

Large-Capacity Refrigerated Centrifuge

The brushless motor emits no dust, making this unit ideal for use in clean hospital environments and for blood component separation in blood centers. Powerful refrigeration and fine control maintain constant sample temperatures.



CR7

The photo shows a CR7 with log data printer (option) connected.

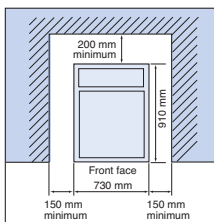
High-capacity lightweight rotor model R7A

- 1,000 ml x 6 bottles
- Max. 7,000 rpm (11,100 x g)
- To be used exclusively with a wide-mouth 1-liter bottle
- 1000PP bottle (WM) (P/N: S307700A, 6 pcs/box)
- 1000PC bottle (WM) (P/N: S308357A, 6 pcs/box)
- 1000PP cap (WM) (P/N: S410870A, 2 pcs/box)
- For high-volume separation of bacteria and organelle from their culture liquid and for rough separation in the manufacturing process of vaccines



High-capacity swinging bucket rotor model R5S3

- 400 ml MAP bag x 12 units can be processed at a time.
- Max. 4,200 rpm (5,030 x g)
- For blood component separation use at blood centers, etc.



Cautions during installation

- To optimize the heat exchange efficiency of the refrigerator unit, install in a space according to the specifications.
- Install on a stable floor.
- Avoid installation near equipment that could be a heat source, or in direct sunlight.
- An extension cord should not be used.
- The heat radiation rate of the centrifuge is about 2,300 kcal/h.
- As a safety precaution, ground the equipment properly according to applicable electrical codes.

Specifications

Model	CR7
Maximum speed (rpm)	7,000
Maximum RCF (x g)	11,100 (R7A rotor)
Maximum capacity (tubes x ml)	1,000 x 6 (R7A rotor or R5S2 rotor)
Drive motor	High-torque brushless high-frequency motor
Speed control range (rpm)	300 to 7,000
Temperature range adjustment (°C)	-20 to +40
Timer	One second to 99 minutes and 59 seconds, with a HOLD function (one minute to 99 hours and 59 minutes optional)
Refrigerator capacity/refrigerant	1.5 kW/R404a
Function	
Memory-based programmed operation	30 programmed operations possible
Acceleration/deceleration time variable	Nine-stage variable acceleration, nine-stage braked
RCF calculation	deceleration, plus free deceleration
RCF integrator	√
RTC (real-time control) *	N/A
Rotor stoppage buzzer	√
Imbalance detection device	√
Automatic rotor temperature compensation	√
Self-diagnosis	√
Automatic rotor identification	N/A
Continuous flow rotor	N/A
Power requirements	Single phase, AC 220/230/240 V-10%, 30A, 50/60Hz
Dimensions (mm)	730 (W) x 910 (D) x 1,150 (H)
Height to the table (mm)	870
Standard accessories	Instruction manual, silicone grease
Weight (kg)	300

Advanced technology

Memory operation

Stores 30 sets of operating parameters.

Actual run timer **PAT.**

Because the timer starts simultaneously with attainment of the selected speed, net operation time can be realized.

Convenient functions are standard features

- RCF calculation
- Memory lock function
- g·sec. calculation
- Step operation input

Numerous safety devices and self-diagnosis functions are standard

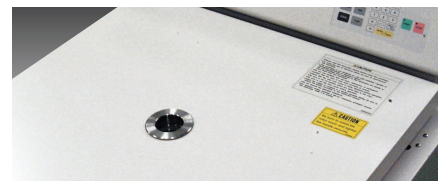
- Door opening/closing detection
- Imbalance detection
- Overspeed detection
- Rotor setting abnormality detection
- Temperature control abnormality detection
- Power source abnormality detection
- Motor rotation abnormality detection

GLP/GMP-compatible operation record control

In order to manage operating log, optional printer or RS232C communication port for data transfer to PC are selectable. (Factory option) Exclusive software to manage operating log on your PC is also available.

Rotor view port

The CR7 with rotor view port model is also available. (Factory option)



Optional accessories: Rotors

Rotor model (Part No.)	Description	Bucket	Max. speed (rpm)	Max. RCF (x g)	Permissible imbalance (g x pcs)	Tube nominal capacity (ml)	Number of tubes (pcs)	Tube dimensions dia. x L (mm)	Rotor angle (degree)	Rotor weight (kg)	Remarks
Swinging bucket rotor	R7S (904313D0)	Standard bucket (included)	7,000	9,420	2 x 2	250	4	62 x 128	—	9.0	250PP bottles (4 pcs) as standard accessories. Order adapters separately.
	R5S2 (90431610)	1000AL bucket (B) (sold separately)	4,200	5,150	50 x 3	1,000	6	Bucket size 99 x 150	—	28	Inner cup (L) for blood bag (6 pcs: standard accessories)
MAP bucket (sold separately)		3,800	4,210	50 x 3	—	6	—	—	28	Inner cup for MAP bag (6 pcs: standard accessories)	
R5S3** (904358D0)		Oval bucket (included)	4,200	5,030	50 x 3	—	6	—	—	32	Oval inner cup (400) for 400ml MAP bag (6 pcs: standard accessories)
1000AL Bucket (B)	R3S (904315D0)	Standard bucket (included)	3,000	1,870	6 x 2	500	4	98 x 100	—	6.9	Order tube racks (BL, OR, GR or YE) and 500PA tubes for 500 ml separately.
		MP bucket (sold separately)	3,000	1,650	6 x 2	—	4	96-hole microplate x 4 pcs 128 x 86 x 55 (H)	—	6.2	R3S rotors can be used for microplates. Place orders for MP bucket or M bucket separately.
		M bucket (sold separately)	2,000	770	6 x 2	—	4	120-hole/96-hole common use microplate x 4 pcs 130 x 88 x 14 (H)	—	6.2	
Fixed angle rotor	R14A (904306D0)	—	7,000	7,560	4 x 2	250	4	62 x 128	35	17	250PP bottle (4 pcs): standard accessories
	R12A3 (904325D0)	—	7,000	8,110	4 x 3	250	6	62 x 128	30	16	250PP bottle (6 pcs): standard accessories
	R10A3 (904345D0)	—	7,000	9,200	6 x 3	500	6	73 x 163	26	14.5	500PA bottle (6 pcs): standard accessories
	R10A5 (904365D0)	—	7,000	9,200	6 x 3	500	6	69 x 169	26	15.5	—
	R10A3	R7A*** (904367D0)	—	7,000 (6,500)	11,100 (9,600)	6 x 3	1,000	6	98 x 168	17	18.6

Notes: 1. For information on product compatibility, please contact your nearest Hitachi representative, if one of these rotors is to be used in a previously delivered (old-type) centrifuge or if a previously delivered (old-type) rotor is to be used in a new centrifuge.
 2. Generally, sample temperatures at the highest rpm can be cooled to 4°C.
 3. For R7A, figures in parentheses represent the highest rpm and centrifugal acceleration under which the temperature can be lowered to 4°C.
 4. At the rotor's maximum rpm, cooling to below 15°C is possible (room temperature: 25°C).

3. **400 ml MAP bag x 12 pieces (2 pcs/bucket) can be processed at a time.
 4. ***A 1,000PP/PC bottle (2), a conventional product, cannot be used.
 5. The warranty period for rotors is 7 years.