

Shaking & Rotating



Boekel Thermal Mixer II

The Thermal Mixer II has a large intuitive touch screen, interchangeable auto-recognized blocks to fit most laboratory consumables, multiple modes for increased process performance and a large and accurate temperature and mixing range.

FEATURES

- Large Color Touch Screen
- Programmable heating, cooling, and mixing sequences
- Intuitive navigation and programming
- 11 Interchangeable, auto-recognized blocks
- Up to five independent programmable steps
- Super accurate 4 point calibration
- Steps can be repeated in the Repeat Mode
- Easy to remove blocks
- 270810 Block included

ACCESSORIES

Catalog No. Interchangeable Platforms

| | |
|--------|---|
| 270810 | Block, 24 x 0.5ml Tubes |
| 270811 | Block, 24 x 1.5ml Tubes |
| 270812 | Block, 24 x 2.0ml Tubes |
| 270813 | Block, 8 x 5.0ml Tubes |
| 270814 | Block, 24 12mm Tubes |
| 270815 | Block, 24 Cryo Tubes |
| 270816 | Block, 8 x 15ml Conical Tubes |
| 270817 | Block, 4 x 50ml Conical Tubes |
| 270818 | Block, Standard and Deepwell Microplate |
| 270819 | Block, 96 Well PCR Plate |
| 270820 | Block, 384 Well PCR Plate |



| | Heat Cool Thermal Mixer II | Heat ONLY Thermal Mixer II |
|---|-------------------------------------|-------------------------------------|
| Model # | 270800 | 270900 |
| Block Included with Unit | 0.5ml x 24 tubes | 0.5ml x 24 tubes |
| Unit Dimensions W x D x H (in) | 9 x 13 x 5.3 | 9 x 13 x 5.3 |
| Unit Dimensions W x D x H (cm) | 23 x 33 x 13.5 | 23 x 33 x 13.5 |
| Speed Range (rpm) | 0, 250 to 3000 | 0, 250 to 3000 |
| Speed Setting Increments (rpm) | 50 | 50 |
| Timer | 0 - 99 Hours 59 Min 59 seconds / ∞ | 0 - 99 Hours 59 Min 59 seconds / ∞ |
| Operation Temperature Range | 10°C to 30°C | 10°C to 30°C |
| Temperature Range | 15°C below ambient to 100°C | 5°C above ambient to 100°C |
| Heat Up Rate (Selectable) | 5°C/Min, 2°C/Min, 1°C/Min | 5°C/Min, 2°C/Min, 1°C/Min |
| Cooling Rate (Fixed) Above Ambient - Below Ambient | 3°C/Min - 5°C/Min | N/A |
| Temperature Accuracy 20°C to 40°C < 20°C & >40°C | +/- 0.2°C +/- 0.5°C | +/- 0.2°C +/- 0.5°C |
| Temperature Uniformity 20°C to 40°C | ±0.3°C | ±0.3°C |
| Temperature Setting | ±0.1°C / 1.0°C to 99°C | ±0.1°C / 1.0°C to 99°C |
| Electrical Approval | Power pack UL, cUL, and CE approved | Power pack UL, cUL, and CE approved |
| Shipping Weight | 25 lbs. / 11.34 kgs. | 25 lbs. / 11.34 kgs. |



Boekel Jitterbug-2/Jitterbug-4 Microplate Thermoshaker

FEATURES

- Accommodates two or four standard microplates or strip trays
- Independently set temperature, shaking speed and mixing duration
- Chamber in a chamber design for excellent stability
- Smooth, quiet operation
- Temperature calibration
- Heated lid to provide greater uniformity
- Accommodates Std. 96, 384, and 536 Plates
- Power pac is UL, CSA and CE approved
- Unit is CE marked

