

# IMV VIBRATION TEST SYSTEMS

## J series

### Air-cooled Vibration Test Systems

# J250/SA5HAG J250/EM5HAG



Long duration shock tests require high velocity and large displacement. J-series is a high-frequency system that offers usability and durability furnished with functions that accommodates high velocity and displacement testing.

#### [Expanded maximum test range]

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

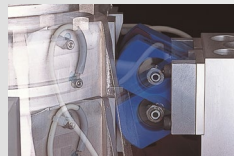
[Patented upper (armature) support system PS Guide] Parallel Slope Guide is standard.

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



#### ① High Velocity and Large Displacement

High velocity of 2.4 m/s and Large displacement of 100 mmp-p (4 inch).



■ PSG 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

#### ② User first principle

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



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System Specification			
System Model		J250/SA5HAG	J250/EM5HAG
Frequency Range (Hz)		0-2,200	0-2,200
Rated Force	Sine (kN)	35	35
	Random (kN rms) *1	35	35
	Shock (kN)	70	70
	High Velocity Shock (kN) *4	-	68
Maximum Acc.	Sine (m/s <sup>2</sup> )	777	777
	Random (m/s <sup>2</sup> rms)	544	544
	Shock (m/s <sup>2</sup> )	1,555	1,555
	High Velocity Shock (m/s <sup>2</sup> peak) *4	-	1,511
Maximum Vel.	Sine (m/s)	2.4	2.4
	Shock (m/s peak)	2.4	2.4
	High Velocity Shock (m/s peak) *4	-	3.5
Maximum Disp.	Sine (mmp-p)	100	100
	High Velocity Shock (mmp-p)	-	100
Maximum Travel (mmp-p)		120	120
Maximum Load (kg)		600	600
Power Requirements (kVA) *2		53	53
Breaker Capacity (A) *3		100	100

Vibration Generator (J250)	
Armature Mass (kg)	45
Armature Diameter (φ mm)	440
Armature Resonance (Hz)	1,700
Allowance Eccentric Moment (Nm)	1,550
Mass (kg)	3,500

Power Amplifier	1BGH5-J250	2BGH5-J250
Maximum Output (kVA)	50	
Mass (kg)	880	930

Cooling (VAPE710/P2R)	
Mass (kg)	250

Environmental Data		
Input Voltage Supply (3 φ, V)		380/400/415/440
Compressed Air Supply (Mpa)		0.6
Working Ambient Temperature	Shaker (°C)	0-40
	Amplifier (°C)	0-85

\*1 Random force ratings are specified in accordance with ISO5344 conditions. Please contact IMV or your local distributor with specific test requirements..

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

\*3 Breaker capacity for 480 V.

\*4 For high velocity option

\*The specification shows the maximum system performance. For long-duration tests, system must be de-rated up to 70%.

Continuous use at maximum levels may cause failure. Please contact IMV if your system operates at more than 70%.

\*For random vibration tests, please set the test definition of the peak value of acceleration waveform to operate at less than the maximum acceleration of shock.

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

\*Armature mass and acceleration may change when a chamber is added.

Vibration Generator (J250) a: W 1,463 mm b: H 1,301 mm c: D 1,100 mm d: 860 φmm

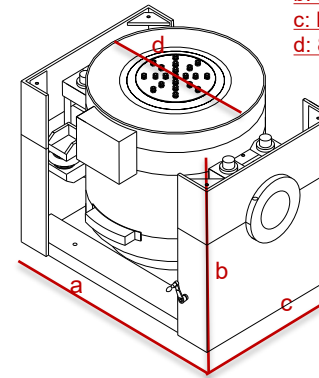
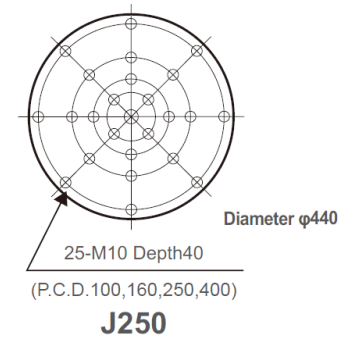
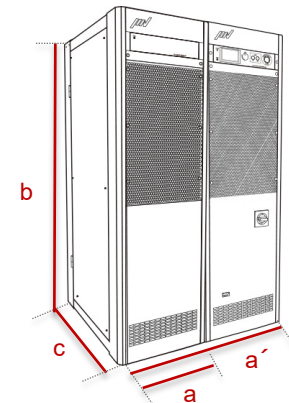


Table Insert Pattern (unit: mm)



Amplifier (1BGH5-J250/2BGH5-J250)



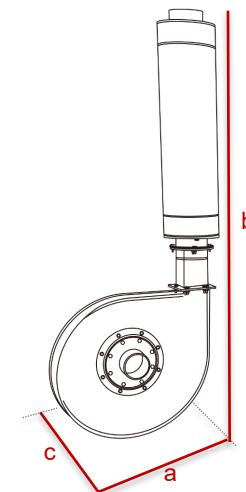
1BGH5-J250

a: W 580 mm  
b: H 1,950 mm  
c: D 850 mm

2BGH5-J250

a': W 1,160 mm  
b: H 1,950 mm  
c: D 850 mm

Blower



a: W 1,160 mm  
b: H 2,405 mm  
c: D 787 mm