

Climatic Test Chamber

Model CTC256



Standard equipment

Ventilation and Control

- high-performance air fan in working chamber
- depending on operation status automatic adaption of fan speed resp. manual adjustment from 10 to 100 %
- adaptive, fuzzy-supported multifunctional digital microprocessor PID-controller
- 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 7-day programme timer with real time clock, precise minute setting
- integrated timer for tempering profiles of up to 40 ramps each, each segment adjustable from 1 min. to 999 hrs.
- digital display of all set parameters, such as temperature, weekdays, time, humidity, fan speed, programme status and set-up values - language to be chosen via set-up
- resolution of display for setpoint values 0.1 °C up to 99.9 °C, 0.5 °C from 100 °C and for actual values 0.1 °C (LED)
- calibration facility through controller for three freely selectable temperature values
- active humidifying and de-humidifying control (10-98 %) with digital display of relative humidity - resolution of display 0.5 %, setting accuracy 1 %
- humidity supply with distilled water from 2 x 10 l tank on telescopic slide integrated in chamber, with automatic change-over

- 2 x 10 l tanks as condensate collector
- 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
- parallel printer interface (incl. real time clock with date function) for all PCL3-compatible ink jet printers for GLP-conforming documentation
- USB-interface incl. Memmert software "Celsius" for programming and documentation
- chip-card control incl. 1 MEMoryCard XL with 32 kB storage capacity (max. 40 ramps)
- incl. works calibration certificate for -20 °C and +160 °C
- incl. works calibration certificate for +30 °C and 60 % rh
- high-performance ring heaters with optimised air circulation
- door heating to avoid condensation

Humidifying and dehumidifying system

- active humidifying and de-humidifying adjustable from 10-98 % rh with digital display of relative humidity - resolution of display 0.5 %, setting accuracy 1 %
- humidity supply with distilled water from external tank by self-priming pump
- humidification by hot steam generator

Cooling Concept

- twin compressor
- speed adjustable condenser fan

- chlorine-free refrigerant R404A

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, adjustable at controller
- with audible and visual alarm in case of over-/under temperature and underhumidity, open door and empty water tank
- 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
- mechanical temperature limiter TB, protection class 1 according to DIN 12 880 to switch off the heating approx. 10 °C above nominal temperature

Textured Stainless Steel Casing

- w x h x d: 898 x 1730 x 1100 mm
- fully insulated stainless steel door with double-locking and 4-point adjustment, heated
- rear zinc-plated steel
- on lockable castors

Interior - Heating Concept

- w x h x d: 640 x 670 x 597, 256 l
- easy-to-clean stainless steel interior, material 1.4301 (ASTM 304), hermetically welded
- 1 stainless steel grid

Temperature

- with humidity from +10 °C up to +95 °C
- without humidity: from -42 °C up to +190 °C

- Average heating up speed 10 K / minute - 40 °C to +180 °C
- Average cooling down speed 5 K / minute +190 °C to 0 °C
- Average cooling down speed 3 K / minute +180 °C to -40 °C
- Heating up time 20 minutes from -40 °C up to +180 °C (98 % of setpoint)
- Cooling down time 95 minutes from +180 °C to -40 °C (98 % of setpoint)
- Temperature variation in time +/- 0.2 to 0.5 K
- temperature distribution (spatial) +/- 0.5 up to 2K

Voltage / Power Rating

- 400 V, 3 phases/N, 50 Hz / approx. 7.000 W

Packing Data

- net weight approx. 297 kg
- gross weight approx. 420 kg
- dimensions approx.:
carton w x h x d: 106 x 200 x 130 cm
- the appliances must be transported upright

Customs Tariff Number

- 8419 8998

Country of Origin

- Federal Republic of Germany

WEEE-Reg.-No.

- DE 66812464