

# IMV VIBRATION TEST SYSTEMS

## J series

### Air-cooled Vibration Test Systems

# J240/SA4HAG J240/EM4HAG



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		J240/SA4HAG	J240/EM4HAG
Frequency Range (Hz)		0-2,400	0-2,400
Rated Force	Sine (kN)	24	24
	Random (kN rms) <sup>*1</sup>	24	24
	Shock (kN)	55	55
	High Velocity Shock (kN) <sup>*4</sup>	-	48
Maximum Acc.	Sine (m/s <sup>2</sup> )	923	923
	Random (m/s <sup>2</sup> rms)	646	646
	Shock (m/s <sup>2</sup> )	2,000	2,000
	High Velocity Shock (m/s <sup>2</sup> peak) <sup>*4</sup>	-	1,846
Maximum Vel.	Sine (m/s)	2.4	2.4
	Shock (m/s peak)	2.4	2.4
	High Velocity Shock (m/s peak) <sup>*4</sup>	-	3.5
Maximum Disp.	Sine (mmp-p)	100	100
	High Velocity Shock (mmp-p)	-	100
Maximum Travel (mmp-p)		120	120
Maximum Load (kg)		400	400
Power Requirements (kVA) <sup>*2</sup>		38	38
Breaker Capacity (A) <sup>*3</sup>		75	75

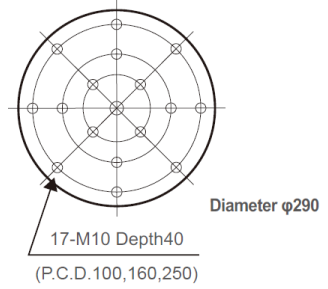
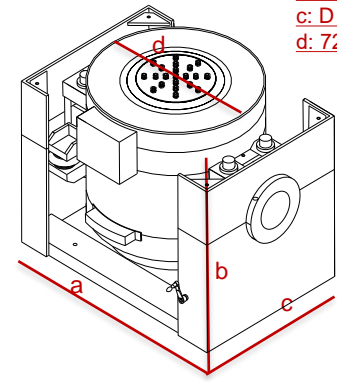
Vibration Generator (J240)	
Armature Mass (kg)	26
Armature Diameter (φ mm)	290
Armature Resonance (Hz)	2,000
Allowance Eccentric Moment (Nm)	850
Mass (kg)	2,400

Power Amplifier	SA4HAG-J40	EM4HAG-J40
Maximum Output (kVA)	34	
Mass (kg)	440	490

Cooling (VAPE/N 560/2R)	
Mass (kg)	150

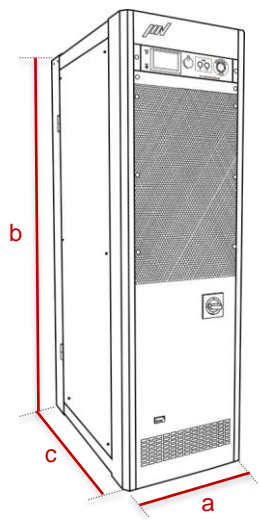
Environmental Data		
Input Voltage Supply (3 φ, V)		380/400/415/440
Compressed Air Supply (Mpa)		0.6
Working Ambient Temperature	Shaker (°C)	0-40
	Amplifier (°C)	0-85

Vibration Generator (J230) **a: W 1,234 mm** **b: H 1,145 mm** **c: D 890 mm** **d: 720 φmm** Table Insert Pattern (unit: mm)



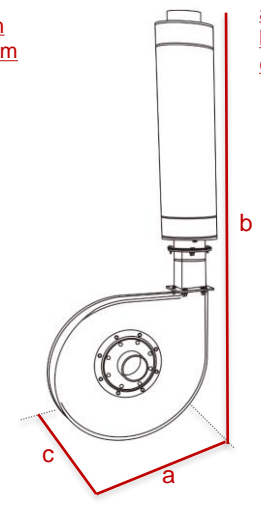
**J240**

Amplifier (SA4HAG-J40/EM4HAG-J40)



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

Blower



**a: W 929 mm**  
**b: H 2,175 mm**  
**c: D 534 mm**

<sup>\*1</sup> Random force ratings are specified in accordance with ISO5344 conditions. Please contact IMV or your local distributor with specific test requirements.  
<sup>\*2</sup> Power supply: 3-phase 380/400/415/440 V, 50/60 Hz. A transformer is required for other supply voltages.  
<sup>\*3</sup> Breaker capacity for 480 V.  
<sup>\*4</sup> 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.

