



MDF-U731M-PA | FZRMD24

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MDF-U731M-PA | **FZRMD24** 

# **Biomedical Freezer**

-30°C Upright Freezer

24.4 cu.ft. | 690 L

Our biomedical freezer provides uniform, reliable and environmentally safe operation. The manual defrost storage solution is designed for long, intermediate and short-term storage at temperatures as low as -30°C. The biomedical freezer can be used in clinical, biotechnology and industrial laboratories.

# Refrigeration Design

This biomedical freezer utilizes unique high performance laboratory and clinical grade refrigeration systems to provide dependable cooling by balancing temperature performance and energy management. The reserve refrigeration power, initiated automatically on demand, assures fast temperature recovery following door openings.

# Uniform Storage Environment

Uniform temperatures are maintained throughout the storage chamber through unique electrical control of the refrigeration system. This assures product safety regardless of storage location. This freezer is ideal for storage of biologics, enzymes, culture media, vaccines, lab specimens and other temperature sensitive materials.

## Manual Defrost Systems

Model MDF-U731M-PA | FZRMD24 includes a cold wall evaporator with a manual defrost system. Coils are placed strategically within the chamber for maximum cooling performance. The chamber storage area is maintained at a constant temperature until a manual defrost is initiated. This stability is ideal for temperature sensitive biological materials, such as enzymes.



### **Uniform Storage Environment**

Uniform temperatures are maintained throughout the storage chamber for assured product safety regardless of storage location. This is ideal for storage of biologics, enzymes, culture media, vaccines, lab specimens and other temperature sensitive materials.



# Microprocessor Control and Alarm System

This biomedical freezer includes factory preset audible and visual alarms for power failure and door ajar, battery backup and a self-diagnostic messaging system. The softkey six button menu allows for easy management of all freezer functions.



# **Optional Storage Bins**

Optional storage bins and adjustable shelving allow for the optimum arrangement of storage configurations to meet your specific needs. The optional bins (MDFTO7SC) come in seven packs of two for a total number of 14 bins.





# -30°C Upright Freezer



Model MDF-U731M-PA I **FZRMD24** shown with optional storage bins.

# **Maximize Floor Space**

The upright cabinet design offers maximum storage with minimal floor space required.

**Dimensions** Unit: inch | mm



### MDF-U731M-PA | FZRMD24

| Model Number                                     |                 | MDF-U731M-PA I <b>FZRMD24</b>                                  |
|--|-----------------|--|
| External Dimensions (W $\times$ D $\times$ H) 1) | inches   mm     | 30.3 x 32.7 x 77.0   770 x 830 x 1955                          |
| Internal Dimensions (W × D × H)                  | inches   mm     | 25.6 x 27.6 x 59.8   650 x 700 x 1520                          |
| Volume   | cu.ft.   liters | 24.40   690  |
| Net Weight                                       | lbs   kg        | 335   152  |
| Performance                                      |                 |  |
| Warranty   |                 | 2 years parts and labor, 3 years compressor parts              |
| Cooling Performance 2)                           | °C              | -30  |
| Temperature Setting Range                        | °C              | -18 to -35 in 1°C increments                                   |
| Temperature Control Range 2)                     | °C              | -20 to -30 in 1°C increments                                   |
| Control  |                 | -20 to -50 iii i C ilidemens                                   |
|  |                 |  |
| Controller                                       |                 | Microprocessor, softkey data entry, password protected, memory |
| Display  |                 | LED  |
| Temperature Sensor                               |                 | Thermistor   |
| Refrigeration                                    |                 |  |
| Refrigeration System                             |                 | Single, hermetic, reciprocal compressor                        |
| Compressors                                      | W               | (1) 400  |
| Refrigerant                                      |                 | SNAP and CARB Approved HFO R-449A                              |
| Evaporator Type                                  |                 | Cold Wall  |
| Defrost  |                 | Manual   |
| Insulation Material                              |                 | Rigid polyurethane foamed-in-place                             |
| Construction                                     |                 |  |
| Exterior Material                                |                 | Powder coated steel  |
| Interior Material                                |                 | Painted steel  |
| Outer Door                                       |                 | 1; Solid   |
| Key Lock   |                 | Standard   |
| Additional Door Lock                             |                 | Hasp for pad lock  |
| Shelves  |                 | 4; Adjustable, wire  |
| Shelf Dimension (W x D)                          | inches   mm     | 24.6 x 24.4   626 x 620  |
| Max. Load - Total                                | lbs   kg        | 110   50   |
| Access Port / Position                           |                 |  |
| Bins   | qty             | 2; 1 left side, 1 top  |
|  | qty             | Optional   |
| Access Port Diameter                             | inches   mm     | 1.1   30   |
| Casters  | qty             | 2; Swivel   2; fixed   |
| Leveling Feet                                    | qty             | 2; Front of base for securing unit in place                    |
| Alarms   | (V              | = Visual Alarm, B = Buzzer Alarm, R = Remote Alarm)            |
| Power Failure                                    |                 | V-B-R  |
| High Temperature                                 |                 | V-B-R  |
| Low Temperature                                  |                 | V-B-R  |
| Door Ajar  |                 | V-B  |
| Remote Alarm Contacts / Outputs                  |                 | Normal open, normal closed, common   DC 30V, 2A                |
| Electrical and Noise Level                       |                 |  |
| Power Supply                                     |                 | 115V, 1Ø, NEMA 5-15P,<br>requires NEMA 5-15R receptacle        |
| Noise Level 3)                                   | dB(A)           | 40   |
|  | -24 4           |  |
| Options  |                 |  |
| Bin Capacity                                     | pack            | 7 packs of 2, total 14 bins                                    |
| Bin  | part number     | MDFTO7SC   |
|  | part number     | MDF730SLF  |
| Extra Shelf                                      |                 |  |
|  |                 |  |
| Extra Shelf Temperature Recorders Circular Type  |                 | MTRC954  |
| Temperature Recorders                            |                 | MTRC954<br>C740306REV  |
| Temperature Recorders<br>Circular Type           | pack of 6       |  |

<sup>1)</sup> Exterior dimensions of main cabinet only, excluding handle and other external projections

Specifications are subject to change without notice.

Performance data herein is based on independent testing at time of publication.





<sup>&</sup>lt;sup>2)</sup> Air temperature measured at freezer center, ambient temperature +30°C, no load <sup>3)</sup> Nominal value – Background noise 20db[A]