



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**

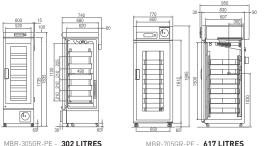
Insulated window prevents condensation and ensures temperature uniformity.

#### Interior Lamps

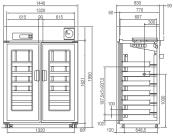
Fluorescent interior lamp with ON/OFF switch and a large view window in the outer door provide a clear view of stored blood.

#### 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-705GR-PE - 617 LITRES



MBR-1405GR-PE - 1301 LITRES



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External Dimensions (W x D x H) <sup>1)</sup>	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	
Interior Material		Painted Steel		
Outer Doors	qty	1, Double layer glass window		
Outer Door Lock		Υ		
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 = Bı	uzzer 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 <sup>2)</sup>	dB [A]	41	45	48
Options				
Temperature chart recorder			Included	
- Chart paper		RP-G04-PW		
- Ink pen		PG-R-PW		
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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.

 $<sup>^{\</sup>rm II}$  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