



MDF-DU900V-PE

VIP

-86°C Upright Freezer

845 L







PHCbi's MDF-DU900V VIP -86°C Upright Freezer provides maximum sample storage capacity within an optimum footprint combined with industry leading cooling performance and reliability for an ideal long-term preservation solution.

Maximum Sample Storage

The use of space saving patented VIP PLUS panels within the freezer cabinet allows a capacity of up to 672 2" boxes inside a footprint of just 1m² for maximum storage. The freezer's conventional depth allows for easy installation.

Reliable PHCbi Technologies

Cool Safe® compressors that are specifically designed for ultra-low temperature applications are employed in the proven PHCbi cascade refrigeration system ensuring the highest levels of performance and reliability.

Enhanced Use & Intelligent Security

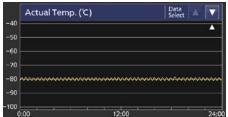
The new EZlatch makes access to stored samples even easier.

A colour LCD touch panel allows full user control, even with gloved hands, while the USB port makes transferring logged data to a PC simple and convenient.



High Capacity Sample Storage

Ideal for high volume and long term sample storage in biobanks and biorepositories.



Dependable Preservation

Quality of design and manufacture ensures trusted and reliable storage that maintains the integrity of precious samples.



Easy Data Monitoring

Important information such as freezer temperature, door opening times and alarm history is logged for monitoring in GLP applications.

VIP -86°C Upright Freezer



Application Specific Design

Refrigeration components are carefully selected and matched for optimum and efficient operation under demanding laboratory environments. This improves temperature recovery after door openings and sample placement, while ensuring lower internal temperatures for increased durability.

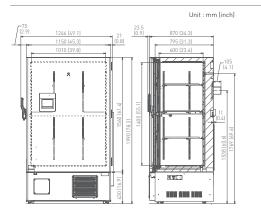
Highest Box Capacity

The use of highly efficient VIP PLUS insulation optimizes interior volume in the smallest footprint possible. This ensures the most efficient use of space for up to 40%* more 2" box storage capacity within the same footprint.

*MDF-DU900V-PE compared with PHCbi model with an equivalent footprint.

Microprocessor Control with Touch Screen Display

Managed and monitored by an integrated microprocessor controller with a comprehensive alarm system and self- diagnostic functions. Freezer temperature and important status information are clearly displayed and logged, with the possibility to export the data to USB.





The MDF-DU900V-PE is certified as a Class IIa Medical Device [93/42/EEC and ZUU1/41/EG, 10. medical purposes of storing cells, tissues, organs and embryos.



