

# Biomedical

-30°C Chest Freezer

138 | 221 | 425 L



MDF-237-PE

**Power to counteract frequent door openings** Biomedical Chest Freezers offer outstanding reliability and performance, as required in a wide variety of storage- and research applications.

## Precise & Uniform Storage

Precise and uniform storage temperatures regardless of ambient conditions through microprocessor temperature control.

## Stable Temperature Control

Manual defrost provides stable temperature control and does not exhibit transient temperature.

## Ease of Use & Intelligent Security

A comprehensive visual and audible alarm system with remote alarm contacts ensures users are aware of any abnormalities and can take appropriate actions.



## Outstanding reliability and performance

The outstanding reliability and performance provided are ideal in a wide variety of storage and research applications.



## Effective storage

In the medical field they provide effective storage of life-saving blood supplies and vaccines, as well as samples for diagnosis.



## Valuable Sample Storage

An ideal storage solution with door lock (key included) for valuable samples.

# Biomedical -30°C Chest Freezer



MDF-437-PE

## Easy to read digital display

Temperature readings are displayed and controlled in the range of -20°C to -30°C.

## Direct Cooling System

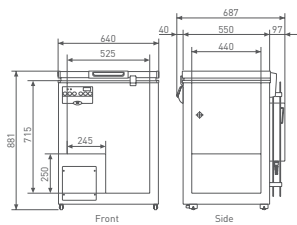
The Biomedical -30°C Chest Freezers feature a direct cooling system for uniform temperature control. Manual defrost ensures a stable environment with no large temperature peaks.

## Visual LED Alarm Alerts

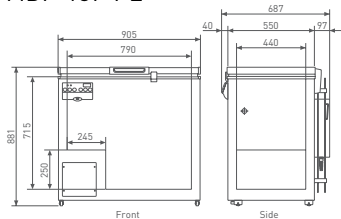
Audible and flashing LED visual alarms alert users to the unlikely event of either a high or low temperature condition to protect stored products.

## Microprocessor Control

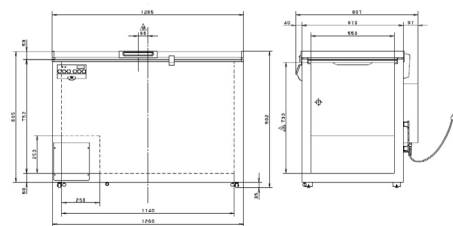
Managed and monitored by an integrated microprocessor controller with a comprehensive alarm system and diagnostic functions.



MDF-137-PE



MDF-237-PE



MDF-437-PE

Model Number		MDF-137-PE	MDF-237-PE	MDF-437-PE
<b>Dimensions</b>				
External Dimensions (W x D x H) <sup>1)</sup>	mm	640 x 687 x 881	905 x 687 x 881	1265 x 807 x 902
Internal Dimensions (W x D x H)	mm	525 x 440 x 715	790 x 440 x 715	1140 x 550 x 733
Volume	litres	138	221	425
Capacity	2" boxes	51	111	201
Net weight (approx)	kg	52	60	81
<b>Performance</b>				
Cooling performance <sup>2)</sup>	°C		-30	
Temperature setting range	°C		-18 ~ -35	
Temperature control range <sup>2)</sup>	°C		-20 ~ -30	
<b>Control</b>				
Controller			Microprocessor	
Display			LED	
Temperature sensor			Thermistor	
<b>Refrigeration</b>				
Cooling method*			Direct	
Compressor	W	150	200	250
Refrigerant		R-134a	R-134a	R-449A
Refrigerant weight	g	160	175	300
Refrigerant GWP		1430	1430	1397
Total Refrigerant weight (CO equivalent)	t	0.229	0.250	0.419
Insulation material			PUF	
Insulation thickness	mm	55	55	60
<b>Construction</b>				
Exterior Material			Painted Steel	
Interior Material			Coloured aluminium	
Outer lid	qty		1	
Outer lid lock			Y	
Containers / baskets	qty	2	3	4
Max. load per container / basket	kg		10	
Max. load - total	kg	50	80	110
Access port	qty		2	
- position			Right / bottom left	
- diameter	∅ mm		17	
Casters	qty		4 (2 levelling feet)	
<b>Alarms</b> (R = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm)				
Power Failure			V-B-R	
High Temperature			V-B-R	
Low Temperature			V-B-R	
<b>Electrical and Noise Level</b>				
Power Supply	V		230V 50Hz single phase	
Noise Level <sup>3)</sup>	dB [A]	35	41	42
<b>Options</b>				
Storage systems		MDF-13B2-PW, set of two baskets MDF-13B3-PW, set of three baskets		MDF-43B2-PW, set of two baskets MDF-43B3-PW, set of three baskets
Temperature recorders				set of three baskets
- Circular type		MTR-G85C-PE		
- Chart paper		RP-G85-PW		
- Ink pen		PG-R-PW		
- Recorder housing		MDF-S740-PW		
- Continuous strip type		MTR-4015LH-PE		
- Chart paper		RP-40-PW		
- Recorder housing		MDF-S3040-PW		

Appearance and specifications are subject to change without notice.

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

2) Air temperature measured at freezer centre, ambient temperature +35°C, no load

3) Nominal value - Background noise 20dB

\* Contains fluorinated greenhouse gases.

# PHC Europe

A Member of PHC Group

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