

# EDM-5000LS-D563A

Electro-dynamic Vibration Testing System (Long Stroke, Air Cooled)

## Features

- 100mm p-p displacement, long stroke
- Double field magnetic circuit design
- Advanced shaker trunnion isolation design
- Dedicated dynamic auto-centering control
- Latest SiC-FET technique based power amplifier, modularized power module with higher switching frequency range, SNR and more safety
- Smarter remote control on power amplifier thru Ethernet connectivity
- System MTBF > 6,000 Hours
- Flexible vibration isolation design for foundation based installation or foundation-free based installation by pneumatic isolators
- Optional head expander, slip table, chamber thermal barrier
- Optional motor-driven shaker rotating mechanism (for slip table)

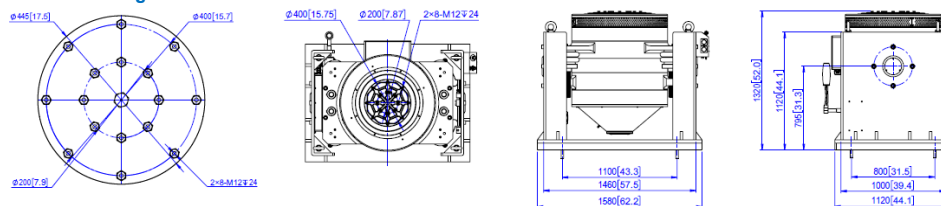


## Performances

Shaker Model	EDM-5000LS
Rated Sine Force	50 kN
Random Force (rms)	35 kN
Shock Force	100 kN
Usable Frequency Range	5-2,500 Hz (1)
Max. Displacement (p-p)	100 mm
Max. Velocity	2.0 m/s
Max. Acceleration (sine, bare table)	800 m/s <sup>2</sup>
Max. Static Payload	800 kg
Armature Diameter	445 mm
Effective Moving Elements Mass	63 kg
Armature Fundamental Resonance	2,000 Hz
	(Bare table, ±5%)
Body Suspension Natural Frequency	<3 Hz
Overturning Movement	>1,000 Nm
Magnetic Flux Leakage	<5 mT (2)
Load Attachment Points	16xM12
Armature Insert Pattern	8x200 mm, 8x400 mm
Dimension (W×D×H, without slip table)	1580×1120×1320 mm
Weight (without slip table)	5,365 kg
System Working Environment	
Temperature	0~40 °C
Humidity (RH, non-condensing)	10~90%
Power Supply Requirement	90 kVA, 3-phase 380V/50Hz (3)
Compressed Air Requirement	0.6 Mpa (3)

Power Amplifier Model	VSA-D563A
Amplifier Type	Digital Switching
Power Module	SiC-FET
Computer Connectivity	Ethernet+Software
Rated Power Output	56 kVA
Max. Output Voltage	120 Vrms
Max. Output Current	490 Arms
Switching Frequency	400 kHz
Signal to Noise Ratio	>70 dB
Conversion Efficiency	>93%
Frequency Response	±1.5 dB (5-5,000Hz)
Harmonic Distortion	<0.8% (5-5,000Hz)
Interlocks and Protection	voltage, current, travel, temperature cooling, module failure, etc
Dimension (W×D×H)	600×940×1965 mm
Weight	820 kg
Air Blower Model	PBL-W50
Blower Power	22 kW
Air Flow, Pressure	1.36 m <sup>3</sup> /s, 0.09 kgf/cm <sup>2</sup>
Hose Diameter	200 mm
Dimension (W×D×H)	1075×871×1950 mm
Weight	394 kg
Accessories (standard)	
Wires/Hose Length	6 m (4)
Accessories	Center Ruler, Dust Cover, Installation Tools

## Outline Drawing



## Notes

- (1) This is sine working frequency defined as per standard ISO 5344. Sine working frequency can start from 2Hz, and Random working frequency can start from 1Hz.
- (2) Magnetic flux leakage 1 mT is available if degaussing coil is equipped.
- (3) Power supply can be customized as per standard of different countries/area.
- (4) Length can be customized as per customer requirement.

Specifications subject to change without prior notice.

Econ Technologies Co., Ltd

Building 4, 1418-41 Moganshan Rd. Hangzhou 310015, China

Tel/Fax: +86-571-88174609, www.econ-group.com, salesintl@econ-group.com

Vibration Testing, Measurement, and Calibration