ID 300

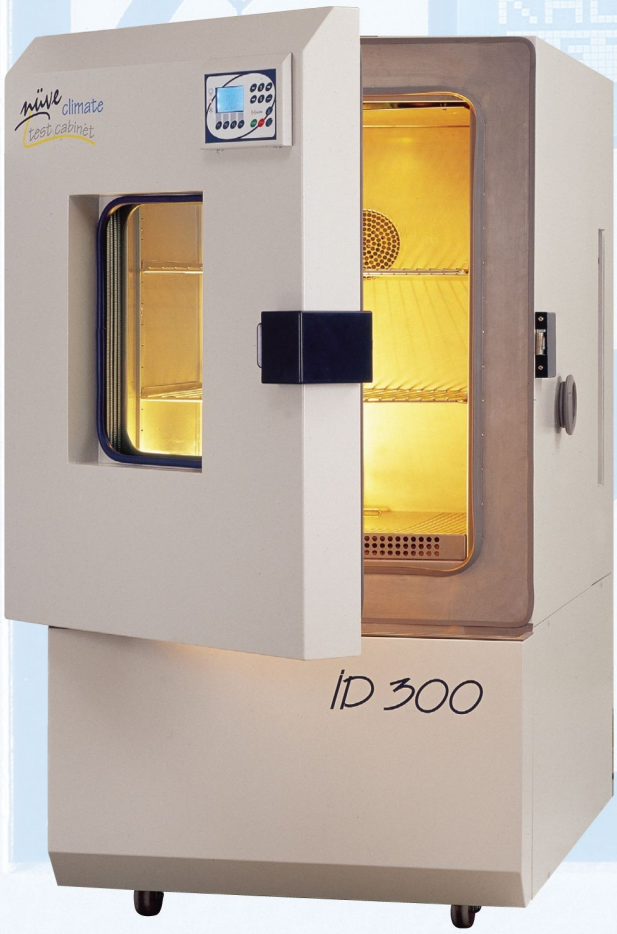
CLIMATIC TEST CABINET

nüve®

ID 300

The vast experience of Nüve on heating and cooling created ID 300 Climatic Test Chamber which is ideal for simulating climatic test conditions. By means of its wide temperature and humidity control range various kinds of products can be tested at different climatic conditions. Stability, artificial aging and storage tests can be easily done as well. The reliability, performance, ease of use and safety features make ID 300 one of the indispensable equipment for quality control and R&D laboratories in:

- Electronic Industry
- Telecommunication Industry
- Automobile Industry
- Automobile Supply Industry
- Aircraft and Aviation Industry
- Chemical Industry
- Plastic Industry
- Textile Industry
- Pharmaceutical Industry
- Construction Materials Industry
- Food Industry
- Packaging Industry
- Military Equipment and Armament Industry

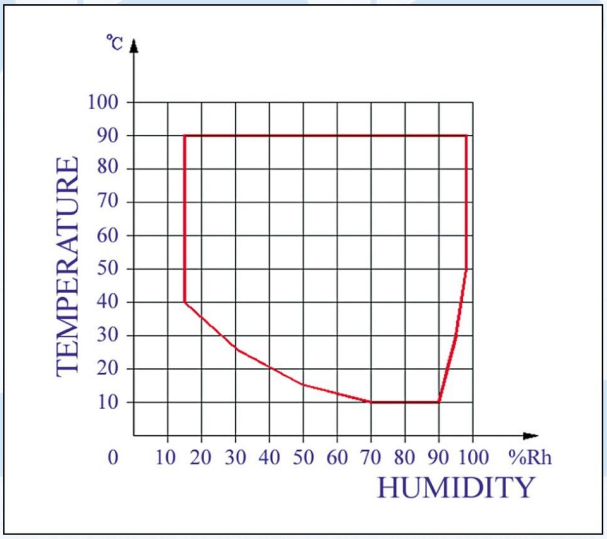


The right materials was chosen for the construction of the product to ensure maximum durability and reliability. The chamber is made of stainless steel that does not show any deformation although it is subjected to sudden temperature changes during operation. The outer body including the door is made of epoxy-polyster powder coated stainless steel to resist high humidity levels.

