

Custom Product

# VOC Emission Test Chamber


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Model		VOC-010	VOC-020	
Compact chamber	Temperature control range	+20 to +100°C : At test operation (no load, with specimen) +80 to +250°C : Heat processing operation time (no load, no specimen)		
	Temperature and humidity control range	30 to 90%RH (at+20 to +50°C)(no load, with specimen)		
	Temperature and humidity control width	±0.5°C / ±5% (no load, no specimen)		
	Temperature and humidity distribution width*1	±1.0°C / ±5% (no load, no specimen)		
	Background concentration	Less than 2 µg/m <sup>3</sup> for single substance concentration		
		Less than 20 µg/m <sup>3</sup> for TVOC concentration		
	Air exchange rate	0.2 to 2.0 times per hour (at test operation)	0.2 to 1.5 times per hour (at test operation)	
	Air exchange rate control width	±5% (air exchange rate of 0.5 times per hour or higher)		
	Mass transfer coefficient	9 to 18m/h (water vapor conversion)		
	Air tightness	Air leakage under 1% of supply air amount (at air exchange rate of 0.5 times per hour)		
	Recovery rate	80% or higher (Toluene)		
	Effective inner dimension (W × H × D mm)	1000 × 1100 × 810	2000 × 1100 × 810	
		(Inner capacity: Approx. 1 m <sup>3</sup> )	(Inner capacity: Approx. 2 m <sup>3</sup> )	
	Material (Configuration)	Stainless steel plate (full circumference welded structure)		
	Door effective dimension (W × H mm)	1000 × 1100	2000 × 1100	
Door lock	Latch lock (6 locations)	Latch lock (16 locations)		

Outside dimensions (W × H × D mm)		2250 × 1950 × 1520	3250 × 1950 × 1520	
Door effective dimension (W × H mm)		1600 × 1570	2600 × 1570	
Air circulator		Cross line flow fan		
Refrigerator		Indoor air-cooled fully sealed (Refrigerant: R134a)		
Heater		Nichrome strip wire heater		
Evaporator		Multistage plate fin cooler		
Chamber weight		Approx. 1000 kg	Approx. 1800 kg	
Accessories		Recorder (paperless recorder), Integrating hour meter, Caster, Sampling port for specimen collection (2 locations), Air-circulating fan (VOC-020)		
Utility requirements	Power source facilities	Power supply	AC200V 3φ 3W 50/60Hz Allowable voltage fluctuation : Rated voltage ±5% (The allowable operating range is the rated voltage ±10%)	
		Maximum load capacity	11.5kVA (15.8kVA when equipped with air compressor)	
		Maximum current	32.0A (45.6A when equipped with air compressor)	
		Leakage breaker capacity	40A (50A when equipped with air compressor)	
	Compressed air	Discharged air flow	160 L/min or higher (atmospheric pressure) Oil-free	
		Control pressure	0.6 to 0.9MPa	
		Connection tube outer diameter	φ10mm	
	Exhaust	Exhaust duct diameter	φ100mm (Flange diameter φ150mm)	
		Discharge air volume	Max. 120 m <sup>3</sup> /h or higher	
		Construction requirements	<ul style="list-style-type: none"> <li>Constructed with metal duct.</li> <li>Total pressure loss of exhaust duct at 100 Pa or lower.</li> </ul>	
	Supply water	Quality	Pure water (Quality equivalent to A1 water specified in JIS K0557)	
		Maximum water supply rate	20L (manual supply)	
	Natural drainage pipe		Indirect drain VP30 1 units	
	Floor load capacity		350kg/m <sup>2</sup>	350kg/m <sup>2</sup>

\*1 Measurement method complies with Japan Testing Machinery Association (JTM). However, the calculation method is half the maximum value minus the minimum value when stable.

- This is the measured performance at the control point after stable operation for 30 minutes with an ambient temperature of +5 to +32°C and no load.
- The allowable voltage fluctuation is within ±5% of the rated voltage, and the allowable frequency fluctuation is within ±1% of the rated frequency.

- TVOC concentration of installation space (supply air) must be less than 300  $\mu\text{g}/\text{m}^3$ , and there must not be a significant fluctuation.

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