

# MBR Blood Bank Refrigerators

302/622 L



MBR-305GR-PE



## Robust design for safest 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 Panasonic.

### 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 transparent 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 for valuable blood samples.



### 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-705GR-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

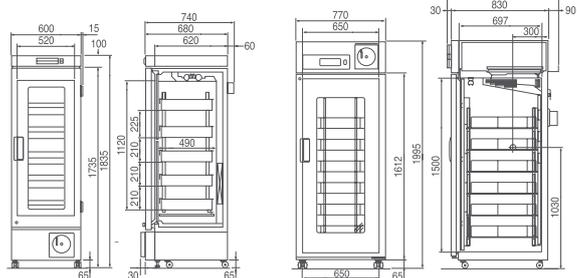
Insulated window prevents condensation and ensures temperature uniformity.

## 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-305GR-PE 302 LITRES

MBR-705GR-PE - 617 LITRES

Model Number		MBR-305GR-PE	MBR-705GR-PE
External Dimensions (W x D x H) <sup>1)</sup>	mm	600 x 680 x 1835	770 x 830 x 1955
Internal Dimensions (W x D x H)	mm	520 x 490 x 1150	650 x 697 x 1500
Volume	litres	302	622
Net Weight (approx)	kg	147	213
Capacity	450ml bags	120	360
<b>Performance</b>			
Temperature setting range	°C	4 +/- 1.5	4 +/- 1.5
<b>Control</b>			
Controller		Microprocessor	
Display		LED	
Temperature recorder		MTR-G04 (included)	
Temperature sensor		2 bottles with thermistor sensor	
<b>Refrigeration</b>			
Defrost method	W	Fully automatic	
Refrigerant*		R-134A	R-134A
Refrigerant weight	g	160	115
Refrigerant GWP		1430	1430
Total Refrigerant weight (CO <sub>2</sub> equivalent)	t	0.229	0.164
Cooling method		Forced air	
Insulation	mm	PUF	
<b>Construction</b>			
Exterior Material		Painted Steel	
Interior Material		Painted Steel	
Outer Doors	qty	1, Double layer glass window	
Outer Door Lock		Y	
Inner Door	qty	2, Acrylic	3, Acrylic
Shelves	qty	5, Stainless steel	6, Stainless steel
Drawers	qty	-	
Max. load - per shelf/drawer	kg	20	40
Max. load - total	kg	100	240
Access port	qty	1	3
Access Port Position		Left	Left/right/top
Access Port Diameter	∅ mm	30	30
Casters	qty	4	4
Interior light		Fluorescent	
<b>Alarms (R = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm)</b>			
Power Failure		V-B-R	
High Temperature		V-B-R	
Low Temperature		V-B-R	
Door Open		V-B	
<b>Electrical and Noise Level</b>			
Power Supply	V	230V 50Hz single phase	
Noise Level <sup>4)</sup>	dB [A]	41	45
<b>Options</b>			
Temperature recorders			
Temperature chart recorder		Included	
- Chart paper		RP-G04-PW	
- Recorder housing		PG-R-PW	

Appearance and specifications are subject to change without notice.

<sup>1)</sup> Exterior dimensions of main cabinet only, excluding handle and other external projections - See dimensions drawings on website for full details.

<sup>2)</sup> Nominal value - Background noise 20dB

<sup>3)</sup> Remote alarm comes with optional power failure alarm MPR-48B1-PW

<sup>4)</sup> Double pane glass window with heat reflecting film

\* Complies with Art. 11, Annex III of F-Gas Regulation (EU) No 517/2014. Contains fluorinated greenhouse gases.



PHC Europe B.V.



Crucial Temperature Solutions



The MBR-305GR-PE and MBR-705GR-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.