| | Jitterbug-2 - 2 Plate Capacity | Jitterbug-4 - 4 Plate Capacity |
|------------------------------|--|--|
| Catalog No. | 270400 | 270440 |
| Speed | 250 to 1200 rpm | 250 to 1200 rpm |
| Orbit | 2 mm | 2 mm |
| Stability | ±0.1°C | ±0.1°C |
| Uniformity | ±0.2°C | ±0.2°C |
| Timer (with auto shut off) | 1 min to 96 hrs | 1 min to 96 hrs |
| Time setting resolution | 1 min | 1 min |
| Temperature range | Ambient +5 to 60°C | Ambient +5 to 60°C |
| Product Dimensions W x D x H | 10.5" x 10.6" x 6" (26.6 cm x 26.7 cm x 14.5 cm) | 15.5" x 15.5" x 6" (38.5 cm x 27 cm x 14 cm) |
| Power | 12 V DC, 4.5 A via 115/ 230 V AC adapter | 12 V DC, 5.0 A via 115/ 230 V AC adapter |
| Shipping Weight | 16 lbs. / 7.25 kgs. | 16 lbs. / 7.25 kgs. |

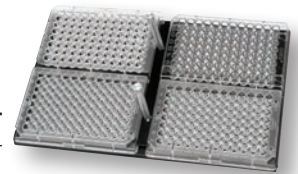
Boekel Microplate Shakers

FEATURES

- Compact with low profile and small footprint
- Reliable, regulated shaking for two or four microplates
- Simple screw attachments allow quick and easy fitting of any standard depth 96- or 384-well plates, holding the plates securely in place
- LCD Display
- Power pac is UL, CSA and CE approved
- Unit is CE marked

ACCESSORIES

| Catalog No. | Interchangeable Platforms |
|-------------|-------------------------------|
| 270390 | Platform for four microplates |



| | 2 Plate Capacity | 4 Plate Capacity |
|------------------------------|--|--|
| Catalog No. | 270300 | 270340 |
| Speed | 250 to 1000 rpm | 250 to 1000 rpm |
| Orbit | 2 mm | 2 mm |
| Timer (with auto shut off) | 1 min to 96 hrs | 1 min to 96 hrs |
| Time setting resolution | 10 sec | 10 sec |
| Product Dimensions W x D x H | 7" x 7.25" x 3.5" (17.5 cm x 18.5 cm x 9 cm) | 7" x 7.25" x 3.5" (17.5 cm x 18.5 cm x 9 cm) |
| Power | 12 V dc, 0.5 A via 115/ 230 V AC adapter | 12 V dc, 0.5 A via 115/ 230 V AC adapter |
| Shipping Weight | 10 lbs. / 4.5 kgs. | 10 lbs. / 4.5 kgs. |



Boekel Orbital Shaker

FEATURES

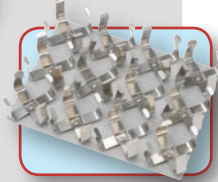
- Compact with low profile and small footprint
- Smooth horizontal orbital motion for mixing in bottles, flasks, and beakers
- Soft start and noise-free operation
- Can be used in an incubator 4°C to 40°C
- Platform not supplied. See interchangeable platforms listed below.
- Power pac is UL, CSA and CE approved
- Unit is CE marked

ACCESSORIES

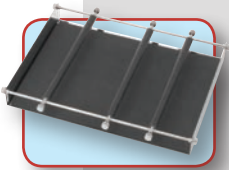
| Catalog No. | Interchangeable Platforms |
|-------------|---|
| 270290 | 6 x 250 mL flasks/400 mL beakers |
| 270291 | 12 x 100 mL flasks/150 mL beakers |
| 270292 | Universal platform with adjustable bars |
| 270293 | Flat platform with rubber mat |



270290



270291



270292



270293

Orbital Shaker

| Catalog No. | 270200 |
|------------------------------|--|
| Speed | 50 to 300 rpm |
| Orbit | 18 mm |
| Load Limit | 5.5 lbs. / 2.5 kgs. |
| Timer (with auto shut off) | User defined up to 99 hours |
| Time setting resolution | 1 min |
| Tray Dimensions W x D | 10" x 8" (25.4 cm x 20.3 cm) |
| Product Dimensions W x D x H | 10.5" x 11" x 4" (26.7 cm x 28 cm x 10 cm) |
| Power | 12 V dc, 0.5 A via 115/ 230 V AC adapter |
| Shipping Weight | 13 lbs. / 5.8 kgs. |



Orbitron V™ Platform Rotator

FEATURES

- 3D gyrating motion
- 12" square aluminum tray with flat mat (standard)
- 8" square or 12" square double stacking tray (optional)
- Easy to adjust angle, no tools required
- Dimpled rubber mat (optional)
- Supplied with flat mat
- Unit is UL/CSA & CE marked

