

Constant Climate Chamber

Model HPP110



Standard equipment

Ventilation and Control

- forced ventilation by Peltier fan
- adaptive multifunctional digital PID-microprocessor controller with 2 high-definition TFT-colour displays
- integral fault diagnostics for temperature and humidity control
- 2 Pt100 sensors Class A in 4-wire-circuit, mutually monitoring and taking over the performance at the same temperature value
- Digital backwards counter with target time setting, adjustable from 1 minute to 99 days
- parameters adjustable on ControlCOCKPIT: temperature (Celsius or Fahrenheit), relative humidity, programme time, time zones, summertime/wintertime
- SetpointWAIT function - the process time does not start until the set temperature is reached
- AtmoCONTROL software on a USB stick for programming, managing and transferring programmes via Ethernet interface or USB port
- Heating and cooling performance distribution by individual control of the Peltier elements in the upper and lower row
- Setting of languages on ControlCOCKPIT: German/English/Spanish/French
- resolution of display for setpoint and actual temperature values 0.1 °C
- calibration facility directly at ControlCOCKPIT for three freely selectable temperature values, 2-point calibration for humidity: 20 and 90 % rh
- humidity supply with distilled water from external tank by self-priming pump
- programme stored in case of power failure
- incl. works calibration certificate for +10 °C and +37 °C, 60 % rh at +30 °C

Humidifying and dehumidifying system

- active humidifying and de-humidifying adjustable from 10 - 90 % rh with digital display of relative humidity - resolution of display 0.1 %, setting accuracy 0.5 %
- humidity supply with distilled water from external tank by self-priming pump
- humidification by hot steam generator
- dehumidification by cold trap using the Peltier technology

Multiple Overtemperature Protection

- with audible and visual alarm
- over- and undertemperature monitor TWW, protection class 3.3 or adjustable temperature limiter TWB, protection class 2, selectable on display
- 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 function is switched off in case of overtemperature, cooling function in case of undertemperature

Textured Stainless Steel Casing

- w x h x d: 745 x 864 x 674 mm
- fully insulated stainless steel door with 2-point locking (compression door lock)
- inner glass door
- rear zinc-plated steel

Interior - Heating Concept

- w x h x d: 560 x 480 x 400 mm, 108 l
- energy-saving Peltier heating-/cooling system integrated in the rear (heat pump principle)
- 2 stainless steel grids
- Max. loading of chamber: 150 kg

Temperature Range

- without light: from 0°C to +70°C
- with light: from +15°C to +40°C

Voltage / Power Rating

- 230 V (+/- 10 %), 50/60 Hz / approx. 650 W
- 115 V (+/- 10 %), 50/60 Hz / approx. 650 W

Packing Data

- net weight approx. 80 kg
- gross weight carton approx. 105 kg
- dimensions approx.:
carton w x h x d: 83 x 106 x 80 cm

- the appliances must be transported upright

Customs Tariff Number

- 8419 8998

Country of Origin

- Federal Republic of Germany

WEEE-Reg.-No.

- DE 66812464