



MBR-305GR-PE

MBR Blood Bank Refrigerators 30

302/617/1301 L



Robust design for safe storage of whole blood

MBR Blood Bank Refrigerators are designed to conform to the strictest blood storage regulations, with assured stable and reliable temperature controls that utilise original technology from PHC.

Stable Temperature Control

Temperature is controlled by two sensors located in the liquid-loaded monitor bottles, which are in the shape of a blood bag.

Temperature Variations Prevention

Specially designed to minimise cold air loss even with frequent door openings. Separated transparant inner doors minimize the chamber air leakage during door openings. A large air circulation fan enables rapid temperature recovery.

User-friendly Design

Fluorescent interior lamp with ON/OFF switch and a large view window in the outer door provide a clear view of stored items. Digital display is easy to see, and is calibratable through the control panel.



Microprocessor Control

Microprocessor control ensures the most accurate temperature control available to conform to the strictest blood storage regulations.



Temperature Uniformity

Multi air-flow plenum system ensures excellent temperature uniformity in larger capacity models (MBR-705GR-PE and MBR-1405GR-PE).



Sample Safety

To ensure the safety of the precious blood supply, MBR series provide several safety functions like audible and visual alarms.

MBR Blood Bank Refrigerators



MBR-1405GR-PE

Stable Temperature Control

Two thermistor sensors constantly monitor the temperature in both the upper and lower part of the chamber. The sensors are located in liquid loaded monitor bottles, which are in designed to mimic the shape of a blood bag to accurately monitor product temperature.

Insulated Windows

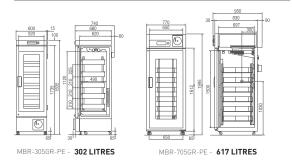
Insulated window prevents condensation and ensures temperature uniformity.

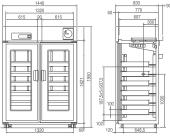
Interior Lamps

Fluorescent interior lamp with ON/OFF switch and a large view window in the outer door provide a clear view of stored blood.

Audible and flashing LED Visual alarms

Audible and flashing LED visual alarms with remote alarm contacts are in place in case of power failure, high or low temperature condition, or during any thermal sensor abnormality.





MBR-1405GR-PE - 1301 LITRES



PHC Europe B.V. Nijverheidsweg 120 | 4879 AZ Etten-Leur | Netherlands T: +31 (0) 76 543 3839 | F: +31 (0) 76 541 3732 www.phchd.com/eu/biomedical

| External Dimensions (W x D x H) ¹⁾ | mm | 600 x 680 x 1835 | 770 x 830 x 1955 | 1440 x 830 x 1950 |
|---------------------------------------------------------|------------|-----------------------------------------------------|-------------------------------------|--------------------------------------------|
| Internal Dimensions (W x D x H) | mm | 520 x 490 x 1150 | 650 x 697 x 1500 | 1320 x 710 x 1500 |
| Volume | litres | 302 | 617 | 1301 |
| Net Weight (approx) | kg | 147 | 213 | 315 |
| Capacity | 450ml bags | 120 | 360 | 720 |
| Performance | | | | |
| Temperature setting range (Ambient temperature 35°C) | °C | 4 +/- 1.5 | 4 +/- 1.0 | 4 +/- 1.5 |
| Control | | | | |
| Controller | | Microprocessor | | |
| Display | | LED | | |
| Temperature recorder | | MTR-G04 (included) | | |
| Temperature sensor | | 2 bottles with thermistor sensor | | |
| Refrigeration | | | | |
| Cooling method | | Forced air | | |
| Defrost method | | Fully automatic | | |
| Refrigerant | | HFC | | |
| Insulation | | PUF | | |
| Construction | | | | |
| Exterior Material | | | Painted Steel | 1 |
| Interior Material | | Painted Steel | | |
| Outer Doors | qty | 1, Double layer glass window | | |
| Outer Door Lock | | Y | | |
| Inner Door | qty | 2, Acrylic | 3, Acrylic | 6, Acrylic |
| Drawers | qty | 5, stainless steel roll-out drawers | 6, stainless steel roll-out drawers | 12, stainless steel roll-out drawers |
| Max. load - per drawer | kg | 20 | 40 | 40 |
| Max. load - total | kg | 100 | 240 | 480 |
| Access port | qty | 1 | 3 | 2 |
| Access Port Position | | Left | Left/right/top | Left/right |
| Access Port Diameter | Ø mm | 30 | 30 | 30 |
| Casters | qty | 4 | 4 | 4 |
| Interior light | | Fluorescent | | |
| Alarms | (R = | = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm) | | |
| Power Failure | | V-B-R | | |
| High Temperature | | V-B-R | | |
| Low Temperature | | V-B-R | | |
| Door Open | | V-B | | |
| Electrical and Noise Level | | | | |
| Power Supply | V | 230V 50Hz single phase | | |
| Noise Level ^{2]} | dB [A] | 41 | 45 | 48 |
| Options | | | | |
| Temperature chart recorder | | | Included | |
| - Chart paper | | RP-G04-PW | | |
| - Ink pen | | PG-R-PW | | |
| P = ·· | | | | |

MBR-305GR-PE

600 x 680 x 1835

External Dimensions (W x D x H)1)

MBR-705GR-PE

770 x 830 x 1955 1/4/0 x 830 x 1950

MBR-1405GR-PE

Appearance and specifications are subject to change without notice.



The MBR-305GR-PE, MBR-705GR-PE and MBR-1405GR-PE are certified as a Class IIa Medical Device [93/42/EEC and 2007/47/EC) for medical purposes of storing blood and blood products.

 $^{^{\}rm II}$ Exterior dimensions of main cabinet only, excluding handle and other external projections - See dimensions drawings or website for full details. $^{\rm II}$ Nominal value - Background noise 20dB