

IMV VIBRATION TEST SYSTEMS i series

Air cooled Vibration Test Systems i240 / SA3AM EM2401A

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: 2.4 m/s • Max. velocity of Shock force 4.6 m/s • Max. displacement: 100 mmp-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.



IMV VIBRATION TEST SYSTEMS

i series

Air cooled Vibration Test Systems

i240 / SA3AM EM2401A



System Specifications			
System Model		i240/SA3AM	EM2401A
Frequency Range (Hz)		0-2600	
Force	Sine (kN)	24	
	Random (kN rms) *1	24	
	Shock (kN)	48	
Maximum Acc.	Sine (m/s ²)	1200	
	Random (m/s ² rms)	840	
	Shock (m/s ²)	2400	
Maximum Vel.	Sine (m/s)	2.2	
	Shock (m/s peak)	2.2	2.2(3.5)*3
Maximum Disp.	Sine (mmp-p)	51	
	Maximum Travel (mmp-p)	68	

Vibration Generator (i240)	
Armature Mass (kg)	20
Armature Diameter (φ mm)	290
Armature Resonance (Hz)	2300
Allowance Eccentric Moment (N·m)	850
Maximum Payload (kg)	400
Mass (kg)	2000

*1) Random 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.

Please contact IMV or your local distributor with specific test requirements.

The specification shows the maximum system performance.

For long-duration tests, de-rating by up to 70 % must be applied.

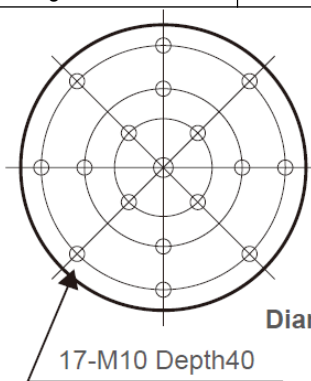
Continuous use at maximum levels may cause failure.

* 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 Blower		
Model		VAPE/N 560/2R
Mass (kg)		150
Environmental Data		
Power Requirement (kVA) *2		36
Input Voltage Supply (3 φ, V)		380/400/415/440
Compressed Air Supply (Mpa)		0.6
Working Ambient	Temperature (°C)	0 - 40
	Humidity (%RH)	0 - 85

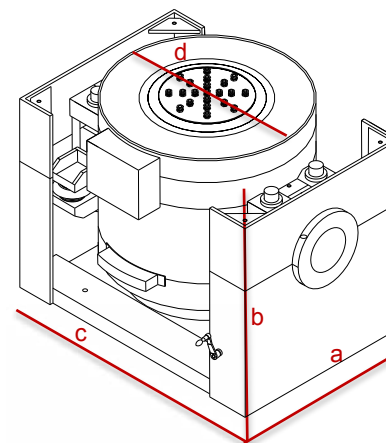
Power Amplifier		
System Model	SA3AM-i40	SA3AM-i40EM
Maximum Output [kVA]	30	29
Mass [kg]	410	460



Diameter φ290
unit: mm

17-M10 Depth40
(P.C.D.100,160,250)

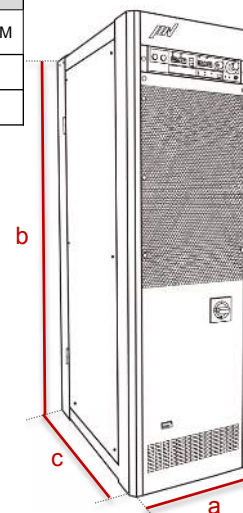
i240



Shaker

Model: i240

a: W 1234 mm
b: H 997 mm
c: D 890 mm
d: 720 φmm

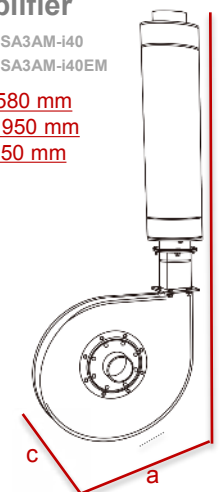


Amplifier

Model: SA3AM-i40

Model: SA3AM-i40EM

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

IMV CORPORATION