

Section 2 Specifications

Model No.	All Analog "A" Class Units	All Analog "A" Class Units	All Analog "E" Class Units	All Analog "E" Class Units
Exterior Unit Dimensions in. (cm)				
Width	41" (104.1 cm)	41" (104.1 cm)	41" (104.1 cm)	41" (104.1 cm)
Height	41" (104.1 cm)	41" (104.1 cm)	41" (104.1 cm)	41" (104.1 cm))
Length	32" (81.3 cm)	32" (81.3 cm)	32" (81.3 cm)	32" (81.3 cm)
Weight lbs (kg)	476 (215.9)	476 (215.9)	512 (232.2)	512 (232.2)
Electrical: Standard Temperature/Refrigerated - Dedicated Power Source				
Volts (AC)	120/120	220-240/220-240	120/120	220-240/220-240
Amps	12.0/14.0	6.5/8.5	7.5/14.0	6.5/8.5
Watts	1450/1600	1500/1950	900/1600	1500/1950
Freq.	50/60 (both models)	50/60 (both models)	50/60 (both models)	50/60 (both models)
Speed	40 to 400 rpm, ±10 rpm	40 to 400 rpm, ±10 rpm	15 to 500 rpm, +1 rpm	15 to 500 rpm, +1 rpm
Timer	Continuous or timed from 1-60 mins	Continuous or timed from 1-60 mins	Continuous or timed from 0.1-999 hours or 0.1-999 mins	Continuous or timed from 0.1-999 hours or 0.1-999 mins
Recorder Output	None	None	None	None
RS232 Interface	None	None	Monitor speed and time with a computer	Monitor speed and time with a computer
Display	Analog tachometer displays speed in rpm	Analog tachometer displays speed in rpm	2 individual LED displays indicate time and speed simultaneously. 3 characters height 1/2 inch (1.27 cm)	2 individual LED displays indicate time and speed simultaneously. 3 characters height 1/2 inch (1.27 cm)
Soft Start Feature	None	None	Software algorithms prevent sudden start/stops	Software algorithms prevent sudden start/stops
Mutable Alarms	None	None	Audible portion of the alarm can be silenced for a 1 hr. period without deactivating the actual alarm condition by depressing any key	Audible portion of the alarm can be silenced for a 1 hr. period without deactivating the actual alarm condition by depressing any key

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Motor	All Analog "A" Class Units	All Analog "A" Class Units	All Analog "E" Class Units	All Analog "E" Class Units
Model No.	Permanent Magnet DC	Permanent Magnet DC	Solid State Brushless DC	Solid State Brushless DC
Speed	None	None	Audible with flashing LED indicates when speed deviates more than 10% of set point	Audible with flashing LED indicates when speed deviates more than 10% of set point
Speed Shut Off	None	None	When speed deviates 10% of set point, unit will shut down immediately	When speed deviates 10% of set point, unit will shut down immediately
Timer	None	None	Beeps twice when time has expired. Shaking motion stops.	Beeps twice when time has expired. Shaking motion stops.
Unbalanced Load	None	None	If the unit is running in an unbalanced condition, an alarm will sound and the shaker will stop until the end user corrects the condition. The speed display will flash "bAL" on speed panel LED.	If the unit is running in an unbalanced condition, an alarm will sound and the shaker will stop until the end user corrects the condition. The speed display will flash "bAL" on speed panel LED.

Optional Platform Dimensions in. (cm)	
Catalog Number	L xW
30115	Universal 30" x 18" (76.2 x 45.7 cm)

The MAXQ 5000 series of incubated and refrigerated floor shakers are available in one of two control configurations:

- A-Class shakers SHKA5000, SHKA5000-1CE, SHKA5000-7 and SHKA5000-8CE: control temperature by a Proportional/Integral/Derivative (PID) microprocessor-based controller. Solid-state control maintains time and speed and is adjustable with rotary dials. Analog tachometer displays speed in RPM, verifying accuracy of speed setting. Refrigerated units feature environmentally safe CFC free insulation and coolant.
- E-Class shakers SHKE5000, SHKE5000-1CE, SHKE5000-7 and SHKE5000-8CE: control temperature, time and speed by a Proportional/Integral/Derivative (PID) microprocessor-based controller that is adjustable with membrane switches on a keypad in 1 rpm increments. Solid-state DC brushless motor provides more power. Refrigerated units feature environmentally safe CFC free insulation and coolant. Flashing display indicates power interruption. Pressing any key will clear display. Non-volatile memory maintains speed and time set points in the event of a power interruption. Speed and time set points are automatically reactivated after power is restored.

Two temperature ranges are available all with accuracy of $\pm 0.1^{\circ}\text{C}$ at 37°C in flask:

- Standard Temperature: SHKA5000, SHKA5000-1CE, SHKE5000 and SHKE5000-1CE, 10°C above ambient to 60°C .
- Refrigerated: SHKA5000-7, SHKA5000-8CE, SHKE5000-7 and SHKE5000-8CE: 15°C BELOW ambient to 60°C . Refrigeration system needs to be turned off whenever the set point is at or above 32°C .

In addition, all versions offer:

- Drive interrupt halts shaking action when door is opened.
- Door window.
- Foot pedal opens door automatically for hands free operation.
- All set points are retained by non-volatile memory that automatically reactivates after power is restored.
- Visual, user adjustable over-temperature safety signal with independent thermostat controls the heat if main controller fails.
- 1-inch (2.54 cm) triple eccentric orbital drive on 6 sets of permanently lubricated ball bearings.
- Over temperature protection in the event of primary control failure.
- 75 lb. (34 kg) platform load capacity at safe speeds less than 400 rpm for A-Class shakers and less than 500 rpm for E-Class shakers.
- UL, cUL and CE certification.

Environmental Operating Conditions

Pollution Degree 2

Installation Category II

Altitude: 2000 meters MSL (Mean Sea Level)

Relative Humidity: 20% to 80% maximum, non-condensing

Electrical Supply :120VAC or 240VAC

Voltage Tolerance: +10% of normal rated line

Temperature: 15°C to 32°C

Product Usage: Indoor use only

Caution Shaker operation in a CO₂ enriched atmosphere is not recommended. Formation of carbonic acid could cause electrical failures. s