Section 5 Specifications

**Specifications are based on nominal voltages of 115V or 230V in ambients of 22°C to 25°C.*

Shaking

Range . . . . . .25-525 RPM

Accuracy . . . . . .1 RPM

Motion . . . . . .One inch per orbit

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

Temperature

Range . . . . . .5°C above ambient to 80°C (176°F)

Control Range . . . . . .0.1°C

Temperature Uniformity . . . .0.2° at 37°C (in flask)

. . . . . .0.6° at 60°C (in flask)

. . . . . .1° at 80°C (in flask)

Timer

Set for continuous (hold) operation or set for countdown operation in 5-minute increments from 5 minutes to 200 hours. Timer counts up or down in 5-minute increments.

Alarms

Audible and visual alarms for adjustable tracking high/low RPM, independent platform monitor (check belt), adjustable tracking high/low temperature, independent over temperature, temperature sensor failure, run termination and power failure.

Safeties

Over temperature alarm conditions shuts down heaters, independent platform monitor alarm condition shuts down motor.

LCD Display

40-character LCD readout continuously displays speed in 1 RPM increments, temperature in 0.1°C increments, and time to 5-minute increments.

Microprocessor

Non-volatile memory retains all programming and automatically restarts in the event of a power failure, controlled acceleration provides smooth start up and stopping.

Drive Motor

1/3 HP brushless DC, permanently lubricated ball bearing

Cover

Hardened acrylic, dual gas spring cylinder assisted

Construction

Interior . . . . . .Cold rolled steel

Exterior . . . . . .Cold rolled steel

Finish . . . Powder coated for a durable, easily maintained surface

Platform . . . . . .Anodized brushed aluminum

Dimensions

Exterior . . . . . .4.3" W x 20.9" H x 29.0" F-B
. . . . . .(61.7cm x 53.1cm x 73.7cm)

Exterior (lid open) .4.3" W x 35.7" H x 29.0" F-B
. . . . . .(61.7cm x 90.7cm x 73.7cm)

Interior . . . . . .0.6" W x 12.6" H x 20.5" F-B
. . . . . .(52.3cm x 32.0cm x 52.1cm)

Electrical

Nominal . . .115 VAC, 50/60 Hz, 1 PH, 6.5 FLA,
Operating Range: 90 - 125 VAC

Nominal . . . .230 VAC, 50/60Hz, 1 PH, 3.2 FLA,
Operating Range: 180 - 253 VAC

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

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

Certification

UL . . . . . .Standard 3101-1

CSA . . . . . .Standard C22.2 No. 1010

CE Mark . . . . . .IEC 1010 and EMC

Capacity

Flasks from (49) 25ml up to (6) 2L

Weights

Net . . . . . .185 lbs. (83.9kg)

Shipping . . . . . .266 lbs. (120.7kg)

Optional Platforms

Size . . . . . .18" x 17-3/4" (45.7cm x 45.1cm)

Clips . . .25ml, 50ml, 125ml, 250/300ml, 500ml, 1l, and 2l

Ambient Operating Conditions - For indoor use only

Temperature . . . . . .10°C (50°F) to 40°C (104°F)

Humidity . . . . . .20% to 80%, non-condensing

Sound Level . . . . . .Not to exceed 85db

Safety Specifications

Altitude - 2,000 meters

Temperature - 10°C to 40°C

Humidity - 20% to 80%, non-condensing

Mains Supply Fluctuations - Operating Voltage Range

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 that 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 2500V for a 230V supply and 1500V for a 120V supply.

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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.