

IMV VIBRATION TEST SYSTEMS

J series

Air-cooled Vibration Test Systems

J230/SA3HAG J230/EM3HAG



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

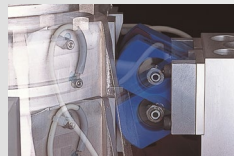
[Patented upper (armature) support system PS Guide] Parallel Slope Guide is standard.

[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

③ User first principle

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





System Specification			
System Model		J230/SA3HAG	J230/EM3HAG
Frequency Range (Hz)		0-3,000	0-3,000
Rated Force	Sine (kN)	16	16
	Random (kN rms) ^{*1}	16	16
	Shock (kN)	40	40
	High Velocity Shock (kN) ^{*4}	-	30
Maximum Acc.	Sine (m/s ²)	941	941
	Random (m/s ² rms)	658	658
	Shock (m/s ²)	2,000	2,000
	High Velocity Shock (m/s ² peak) ^{*4}	-	1,764
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)		300	300
Power Requirements (kVA) ^{*2}		28	28
Breaker Capacity (A) ^{*3}		50	50

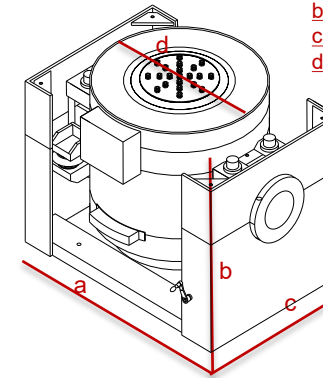
Vibration Generator (J230)	
Armature Mass (kg)	17
Armature Diameter (φ mm)	200
Armature Resonance (Hz)	2,200
Allowance Eccentric Moment (Nm)	700
Mass (kg)	1,800

Power Amplifier	1BGH3-J230	2BGH3-J230
Maximum Output (kVA)	20	
Mass (kg)	330	380

Cooling (VAPC 630/P2R1)	
Mass (kg)	150

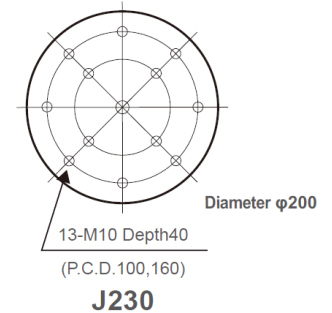
Environmental Data		
Input Voltage Supply (3 φ, V)		380/400/415/440
Compressed Air Supply (Mpa)		0.6
Working Ambient Temperature	Shaker (°C)	0-40
	Amplifier (°C)	0-85

Vibration Generator (J230)

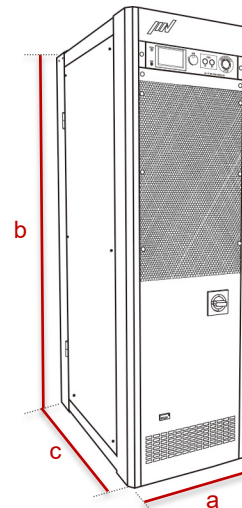


a: W 1,124 mm
b: H 1,079 mm
c: D 850 mm
d: 630 φmm

Table Insert Pattern (unit: mm)

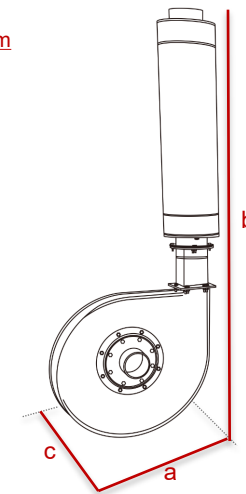


Amplifier (1BGH3-J230/2BGH3-J230)



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

Blower



a: W 1,044 mm
b: H 2,285 mm
c: D 704 mm

*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.