



# TEMPERATURE HUMIDITY CONTROL CABINETS

MODEL NO. - ACM-78092-S





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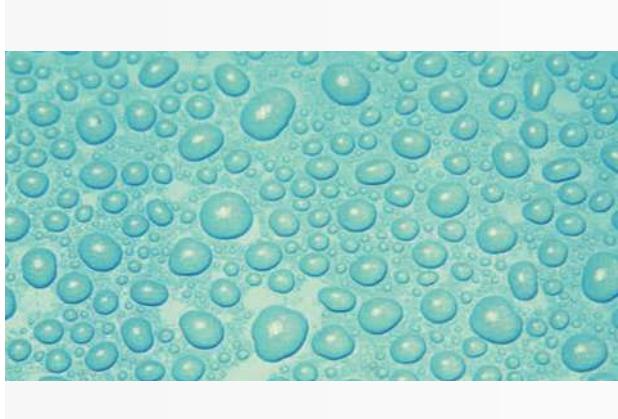
We are manufacturers of humidity control cabinets, temperature control cabinets in India since last two decades. Our temperature and humidity control cabinets are conceptualized and designed to create test chambers to study and contemplate the effects of different environmental parameters such as humidity, temperature applications tests involving micro-organisms, plants, tissues, electronic components etc. apart from various customized industrial and research applications. Our temperature control cabinets and humidity control cabinet have a variety of usage in R and D laboratories, research studies and product testing facilities across the globe. Apart from that, these temperature and humidity control cabinets have a variety of usages in tissue culture applications, enzyme reaction studies, growth observation studies, fermentation analysis and various other general and specialized applications in various laboratories.

We specialize in both standard and customized temperature control cabinets and humidity test cabinets, specifically designed to meet the challenging demands of various scientists for individual and specialized research

applications. Over a short period of time Weiber brand have been established as reliable exporters of temperature control cabinets and humidity control cabinets in India, catering to the vast markets in South East Asia, Middle East, Africa and Europe. Apart from that we are supplying our temperature and humidity control cabinet in India, catering to a variety of customers ranging from Defence Installations, Research Laboratories, Educational Institutes and various R and D laboratories of leading national and multinational companies.

## SALIENT FEATURES

- Reliable
- Precise Control Of Environmental Parameters
- Micro-processor based Controllers
- Aesthetically designed
- Corrosion Resistant interior and exteriors
- Energy Efficient
- CFC free cooling (optional)
- Sturdy Construction
- Low Maintenance



## CONSTRUCTION

Weiber temperature and humidity control cabinet are double walled convection heated and cooled units. Outer body of our temperature and humidity control cabinet s are constructed out of thick PCRC sheet duly pre-treated with primers and rust proofing and painted with long lasting stove enamel or elegantly powder coated.. The inner chamber is made of heavy gauge stainless steel sheet of SS-304 grade or anodized aluminum sheet or G.I. (as per the customer's requirements). The gap between the walls is filled high grade mineral glass wool, which ensures maximum thermal efficiency in our humidity control cabinets.

The unit is provided with two doors, the inner door is made of thick plexi glass/float glass, to view the specimens/culture media/stocks, without disturbing the temperature of the chamber. This door is provided with magnetic door closer. The outer door is made of mild steel sheet lined with stainless steel from inside. This door is provided with lock and key arrangement. The unit is mounted on a sturdy steel frame The unit is provided with various customized shelves in various permutations and combinations to suit individual requirements. The triple walled back of our temperature and

humidity control cabinets are provided with one/two/three (size specific) air circulation fans for uniform maintenance of the temperature throughout the chamber.

## HEATING

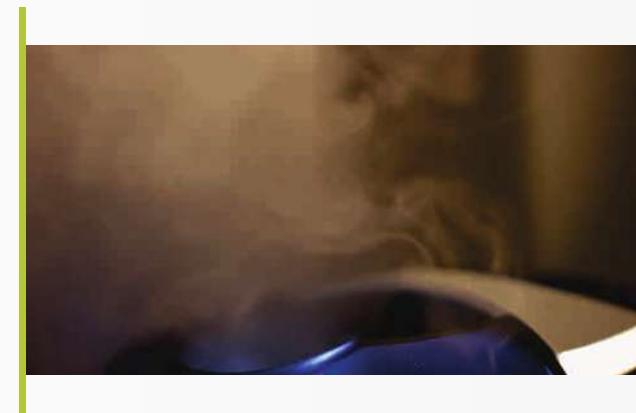
Indirect heating system is provided in our units, comprising of air heaters made of high grade Kanthal A-1 wires of suitable wattage. The warm air is evenly distributed throughout the chamber through efficient motor fans ensuring a very good temperature sensitivity.

## COOLING (Optional)

An energy efficient cooling unit is installed in our environmental chambers to enable bio chemical demand, cyclic and growth studies at lower room temperatures. We use ISI marked high end CFC free compressors of Kirloskar/Tecumseh make, conforming to latest international standards and guidelines.

