



## HIGH SPEED REFRIGERATED CENTRIFUGE





# Quick Acceleration and Deceleration SUPREMA series realize to shorten spinning time and to speed up laboratory work.



\*Compared to the previous model with an equivalent rotor, acceleration and deceleration times are reduced with these percentages approximately

# **User Friendly Front Indicator**

The Front Indicator (green/red/orange line indicator) permits monitoring the operation status from a distance.





# 10-step acceleration characteristics and 10-step and natural deceleration characteristics

The initial value of acceleration and deceleration characteristics is adjusted between 0 and 500 rpm, however, the function setting allows to set the adjustable rotation speed to the maximum speed of the rotor in use, adjustable in steps of 100 rpm.



Design incorporates

friendliness to the global

environment and safety

#### Multiple memory functions Easy-to-use and convenient LCD

The LCD display on the control panel features such special functions as history and memory functions as well as memory settings for information and operation conditions on the centrifuge program.

A simple memory function allows setting three operation conditions for each rotor.
99 memory settings can be stored.

#### \_\_\_\_\_

#### Sample temperature display

SUPREMA Series high speed refrigerated centrifuge control and maintain the sample temperature near the set temperature using the date from chamber temperature, rotor types and rotational frequency and display the value estimated from each data as actual sample temperature.

OHFC R404A with the ODP = 0.0, which contains no chlorine to destroy the ozone layer, is used to reduce environmental impact.
 Output destroy in purchase the suprementation when the reter is

- Imbalance detection system: The system prevents operation when the rotor is unbalanced and the maximum permissible imbalance value is exceeded, and automatically slows the rotor down and stops.
- Safety devices:
  - Lid interlock, lid Open/Close Detector, Overspeed Detector, Overcurrent Detector (power switch), Motor Overcurrent Detector,
  - Temperature Error Detector (high or low temperature)





#### Subrema 25

6 tubes × 1,000ml Large Volume Rotor With the lightweight aluminum rotor, large volume of samples can be centrifuged.





rogrammed operation function							
Several operation conditions can be programmed during a							
centrifuging operation and automatically executed in linear							
sequence. This function allows to store five programs in five							
different combinations.							

Centrifugal acceleration integrator function
 Capable of consecutive spins

Model	Suprema25	Suprema21						
Maximum Speed	25,000rpm	21,000rpm						
Maximum RCF	60,110G	46,850G						
Maximum Capacity	1,000ml×6 tubes	1,000ml ×4 tubes						
Speed Control	Microprocessor							
Motor	Induction Motor							
Drive System	Direct Drive							
Data Entry	Jog Dial							
Speed Setting Range	0 to 25,000rpm (100rpm increments)	0 to 21,000rpm (100rpm increments)						
RCF Setting Range	0 to 60,110G (10G increments)	0 to 46,850G (10G increments)						
Temperature Setting Range	-9 to 35°C(1°C increment)							
Time Setting Range	Setting Range 0 to 50sec.(10sec. increments), 0:01 to 9:59 (1min. increment), 10 to 24hours (1hours increment), Free							
Acceleration/ Deceleration Setting	Acceleration : 10 steps, Deceleration : 10 steps and Free							
Memory Function	3 Memories for each rotor with Memory Keys and 99 Memories with Menu Key							
Program Operation	0	_						
RCF Integrated Operation	O –							
Continuous Flow Rotor	0 -							
Other Function	Rotor Speed Automatic Setting with BART Code, Radius Setting, Date and Time Display							
Safety Devices	Lid Interlock System, Lid Open / Close Detector, Overspeed Detector, Imbalance Detector,           Overcurrent Detector, Rotor Identification System, Motor Overcurrent Detector, Temperature Error Detector							
Refrigerant	HFC R404A							
Power Requirement	1-Phase AC 220/230/240V, 50Hz/60Hz, 30A							
Rated Current	21A	18A						
Power Consumption (Heat output)	3.3kW (2,840 k cal/h)	2.6kW(2,240 kcal/h)						
Dimensions W×D×Hmm (Except projection)	715W×794D×1,017H mm (Height to Operation Table : 869H mm)	570Wx794Dx1,018H mm (Height to Operation Table : 869H mm)						
Net Weight	265kg	215kg						
Accessories	Operator's Manual 1 Digital Warranty Information 1 Inspection Sheet 1 Clear Case 1 Attachment Screw 1 Level 1 Special Tool for Continuous Flow Rotor Use (for Suprema25) 1 Rotor puller 1							

