

Two Chamber High Temperature Test Chamber

Item Number: DA03



Introduction

Two chamber high temperature test chamber for battery constant temperature and high temperature performance testing, with independent control, 216 L capacity, pressure relief protection, and compliance support for lithium battery safety evaluation in demanding laboratory environments reliably.

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Application	Description	Key Benefit
Electric vehicle traction battery safety testing	Conduct constant-temperature and high-temperature tests for traction batteries in work associated with GB/T 31485-2015.	Two independently controlled chambers can support separate battery test conditions within one installation.
Portable electronic lithium-ion battery evaluation	Evaluate lithium-ion batteries and battery packs for portable electronic products in work associated with GB 31241-2014.	The adjustable RT+10°C to +150°C range provides defined elevated-temperature conditions for battery safety evaluation.
Battery high-temperature performance testing	Perform high-temperature performance checks on battery samples using controlled chamber conditions after stabilization.	Specified fluctuation, deviation, and gradient limits provide measurable thermal performance criteria.
Battery constant-temperature testing	Maintain selected elevated setpoints for battery constant-temperature testing in either chamber.	±0.1°C adjustable control precision supports closely managed temperature settings.
Parallel battery sample comparison	Run separate test programs in the two chambers to compare battery samples, test stages, or temperature conditions.	Independent operation prevents one chamber's program from dictating the other chamber's controller settings.
Safety-focused battery thermal testing	Conduct battery testing where pressure-relief provision and door restraint measures are required considerations.	Side pressure relief and 10 mm explosion-proof chains provide defined equipment safety provisions.

Item Number	Parameter	Specification
DA03	Intended use	Primarily used for battery constant-temperature testing and high-temperature performance testing
DA03	Applicable standard	GB/T 31485-2015 Electric vehicle traction battery safety requirements and test methods
DA03	Applicable standard	GB 31241-2014 Safety requirements for lithium-ion batteries and battery packs for portable electronic products
DA03	Effective volume	216 L
DA03	Number of chambers	2
DA03	Internal chamber dimensions	W600 mm × H600 mm × D600 mm (width × height × depth) × 2
DA03	External dimensions	W1340 mm × H1765 mm × D1085 mm (width × height × depth; subject to actual design dimensions)
DA03	Operating system	Each chamber can operate independently; independent controller
DA03	Pressure-relief device	Pressure-relief device installed on the side of the equipment
DA03	Explosion-proof chains	Two chains installed at the left, right, upper, and lower positions of the door arrangement
DA03	Explosion-proof chain diameter	10 mm
DA03	Test ambient temperature	5-35°C

Item Number	Parameter	Specification
DA03	Test ambient humidity	10%~85%RH
DA03	Test specimen weight	None
DA03	Test specimen heat generation	None
DA03	Temperature range	RT+10°C~+150°C (adjustable control precision $\pm 0.1^{\circ}\text{C}$)
DA03	Temperature fluctuation	$\leq \pm 0.5^{\circ}\text{C}$ (after temperature stabilization, the temperature change at any point in the test chamber within the specified time)
DA03	Temperature deviation	$\leq \pm 2.0^{\circ}\text{C}$ (after temperature stabilization, the difference between the highest or lowest temperature and the nominal temperature at any time)
DA03	Temperature gradient	$\leq \pm 2^{\circ}\text{C}$ (after temperature stabilization, the maximum difference between the average temperatures of any two points in the chamber over any time interval; the new standard uses temperature gradient instead of the former temperature uniformity term)
DA03	Heating time	RT+10-100°C, approximately 10 minutes
DA03	Equipment weight	500 KG
DA03	Power supply	380 V, 50 Hz, 9.0 KW
DA03	Noise	≤ 75 db measured at 2 m from the equipment