 | 20 |
| Fixtures | | | |
| Number of shelves (std./max.) | 1/4 | 1/5 | 1/6 |

* All technical data is specified for unloaded units with standard equipment at an ambient temperature of +22 °C ±3 °C and a power supply voltage fluctuation of ±10%. The temperature data is determined in accordance to BINDER factory standard following DIN 12880, observing the recommended wall clearances of 10 % of the height, width, and depth of the inner chamber. All indications are average values, typical for units produced in series. We reserve the right to change technical specifications at any time.

Series VDL: Vacuum drying chambers for flammable solvents

A 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 2/3/- G IIB T3 Gb/Gc/- X.

Features:

- Temperature range: room temperature plus 9 °C to 110 °C
- ATEX compliance chamber's interior: EX II 2/3/- G IIB T3 Gb/Gc/- X
- Intuitive touchscreen controller with graphical pressure and temperature display
- Program-controlled drying monitoring with automatic ventilation at end of process
- Internal data logger, measured values can be readout in open format via USB
- Pressure control device for heating activated from < 100 mbar
- 2 aluminum expansion racks, can be custom-positioned
- Universal connection for ventilation with ambient air or inert gas
- Universal access port DN 16
- Shatterproof, spring-mounted safety glass panel
- Large viewing window
- Computer interface: Ethernet

Optional equipment:

- Expansion racks - Choice of aluminum or stainless steel racks depending on the application requirements
- Analogue output for temperature and pressure signals - for external monitoring and evaluation of the process parameters, integration into in-house systems is possible
- Universal ventilation - Selection of different ventilation by air or inert gas
- Universal access port DN 40
- Multi Management Software APT-COM - Manage, record and document device parameters



VDL 056



VDL 056 w/m Module

Technical data:

| | VDL023 | VDL056 | VDL115 |
|--|-----------|-----------|-----------|
| | 230V * | 230V * | 230V * |
| Article Number | 9630-0009 | 9630-0010 | 9630-0011 |
| Performance Data Temperature | | | |
| Temperature range 9 °C above ambient temperature to [°C] | 110 | 110 | 110 |
| Temperature variation at 100 °C [± K] | 1,0 | 1,2 | 2,9 |
| Temperature fluctuation [± K] | 0,1 | 0,1 | 0,1 |
| Heating-up time to 100 °C [min] | 110 | 140 | 170 |
| Vacuum Data | | | |
| Leak rate [bar/h] | 0,01 | 0,01 | 0,01 |
| Electrical data | | | |
| Rated Voltage [V] | 200...230 | 200...230 | 200...230 |
| Power frequency [Hz] | 50/60 | 50/60 | 50/60 |
| Nominal power [kW] | 0,9 | 1,4 | 1,6 |
| Unit fuse [A] | 6,3 | 8 | 10 |
| Phase (Nominal voltage) [ph] | 1~ | 1~ | 1~ |
| Connections | | | |
| Vacuum connection with small flange [DN mm] | 16 | 16 | 16 |
| Measuring access port with small flange [DN mm] | 16 | 16 | 16 |
| Inert gas connection with flow limiter (RP") | 3/8 | 3/8 | 3/8 |
| Outer dimensions | | | |
| Width net [mm] | 523 | 638 | 743 |
| Height net [mm] | 698 | 815 | 942 |
| Depth net [mm] | 413 | 461 | 581 |
| Wall clearance back [mm] | 100 | 100 | 100 |
| Wall clearance sidewise [mm] | 70 | 70 | 70 |
| Viewing window width [mm] | 305 | 420 | 525 |
| Viewing window height [mm] | 305 | 420 | 468 |
| Doors | | | |
| Unit doors | 1 | 1 | 1 |
| Internal Dimensions | | | |
| Width [mm] | 285 | 400 | 506 |
| Height [mm] | 285 | 400 | 506 |
| Depth [mm] | 295 | 343 | 460 |
| Further Dimension | | | |
| Interior volume [L] | 24 | 55 | 119 |
| Net weight of the unit (empty) [kg] | 72 | 104 | 158 |
| Permitted load [kg] | 50 | 60 | 70 |
| Load per rack [kg] | 20 | 20 | 20 |
| Fixtures | | | |
| Number of shelves (std./max.) | 2/4 | 2/5 | 2/6 |

* All technical data is specified for unloaded units with standard equipment at an ambient temperature of +22 °C ±3 °C and a power supply voltage fluctuation of ±10%. The temperature data is determined in accordance to BINDER factory standard following DIN 12880, observing the recommended wall clearances of 10 % of the height, width, and depth of the inner chamber. All indications are average values, typical for units produced in series. We reserve the right to change technical specifications at any time.