



IMV VIBRATION  
TEST SYSTEMS  
**A series**

## Air cooled Vibration Test Systems **A74 / EM10HAM**



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 3.5 m/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

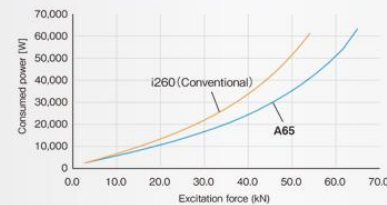
Expansion of test case and respond to high spec. test  
Meet the needs for versatile test use.

- 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

# A74 / EM10HAM



### System Specifications

System Model		A74/EM10HAM
Frequency Range (Hz)		0-2600 <sup>3</sup>
Rated Force	Sine (kN)	74
	Random (kN rms) <sup>1</sup>	74
	Shock (kN)	222 (170) <sup>4</sup>
Maximum Acc.	Sine (m/s <sup>2</sup> )	1000
	Random (m/s <sup>2</sup> rms)	630
	Shock (m/s <sup>2</sup> )	2000
Maximum Vel.	Sine (m/s)	2.0
	Shock (m/s peak)	2.5 (3.5) <sup>4</sup>
Maximum Disp.	Sine (mm p-p)	76.2
	Maximum Travel (mm p-p)	82

### Vibration Generator (A74)

Armature Mass (kg)	74
Armature Diameter (φ mm)	446
Shaker Body Diameter (φ mm)	925
Armature Resonance (Hz)	1770
Allowance Eccentric Moment (N.m)	1550
Maximum Payload (kg)	1000
Stray Field (mT)	80
Mass (kg)	3500

<sup>1</sup>) Force ratings are specified in accordance with ISO5344 conditions.

<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>) Above 2000 Hz, the force rolls-off at a rate of -12 dB/oct.

<sup>4</sup>) Maximum velocity 4.6 m/s. High velocity restricts maximum Shock force.

\* The specification shows the maximum system performance.

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

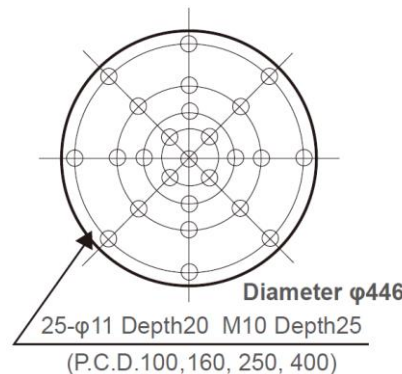
\* In the case of Random vibration test, please set the test definition of the peak value of acceleration waveform to be operated less than the maximum acceleration of Shock.

\* Frequency range values vary according to sensor and vibration controller.

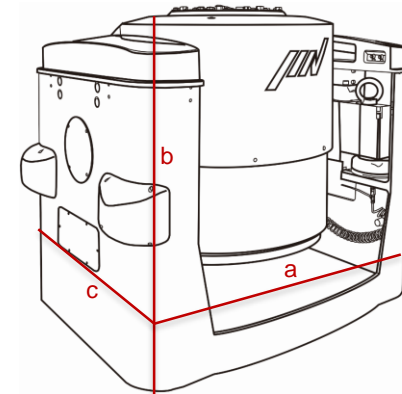
\* Armature mass and acceleration may change when chamber is combined.

Cooling		
System Model	VAPE 900/N2R	
Mass (kg)	320	
Cooling Air Flow (m <sup>3</sup> /min)	70	
Environmental Data		
Power Requirement (kVA) <sup>2</sup>	118	
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	EM10HM-A74
Maximum Output (kVA)	118
Mass (kg)	2400



unit: mm



### Shaker

Model: A74

a: W 1310 mm

b: H 1253 mm

c: D 1040 mm

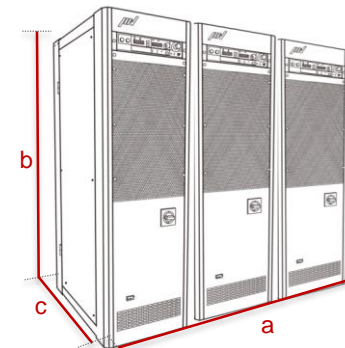
### Amplifier

Model: EM10HAM

a: W 1740mm

b: H 1950mm

c: D 850mm



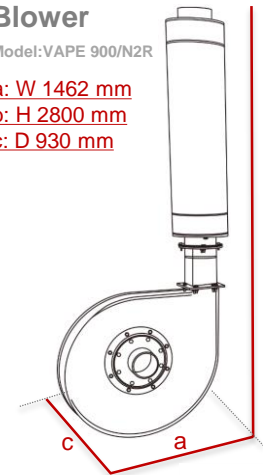
### Blower

Model:VAPE 900/N2R

a: W 1462 mm

b: H 2800 mm

c: D 930 mm



**IMV CORPORATION**