

IMV VIBRATION TEST SYSTEMS i series

Air cooled Vibration Test Systems i250 / SA4AM EM2501A

Vibration tests have diversified and specifications have become increasingly strict. i-series offer a user-friendly lineup with enhanced performance and durability.

[Expanded maximum test range]

Max. velocity of Sine force: 2.4 m/s • Max. velocity of Shock force 4.6 m/s • Max. displacement: 100 mmp-p

[Patented upper (armature) support system PS Guide] Parallel Slope Guide is standard.

[Low noise] Optimised design of the air intake based on fluid dynamics has reduced the air-intake noise.

[All models can be directly coupled to a climatic chamber.]



① High durability with PS guide

PS guide (parallel slope guide) is an upper support system conforming to continued vibration testing at high velocity.



■ PS guide system

② Improvement of Testing Environment

With the operation of Intelligence Shaker Management (ISM), EM range can reduce power consumption and CO2 emissions automatically.

eco-shaker

③ User first principle


Compatible with K2 vibration controller. Intuitive interface leads The operator with user-friendly guidance.



Air cooled Vibration Test Systems

i250 / SA4AM EM2501A



System Specifications			
System Model		i250/SA4AM	 EM2501A
Frequency Range (Hz)		0-2500	
Rated Force	Sine (kN)	32	
	Random (kN rms) *1	32	
	Shock (kN)	64	
Maximum Acc.	Sine (m/s ²)	914	
	Random (m/s ² rms)	640	
	Shock (m/s ²)	1828	
Maximum Vel.	Sine (m/s)	2.2	
	Shock (m/s peak)	2.2	2.2(3.5) *3
Maximum Disp.	Sine (mmp-p)	51	
	Maximum Travel (mmp-p)	68	

Vibration Generator (i250)	
Armature Mass (kg)	35
Armature Diameter (φ mm)	440
Armature Resonance (Hz)	1900
Allowance Eccentric Moment (N·m)	1550
Maximum Payload (kg)	600
Mass (kg)	3000

*1) Random force ratings are specified in accordance with ISO5344 conditions.

*2) Power supply: 3-phase 380/400/415/440 V, 50/60 Hz. A transformer is required for other supply voltages.

*3) Maximum velocity 4.6 m/s. High velocity restricts maximum Shock force.

Please contact IMV or your local distributor with specific test requirements.

The specification shows the maximum system performance.

For long-duration tests, de-rating by up to 70 % must be applied.

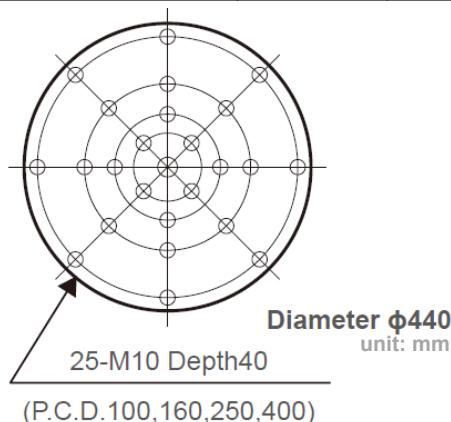
Continuous use at maximum levels may cause failure.

* In the case of Random vibration test, please set the test definition of the peak value of acceleration waveform to be operated less than the maximum acceleration of Shock.

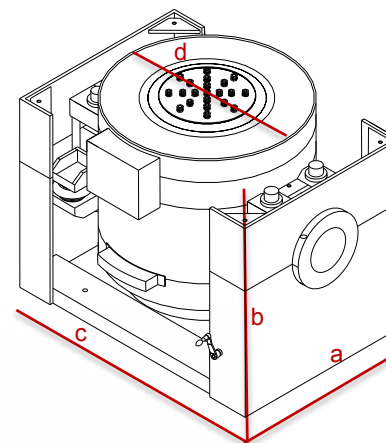
* Frequency range values vary according to sensor and vibration controller.

Cooling Blower		
Model		VAPE 710/P2R
Mass (kg)		250
Environmental Data		
Power Requirement (kVA) *2		51
Input Voltage Supply (3 ϕ , V)		380/400/415/440
Compressed Air Supply (Mpa)		0.6
Working Ambient	Temperature (°C)	0 - 40
	Humidity (%RH)	0 - 85

Power Amplifier		
System Model	SA4AM-i50	SA4AM-i50EM
Maximum Output [kVA]	40	40
Mass [kg]	850	900



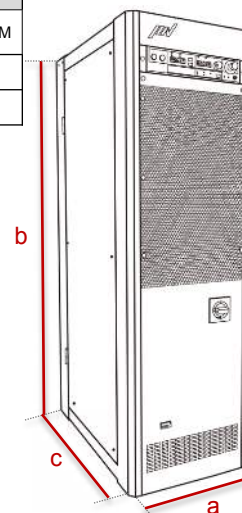
i250



Shaker

Model: i250

a: W 1463 mm
b: H 1187 mm
c: D 1100 mm
d: 860 φmm

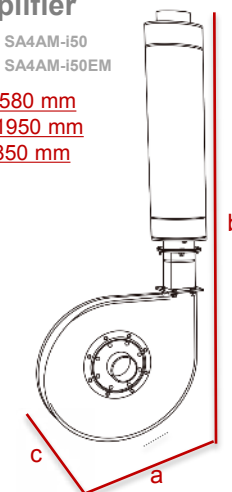


Amplifier

Model: SA4AM-i50

Model: SA4AM-i50EM

a: W 580 mm
b: H 1950 mm
c: D 850 mm



Blower

Model: VAPE 710/P2R

a: W 1160 mm
b: H 2405 mm
c: D 787 mm