

PH-BSI-NSF-UCFS-0504

Product Description

Refrigeration System

Compressor

Refrigerant

These undercounter refrigerators are designed in accordance with the NSF/ANSI 456 Standard for Vaccine Storage. Units protect pharmaceuticals at optimal temperatures, preventing waste and allowing for peak delivery.

These solid door freestanding refrigerators utilize microprocessor controllers and feature temperature alarms, remote alarm contacts, LED interior lighting, and probe access ports with included probes. Vaccine Storage Refrigerators utilize HFC-free refrigerant for environmental health and energy efficiency.

General Description and Application

Description	Single Solid Door Pharmacy/Vaccine Undercounter Refrigerator Freestanding		
Operational environment	Indoor use only. Optimal operating range: +18°C to +26°C (+65°F to +78°F), <70% RH		
Storage capacity	5.2 cu. ft. gross volume		
Door	One swing solid door, self-closing, right hinged, non-reversible, magnetic sealed gasket, keyed lock		
Shelves	Three shelves (two adjustable/one fixed) with guard rail on back		
Mounting and Installation	Leveling legs. Note: 4" of clearance on all sides must be maintained for adequate ventilation		
Interior lighting	Shielded, switched LED lighting, full coverage, balanced spectrum		
Airflow management	Forced Air technology, patent pending		
External probe access	Rear wall port (3/8") dia.		
Insulation	Cabinet is foamed-in-place with EPA compliant high density urethane foam		
Exterior materials	White powder coated steel		
Access control	Pyxis [®] , Omnicell [®] and AcuDose RX [®] compatible		
General warranty	Two (2) years parts and labor warranty, excluding display probe calibration		
Compressor warranty	Five (5) years compressor warranty		
Product Weight	96 lbs.		
Shipping Weight	132 lbs.		
Rated Amperage	1.3 Amps		
Power Plug/Power Cord	NEMA 5-15 plug, 8 to 10 ft typical, conforms to UL471 requirements, Vaccine storage power cord warning label		
Facility Electrical Requirement	110-120V AC: 15 A (minimum)		
Agency Listing and Certification	Certified in accordance with the NSF/ANSI 456 Standard for Vaccine Storage. UL, C-UL, ETL, C- ETL listed (either single or dual agency listings) and certified to UL471 standard, hydrocarbon refrigerant safety, Energy Star Certified		
Included Accessories	Temperature monitor device (TMD) complies with the current CDC guidelines, with 3 years certification of calibration, "buffered" probe in the product simulated solution, min/max memory, field installable, and visual & audible temp alarm		
	Pharmacy refrigerator/freezer toolkit and temperature logs		

Product Data Sheet

Undercounter 5.2 cu. ft. Solid Door Freestanding Vaccine Refrigerator - Certified to NSF/ANSI 456 Standard for Vaccine Storage



*-one or more of these certifications may apply to this unit.

Temper	Temperature Probes				
Probe	Ave	Min	Max		
1	3.9	2.7	5.2		
2	4.3	4.0	4.8		
3	4.1	3.4	4.9		
4	3.9	2.7	5.2		
5	4.3	4.0	4.8		
6	4.5	4.0	5.2		
7	4.8	4.4	5.3		
8	4.7	4.2	5.2		
9	4.9	4.4	5.5		
10	5.1	4.6	5.6		
11	5.5	5.0	6.1		
12	5.5	5.2	5.8		
13	5.5	5.3	5.8		
14	5.0	4.4	5.8		
15	5.3	5.0	5.7		



Temperature Charts



Condenser	Tube and grid construction, fanless
Evaporator	Plate wall
Defrost	Cycle optimized, zero energy

Hermetic, high performance

EPA SNAP compliant, R600a, Isobutane

Performance	
Uniformity ¹ (Cabinet air)	+/- 1.4°C
Stability ² (Cabinet air)	+/- 1.3°C
Maximum temperature variation	+/-1.7°C
Temperature rise after 8 sec door	Temperature did not exceed 6.5°C at any probe for all required NSF/ANSI 456 testing
openings	scenarios ³
Recovery after 3 min door opening	All probes recover to under 8°C within 6 min.
Energy consumption	1.15 KWh/day⁴
Average heat rejection	1.67 KWh/day (237 BTU/h)⁴
Noise pressure level (dBA)	41 or less installed
Pull down time to nominal operating	42 min
temp	

Controller, Configuration, Alarms and Monitoring			
Controller technology	Parametric, microprocessor, LED display with 0.1°C resolution		
Temperature setpoint range	1°C to 10°C (Setpoint must remain unaltered from the factory setting to remain compliant wit NSF/ANSI 456 Standard for Vaccine Storage requirements)		
Display probe	Calibrated, stainless steel		
External alarm connection	State switching remote alarm contacts		
	Visual and audible indicators		
Alarms	High / Low temperature, compliant with alarm requirements defined in the NSF/ANSI 456		
	Standard for Vaccine Storage		
Simulator ballast	Glass bead thermal media		

Performance data acquired at 22°C ambient, using NSF/ANSI 456 compliant validation ballast probes, empty chamber, during stabilized steady state operation and a DAQ sampling rate of one measurement every 10 seconds

1 - Uniformity is defined as the maximum variance in temperature across all probes at any point in time over the testing period

2 - Stability is defined as the maximum variance in temperature experienced by any single probe over the testing period

3 - Temperature performance for all loaded and unloaded door opening protocols, all alarm, controller and probe requirements as defined in the NSF/ANSI 456 standard for vaccine storage

4 - Data per Energy Star test results or equivalent testing and calculation. Heat rejection based on daily averages, not continuous operation. Performance exceeds Energy Star requirements.







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Undercounter 5.2 cu. ft. Solid Door Freestanding Vaccine Refrigerator - Certified to NSF/ANSI 456 Standard for Vaccine Storage



Dimensions	Dimensions					
		Width	Depth	Height	Door Swing	Total open Depth
E>	terior	23 3/4"	24"	32 1/8"	22"	45 3/4"
In	iterior	19 7/8"	15 3/8"	24 3/4"		



Note: This unit must have 4" clearance on sides and back for adequate ventilation

Contact		
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