



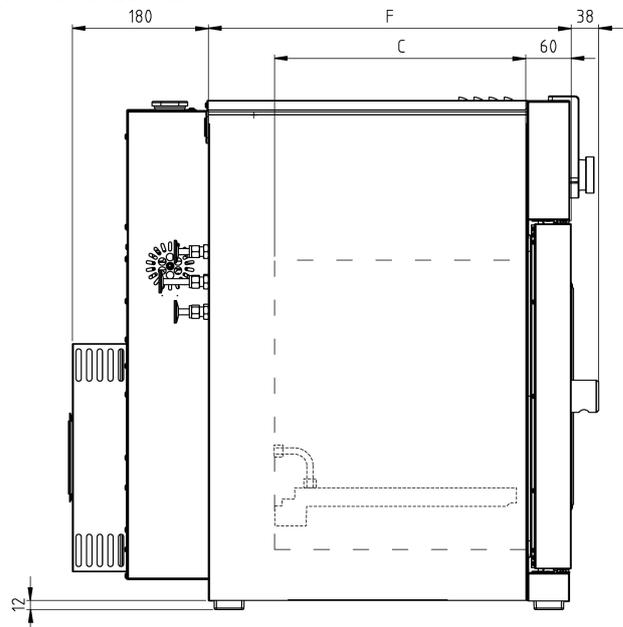
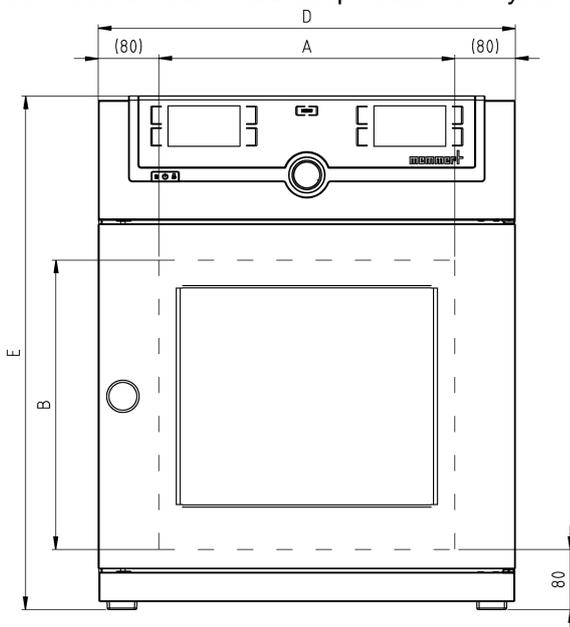
Cooled vacuum oven VO49cool

For gentle drying of bacteria and starter cultures or simulation of intercontinental flights.



The direct contact between the load and the heatable thermoshelves in the chamber of the vacuum oven ensures rapid and uniform temperature control of food, cosmetics, watches, books, PCBs or injection moulds, without the loss of heat.

On this page, you can find all the essential technical data on our vacuum drying oven. Our customer relations team will be pleased to help if you want further information. If you should require a customised special solution, please contact our technical specialists at myAtmoSAFE@memmert.com.



Temperature

Temperature range from +5°C up to +90°C

resolution of display for actual values 0.1°C

resolution of display for setpoint values 0,1°C

resolution of display/setting accuracy 0.5°C

Pressure (Vacuum)

Vacuum range 5 to 1100 mbar

Pressure control Digital electronic pressure control for a speed-controlled vacuum pump. Tubing for vacuum, air and inert gas are made of material 1.4571 (ASTM 316 Ti). Programmable, digitally controlled inlet for air.

Permitted final vacuum 0.01 mbar

Maximum leakage rate 0.01 bar/h

Pump control speed control, optimised rinsing procedures for the pump membranes as well as signal output for pump ON/OFF

Connection Vacuum connection with small flange DN16, and gas inlet with small flange DN16

Control technology

adjustable parameters temperature (Celsius or Fahrenheit), pressure (vacuum), programme time, time zones, summertime/wintertime

Language setting German, English, Spanish, French, Polish, Czech, Hungarian, Italian

ControlCOCKPIT TwinDISPLAY. Adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays.

Timer Digital backwards counter with target time setting, adjustable from 1 minute to 99 days

Function SetpointWAIT the process time does not start until the set temperature is reached

Communication

Interface Ethernet LAN, USB

Documentation programme stored in case of power failure

Programming AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port

Safety

Temperature control mechanical temperature limiter TB, protection class 1 according to DIN 12880 to switch off the heating approx. 10°C above nominal temperature

AutoSAFETY additionally integrated over- and undertemperature protection "ASF", automatically following the setpoint value at a preset tolerance range, alarm in case of over- or undertemperature, heating is switched off in case of overtemperature, compressor in case of undertemperature

Autodiagnostic system integral fault diagnostics for temperature control

Alarm visual and acoustic

Heating concept

Thermoshelves	1 connection for thermoshelves in the rear (lowest level)
VO cooling	Peltier cooling unit ensures a surface temperature distribution with a maximum deviation of ± 1 K across the entire temperature range
VO direct heating	fuzzy-supported MLC (Multi-Level-Controlling) microprocessor controller adapting its performance to the volume (local temperature sensing)

Standard equipment

Premium module T5	comprises the inert gas inlet, 2 extra connectors for thermoshelves, an additional thermoshelf
Works calibration certificate	for +50°C/20 mbar
Interior	additional interior mountings of stainless steel, material 1.4404. consisting of mounting at the sides with guide bars for thermoshelves and on top (diffusor) to avoid turbulences when aerating
Interior	all tubings made of stainless steel, material no. 1.4571
Internals	1 thermoshelf of aluminim, material 3.3547 (ASTM B209) with integrated large-area heating and cooling, in lowest position (cannot be removed)

Stainless steel interior

Material	hermetically welded stainless steel interior of extremely corrosion-resistant stainless steel, material 1.4404
Volume	49 l
Dimensions	$w_{(A)} \times h_{(B)} \times d_{(C)}$: 385 x 385 x 330 mm
Max. number of internals	
Max. loading of chamber	20 kg
Max. loading per internal	0 kg

Textured stainless steel casing

Door	full-sight glass door, inside spring-loaded, 15 mm thick glazed panel in safety glass, outside with anti-splitter screen
Dimensions	$w_{(D)} \times h_{(E)} \times d_{(F)}$: 550 x 680 x 730 mm
Housing	rear zinc-plated steel

Electrical data

Voltage	230 V, 50/60 Hz
Electrical load	approx. 500 W

Ambient conditions

Ambient temperature +5 °C to +40 °C

Set Up The distance between the wall and the rear of the chamber must be at least 15 cm. The clearance from the ceiling must not be less than 20 cm and the side clearance from the wall must not be less than 8 cm.

Humidity rh max. 80 %, non-condensing

Overvoltage category II

Pollution degree 2

Packing/shipping data

Transport information The appliances must be transported upright

Customs tariff number 8419 8998

Country of origin Federal Republic of Germany

WEEE-Reg.-No. DE 66812464

Dimensions approx incl. carton w x h x d: 830 x 1050 x 800 mm

Net weight approx. 89 kg

Gross weight carton approx. 112 kg

Standard units are safety-approved and bear the test marks

