

KUBOTA

Compact Table Top Refrigerated Centrifuge



2800

A wide variety of tubes, from microtubes up to 24 x 15mL tubes.

6 x Micro-plates or 2 x deep-well plates can be centrifuged at RCF 1,790xg.

Features

Easy-to-use functions maximize convenience

- **3 available memory settings, with one-touch save and recall operation.**

A memory function is available for repetitive operation using the same set values of operation, i.e. speed, time and temperature.

- **Buzzer at the end of operation**

5 different buzzer sounds allow recognition of the end of a centrifugal operation from across the room.

- **Compliance with GMP requirements**

Equipped with a tachometer port to comply with GMP Tachometer port is useful for actual rotor speed measurements.

- **Pre-cooling**

- **Memory flashing function for easy spin-down**

(Patented)
Automatically memorizes the duration of spin-down operations ranging from 1 to 99 seconds. The last flashing operation (1-99sec.) is automatically memorized and easily recalled simply by pressing the "Flashing" key.

Safety comes first

- **Numerous detectors ensure safe, reliable operation. If trouble is detected, operation stops immediately.**
- **The 2800 model conforms to International Safety Standard IEC 61010-2-020.**



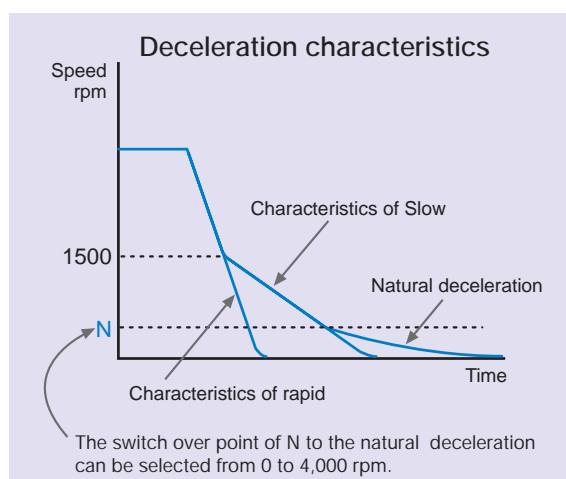
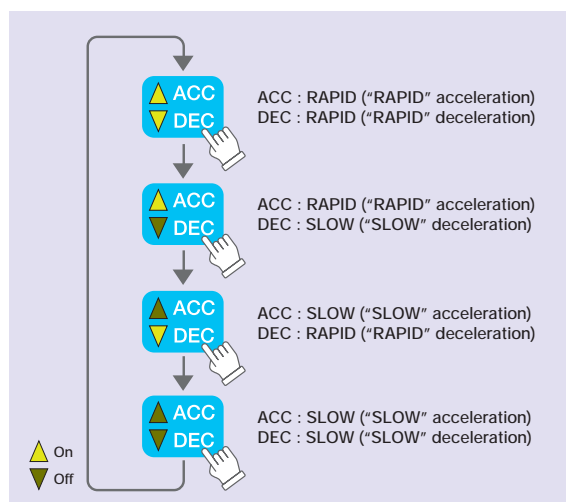
In the event of breakage, all fragments will be safely retained inside the centrifuge unit. Interlocking parts are protected against mechanical impact and employ a two-stage electrical protection circuit.

Sample temperature is maintained at 4°C at maximum speed of rotation of all rotors (at 25°C ambient temperature)



Acceleration/Deceleration Function

Rapid/slow acceleration and rapid/slow deceleration can be switched according to the type of sample and experimental conditions. The switch pattern is shown as below.



