

Shaking & Rotating



Boekel Heat/ Cool Thermal Mixer



FEATURES

- Digital microprocessor control
- Adjustable speed provides gentle or vigorous mixing action
- Temperature range from 18° below Ambient to 99° C for great functionality in the life science lab
- Four thermal block configurations accommodate MC tubes, standard/ deep-well plates and PCR strip/ plates
- Programmable control for standard operation, on/ off mixing function, and on/ off mixing function with heat/ cool programmability, including up to ten programmable settings per set function
- Supplied with platform 270690
- Power pac is UL, CSA and CE approved
- CE marked
- 2 year warranty

ACCESSORIES

Catalog No.	Interchangeable Platforms
270690	20-place 1.5/ 2.0ml tube block
270691	20-place .5ml tube block
270692	96 Pos. PCR tube block
270693	Standard/ Deep-well MTP block

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
- Heated lid to provide greater uniformity
- Accommodates Std. 96, 384, and 536 Plates
- Power pac is UL, CSA and CE approved
- CE marked
- 2 year warranty

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
- Power pac is UL, CSA and CE approved
- CE marked
- 2 year warranty



ACCESSORIES

Catalog No.	Interchangeable Platforms
270390	Platform for four microplates

Boekel Microtube Thermoshaker



FEATURES

- Benchtop shaker/ incubator
- Compact benchtop incubator, without shaking
- Microtube shaker without temperature control, also suitable for cold room operation
- Rapid heat up
- Continuous or timed operation
- Programmable timer
- Power pac is UL, CSA and CE approved
- CE marked
- 2 year warranty

ACCESSORIES

Catalog No.	Interchangeable Platforms
270590	20 x 1.5/2.0mL microtubes
270591	20 x 0.5 mL and 12 x 1.5 mL microtubes

Boekel Heat/ Cool Thermal Mixer

Catalog No.	270600
Speed	250 to 1400 rpm
Orbit	2 mm
Heat-up time	5° C per min.
Cool-down time	2 - 3° C between 99 C and ambient, 0.5 - 1° C between ambient
Timer (with auto shut off)	Completely programmable including on/ off mix function
Thermal block capacity	20 .5ml MCT, 20 1.5/ 2.0ml MCT, 1 96 well PCR plate or PCR strip tubes, 1 standard or deep well micro-plate
Product Dimensions W x D x H	175 mm x 185 mm x 90 mm (7" x 7.25" x 3.5")
Power	19.4 V dc, 4.74 via 100/ 240 AC adapter
Shipping Weight	7.25 kgs. (16 lbs.)

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-Switch 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	265 mm x 270 mm x 145 mm (10.5" x 10.6" x 6")	385 mm x 270 mm x 140 mm (15.5" x 15.5" x 6")
Power	12 V dc, 4.5 A via 115/ 230 V AC adapter	12 V dc, 4.5 A via 115/ 230 V AC adapter
Shipping Weight	7.25 kgs. (16 lbs.)	7.25 kgs. (16 lbs.)

2 Plate Capacity

4 Plate Capacity

Catalog No.	270300	270340
Speed	150 to 1000 rpm	150 to 1000 rpm
Orbit	2 mm	2 mm
Timer (with auto shut off)	1 min to 4 hrs	1 min to 4 hrs
Time setting resolution	10 sec	10 sec
Product Dimensions W x D x H	175 mm x 185 mm x 90 mm (7" x 7.25" x 3.5")	175 mm x 185 mm x 90 mm (7" x 7.25" x 3.5")
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	4.5 kgs. (10 lbs.)	4.5 kgs. (10 lbs.)

Microtube Thermoshaker

Catalog No.	270500
Speed	250 to 1400 rpm
Orbit	2mm
Uniformity	±0.2°C
Uniformity	±0.1°C
Timer (with auto shut off)	1 min to 96 hrs
Time setting resolution	1 min
Temperature range	Ambient +5 to 100°C
Product Dimensions W x D x H	205 mm x 230 mm x 130 mm (8" x 9" x 5")
Power	12 V dc, 0.5 A via 115/ 230 V AC adapter
Shipping Weight	6.35 kgs. (14 lbs.)