When cold and hot temperatures are concerned, the insulation becomes more important for the efficiency of the product. ID 300 has triple insulation consisting of high density injected polyurethane, glass wool and aluminum layer. Also, double door seals ensure total insulation of the test chamber even under extreme climatic test conditions. 80 mm access port on the right side is offered as standard.

The door window is a quintuple glass for perfect insulation and it is heated against condensation. The window is large enough for the observation of the samples by the help of the interior lighting.

One of the most important issues for a climatic test chamber is the method used for attaining and measuring humidity. In ID 300, humidity is produced by a dew-point bath which is the most stable and closest system to natural phenomena. Humidity is measured according to



psychrometric diagram by means of the dry and wet bulb temperatures. As the advantage of the system, the recovery time is fast and humidity measurement is very sensitive. The heating is controlled by PID while cooling and the humidity level are controlled by proportional system.

The door-mounted, state-of-art control unit is based on programmable microprocessor technology. Easy to use control system allows to program:

- Program name: There are ten program memories.
- Temperature: -40°C / +150°C
- Humidity: 15% - 98% RH
- Time: 0 - 999 hours 59 minutes
- No. of step: 1 - 9
- No of program repetition: 1- 99

- Altitude: It is essential to program the altitude to calculate the right humidity value according to psychrometric formula.

The control system also contains a comprehensive self-diagnostic system to provide information regarding any system malfunction. The self-diagnostic system warns the user in case of:

- Overheating
- Heater failure
- Circulation fan motor failure
- Cooling system failure
- Water pump failure
- Communication failure
- Power failure
- Temperature sensor failure
- Low water level
- Full reserve tank

User friendly control panel includes 128x64 pixel LC display. Making a program is a very easy by the help of the leading messages written on the display. The control system of ID 300 has 32 Kb memory which can be upgraded to 256 Kb as an option.

The auxiliary control panel includes adjustable electronic safety thermostat and the following connections:

- Printer connection: Previously operated programs in the memory and the current operating program can be printed easily by the connection of a dot-matrix printer.

- RS 232 connection: ID 300 can be connected to a computer.
Optional **NüveClimate™** software allows to program the instrument and to control the operation via computer.

- External temperature probe connections: Four PT 100 temperature probes can be connected to ID 300 to measure any four points in the chamber or the temperature of the sample. Measured temperatures are shown on the display.

- Power supply: 230 V power socket allows to operate any equipment inside the chamber (i.e shaker,stirrer) or outside (i.e printer, PC) up to 500 W.

Besides all of its technical advantages, ID 300 is environmentally friendly with its CFC-free insulation and refrigerant.

TECHNICAL SPECIFICATIONS

	ID 300
Temperature range without humidity	- 40°C / + 150°C
Temperature range with humidity	+ 10°C / + 90°C
Humidity range	15% / 98% RH
Temperature set and reading sensitivity	0.1°C
Humidity set and reading sensitivity	1% RH
Timer	0 - 999 hours and 59 minutes and hold position
No of program memory	10
No of steps	9
No of program repetition	1 - 99
Altitute setting	0 - 2000 meters
Memory capacity	32 Kb
Useful volume	290 liters
No of shelves standard/max.	2 / 16
Internal material	Stainless Steel
External material	Epoxy-polyester powder coated stainless steel
Internal dimensions (WxDxH) mm	600x620x780
External dimensions (WxDxH) mm	950x1450x1660
Packing dimensions (WxDxH) mm	1450x1060x1930
Power Consumption	6800 W
Power supply	400 V, 50 Hz., 3 phases

FACTORY FITTED OPTIONS

ID	300W	**NüveClimate**™ data control software and RS 232 interface
ID	300A	Automatic water supply unit
E	05 073	256 Kb memory
I	01 067	Portable PT 100 temperature sensor

ACCESSOIRES

R	01 098	Shelf
R	01 112	Shelf Support
P	03 566	Shelf Carrier

We reserve the right to modify the design and description

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