ACCESSORIES

| Catalog No. | Description |
|-------------|--|
| 260288 | Optional 8 inch Tray (Includes Platform, 1 each, flat and dimpled mat) |
| C 2202208 | Dimpled rubber mat 12" |
| C 2202162 | Flat rubber mat 12" |
| C 2202774 | Dimpled rubber mat 8" |
| C 2202775 | Flat rubber mat 8" |
| 260312 | Stacking tray 12" |

Orbitron V (115 VAC)

Orbitron V (230 VAC)

| Catalog No. | 281111 | 281111-2 |
|------------------------------|---|---|
| Variable speed | 5-120 rpm orbits/min | 5-120 rpm orbits/min |
| Variable tilt angle | 0° - 12° | 0° - 12° |
| Operating Temperature | Can operate at 4°C to 40°C | Can operate at 4°C to 40°C |
| Timer | Adjustable up to 12 hours | Adjustable up to 12 hours |
| Product Dimensions W x D x H | 14" x 12" x 11" (35.5 cm x 30.4 cm x 27.9 cm) | 14" x 12" x 11" (35.5 cm x 30.4 cm x 27.9 cm) |
| Load Limit | 20 lbs. / 9 kgs. | 20 lbs. / 9 kgs. |
| Power | 115 VAC; 50/60Hz, 6 watts, 0.6 amps | 230VAC; 50/60Hz, 60 Watts, 0.7 amps CE marked |
| Shipping Weight | 25 lbs. / 11.4 kgs. | 25 lbs. / 11.4 kgs. |



Mini Orbitron™ Platform Rotators

FEATURES

- Provides gentle, continuous mixing of specimens
- Extremely quiet
- Auto reverse
- Low profile and small footprint minimizes bench space
- Accommodates a variety of blood tubes, Centrifuge tubes, glass vials, or plates
- Supplied non-slip mats can be cleaned with soap and water and autoclaved too.

| | Mini Orbitron (115 VAC) | Mini Orbitron (230 VAC) | Variable Speed Nutator (115 VAC) | Variable Speed Nutator (230 VAC) |
|------------------------------|---|--------------------------|---|----------------------------------|
| Catalog No. | 260100 | 260100-2 | 201100 | 201100-2 |
| Speed | 24 rpm Fixed | | 4-24 rpm Variable | |
| Tilt Angle | 20° Fixed | | | |
| Load Capacity | 0.8 kg (1.8 lbs) | | | |
| Operating Temperature | +4°C to 40°C | | | |
| Tray Size W x D | 9.75" x 5.25" (24.3 cm x 13.1 cm) | | | |
| Product Dimensions W x D x H | 7.5" x 5" x 5.5" (19 cm x 12.7 cm x 13.97 cm) | | 7.5" x 5" x 5.5" (18.7 cm x 12.5 cm x 13.7) | |
| Net Weight | 2.21 lbs / 1 kg | | | |
| Power | 115 VAC, 60 Hz, 0.2 amps | 230 VAC, 50 Hz, 0.2 amps | 115 VAC, 60 Hz, 0.2 amps | 230 VAC, 50 Hz, 0.2 amps |
| Shipping Weight | 3 lbs. / 1.3 kgs. | | | |



Orbitron I™ & Orbitron II™ Platform Rotator

FEATURES

- Gentle, low foaming agitation
- Small footprint
- Can be used in incubator or cold room
- Accepts many different sized tubes simultaneously with no need for unwieldy racks or clamps
- Thin power cord easily passes through incubator door gaskets
- Rugged steel platform has notches for bungee cords if necessary
- Fixed position platform at 23° angle
- Supplied with 12" x 12" tray and dimpled mat
- Power pac is UL, CSA and CE approved
- Unit is CE marked

