PHCBI

MPR-N450FH-PA | REFFZR16-GS
MPR-N450FSH-PA | REFFZR16-SS

Pharmaceutical
Refrigerator with Freezer

+2°C to +14°C Refrigerator
-30°C to -20°C Freezer

11.5 cu.ft. | 326 L
4.8 cu.ft. | 136 L

ECO natural refrigerants   IC+ inverter controlled

MPR-N450FH-PA | **REFFZR16-GS**

The PHCbi brand Pharmaceutical Refrigerator with Freezer offers a complete storage solution in one cabinet. This multipurpose cabinet is designed for safe, reliable storage of vaccines and biological materials. Refrigerated and frozen products can be maintained within a single footprint.

Superior Uniformity

The refrigerator provides superior uniformity throughout. Temperatures remain stable wherever products are stored, even in a fully loaded chamber. The refrigerator is engineered to prohibit inadvertent freezing of temperature sensitive vaccines.

Independent Refrigeration Systems

The single cabinet includes two independent temperature controlled chambers with separate refrigeration systems. The refrigerator section operates on a high efficiency inverter compressor running at variable speed upon demand to reduce energy consumption. New EPA SNAP refrigerants help meet facility sustainability goals and lower global environmental impact.

Security Control and Monitoring

The microprocessor controller and softkey interface are door mounted at eye level. An OLED alphanumeric display provides convenient, secure user management. Refrigerator and freezer temperatures can be displayed simultaneously or individually. Minimum/maximum temperatures are automatically displayed every 24 hours. All alarm conditions are displayed and recorded. Data transfer is through a USB port.

Temperature Distribution

Temperature uniformity is maintained at all storage levels even at full load conditions. This provides even, horizontal airflow across the solid adjustable glass shelves at all shelf levels to assure optimum temperature uniformity under full load conditions.

Natural Refrigerants

Hydrocarbon refrigerants help achieve facility sustainability objectives by minimizing any environmental impact without compromising cooling performance, ambient tolerance and recovery speeds following door openings.

Easy to Use

Adjustable audible and visual alarms are standard, along with integrated system diagnostics and predictive performance supervision. The password-protected control panel provides security and minimizes risk of accidental changes in setpoint.

PHC Corporation of North America

FOLLETT HEALTHCARE

Pharmaceutical Refrigerator with Freezer

Slim Profile Cabinet Design

The space saving, ergonomic design has double doors for refrigerator and freezer chambers. The 15" door open allowance permits easy cabinet installation in narrow aisles and hallways for greater flexibility. Independent key locks on the refrigerator and freezer compartments increase security. The MPR-N450FH-PA | **REFFZR16-GS** has triple-pane viewing windows.

Maximized Storage

The refrigerator includes three adjustable, tempered glass shelves. The solid shelf construction eliminates tipping of bottles and vials. A rear wall LED light is included for product viewing.

Model MPR-N450FSH-PA | **REFFZR16-SS** with solid doors for storage of light-sensitive products.

Defrost Methods

Both models include manual defrost for the freezer compartment. The refrigerator compartment includes an automatic defrost, which activates electronically when needed. The refrigerator evaporator operates above freezing at all times. This prevents vaccines and lab supplies from freezing.
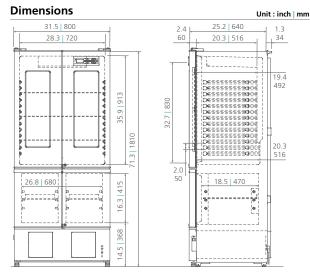
Dimensions

Unit : inch | mm

Illustration shown for Model MPR-N450FH-PA | **REFFZR16-GS**.
Dimensions apply to models with windows and models with solid doors.

Model Number		MPR-N450FH-PA | REFFZR16-GS refrigerator / freezer	MPR-N450FSH-PA | REFFZR16-SS refrigerator / freezer
External Dimensions (W × D × H)[1]	inches | mm	31.5 x 25.2 x 71.3 | 800 x 640 x 1810	
Internal Dimensions (W × D × H)	inches | mm	28.3 x 20.3 x 35.9 | 720 x 516 x 913 26.8 x 18.5 x 16.3 | 680 x 470 x 415	
Volume	cu.ft. | liters	11.5 | 326 / 4.8 | 136	
Net Weight	lbs. | kg	284 | 129	
Performance			
Warranty[2]		3 years parts and labor	
Cooling Performance[3]	°C	+2 to +14 (max +2) / -30 to -20 (max -30)	
Temperature Setting Range	°C	+2 to +14 / -30 to -20	
Control			
Controller		Microprocessor, softkey data entry, password protected	
Display		White graphic OLED	
Temperature Display		Select refrigerator, freezer or concurrent	
USB Logging Function		Logs 3 months of data at 1 minutes intervals	
Refrigeration			
Compressor	W	(1) 120, inverter / (1) 170	
Natural Refrigerant		HC R-600a / HC R-290	
Construction			
Exterior and Interior Material		Painted steel / ABS resin	
Insulation Material, SNAP Compliant		Polyurethane foam-in-place, CFC free	
Key Lock		(1) Standard / (1) Standard	
Shelves	qty	(3) Tempered glass, adjustable / (2) PE Coated wire	
Shelf – Dimension (W × D)	inches | mm	28.2 × 17.7 | 715 × 449 / 11.5 × 17.6 | 293 × 446	
Max. Load per Shelf	lbs. | kg	55 | 25 / 33 | 15	
Max. Load – Total	lbs. | kg	165 | 75 / 132 | 60	
Access Port	inches | mm	(1) Back wall, left 1.2 | 30 (1) Lower back middle 1.2 | 30	
Casters	qty	4 (plus 2 leveling feet on front base)	
Alarms (V=Visual, B=Buzzer, M=Message, R=Remote Alarm)			
Power Failure[4]		R	
High Temperature		V-B-M-R	
Low Temperature		V-B-M-R	
Sensor		V-B-M-R	
Door Open		V-B-M	
Electrical and Noise Level			
Power Supply		115V, 60Hz, 1Ø, NEMA 5-15P, requires NEMA 5-15R receptacle	
Noise Level[5]	dB(A)	41	
Temperature Recorders			
Circular Type, Dual Pen	6", 7 Day Circular	MTRC955	
Chart Paper	52 charts per box	C740306REV	
Ink Pen, Red	pack of 6	R252	
Ink Pen, Blue	pack of 6	R253	
Accessories			
Black-Out Panel for Photosensitive Product		MPR-45BP-PW	–
Alarm Battery, Powers Alarm if Power Fails[4]		MPR-48B2-PW	
Analog Temperature Transmitter		MTR420MAC	
Optional Communication System			
Wireless, Cloud-Based, Automatic Data Management		LabAlert® Monitoring System	

[1] Exterior dimensions of 26.5", 673 mm includes allowance for removable standoff brackets
[2] Current warranty offered at time of printing and may be subject to change
[3] Air temperature measured at freezer center, ambient temperature +30°C, no load
[4] With the purchasing of MPR-48B2, the power failure alarm activates with V, B and M
[5] Nominal value – Background noise 20 dB(A)

Specifications are subject to change without notice.
Performance data herein is based on independent testing at time of publication.

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