ES-160-590		
System Performance	**Metric**	**American**
Rated Sine Force	160 kN	35200 lbf
Rated Random Force	160 kN	35200 lbf
Rated Shock Force	320/480* kN	70400/105600* lbf
Usable Frequency	DC-2200 Hz	DC-2200 Hz
Maximum Velocity	2/2.5* m/s	78.7/98.4* in/s
Maximum Acceleration	1000 m/s²	100 g
Maximum Static Payload	1600 kg	3527 lbs
Resonance Frequency	1800±5% Hz	2100±5% Hz
Maximum Displacement p-p	51 mm	2 in

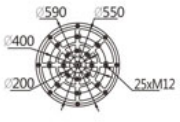
Shaker: ET-160-590		
Mass of Moving Elements	140 kg	308 lbs
Armature Diameter	590 mm	23.2 in
Weight	About 11000 kg	About 24251 lbs
Body Suspension Natural Frequency	2.5 Hz	2.5 Hz
Stray Flux Density	<10 Gauss	<10 Gauss
Dimension L×W×H	1780×1280×1380 mm	70.1×50.4×54.3 in

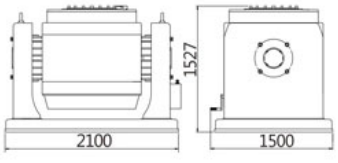
Power Amplifier: SDA-160		
Power	160 kVA	160 kVA
Power Supply Requirement	230 kVA	230 kVA
Dimension L×W×H	1800×1010×2070 mm	70.9×39.8×81.5 in
Weight Uncrated	About 2600 kg	About 5732 lbs

Water Cooling: CU-2		
Internal Circle Water Flow (Distilled Water)	80 L/min	17.6 gal/min
Internal Circle Water Pressure (Distilled Water)	1 Mpa	145 psi
External Circle Water Flow (City Water)	160 L/min	35.2 gal/min
External Circle Water Pressure (City Water)	0.25-0.4 Mpa	36-58 psi
Water Pump Power (Internal/External)kW	8/4 kW	8/4 kW
Distilled Water Requiremnt	Hardness 30ppm, PH7～8, Conductivity 1Us/cm	
Unit Weight (kg)	About 300 kg	About 661 lbs
Dimension L×W×H	607×1010×2070 mm	23.9×39.8×81.5 in

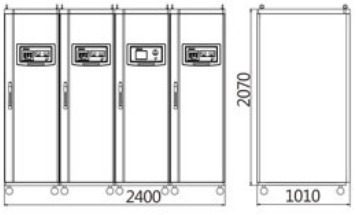
Options	
• Magnesium or Aluminum Armature	•Customized Fixtures (T, L, Cube)
• Combo or Standalone Slip Table	•Pneumatic Isolators or Free Foundation Isolation Base
• Motorized Shaker Body Rotation System	•Air Caster or Glide Rail
• Head Expanders and Vertical Support Platforms	•Cooling tower
• Thermal barrier	•Remote control

Outline Drawing

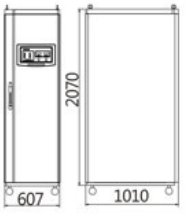




ET-160-590



Power Amplifier SDA-160



Water Cooling CU-2

Water-cooled Series

Water-cooled Vibration test system features with the large force, large bearing capacity and high cooling efficiency, to complete the tri-axial sinusoidal vibration test, broadband random vibration test and classical (semi-sinusoidal, trapezoidal, and postpeak sawtooth) pulse and shock response spectrum test. The multi-environment combined test can be completed with the equipped climate chamber. At present, this series has a variety of models to choose. The exciting force range is from 50 kN to 500 kN and maximum load is from 800 kg to 10000 kg.

Performance characteristics

- Random to sinusoidal excitation force ratio: 1:1
- Two-times-of-sine shock force (Three times optional)
- Displacement peak-to-peak: 51mm, 76mm or 100mm
- Lightweight armature and large working table
- Better vibration isolation effect of air spring at trunnion position
- Large bearing capacity of air spring in central room, andgoodlow-frequency performance
- Equipped with an automatic centering system, to controlthe armature is always in the balance position during movement
- Double magnetic circuit design, with low flux leakage and uniform magnetic field

NOTE: In keeping with our commitment to continuous product improvement, the information herein is subject to change.