

**CTS - Temperature Test Cabinet Type TP+5/2000-S**



## **CTS - Temperature Test Cabinet Type TP+5/200-S**



Your benefits:

- low power consumption, please see quotation text
- very low-noise level, only 55 dB(A)
- user-friendly and convenient handling and programming with the colour CTS-Multi-Touch panel or with the optional CID-Software on the PC
- uniform operation due to identical operating panel for all cabinets from bench top to walk-in chambers
- temperature measuring with PT 100

### **Included in basic equipment**

- operating panel with high resolution colour LCD display for easy handling installed in the front of the cabinet
- defined keys for elementary functions of the cabinet such as start/stop, fixed-value/automatic operation, interruption, light, etc.
- error display in plain text
- potential-free switch contact for heat emitting specimen
- Ethernet - Interface
- Potential-free, error contact
- adjustable software-temperature-limiter min./max.
- safety temperature limiter according DIN EN 14597
- door lockable; one-hand operation with integrated safety function to avoid unintentional closing
- door switch, door open cooling in bypass, test space fan and heating off
- international standards are fulfilled (CE-Conformity)
- Recovery time after open door within 15 minutes.
- dual band alarm, adjustable
- Acoustic alarm at 3°C and 7°C from the set point after 15 minutes

## **Technical data**

### **Temperature tests:**

Temperature range	5°C to +15°C
Temperature fluctuation	≤ ±0,5 K temporally

Recovery time after open door within 15 minutes.  
Acoustic alarm At 3°C and 7°C from the set point after 15 minutes

The technical data, especially the performance data, refer to basic cabinet at an ambient temperature of +25°C, nominal voltage of 230V without test specimen, without radiation and without accessories or options, measured in the air inlet.

Options can influence the technical data (e.g. entry port, door with window, notch, bursting disk, etc.) so that the end temperature, temperature change rate and at climate test cabinets the max. climate values could be reduced.

Ambient conditions like temperature and sea level can also influence the performance data.

### **Dimensions:**

Test space capacity	2000 l
Test space	900 x 1200 x 2100 mm (D x W x H)
Overall dimensions	1060 x 1360 x 2580 mm (D x W x H)
Dimension door	900 x 2000 mm (w x H)
Dimension window	200 x 900 mm (w x H)
Weight	approx. 300 kg net

### **Data for installation and operation:**

Nominal voltage	230 V +/-10 %, 1/N/PE, 50 Hz
Nominal power	1,6 kW
Nominal current	7 A
Connection	Schuko stecker
Fuse (on site)	16 A time-lag
Protection class	IP 22
<b><u>Drain for condensate:</u></b>	pressureless, ∅ 1/2" mm

**Design:**

Test space	stainless steel V2A, grade 1.4301
Air flow	Central axial suction fan, in the test space on the ceiling air
Cooling	mechanical cooling by direct evaporation in heat exchanger
Door	hinged on left-hand side, lockable, Window 200 x 1000 mm, W x H
Refrigerating unit	air cooled, low noise refrigeration unit, continuous performance adjustment via electronic monitoring and control system, environmental friendly refrigerants R 452 A based on the current directives and regulations.
Sound pressure level in accordance to DIN EN ISO 3744	55 dB(A), measured in a distance of 1 m from front
Ambient conditions for operating:	temperature: +15°C to +30°C rel. humidity: 20 % to 75 % rel. h. The room must be dry and ventilated. The floor has to be plane.  Local laws and standards have to be considered by the customer.

**Control**

- 32-bit controller
- compatible for all CID-versions
- external control by customer via ASCII protocol, identical for all CTS equipment
- operating panel with glass surface, illuminated from the back and a screen diagonal of 6,8" (17,5 cm)
- multi-gestures display for easy handling
- big colour display with high resolution

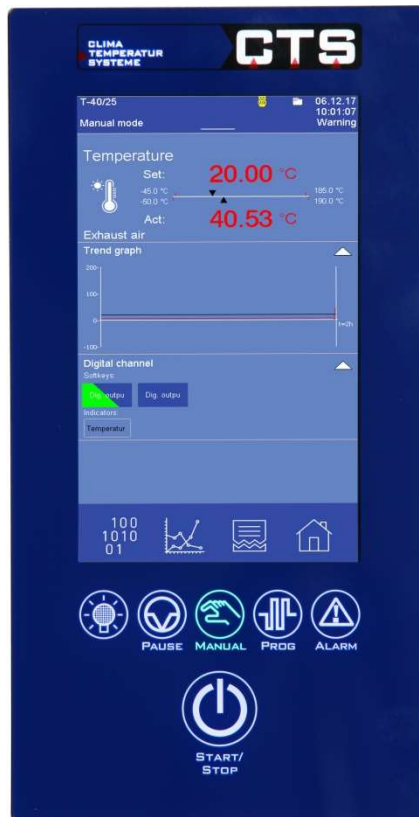
**Functions**

- customer specified favourite bar
- handling via touch, slide and wipe gestures
- error message in plain text with report function
- graphic curve progressions
- possibility to connect a USB Stick for network independent backup of measurement data, which has to be opened via CID – software
- easy input of test programs
- graphic program preview

**Measurement sensor**

temperature sensor PT 100, DIN EN 60751, class A

**Touch-Panel:**



## Data Interfaces

basic:

- RS 232 – Interface

option:

- RS 485 - Interface
- USB – Interface
- Ethernet- Interface

With all interfaces customer has the possibility to control the cabinet via ASCII-protocol. This means simple commands for default and demand settings like set - and actual temperature, status information or to start and stop the cabinet.

The Ethernet - Interface offers the possibility to integrate the cabinet in an onsite network and offers the additional opportunity to get status information via web browser.

As an alternative the CTS-CID-Software for programming, controlling, measuring and visualization can be used to control the cabinet. The CID- license is available as an option.

With the RS 485 - Interface customer can crosslink up to 32 cabinets over a long distance with a PC.

The USB - Interface will be simulated as a virtual serial Interface on the PC by using the included driver.