

Electro-dynamic Vibration Test System

High Force Series

Description:

The high force series shakers are featured by large force, high cooling efficiency, high bearing capacity and excellent guiding capacity, which are suitable for large specimen test. Typical fields of applications are rail transit, ships, automotive, aerospace and aviation, military and defense, etc.

Features:

1. The optimized armature is characterized by high strength, high vibration-resistance, good stiffness and high first resonance frequency;
2. The armature winding adopts high-strength material to ensure excellent insulating performance and high structural strength;
3. Adopt water-cooling design for short circuit ring to improve cooling efficiency;
4. Adopt parallel design for water circuit to improve cooling efficiency and ensure that the heating parts can be cooled down sufficiently;
5. Optimized magnetic circuit design to achieve higher magnetic circuit utilization and lower flux leakage;
6. Random excitation force is equivalent with sine excitation force;
7. Multi-interlock protection to ensure the safety of system and customer's specimen.

System model	TS80W-445	TS80WLS3-445	TS80WLS4-445	TS100-550	TS100LS3-550	TS120-550
1 Sine(peak)/Random(rms)(kN)	80	80	80	100	100	120
2 Shock force(kN)	160/240	160/240	160/240	200/300	200/300	240/360
3 Frequency range(Hz)	5-2,500	5-2,500	5-2,400	5-2,500	5-2,500	5-2,500
4 Max.acceleration(m/s ²)	1,000	1,000	1,000	1,000	1,000	1,000
5 Max.velocity(m/s)	2	2	2	2	2	2
6 Max.displacement(mm)	51	76	100	51	76	51
7 Max.load(kg)	800	800	800	1000	1000	1000
8 Mass of moving elements(kg)	60	60	60	90	90	90
9 Armature diameter(mm)	445	445	445	550	550	550
10 Body suspension natural frequency(Hz)	2.5	2.5	2.5	2.5	2.5	2.5
11 Power amplifier model	PWA80W	PWA80W	PWA80W	PWA100W	PWA100W	PWA120W
12 Power(kVA)	80	80	80	100	100	120
13 Power requirement(kVA)	140	140	140	160	160	180
14 Cooling type	Water cooled	Water cooled	Water cooled	Water cooled	Water cooled	Water cooled

TS120LS3-550	TS160-650	TS160LS3-650	TS180-650	TS180LS3-650	TS200-650	TS200LS3-650
1 120	160	160	180	180	200	200
2 240/360	320/480	320/480	360/480	360/480	400/600	400/600
3 5-2,500	5-2,100	5-2,100	5-2,100	5-2,100	5-2,100	5-2,100
4 1,000	1,000	1,000	1,000	1,000	1,000	1,000
5 2	2	2	2	2	2	2
6 76	51	76	51	76	51	76
7 1000	2,500	2,500	2,500	2,500	2,500	2,500
8 90	150	150	150	150	150	150
9 550	650	650	650	650	650	650
10 2.5	2.5	2.5	2.5	2.5	2.5	2.5
11 PWA120W	PWA160W	PWA160W	PWA180W	PWA180W	PWA200W	PWA200W
12 120	160	160	180	180	200	200
13 180	230	230	250	250	280	280
14 Water cooled	Water cooled	Water cooled	Water cooled	Water cooled	Water cooled	Water cooled