

# Climatic Test Chamber Model CTC 256



# 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
- autodiagnostic system with fault indication on 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 segment adjustable from 1 min. up to 999 hours
- digital display (LED) of all set parameters, such as temperature, weekdays, time, humidity and set-up values - language to be chosen in setup
- digital display of set values (resolution: 0,1 °C below 99,9 °C, 0,5 °C above 100 °C) and actual values (resolution: 0,1 °C) of temperature (LED)
- active control for humidifying and dehumidifying (10-98% rh) with digital display of relative humidity - resolution of display: 0,5%, setting accuracy: 1%
- humidity supply with distilled water from 2 tanks integrated in unit on telescopic slide with automatic change over
- 2 x 10 l tanks as condensate collector, on telescopic slide
- long-term logging (ring store) of all relevant data, GLP-conforming as data logger - 1024 kB
- programme stored on power failure
- parallel printer interface (incl. real-time clock with date function) for printing logging files, suitable all PCL3-compatible ink-jet printers

- (USB available via converter, see accessories)
- USB interface including MEMMERT Software "Celsius" for programming and documentation
- chip card control incl. one MEMoryCard XL with 32 kB (up to 40 ramps)
- incl. works calibration certificate for -20 °C and +160 °C
- incl. works calibration certificate for +30 °C at 60% rh

## **Heating Concept**

- high-performance ring heaters with optimised air circulation
- · door heating to avoid condensate

## **Cooling Concept**

- twin compressor
- speed adjustable condenser fan
- chlorine-free refrigerant R404A

#### **Multiple Overtemperature Protection**

- with audible and visual alarm in case of over-/undertemperature and over-/underhumidity, open door and empty water tank
- independently working, digitally adjustable electronic overtemperature controller TWW, protection class 3.3
- additional integral over- and undertemperature protection "ASF" (Auto-Safety-Function) automatically following the set value at a preset tolerance range
- mechanical temperature limiter TB protection class 1 switching the heating off at approx. 10
   C above max. oven 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 castors

#### Interior

- w x h x d: 640 x 670 x 597 mm, 256 l
- easy-to-clean interior, made of stainless steel, material no. 1.4301 (ASTM 304), hermetically welded
- 1 stainless steel grid
- 3-layer-high-tech-insulation
- lateral entry port, right, 80 mm diam. with silicone plug
- Halogen interior lighting 2 x 25 W, switchable

## **Temperature Range**

- with humidity control: from +10 °C up to +95 °C
- without humidity control: from -42 °C up to +190 °C
- temperature uniformity in chamber: +/- 0.5 up to 2 K

## **Voltage / Power Rating**

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

## **Packing Data**

- net weight approx. 340 kg
- gross weight carton approx. 420 kg
- dimensions approx.:
   w x h x d: 103 x 126 x 194 cm
- the appliances must be transported upright

#### **Customs Tariff Number**

• 8419 3990

## **Country of Origin**

• Federal Republic of Germany

## WEEE-Reg.-No.

• DE 66812464

#### **Accessories**

•	Additional stainless steel grid	E3(x)
•	Full-sight glass door (5-layer insulating glazing), heated	В0
•	External control and logging package consisting of mini-Notebook and Software "Celsius", pre-configurated, and lateral swinging arm	W9
•	Chip card, pre-programmed for common test standards	V7
•	IQ check list with works test data for oven as support for validation by customer	Q1
•	OQ check list with works test data for one freely selectable humidity and temperature value incl. temperature distribution survey for 27 measuring points to DIN 12880: 2007-05 as support for validation by customer	Q2
•	Software conforming to FDA "Celsius FDA-Edition" for up to 16 units	Q3
•	Oven-linked authorisation card (User-ID-Card) - prevents undesired manipulation by unauthorised third parties	V1
•	Computer interface RS485 (for networking a maximum of 16 ovens) instead of interface USB	V2
•	Temperature profile write/read unit for programming via PC with USB interface for writing to and reading from the chip card, up to 40 ramps	V3
•	Additional chip card, blank, formatted (32 kB MEMoryCard XL for a maximum of 40 ramps)	V4
•	Start-up of CTC and TTC chambers and brief training (only D, A, CH) through Memmert service. Service not subject to any discount	K9