#### **Rotor Specifications**

Rotor	r	Max.Capacity (ml × tubes)	Max.Sp (rpm	eed )	Max.RCF (G)	Rotor	Bucket	Rack	Max. Capacity (ml × tubes)	Max.Speed (rpm)	Max.RCF (G)
NA-1		50×6	22,00	00	51,420	11			250 × 4		4,720
NΔ_3H9	3	10×16	21.00	0	50 300			3350-TC01P	50 × 4	5,000	4,670
	*1	50.0	21,00		48,800			3350-G01P	50 × 4		4,500
NA-4HS	<b>o</b> *1	50×8	21,00	0	40,020			3315-TC04P	15 × 16		4,670
NA-8		50×12	15,00	00	31,200	TS-33N	B433	3315-G07P	/ Glass 15×28	(	4,500
NA-11		250×6	12,00	00	22,540		*0	3314-04P	14 × 16	4,000	2,990
NA-12		100×8	15,00	00	30,700			3307-07P	7×28 Veno-Ject II	4,100	2,990
NA-16	*2	500×4	11,00	00	18,270	1		3305-07P	5×28	4,200	2,900
NA-18	*2	500×6	10.00	00	17,780	1	Bucket ca	D KIT B433 *6			2 090
NIA-20		1 5×24	20.00	10	43.840	1		3625C-01P	250 × 4		3,060
NA 00		509	14.00			-		3650-TC05P	15 × 8	-	3,110
NA-22	*3	50×6	14,00	0	20,740			3615-TC14P	15 × 56		3 110
NA-400		1,000×4	9,00	00	15,220			3615-G16P	15 × 64	2 000	3.100
NA-610	*4	1,000×6	7,00	00	11,120			3650-G05P	50 × 20	3,900	3,010
NC-1	*4	1,000ml	17,00	00	31,350	TS-36N	B436	3610C-G02P	100 × 8		3,040
NC-2	*4	1,000ml	14,00	00	21,260	Suprema 25		3614C-18P	14 × 72		2,990
				I		<b>1</b>		3602C-36P	2×144		2,860
			Max Canacity Max Spo		Max BCE	1		00050 400	5 × 192	3,800	2,950
Rotor	Bucket	Rack	(ml × tubes)	[ml × tubes) (rpm) (G)	) (G)			30030-46P	Shionogi Tube 4 × 192		3,110
TS-4N	S4096-02	>	Microplate	1.800	0 510	11		3606C-35P	Eiken Tube 6×140	3 900	3,110
	7115-08		15,20	0,500	0 0.000			AS36C-96D	X8		3,100
-	7110-00		15×32	3,500	0 2,360	-			×16		3,100
	/015-08		15×32	3,500	0 2,190			3850-04P	50 × 16	3,500	2,380
	7050-02		50×8	3,500	0 2,150			3850-N04P	50 × 16	3,500	2,380
	7015-06		15×24	3,600	0 2,320			3850-02P	50 × 8	3,500	2,380
	7215-06		15×24	3,600	0 2,430	B438 TS-38N		38M-1C0204P	50×8or15×16	3,500	2,380
TS-7N	7150-01		50×4	5.000	0 4 670			3815-16P	15 × 40 15 × 64	3,500	2,360
	7050.01		50×4	4.000	0 0.010		3810M-14P	5/7/10×56	3,500	2,370	
	7050-01		50.4	4,000	2,010			3806-EK20P	Eiken Tube	3,500	2,300
	7M5015-1	1	50×4+15×16	3,500	0 2,370			3810-N20P	10 × 80	3,500	2,000
	B407	0705-10P	5×40	3,100	0 1,670			3805-FA16P	FACS Tube	3 500	2 080
		0705-FA10P	5×40	3,100	0 1,670			3802-EP24P	2 × 96	3,500	1.780
	SC-2		8×4	1,600	0 420	]	B438-96		Microplate	4,200	3,100
			Deepwell plate			11	B438-29		250 × 4	4,200	3,650
TS-41N	B241	AS41-96D	Microplate	4,500	U 3,150		B438-1507BH		15×28	,	



**NA-610** 1,000ml×6(tubes): 7,000rpm:11,120G



**NA-400** 1,000ml×4(tubes): 9,000rpm:15,220G



TS-33N 250ml × 4 (tubes): 5,000rpm: 4,720G Fig. Rotor is shown with Bucket B433, Rack 3315-TC04P and 3350-G01P for example only.



B438-5002BH

TS-36N 14ml × 72(tubes) : 3,900rpm:3,110G Fig. Rotor is shown with Bucket B436 and Rack AS36C-96D for example only.



3,310

TS-41N Deepwell plate × 4: 4,500rpm: 3,150G Bucket, Adapter and Cover are included.

4.000

 $50 \times 8$ 

15 × 8

\* Maximum speed and maximum RCF vary by the centrifuge in use. \* 1 High sealed rotor \* 2 NA-16 rotors and NA-18 rotors shipped between 2010 and 2023 may have been supplied with rubber adapter GA5000-01. Remove the rubber adapter GA5000-01 when using the tubes listed in the table above. Failure to do so may result in improper tightening of the rotor lid and cause the rotor to come off. \* 3 Conical Tubes are available without adapters. \* 4 Can be used for Suprema25. \* 5 When centrifuging with a bucket cover, up to 2xDeepwell plate. \* 6 B433 bucket becomes a sealed bucket by using [Bucket cap kit B433]. \* 7 SHIONOGI tube (4ml × 64) available. \* 8 Sealed buckets. \* 9 Different types of tubes cannot be loaded together.

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