IMV VIBRATION TEST SYSTEMS

i series

Air-cooled Vibration Test Systems

i220/SA1HAG
i220/EM1HAG

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

［**Test range**］

- Maximum acceleration: 1,250 m/s^2
- Maximum velocity: 3.5 m/s
- Maximum displacement: 51 mmp-p
- Maximum loading mass: 200 kg

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

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System Specification			
System Model		i220/SA1HAG	i220/EM1HAG
Frequency Range (Hz)		0-3,300	0-3,300
Rated Force	Sine (kN)	8	8
	Random (kN rms) *1	8	8
	Shock (kN)	16	16
	High Velocity Shock (kN) *4	-	10
Maximum Acc.	Sine (m/s²)	1,250	1,250
	Random (m/s² rms)	875	875
	Shock (m/s²)	2,000	2,000
	High Velocity Shock (m/s² peak) *4	-	1,562
Maximum Vel.	Sine (m/s)	2.2	2.2
	Shock (m/s peak)	2.2	2.2
	High Velocity Shock (m/s peak) *4	-	3.5
Maximum Disp.	Sine (mmp-p)	51	51
	High Velocity Shock (mmp-p)	-	51
Maximum Travel (mmp-p)		60	60
Maximum Load (kg)		200	200
Power Requirements (kVA) *2		16.4	16.4
Breaker Capacity (A) *3		30	30

Vibration Generator (i220)	
Armature Mass (kg)	6.4
Armature Diameter (ϕmm)	190
Armature Resonance (Hz)	3,100
Allowance Eccentric Moment (N･in)	294
Mass (kg)	900

Power Amplifier	SA1HAG-i20	EM1HAG-i20
Maximum Output (kVA)	10	
Mass (kg)	280	280

Cooling (VAPE/N 560/2R)		
Mass (kg)		85
Environmental Data		
Input Voltage Supply (3ϕ, V)		380/400/415/440
Compressed Air Supply (Mpa)		0.7
Working Ambient Temperature	Shaker (℃)	0-40
	Amplifier (℃)	0-85

*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.

Vibration Generator (i220)

a: W 1,020 mm
b: H 903 mm
c: D 550 mm
d: 550 φmm

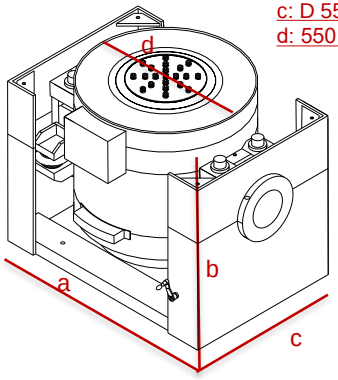
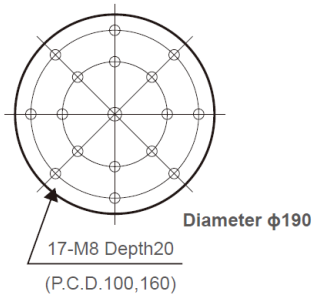
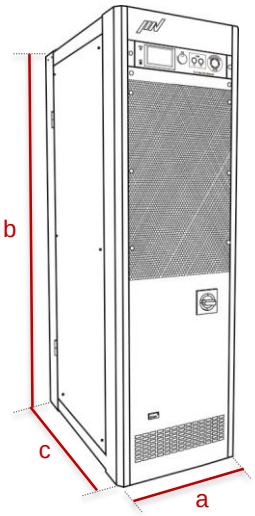


Table Insert Pattern (unit: mm)



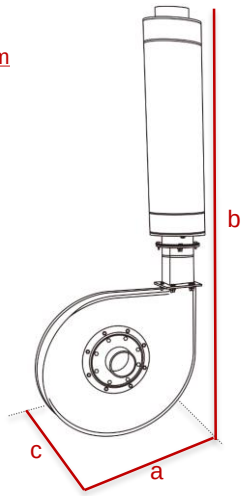
Amplifier (SA1HAG-i20/EM1HAG-i20)

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



Blower

a: W 808_mm
b: H 2,085 mm
c: D 733 mm



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