

# LMC-4200R, Refrigerated Laboratory Centrifuge

## DESCRIPTION

Laboratory bench-top centrifuge with refrigeration LMC-4200R provides temperature control of biomaterial during centrifugation. Temperature control of the so-called "cold-shelf" is a gold standard for enzymologists and cell biologists because it ensures conditions necessary for reproducibility of the sample preparation stage. Temperature control absence at this stage can cause unpredictable results.

LMC-4200R is a modern centrifuge designed for operation with microtest plates, gel cards and tubes from 10 to 50 ml.

### Features:

- Soft start and run-down of the rotor;
- Efficient rate of chamber refrigeration: under 10 min;
- Maintenance of stable temperature during operation;
- User-friendly setting of centrifugation parameters (speed, temperature, time) and simultaneous display of both set and actual values;
- Safe operation is provided by a metal protection chamber and a case cover, automatic stop at imbalance (emergency shutdown, "IMBALANCE" displayed) and a lock keeping the lid closed while the centrifuge is running.
- Rotor selection;
- Setting rotor speed in RPM or RCF;
- Multiple acceleration (Slow, Normal, Fast) and deceleration (0, Slow, Normal, Fast) modes and possibility to switch off forced braking;
- Low noise level;
- Wide choice of accessory rotors.



## CAT. NUMBER

| Without rotor | Without rotor            |
|---------------|--------------------------|
| BS-010212-AAA | 230VAC 50/60Hz Euro plug |
| BS-010212-AAB | 230VAC 50/60Hz UK plug   |
| BS-010212-AA3 | 230VAC 50/60Hz AU plug   |
| BS-010212-EK  | IQ OQ document           |
| BS-010212-FK  | PQ document              |

## SPECIFICATIONS

|                                                                   |                                 |
|-------------------------------------------------------------------|---------------------------------|
| Temperature control range                                         | -10°C ... +25°C                 |
| Stable temperature maintenance range                              | 25°C below ambient ... to +25°C |
| Temperature setting resolution                                    | 1°C                             |
| Speed regulation range for centrifuge tubes                       | 100–4200 rpm <br/> (3160 × g)   |
| Speed regulation range for microtitre plates                      | 100–2000 rpm <br/> (560 × g)    |
| Speed setting resolution                                          | 100 rpm                         |
| Digital time setting                                              | 1 - 90 min (increment 1 min)    |
| Timer sound signal                                                | +                               |
| Rotor imbalance diagnostics (automatic stop, "IMBALANCE" warning) | +                               |
| Display                                                           | LCD, 2 lines                    |
| Chamber diameter                                                  | 360 mm                          |
| Overall dimensions (W×D×H)                                        | 635x580x335 mm                  |
| Weight                                                            | 56 kg                           |
| Nominal operating voltage                                         | 230 V, 50 Hz                    |
| Power consumption (230V / 120 V)                                  | 990 W (4.3 A) / -               |



**R-6**  
BS-010208-DK  
rotor

Swing-out rotor for conical bottom centrifuge tube. Aluminium buckets.



**R-6P**  
BS-010208-XK  
Rotor

Swing-out rotor for conical bottom centrifuge tube. Plastic buckets (POM Kocetal).



**BI-25-6**  
BS-010221-VK  
adapter set

For rotors R-6, R-6P, Ri-6, Ri-6P optional insert set (6 pcs) - BI-25-6 for 25 ml conical tubes



**RMT-24**  
BS-010221-BK  
Rotor

Fixed-angle rotor for 24 - 1.5 or 2 ml microtubes



**R-12/10**  
BS-010208-BK  
Rotor

Swing-out rotor for round bottom centrifuge tube.



**BN-13/75**  
BS-010208-PK  
adapter set

For rotors R-12/10, Ri-12/10 optional adapter set (12 pcs) - BN-13/75 for vacutainers 2-5 ml [13x75]



**BN-13/100**  
BS-010208-QK  
adapter set

For rotors R-12/10, Ri-12/10 optional adapter set (12 pcs) - BN-13/100 for vacutainers 4-8 ml [13x100]



**BN-16/100**  
BS-010208-RK  
adapter set

For rotors R-12/10, Ri-12/10 optional adapter set (12 pcs) - BN-16/100 for vacutainers 8-10 ml [16x100]



**R-24/10**  
BS-010212-JK  
Rotor

Swing-out rotor for round bottom centrifuge tube.



**BN-13/75-24**  
BS-010221-RK  
adapter set

For rotors R-24/10, Ri-24/10 optional adapter set (24 pcs) - BN-13/75-24 for vacutainers 2-5 ml [13x75]



**BN-13/100-24**  
BS-010221-SK  
adapter set

For rotors R-24/10, Ri-24/10 optional adapter set (24 pcs) - BN-13/100-24 for vacutainers 4-8 ml [13x100]



**BN-16/100-24**  
BS-010221-TK  
adapter set

For rotors R-24/10, Ri-24/10 optional adapter set (24 pcs) - BN-16/100-24 for vacutainers 8-10 ml [16x100]



**R-12/15**  
BS-010208-EK  
Rotor

Swing-out rotor for conical bottom centrifuge tube.



**R-2**  
BS-010208-AK  
Rotor

Swing-out rotor for standard 96-well microtitre plates, skirted PCR plates, deepwell plates up to 45mm.



**AP-96**  
BS-010219-DK  
adapter

2 adapters for 96-well semi-skirted and non-skirted PCR plates - made of Ertacetal® C. Autoclavable



**AP-384**  
BS-010219-EK  
adapter

2 adapters for 384-well plates -  
made of Ertacetal® C.  
Autoclavable



**R-24GC**  
BS-010208-VK  
Rotor

Rotor for 24 Gel Cards for blood  
group serology testing (Forward  
Group, Reverse Group, RhD  
Type and 3 cell antibody  
screen)



**RR-U**  
BS-010208-UK  
rack for rotors

Rack for rotors



**BN-11/30**  
BS-010208-ZK  
adapter set for rotor R-6P

Spare adapter set for rotor R-  
6P. Plastic buckets (POM  
Kocetal) (6 pcs).



**BN-16/90**  
BS-010208-SK  
adapter set for rotor R-12/10 R-  
24/10

Spare adapter set for rotor R-  
12/10, R-24/10. Plastic buckets  
(12 pcs).



**BN-17/120**  
BS-010208-TK  
adapter set for rotor R-12/15

Spare adapter set for rotor R-  
12/15. Plastic buckets (12 pcs).