

# IMV VIBRATION TEST SYSTEMS

## J series

Air cooled Vibration Test Systems

## J250 / SA5AM EM2505A

# J

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]

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 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.



## J250 / SA5AM EM2505A

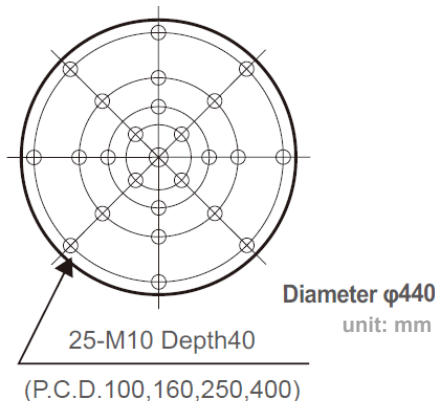


| System Specifications |                               |            |            |
|-----------------------|-------------------------------|------------|------------|
| System Model          |                               | J250/SA5AM | EM2505A    |
| Frequency Range (Hz)  |                               | 0-2200     |            |
| Rated Force           | Sine (kN)                     | 35         |            |
|                       | Random (kN rms) *1            | 35         |            |
|                       | Shock (kN)                    | 70         |            |
| Maximum Acc.          | Sine (m/s <sup>2</sup> )      | 777        |            |
|                       | Random (m/s <sup>2</sup> rms) | 544        |            |
|                       | Shock (m/s <sup>2</sup> )     | 1555       |            |
| Maximum Vel.          | Sine (m/s)                    | 2.4        |            |
|                       | Shock (m/s peak)              | 2.4        | 2.4(3.5)*3 |
| Maximum Disp.         | Sine (mmp-p)                  | 100        |            |
|                       | Maximum Travel (mmp-p)        | 120        |            |

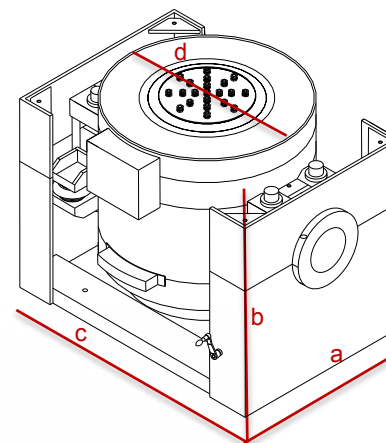
| Vibration Generator (J250)       |      |
|----------------------------------|------|
| Armature Mass (kg)               | 45   |
| Armature Diameter (φ mm)         | 440  |
| Armature Resonance (Hz)          | 1700 |
| Allowance Eccentric Moment (N·m) | 1550 |
| Maximum Payload (kg)             | 600  |
| Mass (kg)                        | 3500 |

| Cooling Blower                |                  |                 |
|-------------------------------|------------------|-----------------|
| Model                         |                  | VAPE 710/P2R    |
| Mass (kg)                     |                  | 250             |
| Environmental Data            |                  |                 |
| Power Requirement (kVA) *2    |                  | 53              |
| 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         |  | SA5AM-J50 SA5AM-J50EM |
| Maximum Output [kVA] |  | 50 50                 |
| Mass [kg]            |  | 880 930               |



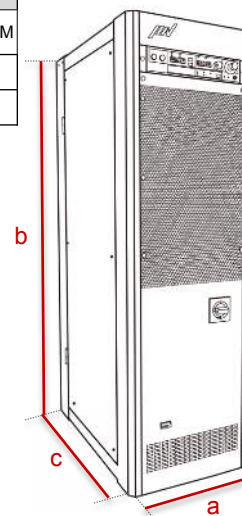
J250



### Shaker

Model: J250

a: W 1463 mm  
b: H 1301 mm  
c: D 1100 mm  
d: 860 φmm



### Amplifier

Model: SA5AM-J50

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

Model: SA5AM-J50EM

a: W 1160 mm  
b: H 1950 mm  
c: D 850 mm



### Blower

Model: VAPE 710/P2R

a: W 1160 mm  
b: H 2405 mm  
c: D 787 mm

\*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.