

Temperature & Humidity Chamber

Economic type

Applied the new developed controller specialized for Temp. & Humid chambers

▣ Differentiated Systems

- Convenient operation with 5.6 inch color touch display controller.
- Possible to check the operation status with graphs.
- Minimize the occurrence of faults by simplifying water direct line and electric circuit.
- Water level check function enables water replenishment at the right time.

▣ Structural Functional Features

- Excellent thermal insulation and sealing to ensure stable temperature and humidity reproducibility even for repeated test use.
- The door part is a double-sealed structure that provides enhanced airtightness.
- Maintains stable temperature and humidity by circulating air in the chamber at the optimum speed.
- Energy-saving system that can perform optimum temperature and humidity tests efficiently, reducing power consumption during operation.

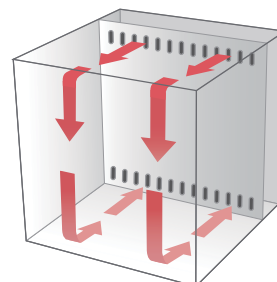
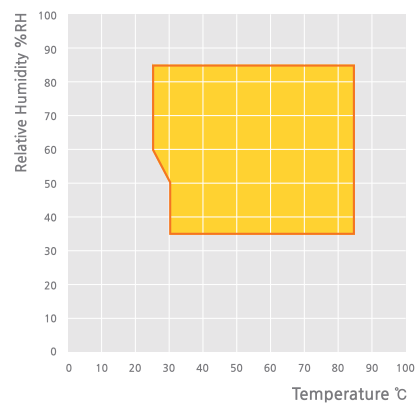
▣ Outstanding Safety

- Electronic over temperature shutdown system.
(advanced over temperature (A-OT) limiter)
Independent precision temperature sensor and controller for safer and more accurate over temperature shutdown.
- General-type over power shutdown system.
(B-OT, backup over temperature limiter)
A backup device for electronic system failure, mechanically preventing over temperature even when it occurs electronic errors.
- Ensures that the surface temperature is kept below 60°C.
- Low and empty water level alarm and automatic shut off.
- Door open warning and automatic shut off.
- Overcurrent and short circuit protection of device.
- Fuse installed for each heater for safety.
- Auto stop when operating current of compressor is overloaded.
- Auto stop when compressor is overheating.
- Auto shut off in case refrigerant pressure (high/low pressure) is abnormal.



TH3-E-200
with Wire Shelves 2ea (standard)

TH3-E-200, 400





Use Convenience Features

- Efficient water supply and recirculation system minimizes water refilling even for long-term high-humidity tests.
- Direct water supply system. (option)
- Easy observation of samples with tempered glass door with built in heating wire and LED lamp.
- A structure that allows the door to be opened and closed easily.
- Easy to clean as it is easy to remove refrigerator condenser grill, making it convenient to maintain efficiency of refrigeration.

Multifunction Control System

- Reliable control with temperature/humidity auto-tuning and temperature calibration.
- Control and data processing by connecting up to 32 devices to PC at same time via RS-485 port.
- PID zone subdivided into 9 zones for more precise control stability.
- Monitor via mobile app anytime, anywhere with LC Connected. (mobile monitoring system) (when purchased LC GreenBox)
- Convenient checking with useful graph display.

Description	No.
Pattern	100
Repeat time	999
Part repeat time	255
Max. segments / pattern	100
Available max. segments	2000
Programmable process time / segment	99 hr. 59 min.

* It is possible to set 100 segments per pattern, but the maximum number of segments is not 10,000 (100 pattern x 100 segment) but 2,000.



Large LCD touch screen controller (5.6 inches)



Tempered glass window with wire heater and LED lamp



Remote monitoring and control via Lab Companion's app

Specification

Model	TH3-E-200	TH3-E-400
Interior dimensions		
Chamber volume (L / cu ft)	201 / 7.1	398 / 14.1
Width (mm / inch)	500 / 19.7	600 / 23.6
Depth (mm / inch)	670 / 26.4	830 / 32.7
Height (mm / inch)	600 / 23.6	800 / 31.5
Quantity of shelves (standard/max.)	2 / 9	2 / 10
Distance of between shelves (mm)	40 / 1.6	40 / 1.6
Max. load per shelf (kg / lbs)	20 / 44.1	25 / 55.1
Permitted total load (kg / lbs)	50 / 110.2	60 / 132.3
Cable port (Ø, mm / inch)	50 / 2.0	65 / 2.6
Water tank capacity (L / cu ft)	20 / 0.7	20 / 0.7
Weight (kg / lbs)	200 / 440.9	270 / 595.2
Temperature data		
Range without humidity (°C / °F)	0 to 90 / 32 to 194	0 to 90 / 32 to 194
Fluctuation (±°C / °F) ¹⁾	0.5 / 0.9	0.5 / 0.9
Variation (±°C / °F) ¹⁾	0.8 / 1.44	0.8 / 1.44
Heating time (0°C to 90°C) (min)	80	80
Cooling time (90°C to 0°C) (min)	90	90
Humidity data (※ Ref.: Temp./ Humid. control range graph)		
Range (%RH)	35 to 85	35 to 85
Fluctuation (±%RH) ¹⁾	1	1
Variation (±%RH) ¹⁾	3	3
Electrical data & Ordering information		
Electrical requirements (230V, 1ph, 60Hz)	15A	16A
Cat. No.	AAH841101K	AAH841111K
Electrical requirements (230V, 1ph, 50Hz)	15A	16A
Cat. No.	AAH841102K	AAH841112K

※ The above specifications are tested according to DIN 12880 and IEC 60068 standards.

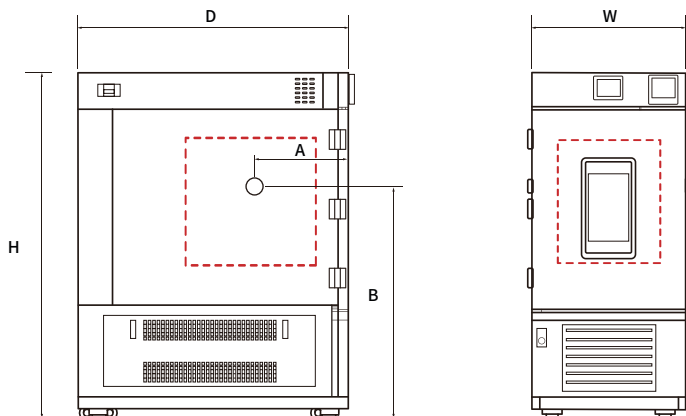
※ Permissible environmental conditions are 18 - 30°C (recommended 20°C), 85% RH or less, under 2000m above sea level.

※ The DI water condition is pH 6.2 - 7.2 and the electrical conductivity is less than 20µs/cm.

1) The set value is set under the conditions of 40°C, 75% RH.

Accessories Page 296

Cable Port, Shelves, Signal Lamp, Recorder, Water Purifier, Direct Water System, Inner Glass Door, LC GreenBox



Dimension

Model	TH3-E-200	TH3-E-400
W (mm / inch)	655 / 25.8	755 / 29.7
H (mm / inch)	1495 / 58.9	1695 / 66.7
D (mm / inch)	1162 / 45.7	1322 / 52.0
A (mm / inch)	375 / 14.8	455 / 17.9
B (mm / inch)	985 / 38.8	1135 / 44.7