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
- Timer features offers time-down or time-up counting feature
- Includes 260653 - 14 Place Tube Carousel for 50mL
- Power pac is UL, CSA and CE approved
- CE marked
- 2 year warranty

ACCESSORIES

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



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
- CE marked
- 2 year warranty

FLASK DANCER PLATFORMS

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



Orbitron III™ Platform Rotator

FEATURES

- 3D gyrating motion
- 12" square aluminum tray with flat mat (standard)
- 8" square or 12" square double stacking tray (optional)
- Dimpled rubber mat (optional)
- Supplied with flat mat
- CSA approved for US and Canada
- CE marked
- 2 year warranty

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"

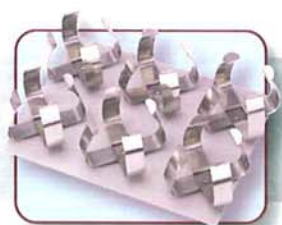


Tube Rotator

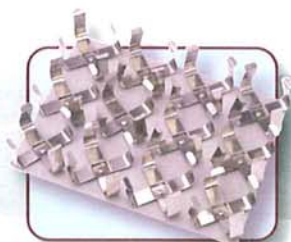
Catalog No.	260650
Speed	4 - 80 rpm
Carousel angle	90 - 180 degrees
Timer (with auto shut off)	Up to 99 hrs and 59 minutes
Carousel capacity	46 9 - 11 mm tubes, 28 14 - 18 mm tubes, 14 27 - 34 mm tubes, 63 18.5 mm culture tubes (drum rotor) and 63 14 mm culture tubes (drum rotor)
Product Dimensions W x D x H	304 mm x 431 mm x 381 mm (12" x 17" x 15")
Power	19.4 V dc, 474 A via 100/ 240 V AC adapter
Shipping Weight	7.25 kgs. (16 lbs.)

Boekel Orbital Shaker

Catalog No.	270200
Speed	50 to 300 rpm
Orbit	18 mm
Timer (with auto shut off)	User defined up to 99 hours
Time setting resolution	1 min
Product Dimensions W x D x H	267 mm x 280 mm x 100 mm (10.5" x 11" x 4")
Tray Dimensions W x D	254 mm x 203 mm (10" x 8")
Power	12 V dc, 0.5 A via 115/ 230 V AC adapter
Shipping Weight	5.8 kgs. (13 lbs.)



270290



270291



270292



270293

Orbitron III (115 VAC)

Orbitron III (230 VAC)

Catalog No.	260301	260301-2
Warranty	2 years	2 years
Operating Temperature	Can operate at 4°C to 40°C	Can operate at 4°C to 40°C
Variable speed	6-125 orbits/min	6-125 orbits/min
Variable tilt angle	0° - 23°	0° - 23°
Load limit	9 kgs. (20 lbs.)	9 kgs. (20 lbs.)
Timer	Adjustable up to 12 hours	Adjustable up to 12 hours
Product Dimensions W x D x H	30.5 cm x 33.0 cm x 22.9 cm (12" x 13" x 9")	30.5 cm x 33.0 cm x 22.9 cm (12" x 13" x 9")
Power	115 VAC; 50/60Hz, 6 watts, 0.6 amps	230VAC; 50/60Hz, 60 Watts, 0.7 amps CE marked
Shipping Weight	9.9 kgs. (22 lbs.)	9.9 kgs. (22 lbs.)

