

# IMV VIBRATION TEST SYSTEMS

## i series

## Air cooled Vibration Test Systems

### i230 / SA2AM

### EM2301A

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

## i230 / SA2AM EM2301A



System Specifications			
System Model		i230/SA2AM	EM2301A
Frequency Range (Hz)		0-3300	
Force	Sine (kN)	16	
	Random (kN rms) <sup>*1</sup>	16	
	Shock (kN)	32	
Maximum Acc.	Sine (m/s <sup>2</sup> )	1250	
	Random (m/s <sup>2</sup> rms)	875	
	Shock (m/s <sup>2</sup> )	2500	
Maximum Vel.	Sine (m/s)	2.2	
	Shock (m/s peak)	2.2	2.2(3.5) <sup>*3</sup>
Maximum Disp.	Sine (mmp-p)	51	
	Maximum Travel (mmp-p)	64	

Vibration Generator (i230)	
Armature Mass (kg)	12.8
Armature Diameter (φ mm)	200
Armature Resonance (Hz)	2600
Allowance Eccentric Moment (N·m)	700
Maximum Payload (kg)	300
Mass (kg)	1500

\*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.

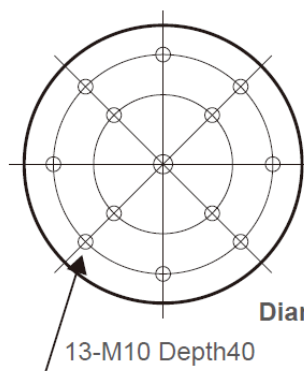
Continuous use at maximum levels may cause failure.

\* 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.

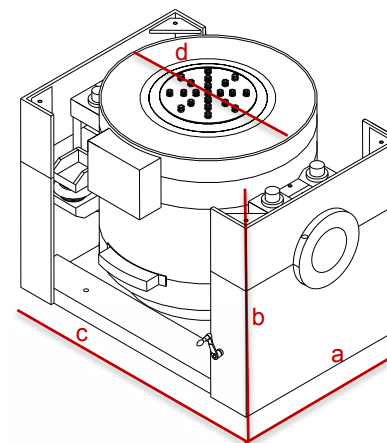
Cooling Blower		
Model		VAPC/ 630/P2R1
Mass (kg)		150
Environmental Data		
Power Requirement (kVA) <sup>*2</sup>		26
Input Voltage Supply (3 φ, V)		380/400/415/440
Compressed Air Supply (Mpa)		0.6
Working Ambient	Temperature (°C)	0 - 40
	Humidity (%RH)	0 - 85

Power Amplifier		
System Model	SA2AM-i30	SAA2M-i30EM
Maximum Output [kVA]	20	20
Mass [kg]	300	350



13-M10 Depth40  
(P.C.D. 100, 160)

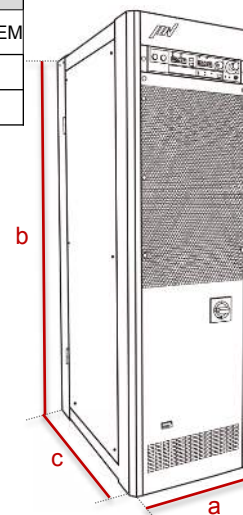
i230



### Shaker

Model: i230

a: W 1124 mm  
b: H 957 mm  
c: D 860 mm  
d: 630 φmm



### Amplifier

Model: SA2AM-i30

Model: SA2AM-i30EM

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



### Blower

Model: VAPC 630/P2R1

a: W 1045 mm  
b: H 2285 mm  
c: D 711 mm