PHC Europe B.\

Model Number		MDF-DU900V-PE
External Dimensions (W x D x H) ¹⁾	mm	1150 x 870 x 1990
Internal Dimensions (W x D x H)	mm	1010 x 600 x 1400
Volume	litres	845
Net Weight	kg	372
Capacity	2" boxes	672
Performance		
Cooling performance 2)	°C	-86
Temperature setting range	°C	-50 to -90
Temperature control range 21	°C	-50 to -86
Control		
Controller		Microprocessor, non-volatile memory
Display		LCD Touch Screen
Temperature sensor		Pt-1000
Refrigeration		
Refrigeration system		Cascade
Compressors	W	2 x 1100
Refrigerant	.,	HFC
Insulation material		PUF / VIP Plus
Insulation thickness	mm	70
Construction	111111	7.0
Exterior Material		Painted Steel
Interior Material		Painted Steel
Outer Door	qty	1
Outer Door Lock	qty	Y
Inner Doors	atv	2 pieces (insulated)
Shelves	qty	2 pieces (insulateu)
Max. load - per shelf	kg	50
Max. load - total	-	150
Vacuum release port	kg	Υ
Access Port	atv	2
Access Port Position	qty	Back, Bottom
Access Port Diameter	Ø mm	17
Casters		4 (2 leveling feet)
Alarms	qty	4 (2 leveling leet) a Alarm, V = Visual Alarm, B = Buzzer Alarm)
	(D - Domot	e Aldrin, v = visual Aldrin, b = buzzer Aldrin)
	(R = Remote	V P P
Power Failure	(R = Remote	V-B-R
Power Failure High Temperature	(R = Remote	V-B-R
Power Failure High Temperature Low Temperature	(R = Remote	V-B-R V-B-R
Power Failure High Temperature Low Temperature Filter	(R = Remote	V-B-R V-B-R V-B
Power Failure High Temperature Low Temperature Filter Door open	(R = Remote	V-B-R V-B-R
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level		V-B-R V-B-R V-B V-B
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply	V	V-B-R V-B-R V-B V-B
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency	V	V-B-R V-B-R V-B V-B 230 50
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency Noise Level ³¹	V	V-B-R V-B-R V-B V-B
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency Noise Level ³¹ Options	V Hz dB [A]	V-B-R V-B-R V-B V-B 230 50 52
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency Noise Level ³¹ Options Small Inner Door Kit	V	V-B-R V-B V-B 230 50 52 MDF-9ID-PW (max 2) 41
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency Noise Level ³¹ Options Small Inner Door Kit Liquid CO ₂ back-up	V Hz dB [A]	V-B-R V-B-R V-B V-B 230 50 52
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency Noise Level ^[3] Options Small Inner Door Kit Liquid CO ₂ back-up Temperature recorders	V Hz dB [A]	V-B-R V-B V-B V-B 230 50 52 MDF-9ID-PW [max 2] 41
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency Noise Level ³¹ Options Small Inner Door Kit Liquid CO ₂ back-up Temperature recorders - Circular type	V Hz dB [A]	V-B-R V-B V-B V-B 230 50 52 MDF-9ID-PW (max 2) 41 MDF-UB6-PW
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency Noise Level ³¹ Options Small Inner Door Kit Liquid CO ₂ back-up Temperature recorders - Circular type - Chart paper	V Hz dB [A]	V-B-R V-B-R V-B V-B 230 50 52 MDF-9ID-PW (max 2) 41 MDF-UB6-PW MTR-G85C-PE 51 RP-G85-PW
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency Noise Level Options Small Inner Door Kit Liquid CO ₂ back-up Temperature recorders - Circular type - Chart paper - Ink pen	V Hz dB [A]	V-B-R V-B-R V-B V-B 230 50 52 MDF-9ID-PW (max 2) 41 MDF-UB6-PW MTR-G85C-PE 51 RP-G85-PW PG-R-PW
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency Noise Level Options Small Inner Door Kit Liquid CO ₂ back-up Temperature recorders - Circular type - Chart paper - Ink pen - Continuous strip type	V Hz dB [A]	V-B-R V-B-R V-B V-B 230 50 52 MDF-9ID-PW [max 2] 4] MDF-UB6-PW MTR-G85C-PE 5] RP-G85-PW PG-R-PW MTR-85H-PW
Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency Noise Level Options Small Inner Door Kit Liquid CO ₂ back-up Temperature recorders - Circular type - Chart paper - Ink pen - Continuous strip type - Chart paper	V Hz dB [A]	V-B-R V-B-R V-B V-B 230 50 52 MDF-9ID-PW [max 2] 41 MDF-UB6-PW MTR-G85C-PE 51 RP-G85-PW PG-R-PW MTR-85H-PW RP-85-PW
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Power Failure High Temperature Low Temperature Filter Door open Electrical and Noise Level Power Supply Frequency Noise Level Options Small Inner Door Kit Liquid CO ₂ back-up Temperature recorders - Circular type - Chart paper - Ink pen - Continuous strip type - Chart paper	V Hz dB [A]	V-B-R V-B-R V-B V-B 230 50 52 MDF-9ID-PW [max 2] 41 MDF-UB6-PW MTR-G85C-PE 51 RP-G85-PW PG-R-PW MTR-85H-PW RP-85-PW

 $^{^{\}rm II}$ Exterior dimensions of main cabinet only, excluding handle and other external projections - See dimensions drawings on website for full details.

Air temperature measured at freezer centre, ambient temperature +30°C, no load.

Nominal value - Background noise 20dB[A].
 Installation of small inner door kit may effect usable storage

capacity.

5) Requires sensor cover MTR-DU700SF-PW.



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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Please contact us if this literature doesn't answer all your questions.