Mini Orbitron™ Platform Rotator

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 with two white, non-slip mats, one dimpled and one flat. Rubber mats can be cleaned with soap and water and autoclaved too.
- 2 year warranty



Orbitron I™ 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 speed and position platform (approximately 20 orbits per minute @ 23° angle)
- Supplied with 12" x 12" tray and dimpled mat
- Power pac is UL, CSA and CE approved
- CE marked
- 2 year warranty



Orbitron II™ Platform Rotator

FEATURES

- Gentle, low foaming agitation
- Small footprint
- Can be used in cold room or incubator
- Accepts a wide variety of tubes, plates, dishes, 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
- Variable speed of 1-23 orbits per minute
- Supplied with two white, non-slip mats, one dimpled and one flat. Rubber mats can be cleaned with soap and water and autoclaved too.
- Power pac is UL, CSA and CE approved
- CE marked
- 2 year warranty



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
- Optional stacking tray and dimpled mat (for test tubes) also available
- Supplied with flat non-skid mat
- Power pac is UL, CSA and CE approved
- CE marked
- 2 year warranty



ACCESSORIES

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

	Mini Orbitron (115 VAC)	Mini Orbitron (230 VAC)
Catalog No.	260100	260100-2
Warranty	2 years	2 years
Fixed Speed	24 rpm	24 rpm
Fixed Tilt Angle	20°	20°
Load Capacity	0.8 kg (1.8 lbs)	0.8 kg (1.8 lbs)
Operating Temperature	+4°C to 45°C	+4°C to 45°C
Product Dimensions W x D x H	19 cm x 12.7 cm x 13.97 cm (7.5" x 5" x 5.5")	
Tray Size W x D	24.3 cm x 13.1 cm (9.75" x 5.25")	24.3 cm x 13.1 cm (9.75" x 5.25")
Net Weight	1 kg (2.21 lbs)	1 kg (2.21 lbs)
Power	115 VAC, 60 Hz, 0.2 amps	230 VAC, 50 Hz, 0.2 amps
Shipping Weight	1.3 kgs. (3 lbs.)	1.3 kgs. (3 lbs.)

	Orbitron I (115 VAC)	Orbitron I (230 VAC)
Catalog No.	260200	260200-2
Warranty	2 years	2 years
Temperature	4°C to 65°C (in a cold room or incubator)	4°C to 65°C (in a cold room or incubator)
Fixed Speed	Approx. 20 orbits/min	Approx. 20 orbits/min
Fixed Tilt Angle	23°	23°
Load Limit	1 kg (2.25 lbs)	1 kg (2.25 lbs)
Product Dimensions w/platform W x D x H	30.5 cm x 30.5 cm x 25.4 cm (12" x 12" x 10")	30.5 cm x 30.5 cm x 25.4 cm (12" x 12" x 10")
Platform Dimensions	30.5 cm x 30.5 cm (12" x 12")	30.5 cm x 30.5 cm (12" x 12")
Shipping Weight	4.4 kg (10 lbs)	4.4 kg (10 lbs)
Power	115 VAC; 50/60Hz, 6 watts, 0.5 amps	230VAC; 50/60Hz, 6 Watts, 0.5 amps CE marked

	Orbitron II (115 VAC)	Orbitron II (230 VAC)
Catalog No.	260250	260250-2
Warranty	2 years	2 years
Temperature	Can operate at 4°C to 40°C	Can operate at 4°C to 40°C
Variable Speed	6-23 orbits/min	6-23 orbits/min
Variable Tilt Angle	0° - 23°	0° - 23°
Load Limit	1 kg (2.25 lbs)	1 kg (2.25 lbs)
Tray Dimensions W x D	30.5 cm x 30.5 cm (12" x 12")	30.5 cm x 30.5 cm (12" x 12")
Product Dimensions W x D x H	30.5 cm x 30.5 cm x 25.4 cm (12" x 12" x 10")	30.5 cm x 30.5 cm x 25.4 cm (12" x 12" x 10")
Shipping Weight	5.5 kg (12 lbs)	5.5 kg (12 lbs)
Power	115 VAC; 50/60Hz, 6 Watts, 0.5 amps	230VAC; 50/60Hz, 6 Watts, 0.5 amps CE marked