## HUMIDITY

Humidity generation provision is incorporated in our temperature and humidity control cabinets the humidity is



generated by means of aerosol humidity generator with efficient humidity controller cum indicator.

### HUMIDITY RANGE

30% to 90% (Humidity Applicable as per the Temperature Humidity Graph Attached)

### HUMIDITY SENSITIVITY

Humidity is controlled by mean of an electronic humidity controller cum indicator with an accuracy of + 5%.

### TEMPERATURE CONTROL

The temperature inside our temperature and humidity control cabinets is controlled through programmable micro-processor based temperature controller cum indicator.

### TEMPERATURE RANGE

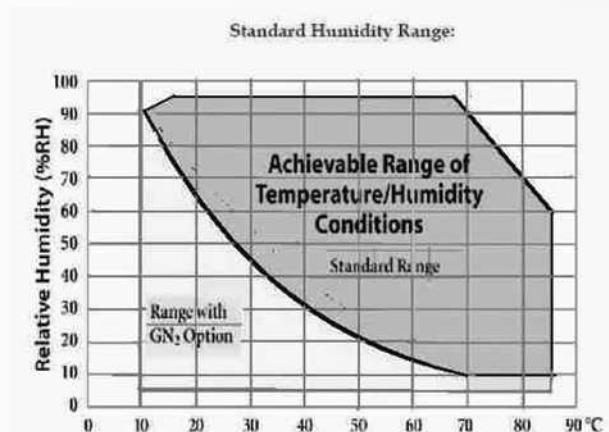
Temperature range of our standard humidity control cabinets models are 5°C above ambient to 60°C / 5°C to 70°C. However we have the capacity to modify the same to suit the individual specialized requirements of our customers.

### TEMPERATURE SENSITIVITY

Temperatures inside our temperature and humidity control cabinets are controlled with a sensitivity of + 1° c or better.

### FRONT PANEL

Front panel of our units comprises of on/off switches heating, cooling and mains indicator lamps, temperature controllers.



Above is a chart that shows the achievable range of humidity as compared to temperature

### SIZE OF INNER CHAMBER

**W x H x D**

455 x 710 x 455 mm

605 x 605 x 605 mm

605 x 910 x 605 mm



## TECHNICAL MATRIX

### Temperature Control

Temperature variation (time)	$\pm$ °C	0.5
Temperature Deviation (spatial)	$\pm$ °C	0.5
Readability/ Set ability	°C	0.1
Humidity range	%	30% to 90% (Humidity Applicable as per the Temperature Humidity Graph Attached)
Humidity Sensor	-	Capacitive
Temperature range	-	5°C to 60°C / 5°C above ambient to 60°C
Sensor thermocouple	-	Type-K
Controller	-	PID Controller
Display	-	LED/LCD
Adjustable alarm limits (visual and acoustic)	-	Optional

### Safety thermostats

Temperature variation (time)	$\pm/-^{\circ}\text{C}$	3
Sensor thermocouple	-	TYPE K
Automatic setting	-	Yes
Adjustable limits	-	Yes

### Accessories

Timer (1-999 minutes or hours)	-	Optional
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Real Time Program	-	Optional
Printer Report Program	-	Optional
Serial Data Port	RS232C	Optional
Inspection window in door	-	Optional
Access Port 30 mm	-	Optional
Castors, lockable	-	Optional

### Shelves

Standard/ max	-	1- 3 (depending on the internal size)
Dimensions	mm	As per the individual model

### Power consumption

Nominal voltage	V	230, 1~
Frequency	Hz	50/60

## UNIVERSAL DIGITAL DATA RECORDER WITH COMPUTER





## DATA ACQUISITION AND CONTROL SYSTEM FOR TEMPERATURE & HUMIDITY CONTROL CABINET

This is unique module which can be incorporated with our temperature and humidity control cabinet to log in temperature and environment related data with a help of a data logger unit which has a pc connectivity by means of RS232C interface. This data is then analyzed and formatted with the help of our unique user friendly analysis software to enable the user to get a formatted and analyzed reports of various inputs during the full operation cycle of the equipment. This is an ideal module for pharmaceutical laboratories, process control applications and high research projects where maintaining a viable record of the performance of the equipment is very essential.

### FEATURES

- Our system incorporates multiple devices such as in line process Indicators, environment scanners and temperature or humidity controllers.

- Provides Astech cable for direct interface to any dot matrix or laser printer for online or offline data records printing
- It has Bulk data storage capacity with high data retention life.
- Facility to obtain nicely formatted print out of the logged data or records with proper headers.
- Our system provided facility to program recording interval with various options to suit individual requirements.
- It is provided with the feature to adjust or select baud rate for any serial communication port.
- Our system is provided with user friendly custom developed software which obtains and analyze the data and facilitates the user to generate reports and graphs etc.



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