



IMV VIBRATION
TEST SYSTEMS

A series

Air cooled Vibration Test Systems

A30/SA3HM

A30/EM3HM

A



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

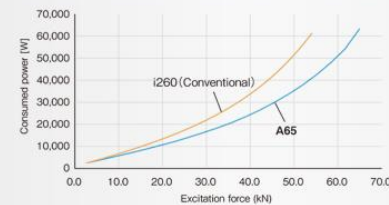
Expansion of test case and respond to high spec. test
Meet the needs for versatile test use.

- 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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System Specifications			
System Model		A30/SA3HM	A30/EM3HM
Frequency Range (Hz)		0-2600	0-2600
Rated Force	Sine (kN)	30	30
	Random (kN rms) ^{*1}	30	30
	Shock (kN)	60	60 (50) ^{*3}
Maximum Acc.	Sine (m/s ²)	900	900
	Random (m/s ² rms)	630	630
	Shock (m/s ²)	1818	1818
Maximu Vel.	Sine (m/s)	2.0	2.0
	Shock (m/s peak)	2.5	2.5 (3.5) ^{*3}
Maximum Disp.	Sine (mm p-p)	76.2	76.2
	Maximum Travel (mm p-p)	82	82

Vibration Generator (A30)		
Armature Mass (kg)		33
Armature Diameter (φ mm)		290
Shaker Body Diameter (φ mm)		725
Armature Resonance (Hz)		1980
Allowance Eccentric Moment (N.m)		850
Maximum Payload (kg)		400
Stray Field (mT) ^{*2}		2.6
Mass (kg)		2000

^{*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.

^{*3}) Maximum velocity 4.6 m/s. High velocity restricts maximum Shock force.

^{*} The specification shows the maximum system performance.

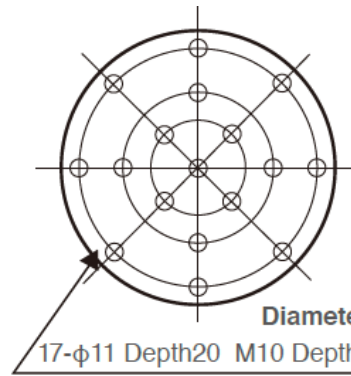
For long-duration tests, de-rating by up to 70 % must be applied. Continuous use at maximum levels may cause failure.

^{*} 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.

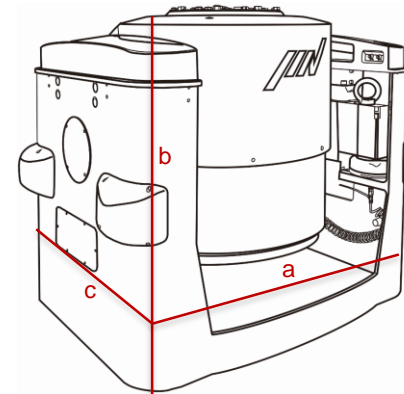
^{*} Frequency range values vary according to sensor and vibration controller.

Cooling		
System Model		VAPE/N 560/2R
Mass (kg)		107
Cooling Air Flow (m ³ /min)		20
Environmental Data		
Power Requirement (kVA) ^{*2}		36
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		SA3HM-A30	EM3HM-A30
Maximum Output (kVA)		31	31
Mass (kg)		420	500



Diameter φ290
17-φ11 Depth20 M10 Depth25
(P.C.D.100,160,250)
unit: mm



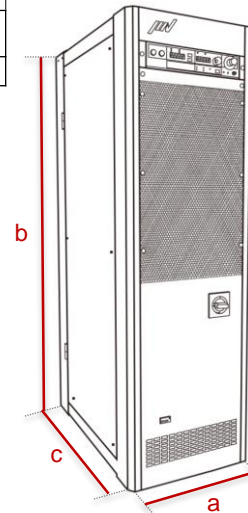
Shaker

Model: A30

a: W 1100 mm

b: H 1048 mm

c: D 840 mm



Amplifier

Model: SA3HM

Model: EM3HM

a: W 580 mm

b: H 1950 mm

c: D 850 mm



Blower

Model: VAPE/N 560/2R

a: W 931 mm

b: H 2175 mm

c: D 538 mm

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