

#### MDF-MU339HL-PE MDF-MU539HL-PE

## Biomedical ECO

-30°C freezers

369 L | 504 L





# Same level of reliability with even better performance and efficiency.

Biomedical ECO -30°C Freezers have natural refrigerants and Inverter Compressors and, therefore, minimise energy consumption, reduce environmental impact and save money on running costs.

## Natural Refrigerants and Inverter Technology

Naturally occuring hydrocarbon [HC] refrigerants have minimal effect on the environment and are compliant with environmental legislation for climate control. Combined with inverter technology, these refrigerants also provide more efficient cooling without compromising cooling perfor-mance, ambient tolerance and recovery speeds following door openings.

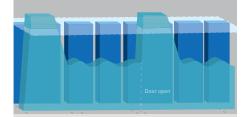
### Safe & Secure Sample Storage

The Biomedical ECO freezers have high and low abnormal temperature alarms, and manual defrosting to prevent samples from being affected by temperature variations.

The MDF-MU539HL-PE features two separate outer doors to reduce cold air leakage when taking samples in and out of the freezer. In addition to a standard-feature door lock, a latch that allows a padlock to be attached is also provided.

### Height-adjustable shelf trays

Both units feature completely height-adjustable shelf trays. The freezer can be equipped with optimal storage containers. Optional drawer and racking systems are available upon request. (the slim model, MDF-MU339HL-PE, features a width of just 616 mm)



#### **Stable Temperatures**

Inverter compressors provide optimum stability, while quality of design ensures reliability. Ideal for samples that are sensitive to temperature fluctuations.



#### **Versatile Alarm Functions**

Alarms for high/low temperatures and an error code display with self diagnostic functions inform users of any abnormalities such as power failures or plug drop-outs, allowing prompt actions to be taken to avoid damaging valuable samples.



#### **Easy Defrosting**

Defrosting can become an easy task with the drain hose which is attached to the main unit.

#### **BIOMEDICAL ECO** -30°C Freezer



MDF-MU339HL-PE

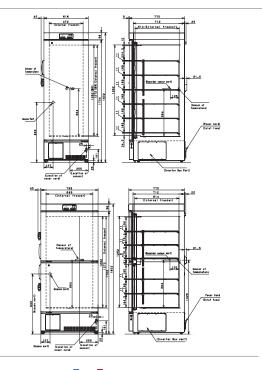
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#### **Inverter Compressors**

While conventional freezers use single speed compressors which cycle on and off, Biomedical ECO Freezers contain inverter compressors that can run at different speeds to maximise cooling performance under different conditions. As the compressor is not cycling on and off as frequently the temperature uniformity of the freezer is significantly improved. Inverter compressors have the added advantage of reducing the energy consumption of the freezer which is not only better for the environment but also helps to reduce running costs.

#### **Integrated Control Centre**

The microprocessor control system is secure, easy to use and comprehensive and can be accessed through a front mounted control panel. The microprocessor has a memory back-up so after a power failure, operation resumes at pre-outage settings. The self diagnostics function will display an error code in the case of an abnormality.





External dimensions (W x D x H) <sup>1)</sup>	mm	616 x 770 x 1802	793 x 770 x 1802	
Internal dimensions (W x D x H)	mm	472 x 614 x 1262	649 x 614 x 1262	
Volume	litres	369	504	
Net weight	kg	122	144	
Performance				
Cooling performance 2)	°C	-30		
Temperature setting range	°C	-18 to -35		
Temperature control range 2)	°C	-20 to -30		
Control				
Controller		Microprocessor, non-volatile memory		
Display		LE	ED	
Temperature sensor		Thermistor		
Refrigeration				
Refrigeration system		Direct		
Compressors	W	400 (inverter control)		
Refrigerant		HC		
Insulation material		PUF		
Insulation thickness	mm	70		
Construction				
Exterior material		Painted Steel		
Interior material		Painted Steel		
Outer door	qty	1	2	
Outer door lock		Yes		
Shelves	qty	6		
Max. load - per shelf	kg	30		
Access port	qty	1		
- position		Back		
- diameter	Ø mm	30		
Casters	qty	4 [2 levelling feet]		
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		
Electrical and noise level				
Power supply	V	220/230/240		
Frequency	Hz	50		
Noise level <sup>3]</sup>	dB [A]	42		
Options				
Temperature recorders				
Circular type		MTR-G85C-PE		
		- Chart paper: RP-G85-PW		
		- Ink pen: PG-R-PW		
		- Recorder housing: MPR-		
Continuous strip type		MTR-4015LH-PE		
		- Chart paper: RP-40-PW - Recorder housing: MPR-S30-PW		
Storage container		MDF-03SC-PW MDF-05SC-PW		
		(2 pcs/set, 3 sets/freezer)	(2 pcs/set, 6 sets/freezer)	
(Inner dimension)	mm	W420 x D552 x H157	W280 x D552 x H157	

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MDF-MU539HL-PE

<sup>1)</sup> External dimensions of main cabinet only, excluding handle

and other external projections.

Air temperature measured at freezer centre, ambient temperature 35°C, no load.

Nominal value - Background noise 20 dB[A]



Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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