

himac centrifuges open a new chapter
High-speed Refrigerated Centrifuge

# CR 30NX



Koki Holdings Co., Ltd.

Life Science Instruments Div.

### Features

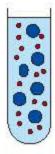
### 100,000Xg swing rotors

Do you need an ultracentrifuge, because you need 100,000Xg for a swing rotor centrifugation?

With 100,000Xg swing rotor centrifugation, CR30NX and top loading swing rotor R25ST or R25ST2 supports your Rate zonal centrifugation or Isopycnic centrifugation.











Isopycnic centrifugation

### 100,000Xg angle rotor

Or with 100,000Xg angle rotor centrifugation, CR30NX supports your cell fractionation.



### **6L rotors**

And, in CR30NX, two types of 6L rotors are available; R7A (6x1L bottle) and R9A2 (4x1.5L bottle).





# New Line-up rotors for CR30NX

Туре	Model	Max.Speed (rpm)	Max.RCF (Xg)	Nominal Capacity	Separation examples
Swinging Bucket	R25ST	25,000	110,000	6x40mL (for round bottom tubes) Largest Volume Rate Zonal Centrifugation	<ul> <li>Virus and Viral particle by Pelleting</li> <li>Exosome by Pelleting or by Density gradient centrifugation</li> <li>Protein by Pelleting or by Density gradient centrifugation</li> </ul>
	R25ST2	25,000	118,000	6x16mL (for round bottom tubes)	Organelle (Microsome) by Pelleting
Fixed Angle	R30AT	30,000	110,000	8x50mL (for round bottom tubes/ bottles)	<ul> <li>Virus and Viral particle by Pelleting</li> <li>Exosome by Pelleting or by Density gradient centrifugation</li> <li>Protein by Pelleting or by Density gradient centrifugation</li> <li>Organelle (chloroplast, mitochondria etc.) by Pelleting</li> </ul>
Fixed Angle	R19A2 Rapid separation with	19,000	50,000 *with himac TC tube	8x50mL (for conical tubes)	<ul> <li>Virus and Viral particle by Pelleting</li> <li>Organelle (chloroplast, mitochondria etc.) by Pelleting</li> <li>DNA, RNA by Pelleting</li> </ul>
	R16A2	16,000	36,100 *with himac TC tube	10×50mL 10×15mL (for conical tubes)	Organella (chloroplast, mitochondria etc.) by Pelleting DNA, RNA by Pelleting
	R16A3	16,000	40,100	6x250mL	• Bacteria by Pelleting

<sup>\*</sup>Other rotors such as for microtubes or for microplates are also available. Please contact your nearest sales representative.

<sup>\*\*</sup> About the use of conventional high-speed rotors with CR30NX, contact your nearest sales representative.

## High-end Technologies

### All rotors maintained at 4°C at maximum rotor speed.

Powerful refrigeration system with appropriate vacuum control

### Low-noise

With the latest noise reduction system, the operating sound level is 56dB; the quietest in this class high-speed refrigerated centrifuges, as of June 2018.

### New rotor ID detection and self-locking rotor system

Rotor model and its maximum speed are automatically identified just the rotor is placed on the drive shaft.

In addition, rotor system is self-locking and no need install the rotor by screw, same as existing himac high-speed centrifuges.

### **Dual sensor System for safe and secure operations:**

- 1. rotor speed
- 2. rotor temperature
- 3. rotor ID
- 4. vacuum level

### MFRS: Mist filter refresh system

Rotating the filter regularly by the motor, oil is removed from the filter and returned to the vacuum pump.

### Useful functions

### Data communication system



 Remote operation and monitoring: "himac View" with your iPhone or Android phone.



2) Optional log management software himac LogManager (Digital signature, audit trail, and encrypted data files, etc. are available.)

### Door lock with Door Open Passcode



\*Patent Pending

# Rotor cover detection sensor with alert function



Rotor cover detection sensor prevents rotors from spinning without rotor covers.

### Door opener foot switch (option)



### Multilingual Display (10 Languages)



- •English
- ·German
- ·French
- ·Spanish
- ·Italian
- ∙Portuguese •Russian
- ·Chinese (simplified)
- ·Korean
- Japanese

Power-saving mode (auto stand-by), User Administration with User Lockout, etc. are also available.

# Specifications

Model	CR3ONX		
Maximum speed	30,000rpm (R30AT angle rotor)		
Maximum RCF	by swing rotor:118,000Xg(R25ST2),by angle rotor:110,000Xg (R30AT)		
Max. Nominal Capacity	6L: R7A rotor (6 X 1,000mL) or R9A2 rotor (4 X 1,500mL)		
Speed Control Range	300rpm to 30,000rpm (*)		
Temperature setting range	−20°C to +40°C		
Temperature Accuracy	± 2°C (**)		
Acceleration / Deceleration mode	Accel 11 modes, Decel 10 modes with 2 modes variable deceleration slope		
Program Function	1,000 programs		
Drive unit	Induction Motor (Inverter)		
Refrigerator	Rotary Inverter Driven Compressor (Refrigerant: R410A)		
Interface	USB X 1, LAN X 1		
Display	High-resolution 6.5 inch color LCD		
Keypad	Touch sensiti∨e LCD panel with GUI icons		
Safety devices	Door interlock, dual-overspeed detector, imbalance detector, rotor cover detector, over-temperature detector		
Noise Level	Less than 56(dBA)		
Applicable standard	CE, cCSAus(***)		
1) EMC Directive	EN61326-1		
2) Product safety	EN61010-1, EN61010-2-020 UL Std. No. 61010-1, UL Std. No. 61010-2-020 (***) CAN/CSA-C22.2 No. 61010-1, CAN/CSA-C22.2 No. 61010-2-020 (***)		
Power Requirement	Single Phase, AC200/208/220/230/240V +/ -10%, 50/60Hz, 30A Three-phase four-wire: AC 220/230/240V +/-10%, 50/60Hz, 16A		
Heat Output	Less than 1.2 kW(****)		
Dimension	708mm(W) x 892mm(D) x 866mm(H) (height to table : 865mm)		
Weight	310Kg		

#### Note

- \* R9A2 rotor's minimum rotation speed setting is 2,000 mm.
- \* \* Temperature calibration may be required depending on users' operating conditions and operating environments.
- \* \* \* For Canada and United States, only.
- \* \* \* \* When R30AT rotor runs at 30,000 rpm



#### CAUTION:

For sale and proper use of you machine, carefully read and follow the instructions in the instruction mannual.

#### Notices:

- All specifications are subject to change without advance notice.
- · Actual color may vary from the color of the photos on this catalogue, due to printing conditions.
- Due to safety reasons, installation environments, operating environments and conditions may be restricted.
- Unless specifically mentioned, products and/or operation panel of the photos are standard specification.
- · For further information, please contact our sales representative.

Manufacturer:

### Koki Holdings Co., Ltd.

Life-Science Instruments Division 15-1, Konan 2-chome, Minato-ku, Tokyo 108-8020, Japan

TEL: +81-(0)3-6738-0863 FAX: +81-(0)3-6738-0861

URL: https://www.himac-science.com

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