| | Orbitron I (115 VAC) | Orbitron I (230 VAC) | Orbitron II (115 VAC) | Orbitron II (230 VAC) |
|---|---|------------------------------------|-------------------------------------|------------------------------------|
| Catalog No. | 260200 | 260200-2 | 260250 | 260250-2 |
| Speed | Approx. 20 orbits/min Fixed | | 6-23 orbits/min Variable | |
| Tilt Angle | 23° Fixed | | 0° - 23° Variable | |
| Load Limit | 2.25 lbs. / 1 kgs. | | | |
| Operating Temperature | 4°C to 40°C (in a cold room or incubator) | | | |
| Tray Dimensions W x D | 12" x 12" (30.5 cm x 30.5 cm) | | | |
| Product Dimensions w/platform W x D x H | 12" x 12" x 10" (30.5 cm x 30.5 cm x 25.4 cm) | | | |
| Shipping Weight | 10 lbs. / 4.4 kgs. | | 12 lbs. / 5.5 kgs. | |
| Power | 115 VAC; 50/60Hz, 6 watts, 0.5 amps | 230VAC; 50/60Hz, 6 Watts, 0.5 amps | 115 VAC; 50/60Hz, 6 Watts, 0.5 amps | 230VAC; 50/60Hz, 6 Watts, 0.5 amps |



Boekel Mini Tube Rotator

FEATURES

- A Variable Speed with LCD display
- Includes 260751 Carousel for 36 x 1.5/2.0ml tubes
- Provides complete 360° Rotation
- An adjustable 0-90° Mixing Angle
- Small footprint for your bench – we know you need all the space you can get!
- Interchangeable carousels for all common laboratory tubes
- Cold Room and Incubator compatible
- AC Adapter 115v to 240V with UL/CSA and CE markings

Mini Tube Rotator

| | |
|--------------------------------|--|
| Catalog No. | 260750 |
| Speed | Variable 4-18 RPMs |
| Mixing Angle | Adjustable 0-90° |
| Load Capacity | 1.75 lbs |
| Carousel Capacity | (36) 1.5/2.0 ml tubes, (10) 10/15 ml and (16) 5/7 ml tubes, (6) 50ml tubes |
| Operating Temperature | +4°C to 40°C |
| Product dimensions (W x D x H) | 9" x 5" x 6" (22.8 cm x 12.7 cm x 15.2 cm) |
| Power Requirements | 12v DC via 100-240 V AC Adapter |
| Shipping Weight | 4.5 lbs. / 2.0 kgs. |

ACCESSORIES

| Catalog No. | Interchangeable Platforms |
|-------------|---|
| 260751 | Carousel, 36 x 1.5/2.0 ml Tubes |
| 260752 | Carousel, 10 x 10/15ml Tubes and 16 x 5/7ml Tubes |
| 260753 | Carousel, 6 x 50 ml Tubes |



Boekel Tube Rotator

FEATURES

- Digital microprocessor control
- Adjustable speed provides gentle or vigorous mixing action
- Adjustable angled head offers mixing angles from 90 to 180 degrees
- Five carousel options provide greater versatility for the most tube mixing needs
- Includes 260653 - 14 Place Tube Carousel for 50mL
- Power pac is UL, CSA and CE approved
- Unit is CE marked

ACCESSORIES

| Catalog No. | Interchangeable Carousel |
|-------------|---|
| 260651 | 46 place tube carousel for 1.5/ 2.0 ml tubes |
| 260652 | 28 place tube carousel for 15 mL tubes |
| 260653 | 14 place tube carousel for 50 mL tubes |
| 260654 | 63 place tube carousel for 18.5 mm cul. tubes |
| 260655 | 63 place tube carousel for 14 mm cul. tubes |

Tube Rotator

| | |
|------------------------------|---|
| Catalog No. | 260650 |
| Speed | 4 - 80 rpm |
| Carousel angle | 90 - 180 degrees |
| Timer (with auto shut off) | Up to 99 hrs and 59 minutes |
| Carousel capacity | 46 x 9 - 11 mm tubes, 28 x 14 - 18 mm tubes, 14 x 27 - 34 mm tubes, 63 x 18.5 mm culture tubes (drum rotor) and 63 x 14 mm culture tubes (drum rotor) |
| Operating Temperature | +4°C to +40°C |
| Product Dimensions W x D x H | 12" x 17" x 15" (30.4 cm x 43.1 cm x 38.1 cm) |
| Power | 24.0 V DC, 2.70 A via 100 - 240 VAC adapter |
| Shipping Weight | 16 lbs. / 7.25 kgs. |



