IMV VIBRATION TEST SYSTEMS

i series

Air cooled Vibration Test Systems

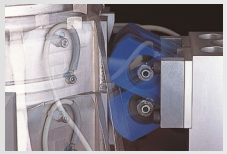
i250 / SA5AM
EM2502A

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: 100mmp-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.

IMV CORPORATION

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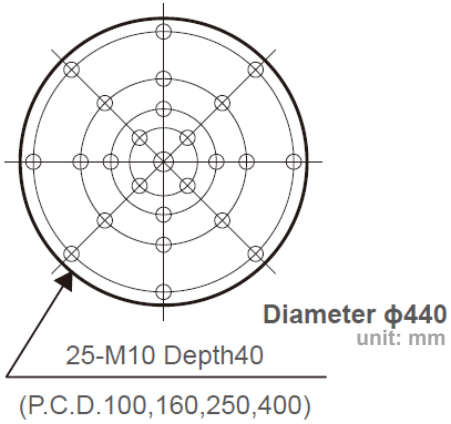
System Specifications			
System Model		i250/SA5AM	EM2502A
Frequency Range (Hz)		0-2500	
Rated Force	Sine (kN) *1	40	
	Random (kN rms)	40	
	Shock (kN)	80	
Maximum Acc.	Sine (m/s^2)	1142	
	Random (m/s^2 rms)	800	
	Shock (m/s^2)	2284	
Maximum Vel.	Sine (m/s)	2.2	
	Shock (m/s peak)	2.2	2.2(3.5)*3
Maximum 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

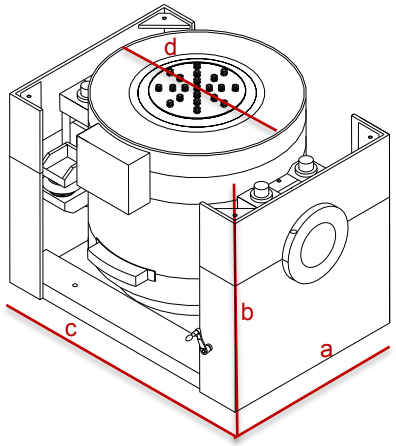
*1) Random force ratings are specified in accordance with ISO5344 conditions.
*2) Power supply: 3-phase 380/400/415/440 V, 50/60 Hz. A transformer is required for other supply voltages.
*3) Maximum velocity 4.6 m/s. High velocity restricts maximum Shock force.
Please contact IMV or your local distributor 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		57
Input Voltage Supply (3ϕ, V)		380/400/415/440
Compressed Air Supply (Mpa)		0.6
Working Ambient	Temperature (℃)	0 - 40
	Humidity (%RH)	0 - 85

Power Amplifier		
System Model	SA5AM-i50	SA5AM-i50EM
Maximum Output [kVA]	50	50
Mass [kg]	880	930

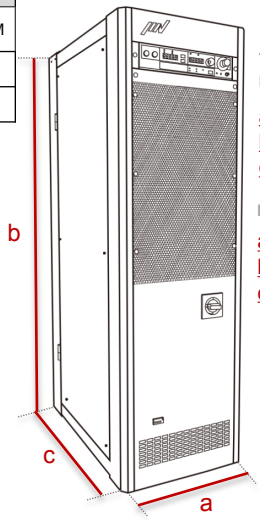


i250



Shaker
Model: i250

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

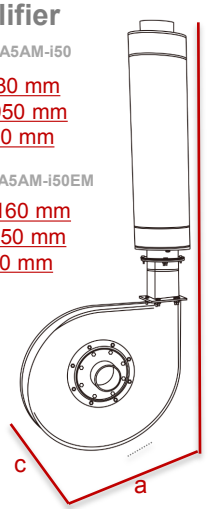


Amplifier
Model: SA5AM-i50

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

Model: SA5AM-i50EM

a: W 1160 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

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