

**SPECIFICATIONS**

Model		TSE-11-A				
System		2-zone transition by vertical transfer of specimen				
Performance <sup>*1</sup>	Test area	High temp. exposure range	+ 60 to +200°C (+140 to +392°F)			
		Low temp. exposure range	− 65 to 0°C (− 85 to +32°F)			
		Temperature fluctuation <sup>*2</sup>	±0.5°C (±0.9°F)			
	Hot chamber	Pre-heat upper limit	+200°C (+392°F)			
		Temp. heat-up time <sup>*3</sup>	Ambient temp. to +200°C (+392°F) within 30 min.			
	Cold chamber	Pre-cool lower limit	−80°C (−112°F)			
		Temp. pull-down time <sup>*3</sup>	Ambient temp. to −80°C (−112°F) within 90 min.			
	Temp. recovery	Recovery conditions	• 2 zones High temperature exposure: +150°C (+302°F), 30 min. Low temperature exposure: −65°C (−85°F), 30 min. • Sensor position: Upstream • Specimen: Plastic molded ICs 2 kg			
		Temp. recovery time	within 5 min.			
	Construction	Test area	Shelf brackets on 2 levels of fixed location			
Heater		Stripped wire heater				
Refrigeration unit		System	Mechanical cascade refrigeration system			
		Compressor	Rotary 1.5 kW × 2			
		Refrigerant	R508A R404A			
		Condenser	Air-cooled condenser			
Cooler		Plate fin cooler, cold accumulator				
Air circulator	Sirocco fan					
Fittings	Specimen power supply control terminal, integrating hour meter without reset, time signal (2), cable port 50 mm, (right side), casters with leveling feet (4), power cable					
Test area load resistance	8 kg					
Specimen basket load capacity	2kg per basket (equally distributed load)					
Inside dimensions (W × H × D)	320 × 148 × 230mm (12.6 × 5.8 × 9 inch)					
Test area capacity	10.9 L					
Outside dimensions (W × H × D) <sup>*4</sup>	680 × 1625 × 1050mm (26.8 × 64 × 41.3 inch)					
Weight	approximately 390kg					
Allowable ambient conditions	0 to +40°C (+32 to +104°F)					
Power supply (Voltage fluctuation: rating ±10%)	200V AC 3 φ 3W 50/60Hz	220V AC 3 φ 3W 60Hz	380V AC 3 φ 4W 50Hz	400/415V AC 3 φ 4W 50Hz	400V AC <sup>*5</sup> 3 φ 4W 50Hz	
Maximum load current	26A	25A	17A	17A	17A	
Exhaust heat quantity <sup>*6</sup>	17,585kJ/h					
Noise level <sup>*7</sup>	60dB or less					

<sup>\*1</sup> The performance values are under the conditions of a +23°C ambient temperature, relative humidity of 65%rh, rated voltage, and no specimen. Heat up time and pull down time are those of single-unit operation of each chamber.

<sup>\*2</sup> The performance values are based on IEC60068-3-5:2001, JTM K07:2007.

<sup>\*3</sup> Temperature heat-up/pull-down time account for performance of each temperature chamber.

<sup>\*4</sup> Excluding protrusions.

<sup>\*5</sup> Compliance with CE Marking.

<sup>\*6</sup> At ambient temperature +23°C.

<sup>\*7</sup> At 1m from front of chamber, 1.2m from floor. (ISO 1996-1:2003 A-weighted sound pressure level) depending on environment



● Do not use specimens which are explosive or inflammable, or which contain such substances. To do so could be hazardous, as this may lead to fire or explosion.

● Do not place corrosive materials in the chamber. If corrosive substances or humidifying water is used, the life of the unit may be significantly shortened.

● Do not place life forms or substances that exceed allowable heat generation.



Be sure to read the user's manual before operation.