Boekel Rocker II™

FEATURES

- Ambient temperature range 4°C to 40°C
- Low voltage power is supplied by wall mount transformer
- Accepts a wide variety of flasks and plates and tubes
- Adjust tilt angle and speed without the need for tools
- Thin power cord easily passes through incubator door gaskets
- Supplied with flat non-skid mat
- Power pac is UL, CSA and CE approved
- Unit is CE marked

ACCESSORIES

| Catalog No. | Description |
|-------------|---|
| 260355 | Stacking Tray (Supplied with rubber non-skid mat) |
| C2202208 | Dimpled Mat |

| Catalog No. | Rocker II (115 VAC) 260350 | Rocker II (230 VAC) 260350-2 |
|---|--|---------------------------------|
| Adjustable Speed | 3 - 25 rpm | 3 - 25 rpm |
| Tilt Angle | 0° to 20° | 0° to 20° |
| Load Limit | 6 lbs. / 2.7 kgs. | 6 lbs. / 2.7 kgs. |
| Operating Temperature | 4°C to 40°C | 4°C to 40°C |
| Stacking Tray Weight | 1.5 lbs. / 0.7 kgs. | 1.5 lbs. / 0.7 kgs. |
| Stacking Tray Clearance | 2.5" (6.3 cm) | 2.5" (6.3 cm) |
| Product Dimensions w/o platform W x D x H | 7.5" x 7" x 5" (19.1 cm x 17.8 cm x 12.7 cm) | |
| Product Dimensions w/platform W x D x H | 12" x 12" x 7" (30.5 cm x 30.5 cm x 17.8 cm) | |
| Power | 12 V dc, 0.5 A via 115/ 230 V AC adapter CE marked | |
| Shipping Weight | 13 lbs. / 5.9 kgs. | 13 lbs. / 5.9 kgs. |



282000

Boekel Tube Rockers

FEATURES

- Provides gentle rocking action for mixing of specimens
- Low profile and small footprint minimizes bench space
- Fixed tilt angle - 35°
- Supplied with non-slip autoclavable tube pad (silicon rubber)
- Power pac is CSA, CE and PSE approved



280150



260450

| | Tube Rocker XL Variable Speed | Tube Rocker Mini Variable Speed | Tube Rocker Mini Fixed Speed |
|---------------------------------|--|--|---------------------------------|
| Catalog No. | 282000 | 280150 | 260450 |
| Speed | 5 - 25 rpm | 5 - 25 rpm | 18 rpm |
| Tilt Angle | 35° angle fixed | | |
| Tube Capacity | Up to 19 tubes maximum 120 mm long | Up to 8 tubes maximum 120 mm long | |
| Load Capacity | 2.8 lbs. / 1.3 kgs. | 1.8 lbs. / 0.8 kgs. | |
| Product Dimensions W x D x H | 16" x 4.7" x 5" (50 cm x 12 cm x 12.7 cm) | 8.6" x 4.7" x 5" (21.8 cm x 12 cm x 12.7 cm) | |
| Power | 12 VDC, 0.5 A via 100/240 Volt AC adapter | | |
| Shipping Weight | 8 lbs. / 3.6 kgs. | 5 lbs. / 2.26 kgs. | |



Boekel Mini Tube Vortex Mixer

FEATURES

- Compact, with low profile and small footprint
- Pressure sensitive cup
- Continuous or touch operation
- Rubber suction pads prevent walking, absorb vibration
- Low voltage supply for safe cold room use
- Power pac is UL, CSA and CE approved
- Unit is CE marked

| Catalog No. 270100 | Vortex Mixer |
|------------------------------|---|
| Speed | 300 to 6000 rpm/ continuous or burst |
| Orbit | 2 mm |
| Tube Diameter (maximum) | 20 mm |
| Operating Temperature | +4°C to +40°C |
| Product Dimensions W x D x H | 4.13" x 5.9" x 3.35" (10.5 cm x 15 cm x 8.5 cm) |
| Power | 12 V dc, 0.5 A via 115/ 230 VAC adapter |
| Shipping Weight | 4 lbs. / 1.8 kgs. |

 **BOEKEL**™
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