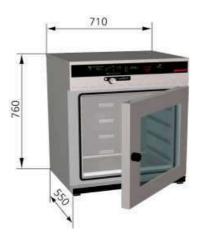


# Vacuum oven Model VO500



# Standard equipment

#### Control

- fuzzy-supported MLC (Multi-Level-Controlling) microprocessor controller adapting its performance to the volume (local temperature sensing) for each thermoshelf
- temperature measured through 4-wire Pt100 sensor individually for each thermoshelf
- self-diagnostics for fault analysis
- digital 7-day programme timer with real time clock, precise minute setting, for one set value or start of ramp operation
- integrated timer for tempering and pressure (vacum) profiles of up to 40 ramps, parameters time, pressure and temperature (setpoint dependent) individually adjustable for each segment from 1 min. up to 99 hrs
- multifunctional programming via menu on 8digit alphanumeric digital display (language to be chosen via set-up)
- digital display of all set parameters, such as temperature, weekdays, time, pressure, programe status and set-up values
- separate LED-symbol for each thermoshelf in operation
- digital display of actual temperature for each thermoshelf individually
- resolution of display for setpoint values 0.1 °C up to 99.9 °C, 0.5 °C from 100 °C
- resolution of display for actual values 0.1 °C up to 99.9 °C, 0.5 °C from 100 °C
- calibration facility through controller for three freely selectable temperature and pressure values
- integrated ring memory as data logger for GLP-conforming long-term documentation of all relevant parameters - 1024 kB
- programme stored in case of power failure

- USB-interface incl. Memmert software "Celsius" for programming and documentation of temperature and pressure
- chip-card control incl. 1 MEMoryCard XL with 32 kB storage capacity (max. 40 ramps)
- incl. works calibration certificate for +160°C/50 mbar

#### **Vacuum Control**

- digital electronic pressure control through solenoid valves
- adjustment range from 10 mbar to 1100 mbar
   digital (LED)
- setting accuracy 1 mbar
- digital display of actual pressure from 5 mbar up to 1100 mbar
- one programmable, digitally controlled inlet for air
- rapid air intake for door opening (door is blocked under vacuum) - programme reactivation at stored values
- vacuum drying process (vacuum cycles) is continued after power failure
- works calibration certificate for +160 ℃ at 50 mbar pressure for each additionally supplied thermoshelf together with the vacuum oven

## **Multiple Overtemperature Protection**

- additional digitally adjustable, electronic micro-processor overtemperature monitor TWW, protection class 3.1 - (max-value for overtemperature, min-value for undertemperature)
- additionally integrated over- and undertemperature protection "ASF", automatically following the setpoint value at a preset tolerance range; alarm in case of overor undertemperature, heating of the individual shelf is switched off in case of overtemperature

- resolution of display/setting accuracy 0.5 °C up to 99.9 °C, 1 °C from 100 °C
- automatic overtemperature protection for each thermoshelf following the setpoint-value (MLOP - Multi-Level-Overtemperature-Protection) switching the heating of the shelf off at about 3 ℃ above setpoint value
- mechanical temperature limiter TB, protection class 1 according to DIN 12 880 to switch off the heating approx. 20 °C above nominal temperature

#### **Textured Stainless Steel Casing**

- w x h x d: 710 x 760 x 550 mm
- full-sight glass door, inside spring-loaded, 15 mm thick glazed panel in safety glass, outside with anti-splitter screen
- rear zinc-plated steel

#### **Interior - Heating Concept**

- w x h x d: 545 x 465 x 400 mm, 101 l
- hermetically welded stainless steel interior of extremely corrosion-resistant stainless steel, material 1.4404
- additional interior mountings of stainless steel, material 1.4404 (removable for cleaning), consisting of mounting at the sides with guide bars for thermoshelves and on top (diffusor) to avoid turbulences when aerating
- all tubings made of stainless steel, material no. 1.4571
- 1 thermoshelf of aluminim, material 3.3547 (ASTM B209) with integrated large-area heating

- 2 connections for thermoshelves in the rear (1st and 3rd level)
- Max. loading of chamber: 60 kg

#### **Temperature Range**

min. 5 °C above ambient up to +200 °C

#### **Voltage / Power Rating**

• 230 V (+/- 10%), 50/60 Hz / approx. 2.400 W

#### **Packing Data**

- net weight approx. 120 kg
- gross weight carton approx. 134 kg
- dimensions approx.: carton w x h x d: 82 x 97 x 67 cm
- the appliances must be transported upright

#### **Customs Tariff Number**

• 8419 8998

#### **Country of Origin**

• Federal Republic of Germany

### WEEE-Reg.-No.

DE 66812464