PHCbi

Biomedical Freezer

MDF-U5412

MDF-U5412

Temperature

(Ambient temperature 30˚C)

-40˚C

Effective capacity

482liters/17.0cu.ft.

280pcs

300ml frozen plasma bag

Biomedical Freezer for reliable preservation of plasma and other biologics

- High freezing power
- Stable & Uniform temperature design
- Ideal freezing environment for biologicals
- Alarm and safety devices

PHC Corporation, Biomedical Division

Life Science Innovator Since 1966

MDF-U5412

Features

PHCbi MDF-U5412 provides an ideal freezing environment for preservation of plasma, vaccines, test samples, and other biological specimens.

Stable & Uniform Temperature Design

- Double outer doors
- Full-height storage containers on each shelf
- Cooling tubes under every shelf
- Direct cooling system for stable temperature control
- Fine-controllable refrigeration circuit with valve

Large Storage Capacity

- 300ml FFP* bag x 280 pieces.

*Fresh Frozen Plasma

User Friendly Design

- Built-in door latch for each door
- Easy calibration through the control panel

Visual and Audible Alarm System

- High & Low temperature alarm
- Power failure alarm with non-volatile memory back up
- Self-diagnostic system

Safety Function

- Remote alarm contact
- Re-activating buzzer, lamp and remote alarm contact (30min. after buzzer stops)
- Standard door lock and independent padlock hasp door latches for extra security
- Remote monitoring by Data acquisition system (Option)
- 1/7/30 days circular recorder (Option)

Environment friendly

- HCFC-Free refrigerant and insulation

Specifications

	Model No.
220 V, 50 Hz	MDF-U5412-PB
220 V, 60 Hz	MDF-U5412-PK MDF-U5412-PR
230 V/240 V, 50 Hz (CE)	MDF-U5412-PE
External Dimensions (W x D x H)*1	804 x 772 x 1802 (mm) / 31.7 x 30.4 x 71.0 (inch)
Internal Dimensions (W x D x H)	658 x 607 x 1272 (mm) / 25.9 x 23.9 x 50.1 (inch)
Net weight	134 kg (295.4 lbs.)
Effective capacity	482 liters (17.0 cu.ft.)
Exterior cabinet	Galvanised steel with baked-on finish
Cabinet insulation	Rigid polyurethane foamed-in place
Outer door	2, Insulated and magnetic sealed
Door lock	1 door lock, 2 lockable door latches for each door
Storage container	6 pcs. (Upper room), 4 pcs. (Lower room)
Casters	4
Adjustable leveling feet	2
Compressor	Hermetic, 400 W (PB & PE models), 450 W (PK & PR models)
Refrigerant	HFC refrigerant
Temperature control range	–20˚C to –40˚C (Ambient temperature 5˚C to 30˚C)
Settable range	–18˚C to –45˚C
Cooling method	Direct cooling
Temperature control	Microprocessor control
Temperature alarm	High / Low (±5˚C to ±15˚C, adjustable)
Power failure alarm	Buzzer and lamp (Automatic rechargeable battery), Memory back up
Remote alarm contact	Allowable contact capacity: DC 30 V, 2 A, Temperature alarm or power failure alarm
Access hole	ø30, Rear side
Accessories	Door lock key, Defrost spatula, Storage containers
Options	Interface board*2 (MTR-L03-PW, MTR-480-PW), Strip chart recorder (MTR-4015LH-PE), Recorder fixing (MPR-S30-PW), Recording paper (RP-40-PW), Circular chart recorder (MTR-G85C-PE), Recorder mounting kit (MPR-S7-PW), Recording paper (RP-G85-PW), Recording pen (PG-R-PW)

*Cooling performance is indicated by the temperature reached at the center of the freezer (at ambient temperature of 30˚C with no load). In order to use the freezer at a stable temperature for a long time, it is recommended that the temperature be set to at least 5˚C higher than the indicated lowest temperature.
In addition, depending on the usage conditions, it may not be possible to reach the indicated lowest temperature.

Caution: PHC Corporation guarantees this product under certain warranty conditions. However, please note that PHC Corporation shall not be responsible for any loss or damage to the contents of the product.

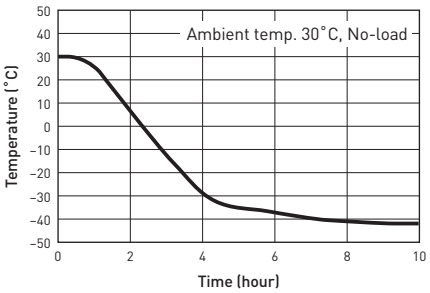
•Appearance and specifications are subject to change without notice.

*1 External dimensions of main cabinet only - see dimension drawings showing handles and other external projections.

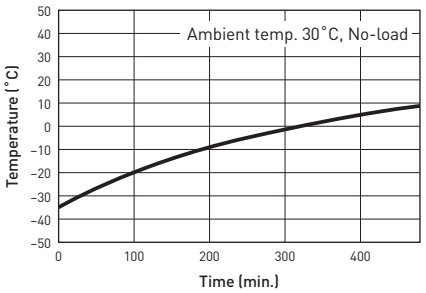
*2 Interface board is for the data acquisition system MTR-5000 user only.

Performance Data

Pull-down characteristics

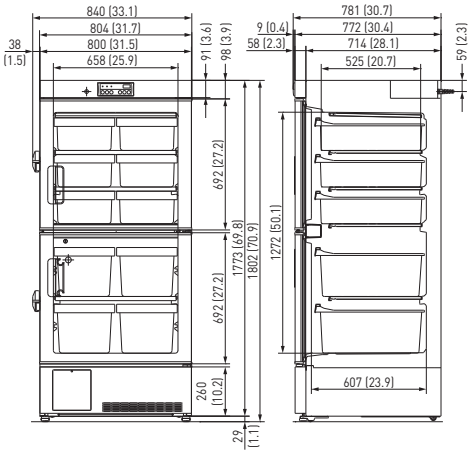


Pull-up characteristics during power failure



Dimensions

Unit : mm (inch)



Preservation (freezers, refrigerators) and Culturing (incubators) Equipment

The management of the design, development, production, sales support, and servicing of the above.

PHC Corporation, Biomedical Division

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PHC Corporation Biomedical Division is certified for:

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