	Rocker II (115 VAC)	Rocker II (230 VAC)
Catalog No.	260350	260350-2
Tilt Angle	0° to 20°	0° to 20°
Adjustable Speed	3 - 25 rpm	3 - 25 rpm
Product Dimensions w/platform W x D x H	30.5 cm x 30.5 cm x 17.8 cm (12" x 12" x 7")	
Product Dimensions w/o platform W x D x H	19.1 cm x 17.8 cm x 12.7 cm (7.5" x 7" x 5")	
Net Weight	3.9 kg (8.5 lbs)	3.9 kg (8.5 lbs)
Shipping Weight	5.9 kg (13 lbs)	5.9 kg (13 lbs)
Stacking Tray Clearance	6.3 cm (2.5")	6.3 cm (2.5")
Stacking Tray Weight	0.7 kg (1.5 lbs)	0.7 kg (1.5 lbs)
Power	12 V dc, 0.5 A via 115/ 230 V AC adapter CE marked	
Recommended Load Limit	2.7 kg (6 lbs)	2.7 kg (6 lbs)

Boekel Mini Tube Rocker

FEATURES

- Provides gentle rocking action for mixing of specimens
- Low profile and small footprint minimizes bench space
- Fixed speed - 18 rpm
- Fixed tilt angle - 35°
- Maximum capacity - 8 tube tray
- Supplied with non-slip autoclavable tube pad (silicon rubber)
- Power pac is CSA, CE and PSE approved
- 2 year warranty



Catalog No. 260450

Tube Rocker

Tube Capacity	Up to 8 tubes maximum 120 mm long
Load Capacity	.8 kg (1.8 lbs.)
Speed	18 RPM's fixed speed
Tilt Angle	35° fixed angle
Product Dimensions W x D x H	218 mm x 120 mm x 127 mm (8.6" x 4.7" x 5")
Power	12 V dc, 0.5 A via 100/ 240 V AC adapter
Shipping Weight	2.26 kg (5 lbs.)

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
- CE marked
- 2 year warranty



Catalog No. 270100

Vortex Mixer

Speed	300 to 6000 rpm/ continuous or burst
Orbit	2 mm
Tube Diameter (maximum)	20 mm
Ambient Operating Temperature Range	+4°C to +45°C
Product Dimensions W x D x H	105 mm x 150 mm x 85 mm (4.13" x 5.9" x 3.35")
Power	12 V dc, 0.5 A via 115/ 230 V AC adapter
Shipping Weight	1.8 kgs. (4 lbs.)

Boekel Microplate Replicators

FEATURES

- Pins are made of stainless steel for durability, autoclaving and flame sterilization
- Economical substitute for expensive robotics systems
- Models 140500 and 140501 include an alcohol reservoir and cleaning pads for debris removal



Catalog No.	Product Dimensions W x D x H	Net Weight	Shipping Weight	Pin Length	Pin Size	Pin Design
96 Pin Replicator Model 140500	11 cm x 7.6 cm x 11 cm (4.5" x 3" x 4.5")	0.6 kg (1.25 lbs)	1.5 kg (2 lbs)	2.54 cm (1")	1.55 mm x 1.55 mm (0.0625" x 0.0625")	Flat, square
48 Pin Replicator Model 140501	11 cm x 7.6 cm x 11 cm (4.5" x 3" x 4.5")	0.45 kg (1 lbs)	0.7 kg (2 lbs)	2.54 cm (1")	1.55 mm x 1.55 mm (0.0625" x 0.0625")	Flat, square
384 Pin Replicator Model 140384	12.8 cm x 8.5 cm x 12.3 cm (5" x 3.75" x 4.75")	0.6 kg (1.25 lbs)	0.9 kg (2 lbs)	2.2 cm (1")	0.019 cm dia. (0.05")	Flat, square
Template Model 140384T1	15.1 cm x 11 cm x 6.6 cm (6" x 4.25" x 2.5")	0.6kg (1.25 lbs)	0.9 kg (2 lbs)	NA	NA	NA



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