



Laboratory Equipment Manufacturer
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INSTRUCTION MANUAL FOR

Medium Size Refrigerated Centrifuge

MDCENR-301



PLEASE READ THIS MANUAL CAREFULLY BEFORE OPERATION






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I . SPECIFICATION

SPEED (rpm)	500 ~ 6,500 LCD Display
MAX RCF	4,500 x g
MAX CAPACITY	400 ml
TEMPERATURE RANGE	0 °C ~ 40 °C
ELECTRIC CONTGROL	Microprocess Control
	10 memory programs for preset parameter
SAFTY DEVICE	Auto imbalance
	Over load protect
	Hidden auto –balance device
	Auto Lid cover lock in motor run
	Fuse device
TIMER	99min:59sec/ Digital timer
NET WEIGHT (kg)	52
SIZE (cm)	65 x 53 x 34
POWER	AC110V/220V , 50 / 60Hz
POWER CONSUMENT	130W / Brushless motor

II . ROTOR AND ACCESSORIES

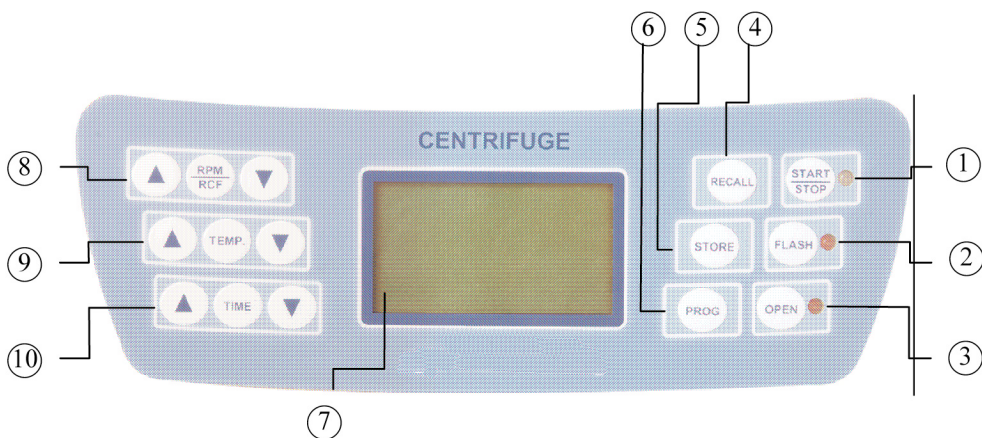
Rotor		Capacity (ml x pcs)	Max speed (rpm)	Max RCF RCF(Xg)	Tube size (φ x l) mm	
					Max	Min
RS-50		100 x 4	3,500	1,990	45 x 112	42 x 95
		50 x 4	4,000	2,600	35 x 117	32 x 90
		50 x 4TC	4,000	2,600	29.5 x 120	26.5 x 90
		15 x 16	3,500	1,990	16.7 x 115	13.5 x 86
		15 x 12TC	3,500	1,990	17 x 120	15 x 85
		10 x 24	3,500	1,990	15.5 x 113	14 x 85
		6 x 40	3,500	1,700	12.7 x 88	11 x 63
		6 x 36	3,500	1,700	12 x 106	11 x 85
		1.5 x 48	3,500	1,330	11 x 56	10 x 36
RS-1508		15 x 8	3,500	1,990	17 x 122	15 x 90
RA-1512H		15 x 12	6,000	4,500	16.7 x 122	15 x 90
RA-1516		15 x 16	4,000	2,250	16.7 x 115	15 x 90
RA-1024		10 x 24	3,500	1,840	16.7 x 107	15 x 90

RA-5004		50 x 4	6,000	3,980	29.5 x 130	27.5 x 94
RA-5006		50 x 6	6,000	3,980	29.5 x 130	27.5 x 90
RA-5008		50 x 8	6,000	4,500	29.5 x 117	27.5 x 90
REA-1520		1.5 x 20	6,000	3,140	11 x 56	10 x 36
RA-1508		15 x 8	6,000	3,940	16.7 x 122	15 x 90

III. OUT-LINE DESCRIPTION



Operation plane:



① START AND STOP : SWITCH ON MAIN POWER ,THIS KEY CONTROL THE START AND ALSO THE STOP.

- ② **SHORT TIME ROTATION** : PUSH “FLASH”KEY, MOTOR START ROTATING IMMEDIATELY. RELEASE THE “FLASH” , THE MOTOR STOP . THIS IS FOR SHORT TIME ROTATION OPERATION.
- ③ **LID OPEN** : NOTICE THE LID OPEN ONLY FUNCTION IN ROTOR ABSOLUTELY STOP . THE LID CAN NOT BE OPEN WHEN ROTOR STILL ROTATION.
- ④ **RECALL PROGRAM** : RECALL THE SEATED SPEED AND RCF ALSO TIME.. PUSH **【RECALL】** KEY, FIGURAL AFTER “P” FLASH, PUSH THE **【PROG】** KEY TO SELECT THE PROGRAM THEN PUSH RECALL KEY .
- ⑤ **MEMORY PROGRAMS** : SET THE SPEED (RPM), (RCF) AND TIMER INTO THE MEMORY :
- WAY OF OPERATION: SET THE SPEED AND TIMER AND PUSH THE **【STORE】** KEY . YOU MAY SEE THE FLASH AFTER THE “P”
- PUSH THE **【PROG】** KEY, TO SELECT THE PRE SET NO. (0~9). THEN PUSH THE **【STORE】** , THE PROGRAM MEMORY DONE.
- ⑥ **SELECT THE PRE SET NO** : YOU MAY CHOOSE FROM 0-9, USE TOGETHER WITH ④、⑤ OPERATION.
- ⑦ **LCD DISPLAY** : SHOW SPEED(RPM), RCF ,TIMER , AND PRE SET PROGRAM NO.
- ⑧ **SPEED & RCF SEATING** : PUSH AND HOLD THE **【RPM/RCF】** KEY FOR 3 SECONDS , MAY CHOOSE RPM OR RCF SEATING . PUSH **▲▼** TO SELECT RPM OR RCF SEATING.
- 1/ FOR RPM SEATING : PUSH **【RPM/RCF】** , YOU MAY SEE THE FLASH FIGURE BEFORE rpm ON LCD DISPLAY . . USE **▲▼** KEY TO HAVE THE rpm YOU NEED. AGAIN , PUSH **【RPM/RCF】** FOR INPUT
- 2/ FOR RCF SEATING : PUSH **【RPM/RCF】** , YOU MAY SEE THE FLASH FIGURE BEFORE Xg ON LCD DISPLAY ; . USE **▲▼** KEY TO HAVE THE RCF YOU NEED AGAIN , PUSH **【RPM/RCF】** FOR INPUT
- ⑨ **TEMPERATURE SEATING** : PUSH **【TEMP】** KEY (LCD SHOW NOW IS LAST RECORD). .PUSH AGAIN **【TEMP.】** , A FLASH FIGURE BEFORE °C , USE **▲▼** TO ADJUST THE TEMPERATURE YOU NEED; AGAIN PUSH **【TEMP】** FOR INPUT..
- ⑩ **TIME SEATING** : PUSH **【TIME】** KEY (MINFLASH) , ADJUST WITH **▲▼** KEY TO SET THE MINIMUM YOU NEED. AGAIN PUSH **【TIME】** KEY (SECFLASH) , PUSH SET AT THE SECOND; PUSH **【TIME】** KEY AGAIN FOR INPUT.