Section 5 Specifications

Shaking

Range . . . . . .25-525 RPM

Accuracy . . . . . .1 RPM

Motion . . . . . .One inch/orbital

Indicator . . . . . .LCD in 1 RPM increments

Timer

Periods . . . . . Programmable from 5 minutes to 200 hours or continuous operation

Indicator . . . . . .LCD in 5 minute increments

Run Time . . . . . Display counts down for a timed run or counts up when in a “hold” function

Alarms

Time . . . . . .Run Termination

RPM . . . . . .Tracking high/low RPM

Power Fail . . . .Message displayed on LCD screen

Safety

RPM . . . . . .Independent platform motion

LCD Display

Run Time, RPM, Alarm Conditions, and Power Failure indicated by messages

Drive

Triple-counterbalanced, quiet, belt drive. Accommodates unbalanced platform loads or uneven flask placement

Drive Motor

1/3 HP brushless DC, permanently-lubricated ball bearing

Automatic Restart

Microprocessor retains all programming in non-volatile memory. In the event of a power outage, the shaker restarts automatically.

Dimensions

Exterior . . 30.5" W x 7.8" H x 25.5" F-B (77.5cm x 19.8cm x 64.8cm)

Electrical

SHKE416/SHKE430 . . .115VAC, 50/60Hz, 1 PH, 1.25 FLA

SHKE416-1CE/SHKE430-1CE . . .230VAC, 50/60Hz, 1 PH, 0.65 FLA

Data Output . . . . . .RS-232 standard

Remote Alarm . . . . .Time, RPM and Power Alarms Contacts

Certification

UL UL61010 A-1

Declaration of Conformity available on request

Capacity

With 29.5" x 18.0" Platform Maximum (91) 25ml up to (4) 6L or (6) 2800 ml Fernbach

With 36.0" x 24.0" Platform* Maximum (75) 125ml up to (8) 6L or (12) 2800 ml Fernbach

**Maximum RPM when the 36" x 24" platform is installed is 400 RPM.*

Weight

Net . . . . . .138 lbs. (62.7 kg)

Shipping . . . . . .176 lbs. (79.9 kg)

Ambient Operating Conditions

Temperature . . . . . .4°C (39°F) to 40°C (104°F)

Humidity . . . . . .20% to 90%, non-condensing

Sound Level - Not to exceed 85 dB

Intended Use

Orbital shakers are designed to provide increased aeration in a stable temperature environment.

Unintended Use

1) Not intended for use in Class I or II applications as defined in 21 CFR
2) Not intended for mixtures of flammable materials

Safety Specifications

Indoor use only
Altitude - 2,000 meters
Temperature - 4°C to 40°C
Humidity - 20% to 90%, non-condensing
Mains Supply Fluctuations - ±10%
Installation Category II[1]
Pollution Degree 2[2]
Class of Equipment I

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[1] Installation category (overvoltage category) defines the level of transient overvoltage which the instrument is designed to withstand safely. It depends on the nature of the electricity supply and its overvoltage protection means. For example, in CAT II which is the category used for instruments in installations supplied from a supply comparable to public mains such as hospital and research laboratories and most industrial laboratories, the expected transient overvoltage is 1500V for a 230V supply and 1500V for a 120V supply.

[2] Pollution Degree describes the amount of conductive pollution present in the operating environment. Pollution degree 2 assumes that normally only non-conductive pollution such as dust occurs with the exception of occasional conductivity caused by condensation.