

# IMV VIBRATION TEST SYSTEMS

## i series

## Air-cooled Vibration Test Systems

### i260/SA7HAG

### i260/EM7HAG

Vibration tests have diversified and specifications have become increasingly strict. i-series offer a user-friendly lineup with enhanced performance and durability.



#### [Expanded maximum test range]

Max. velocity of Sine force: 2.2 m/s, Max. velocity of Shock force 2.2 m/s, Max. displacement: 51mm-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 durability with PS guide

PS guide (parallel slope guide) is an upper support system conforming to continued vibration testing at high velocity.



■ PS 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		i260/SA7HAG	i260/EM7HAG
Frequency Range (Hz)		0-2,600 <sup>*4</sup>	0-2,600 <sup>*4</sup>
Rated Force	Sine (kN)	54	54
	Random (kN rms) <sup>*1</sup>	54	54
	Shock (kN)	108	108
	High Velocity Shock (kN) <sup>*5</sup>	-	90
Maximum Acc.	Sine (m/s <sup>2</sup> )	1,000	1,000
	Random (m/s <sup>2</sup> rms)	700	700
	Shock (m/s <sup>2</sup> )	2,000	2,000
	High Velocity Shock (m/s <sup>2</sup> peak) <sup>*5</sup>	-	1,666
Maximum Vel.	Sine (m/s)	2.2	2.2
	Shock (m/s peak)	2.2	2.2
	High Velocity Shock (m/s peak) <sup>*5</sup>	-	3.5
Maximum Disp.	Sine (mmp-p)	51	51
	High Velocity Shock (mmp-p)	-	51
Maximum Travel (mmp-p)		64	64
Maximum Load (kg)		1000	1000
Power Requirements (kVA) <sup>*2</sup>		83	83
Breaker Capacity (A) <sup>*3</sup>		150	150

Vibration Generator (i260)	
Armature Mass (kg)	54
Armature Diameter (φ mm)	446
Armature Resonance (Hz)	1,800
Allowance Eccentric Moment (N·in)	1,550
Mass (kg)	3,500

Power Amplifier	SA7HAG-i60	EM7HAG-i60
Maximum Output (kVA)	64	
Mass (kg)	1400	1400

Cooling (VAPE 710/N2)	
Mass (kg)	250

Environmental Data		
Input Voltage Supply (3 φ, V)	380/400/415/440	
Compressed Air Supply (Mpa)	0.7	
Working Ambient Temperature	Shaker (°C)	0-40
	Amplifier (°C)	0-85

Vibration Generator (i260)

a: W 1,527 mm  
b: H 1,198 mm  
c: D 1,100 mm  
d: 920 φmm

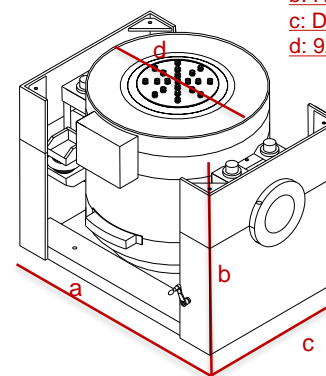
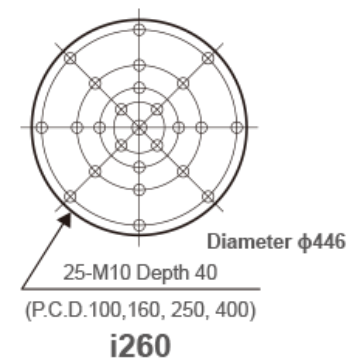
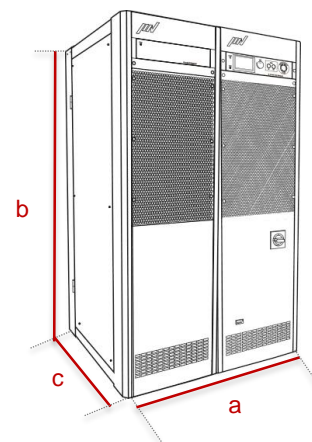


Table Insert Pattern (unit: mm)



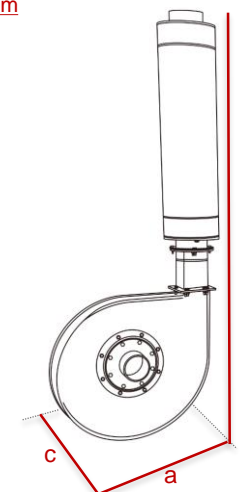
Amplifier

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



<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> Above 4000 Hz, the force rolls-off at a rate of -6 dB/oct.

<sup>\*5</sup> For high velocity option

<sup>\*</sup>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%.

<sup>\*</sup>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.

<sup>\*</sup>Frequency range values vary according to the sensor and vibration controller.

<sup>\*</sup>Armature mass and acceleration may change when a chamber is added.