



IMV VIBRATION  
TEST SYSTEMS

A series

## Air cooled Vibration Test Systems

# A03/SA1MM



A series is the “new standard” in vibration testing, with a solid test performance. A series increases the relative excitation force and has a displacement of 76.2 mmp-p (3 inch stroke) which gives good balance between specification of velocity, acceleration and displacement. It also provides a maximum of 3.5m/s shock velocity testing, which responds to the demand in lithium battery testing. Rapid creation of a test from a set of pre-defined templates conforming to most international test standards. Simply select the standard required to generate the main test settings.

### ① Improvement of performance

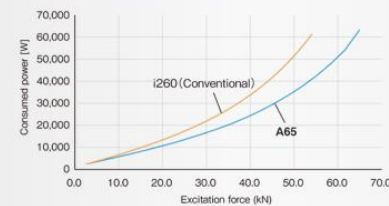
Expansion of test case and respond to high spec. test  
Meet the needs for versatile test use.

- Improvement in excitation force
- Standard 76.2mm displacement
- Expansion in frequency range
- Crosstalk reduction
- High velocity shock test

### ② User friendly and security

Aware of security and functionality and realizes more energy-saving.

Comparison of Consumed power per excitation force A65 vs I260



### ③ User first principle

Intuitive interface leads the operator with user-friendly guidance.





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## Air cooled Vibration Test Systems

# A03/SA1MM



System Specifications		
System Model	A03/SA1MM	
Frequency Range (Hz)	0-4000	
Rated Force	Sine (kN)	3
	Random (kN rms) <sup>*1</sup>	3
	Shock (kN)	9
Maximum Acc.	Sine (m/s <sup>2</sup> )	1000
	Random (m/s <sup>2</sup> rms)	700
	Shock (m/s <sup>2</sup> )	2000
Maximum Vel.	Sine (m/s)	2.0
	Shock (m/s peak)	2.3
Maximum Disp.	Sine (mmp-p)	30
	Maximum Travel (mmp-p)	40

Vibration Generator (A03)	
Armature Mass (kg)	3
Armature Diameter (φ mm)	128
Shaker Body Diameter (φ mm)	480
Armature Resonance (Hz)	3420
Allowance Eccentric Moment (N·m)	160
Maximum Payload (kg)	120
Mass (kg)	400

\*1) 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.

\* The specification shows the maximum system performance.

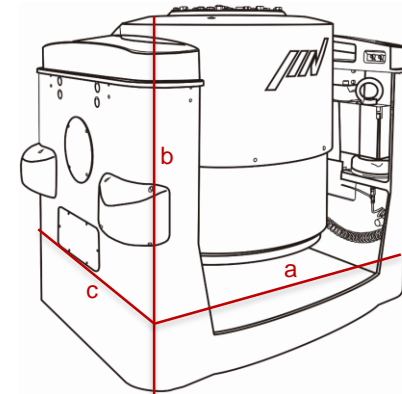
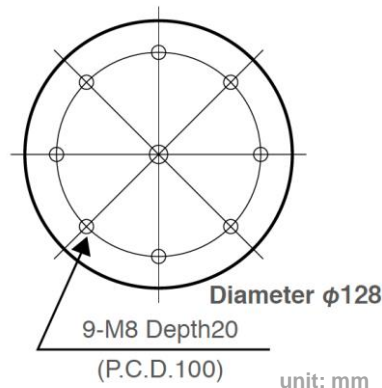
For long-duration tests, de-rating by up to 70 % must be applied. Continuous use at maximum levels may cause failure.

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.

Cooling		
System Model	PRVM 350/2R	
Mass (kg)	45	
Cooling Air Flow (m <sup>3</sup> /min)	8.1	
Environmental Data		
Power Requirement (kVA) <sup>*2</sup>	8.7	
Input Voltage Supply (3φ, V)	380/400/415/440	
Compressed Air Supply (Mpa)	0.7	
Working Ambient Temperature	Shaker (°C)	0 - 40
	Amplifier (°C)	0 - 40

Power Amplifier	
System Model	SA1MM-A03
Maximum Output [kVA]	5.4
Mass [kg]	240



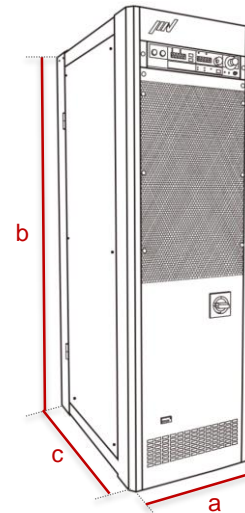
### Shaker

Model: A03

a: W 868 mm

b: H 700 mm

c: D 500 mm



### Amplifier

Model: SA1MM

a: W 580 mm

b: H 1950 mm

c: D 850 mm



### Blower

Model: PRVM 350/2R

a: W 600 mm

b: H 1905 mm

c: D 613 mm

**IMV CORPORATION**