Rotor, Bucket, Tube Rack Table for Model 2800

Rotor Name	Nominal Capacity	Tube size (mm) diam. x length	Rotation Radius cm	Maximum Speed rpm	Maximum RCF *1 xg	Bucket Code No.	Tube Rack Adaptor Code No.
RS-240 *2	48 x 1.5/2mL *3	9.5 ~ 11 x 36 ~ 60	10.9	4,000	1,950	053-5040	
	40 x 6mL RIA tube *3	12.5 ~ 13.3 x 36 ~ 75	11.0	4,000	1,970	053-5030	
	24 x 5-7mL Blood collecting tube/10mL *4,5	12.5 ~ 13.3 x 46 ~ 105	13.6	4,000	2,430	053-5850	
	4 x 7-10mL Blood collecting tube/15mL *6	15 ~ 17.2 x 86 ~ 110	14.2	4,000	2,540	053-4910	
	4 x 15mL Conical tube	17 x 121	14.4	4,000	2,580	053-4910	
	8 x 7-10mL Blood collecting tube/15mL *6	15 ~ 17.2 x 86 ~ 110	14.1	4,000	2,520	053-4900	
	8 x 15mL Conical tube	17 x 121	14.4	4,000	2,580	053-4900	
	16 x 7-10mL Blood collecting tube/15mL *6	15 ~ 17.2 x 86 ~ 110	14.0	4,000	2,500	053-4980	
	24 x 7-10mL Blood collecting tube/15mL *6	15 ~ 17.2 x 89 ~ 105	13.9	4,000 *7	2,490	053-7340	
	4 x 7-10mL Blood collecting tube/15mL *6	15 ~ 17.8 x 87 ~ 110	14.0	4,000	2,500	053-4990	055-7400 *8
	4 x 50mL	27 ~ 37 x 95 ~ 110	14.2	4,000	2,540	053-4990	
	4 x 50mL Conical tube	30 x 117	14.3	4,000	2,560	053-5010	
RMP-23	6 x Micro-plates	86(W) x 128(D) x 52(H)	10.0	4,000	1,790	Equipped with rotor	
	2 x Deep-well plates						

*1 To show the RCF exactly, input the rotation radius. At the factory, the rotation radius is pre-set at 14.6cm.

The above Maximum RCF is the calculated value at the maximum speed at each rotation radius.

*2 Buckets and adaptors are optional.

*3 Tube support can be produced for special tube sizes. Contact our distributor.

*4 Blood collecting tubes made by SEKISUI (Insepack II), Termo (Venoject II), Nipro (Neotube) or Beckton Dickinson (Vacutener) can be used.

*5 Up to 16 tubes of 5/7mL Termo (Venoject II) tubes can be used.

*6 Blood collecting tubes made by SEKISUI (Insepack II), Termo (Venoject II), Nipro (Neotube) or Beckton Dickinson (Vacutener) can be used.

*7 In the case of 15mL taper tubes, please operate at 3,000rpm or less. Bucket 053-7340 is exclusively used with 2800.

*8 In case of using glass tube, rubber cushion 024-1400 is necessary.

*9 This adaptor is used commonly for both 15mL and 50mL conical tubes.

RS-240 Swinging Bucket Rotor



Bucket



48 x 1.5/2mL
Code No.053-5040



40 x 6mL RIA tube
Code No.053-5030



24 x 5-7mL Blood
collecting tube/10mL
Code No.053-5850



4 x 7-10mL Blood
collecting tube/
15mL glass tube/
15mL conical tube
Code No.053-4910



8 x 7-10mL Blood
collecting tube/
15mL glass tube/
15mL conical tube
Code No.053-4900



16 x 7-10mL Blood
collecting tube/
15mL glass tube
Code No.053-4980



24 x 7-10mL Blood
collecting tube/
15mL glass tube
Code No.053-7340



4 x 7-10mL Blood collecting tube/
15mL glass tube/50mL glass tube
Code No.053-4990
Adaptor for 7-10mL Blood collecting tube/
15mL glass tube
Code No.055-7400



4 x 50mL Conical tube
Code No.053-5010
Adaptor applicable for 15mL/50mL
Conical tube
Code No.055-6010

