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Mechanical Shakers

Mechanical Shaker: Vertical

SALIENT FEATURES

RELIABILITY SHAKER: Moderate vibration level shaker designed for production line demonstration of end item reliability and longevity testing per AGREE Spec MIL-STD-781B, MIL-STD-167 and many other Military Or Commercial Testing Specifications. Shaker may be mated to AGREE Chambers for combined Temperature-Vibration Testing.

FATIGUE SHAKER: A high level vibration shaker designed to perform vibration endurance testing over extended periods of time.

FREQUENCY RANGE: The standard shaker provides a frequency range of 8 to 60 Hz adjusted electronically while the machine is operating.

SIMPLE AMPLITUDE ADJUSTMENT: Moving element consists of two counter- rotating eccentric weighted shafts driven by an electric motor. Amplitude of motion precisely adjusted. Easy access to all adjustments through removable panels. Shaker does not have to be removed from chamber to make adjustments.

HEIGHT: May be specified to match chamber requirements Of 30 to 40 inches. Height may be adjusted + 1 inch from the specified dimension.*

LEVELING: Leveling screws provide for complete horizontal plane adjustment of the shaker table top.*

DAMPING: Friction damping to prevent large table or specimen transient excursions during start and stop of operation

NO FOUNDATION REQUIRED: Shaker is Reaction type with self contained coil springs to isolate the shaker and test load from its base. The shaker may be operated on any floor capable of carrying the dead weight loading. No air bags to accidentally deflate during operation.

ADAPTABLE: The carefully machined aluminum top can be directly fitted to all commercial environmental AGREE chambers.

HEAT LOSS: Insulated table top to prevent excessive heat flow in and out of the chamber can be provided.

CASTER OPTIONS: 1) V-Groove Casters with 10 feet of track allow easy installation and removal of the shaker from the test chamber; and 2) Rubber Casters for machine portability. Both types of casters are supplied with brakes.

HOLE PATTERN: 3/8-16 threaded holes on a 6 inch pattern on the table top provide attachment points for test loads

LOW COST: Equivalent performance in an electrodynamic vibration shaker system costs many times more than a mechanical reaction shaker.

POWER: 208, 230/460 Volt 3 phase, 50/60 Hz



* Standard on 211 and 311 Series. Optional on 111 Series

SPECIFICATIONS

Model Number	Reaction	MAXIMUM DISPLACEMENT		MAXIMUM ACCELERATION			
		Reliability or Fatigue		Reliability		Fatigue	
Table Size (Payload)	Moment in-lbs	Bare Table	Full Payload	Bare	Full	Bare	Full
		in (da)	in (da)	Table	Payload	Table	Payload
				(g)	(g)	(g)	(g)
111 Series							
1818 (50) V	16	.138	.113	8.0	6.8	10.0	8.5
1818 (100) V	16	.138	.096	8.0	5.7	10.0	7.2
1818 (300) V	16	.138	.060	8.0	3.6	10.0	4.5
2424 (50) V	16	.131	.109	7.8	6.4	9.8	8.1
2424 (100) V	16	.131	.093	7.8	5.5	9.8	6.9
2424 (300) V	16	.131	.059	7.8	3.2	9.8	4.1
311 Series							
1818 (100) V	34.5	.296	.207	8.0	8.0	10.0	10.0
1818 (300) V	34.5	.296	.129	8.0	6.0	10.0	7.5
2424 (100) V	34.5	.267	.192	8.0	8.0	10.0	10.0
2424 (300) V	34.5	.267	.123	8.0	5.6	10.0	7.1
3030 (300) V	34.5	.238	.117	8.0	5.3	10.0	6.7
3030 (500) V	34.5	.238	.087	8.0	4.0	10.0	5.0
3636 (300) V	34.5	.209	.109	8.0	5.0	10.0	6.3
3636 (500) V	34.5	.209	.083	8.0	3.8	10.0	4.8
3040 (300) V	34.5	.195	.105	8.0	4.8	10.0	6.1
3040 (500) V	34.5	.195	.080	8.0	3.6	10.0	4.6
3048 (300) V	34.5	.177	.100	8.0	4.6	10.0	5.8
3048 (500) V	34.5	.177	.077	8.0	3.5	10.0	4.4
211 Series							
3040 (500) V	96	.309	.171	8.0	5.7	10.0	7.1
3636 (500) V	96	.304	.170	8.0	5.6	10.0	7.0
3048 (500) V	96	.281	.162	8.0	5.3	10.0	6.7
4848 (500) V	96	.238	.147	7.9	4.8	9.9	6.1
4848 (1000) V	96	.238	.106	7.9	3.5	9.9	4.4
4848 (1000) V	200	.496	.221	7.9	3.5	9.9	4.4
4860 (500) V	96	.216	.138	7.2	4.5	9.0	5.7
4860 (1000) V	96	.216	.101	7.2	3.3	9.0	4.2
4860 (1000) V	200	.450	.211	7.2	3.3	9.0	4.2
4860 (2000) V	200	.450	.138	7.2	2.1	9.0	2.7
4872 (1000) V	96	.196	.096	6.5	3.2	8.2	4.0
4872 (1000) V	200	.410	.202	6.5	3.2	8.2	4.0
4872 (2000) V	200	.410	.134	6.5	2.0	8.2	2.6
6060 (1000) V	96	.195	.096	6.4	3.2	8.1	4.0
6060 (1000) V	200	.408	.202	6.4	3.2	8.1	4.0
6060 (2000) V	200	.408	.134	6.4	2.0	8.1	2.6
6096 (1000) V	200	.262	.158	4.1	2.4	5.2	3.1
6096 (2000) V	200	.262	.113	4.1	1.7	5.2	2.2

SPECIFICATIONS AND PRICES SUBJECT TO CHANGE WITHOUT NOTICE

1. If machine is supplied with Insulated Top, maximum Acceleration and Displacement shall be slightly derated.
2. Other sizes are available upon request.
3. Larger reaction moments are available to produce greater displacement capabilities.

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