

IMV VIBRATION TEST SYSTEMS i series

Air cooled Vibration Test Systems i210/SA1M

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

[One of the world's largest class air-cooled systems]

Optimized magnetic circuits based on finite element analysis and unique cooling technologies have enabled an excitation force of 65kN with air cooling.

[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 VIBRATION TEST SYSTEMS

i series

Air cooled Vibration Test Systems

i210/SA1M



System Specifications

System Model	i210/SA1	
Freq. Range (Hz)	0-4000	
Force	SINE (kN)	3
	RANDOM (kN rms) *2	3
	SHOCK (kN)	9
Max. Acc.	SINE (m/s ²)	1000
	RANDOM (m/s ² rms)	700
	SHOCK (m/s ²)	2000
Max. Vel.	SINE (m/s)	2.2
	Shock (m/s peak)	2.2*7
Max. Disp.	SINE (mmp-p)	30
	MAX. TRAVEL (mmp-p)	40

Vibration Generator (i210)

Armature Mass (kg)	3
Armature Diameter (φ mm)	128
Armature Resonance (Hz)	3200
Allowance eccentric moment (N.m)	160
Maximum Payload (kg)	120
Mass (kg)	350

*1) Power supply: 3-phase 200/220/240/380/400/415/440V, 50/60Hz.

A transformer is required for other supply voltages.

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

*3) 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.

*4) 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.

*5) Above 2000 Hz, the force rolls-off at a rate of -12 dB/oct.

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

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

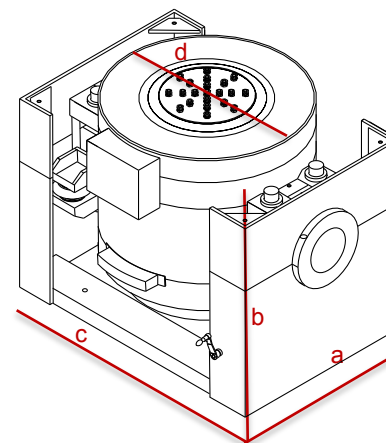
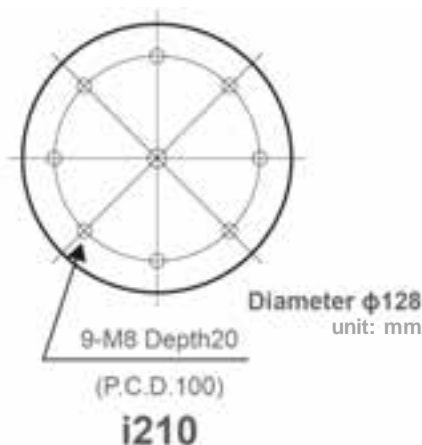
Please contact IMV or your local distributor with specific test requirements.

Cooling Blower

Cooling Blower		
Model		PRVM 350/2R
Mass (kg)		45
Environmental Data		
Power Requirement (kVA) * ¹		6.8
Input voltage supply (3 ϕ , V)		200/220 or 380/400/415/440
Compressed Air Supply (Mpa)		0.6
Working Ambient	Temperature (°C)	0 - 40
	Humidity (%RH)	0 - 85

Power Amplifier

System Model	SA1M-i10
Max. Output [kVA]	3
Mass [kg]	240



Shaker

Model: i210

a: W 868mm

b: H 700mm

c: D 458mm

d: 458φmm

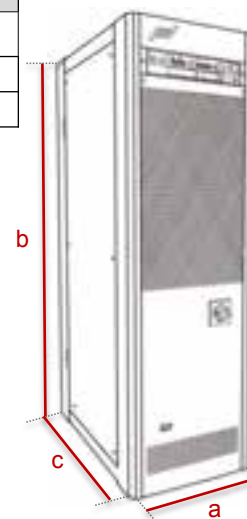
Amplifier

Model: SA1M-i10

a: W 580mm

b: H 1950mm

c: D 850mm



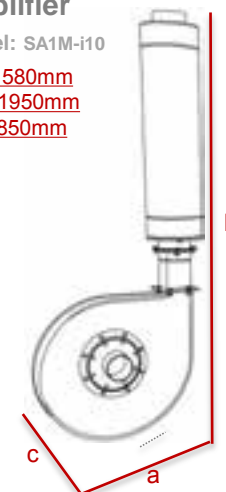
Blower

Model: PRVM 350/2R

a: W 600mm

b: H 1905mm

c: D 557mm



IMV CORPORATION