RMP-23 Plate Rotor

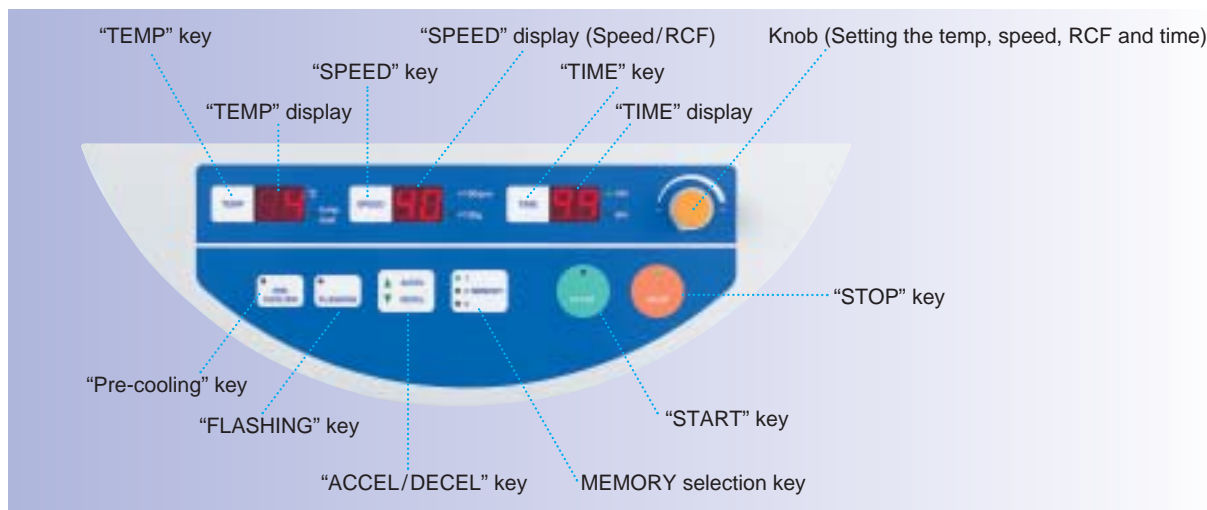
6 x Micro-plates



* Autoclavable (121°C)

* Autoclave parameters should not be exceeded. Refer to operation and service manual.

Operation Panel



Specifications

Model 2800

- Maximum Speed ● 4,000 rpm
- Maximum RCF ● 2,610 xg
- Maximum Capacity ● 360 mL
- Control system ● Microprocessor control (brushless motor)
- Speed, RCF(g), Time, g-sec, Temperature, Acceleration and Deceleration, 3 memory banks
- Alarm display ● Lid open, Imbalance, Over speed, Abnormally high temperature, Detected electrical abnormality in motor, inverter, lid interlock, speed sensor and temperature sensor
- Acceleration/Deceleration ● Two selectable rates: Rapid, Slow, 4 ways of setting
- Speed setting ● From 300 to 4,000 rpm, 100 rpm increments
- Speed indication ● Digital display, from 0 to 4,300 rpm, 100 rpm increments
- RCF setting ● From 100 to 2,600 xg, 100 xg increments
- RCF indication ● Digital display, from 0 to 3,000 xg, 100 xg increments
- Timer setting and indication ● Digital display, with HOLD function (continuous operation) and flashing
 - 1 second to 99 seconds, 1 sec increments
 - 1 minute to 99 minutes, 1 min increments
- Sounds for informing centrifuging stop ● 5 types and no sounding
- Temperature setting/indication ● Digital display, -9°C to +40°C, 1°C increments, Pre-cooling
- Refrigerant ● R134a (CFC free)
- Power requirements ● Single phase 50/60Hz, 110V±10%, 115V±10%, 15A
Single phase 50/60Hz, 220V±10%, 230V±10%, 10A
- Rated voltage and Rated current ● 110V 4.8A, 115V 4.6A, 220V/230V 2.4A
- Power consumption and Heat output ● 360W 1.3MJ/h
- Dimensions, weight ● 37cm x 64cm x 37cm (WxDxH)*1, 110V/115V 48kg, 220/230V 51kg
- Certificates of conformity ● IEC 61010-2-020
CE Marking (220V/230V)




(*1) Not including projections.

All specifications and external appearance are subject to change without notice.

* Use only rotors, adaptors and tube racks made by KUBOTA. Do not attempt to use rotors, adaptors or tube racks made by other manufacturers.

* Follow all instructions in the relevant Instruction & Service Manual when operating centrifuges.

Kubota has acquired ISO 9001 and ISO 13485 certification.

 Safety Precautions	For your safe use of the equipments, be sure to read the instruction manual carefully before you start its operation.	Parts may be adversely affected by heat, humidity and specimens or deteriorated by aging resulting in functional failures or may even lose their safety characteristic to cause accidents.
 DISCONTINUE USE Always discontinue use when phenomena listed at right appear.	<ul style="list-style-type: none"> •The rotor or bucket has been found to be damaged or corroded. •A burnt smell comes out of the equipment. •You receive a minor electrification when you touch the equipment body by a naked hand. •Some other abnormality or failure has been found occurring. 	 IMPORTANT To prevent occurrences of functional failures or accidents, turn off the power switch, pull out the power cable plug from the plug socket and be sure to contact your nearest Kubota Dealer, or an office of Kubota Corporation when there is no Kubota Dealer in your neighbourhood.

KUBOTA CORPORATION

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