

Temperature Chamber for Charge/Discharge Testing BTC Series

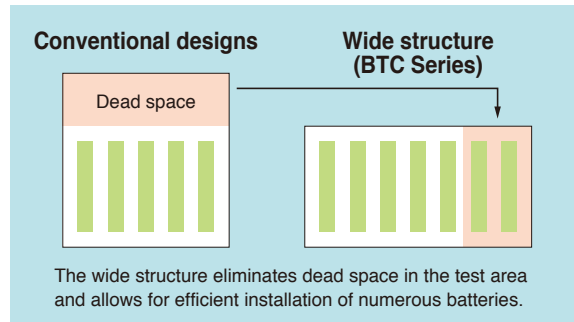
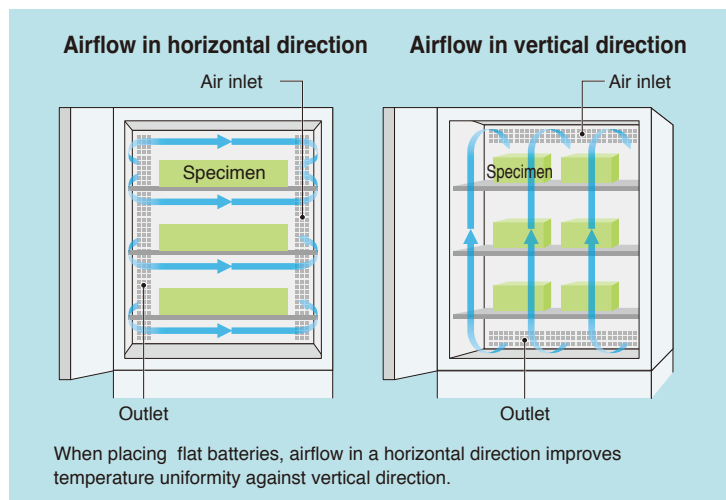
NEW

A new standard of temperature chamber for charge/discharge testing supported for high capacity secondary batteries

- **Improved safety:**
Large pressure-relief vent to release high explosion pressure
- **Minimal temperature variation between batteries:**
Selectable airflow direction in horizontal or vertical
- **Improved ease of operation:**
High-strength, easy-to-use toggle clamp latch
- **Improved battery installation efficiency:**
Wide structure with minimal wasted space and room for numerous batteries



BTC-560Hb1



Model		BTC-560Hb1	BTC-560Vb1	BTC-1120Hb1	BTC-1120Vb1
Airflow direction		Airflow in horizontal direction	Airflow in vertical direction	Airflow in horizontal direction	Airflow in vertical direction
Temperature range		− 40 to +100 °C			
Temperature change rate	Temperature range	− 26 °C ⇔ +86 °C			
	Heat-up rate	2.1 °C/min			
	Cool-down rate	2.2 °C/min			
Air temperature deviation		1.5 °C		2.5 °C	
Allowable heat load		1750 W (stabilized at +20°C)		3000 W (stabilized at +20°C)	
Capacity		560 L		1120 L	
Internal dimensions		W800×H1000×D700 mm		W1600×H1000×D700 mm	
External dimensions *1		W1250×H2195×D1406 mm		W2050×H2195×D1406 mm	
Refrigerant		R449A			
Breaker capacity		AC200V 3 ϕ 30A		AC200V 3 ϕ 50A	
Weight		650 kg		1200 kg	

*1 Partial protrusions not included.

STANDARD EQUIPMENT

Cable port

Cable ports on the right, left and rear side make it possible to install the Charge/Discharge System on either the left or right side of the chamber.

Right/Left: 400 (W) × 100 (H) mm

Rear: ϕ 100 mm × 4

Rubber plugs for cable ports: Spiral-wrapped plugs × 4
Square plugs × 2



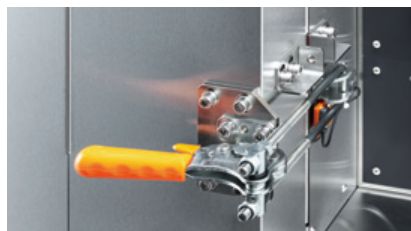
Right side/Left side 400 (W) × 100 (H) mm



Rear side ϕ 100 mm × 4

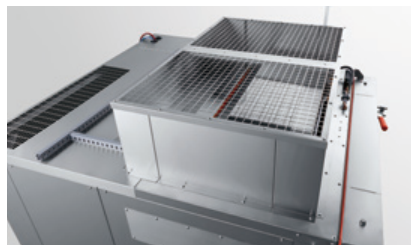
Door lock

The toggle clamp latch ensures a strong and simple method for locking the door.



Large pressure-relief vent (700 × 300 mm)

Sudden pressure rising inside the chamber to prevent equipment damage.



Frost-free

Continuous operation at +10°C and above is possible without defrosting.

- Reinforced test area floor (300 kg)
- Emergency stop switch
- 3-color status indicator tower
- External input/output terminal
- Sheathed heater
- Ethernet port (LAN)



Rear side

OPTIONS (Safety devices)

Electromagnetic door lock

The electromagnetic lock ensures the door cannot be opened during operation.



Air supply/exhaust damper (with or without exhaust fan)

Outside air is taken in to replace the air in the test area.

CO₂ fire extinguisher

Begins discharge when a detector reaches the limit, or when turned ON using the start switch.

Gas detectors (H₂, CO, Hydrogen sulfide)

Monitor the target gas concentrations in the chamber. When the limit set value is reached, an alarm is activated and operation stops.

- Smoke detector
- Door chain
- Thermal detector
- Specimen thermal detector
- Flameproof rubber

OTHER OPTIONS

Viewing window

Viewing windows are equipped with a removable SUS plate to prevent flying glass in the event of an explosion.

Effective viewing dimensions:
295 (W) × 380 (H) mm



- Power supply (400 V, 380 V, 220 V)
- Water-cooled refrigeration circuit
- Heavy-load shelf and shelf bracket (Load capacity: 50 kg)
- Heavy-load shelf and shelf bracket (Load capacity: 100 kg)
- RS-485/RS-232C communication function
- Anchoring fixtures

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Specifications, external appearance, and other descriptions are subject to change without notice due to product improvements.
We appreciate your understanding.