

## INDUCTION-TYPE ELECTRO-DYNAMIC SHAKER

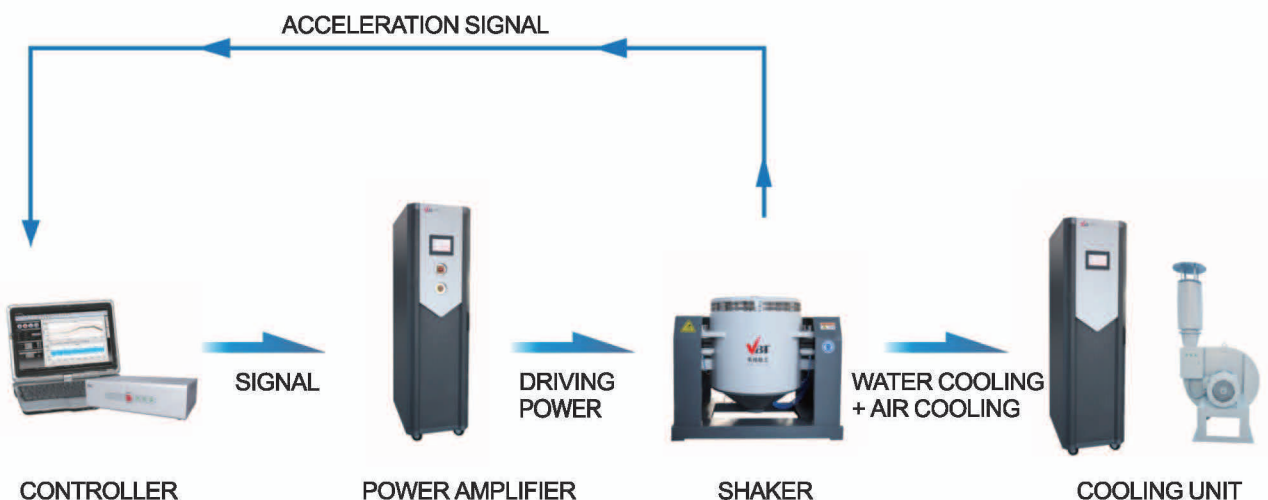
CTS series Induction-Type Electro-Dynamic Shakers have many strengths, such as higher acceleration magnitude, higher usable frequency range, and higher stability than traditional shakers with coil winding armature. It adopts the solid metal armature, which provides electrical simplicity and mechanical durability benefits.

### Induction-Type Armature Features

- Solid aluminum armature (no electrical windings)
- Less weight and higher strength
- No current leads connections
- No cooling water pipes connections

### Performance Characteristics

- Sine Force Range: 10kN-200kN
- Random Force Range: 10kN-200kN
- Shock Force Range: 2-3times Sine Force
- Useable Frequency Range: 1Hz-7,000Hz
- 3 Inch pk-pk displacement standard
- Sine acceleration up to 220g
- Random Acceleration up to 150g
- Safety: Comply with EU Directives



System Model	CTS-70	CTS-80	CTS-100
Sine Force (kN)	70	80	100
Random Force (kN)	70	80	100
Shock Force (kN)	140	160	200
* Higher Shock Force Option (kN)	210	240	300
Sine Acceleration (g)	140	150	180
Random Acceleration (g rms)	100	100	150
# Useable Frequency (Hz)	5-2,800	5-2,800	5-2,800
Displacement (p-pmm)	76	76	76
Velocity (m/s)	2	2	2
& Higher Velocity Option	3	3	3
Effective Mass of Moving Element: (kg)	45/50	45/50	45/50
Armature Diameter (mm)	445	445	445
Armature Inserts Pattern	200-8×M12 400-8×M12	200-8×M12 400-8×M12	200-8×M12 400-8×M12
Max. Internal Load Support (kg)	800	800	800
Stray Magnetic Field (mT)***	1	1	1
Overall Size (mm)			
Length	1,620	1,620	1,400
Width	1,130	1,130	1,150
Height	1,380	1,380	1190
Total Weight of Vertical Shaker (kg)	4,500	4,550	4,600
<b>Recommended Amplifier</b>	<b>SAP-120</b>	<b>SAP-120</b>	<b>SAP-180</b>
Output Power (kVA)	120	120	180
Signal-To-Noise Ratio	65dB	65dB	65dB
Overall Size (mm)			
Length	550	550	550
Width	850	850	850
Height	1,990	1,990	1,990
Total Weight (kg)	650	650	650
<b>Blower (Cooling Fan)</b>	<b>BL-70</b>	<b>BL-80</b>	<b>BL-80</b>
Power (kW)	22	30	30
Air Flow (m <sup>3</sup> /s)	1.3	2.1	2.1
Air Pressure (Pa)	12,000	15,500	15,500
Rotation Speed (r/min)	2,900	2,950	2,950
Overall Size (mm)			
Length	1,200	1,250	1,250
Width	900	1,100	1,100
Height	1,900	2,200	2,200
Total Weight (kg)	460	650	650
<b>Water Cooling Unit</b>	<b>—</b>	<b>WU-1</b>	<b>WU-1</b>
Inner Loop Water Flow (L/min)	—	40	40
Inner Loop Water Pressure (MPa)	—	1	1
Outer Loop Water Flow (L/min)	—	100	100
Outer Loop Water Pressure (MPa)	—	0.25-0.4	0.25-0.4
Overall Size (mm)			
Length	—	550	550
Width	—	850	850
Height	—	1,990	1,990
<b>Water Cooling Unit</b>	<b>150</b>	<b>230</b>	<b>350</b>
System Working Environment	Ambient Temperature Range: 5-40 Ambient Humidity Range: 0-90% RH no condensation Compressed Air Requirement: 6-8 Bar		

\* Optional Higher Shock Force, 3 times the sinusoidal force.

# Optional Lower Useable Frequency, starting from 1Hz.

& Higher Velocity is an option for special test application

@ Stray Magnetic Field value is measured 150mm (6 in) above table, full-field, at normal operating temperature.