

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.



J240/SA4HAG J240/EM4HAG



| 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) ^{*1} | 24 | 24 |
| | Shock (kN) | 55 | 55 |
| | High Velocity Shock (kN) ^{*4} | - | 48 |
| Maximum Acc. | Sine (m/s ²) | 923 | 923 |
| | Random (m/s ² rms) | 646 | 646 |
| | Shock (m/s ²) | 2,000 | 2,000 |
| | High Velocity Shock (m/s ² peak) ^{*4} | - | 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) ^{*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) | | 400 | 400 |
| Power Requirements (kVA) ^{*2} | | 38 | 38 |
| Breaker Capacity (A) ^{*3} | | 75 | 75 |

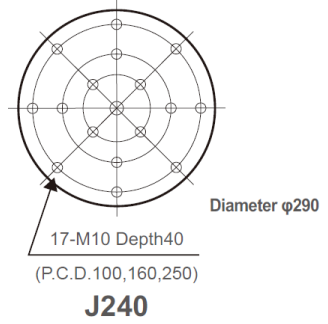
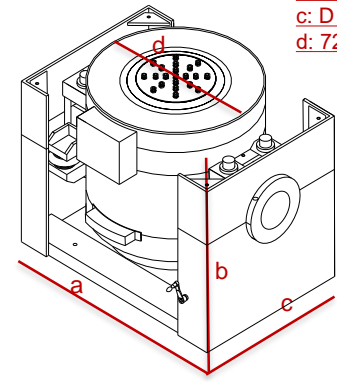
| Vibration Generator (J240) | |
|-----------------------------------|-------|
| Armature Mass (kg) | 26 |
| Armature Diameter (φ mm) | 290 |
| Armature Resonance (Hz) | 2,000 |
| Allowance Eccentric Moment (N·in) | 850 |
| Mass (kg) | 2,400 |

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

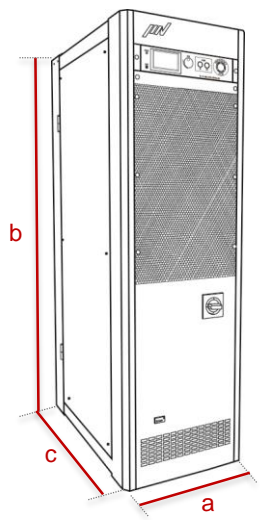
| Cooling (VAPE/N 560/2R) | |
|-------------------------|-----|
| Mass (kg) | 150 |

| 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)

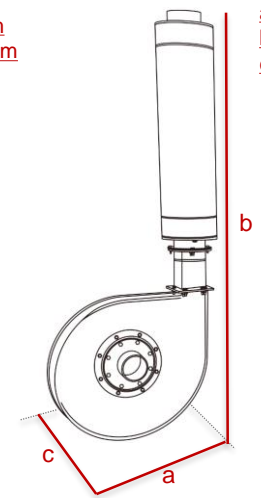


Amplifier (SA4HAG-J40/EM4HAG-J40)



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

^{*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.

