

# Product Data Sheet

49 cu. ft. Plasma Freezer, High Performance, FDA listed Class II medical device

# NSBF492WSWCR/0

## **Product Description**

Corepoint<sup>TM</sup> Scientific Plasma Freezers are designed in accordance with FDA listed Class II medical devices. In addition, plasma freezers also conform to the requirements set forth by AABB for the refrigerated cold storage of blood-based products.

Backed by optimal temperature control and EPA SNAP compliant refrigerants, these high-performance units protect blood, prevent waste, and allow for peak delivery. Corepoint<sup>TM</sup> Scientific Plasma freezers utilize smart controllers and feature a full array of alarms, LED interior lighting, stainless steel interiors, sliding drawers and probe access port.

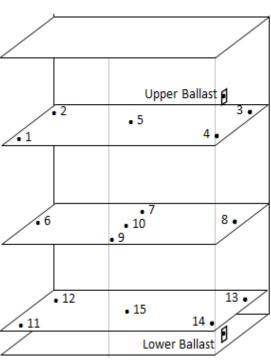
General Description and Applica	ition
Description	Double solid door plasma freezer
Operational environment	Indoor use only, +18°C to +26°C (+65°F to +78°F), <70% RH
Storage capacity	49 cu. ft. gross volume, up to 960 plasma boxes with optional 8 <sup>th</sup> drawer
Door	Two swing solid doors, self-closing, stay position at 100° open, right and left hinged to open from the middle, non-reversible, magnetic sealed gasket, keyed lock
Drawers	7 drawers standard per door (14 drawers total) with option for 8th drawer per door (16 drawers total), 304 SS drawers, 65 lb. capacity each
Mounting and Installation	4 swivel casters, front casters locking
Interior lighting	Shielded, switched LED lighting, full coverage, balanced spectrum
External probe access	Rear wall port (3/4") dia.
Insulation	Cabinet is foamed-in-place with EPA compliant high density urethane foam
Exterior materials	White powder coated steel
Access control	Key lock
General warranty	Two (2) years parts and labor warranty, excluding calibrations
Compressor warranty	Seven (7) years compressor warranty
Product Weight	675 lbs. (14 drawers)
Shipping Weight	794 lbs. (14 drawers)
Rated Amperage	7.6 Amps
Power Plug/Power Cord	Hospital grade, NEMA 5-15, 9 ft nominal (2.7 m)
Facility Electrical Requirement	110-120V AC: 15 A (minimum)
Agency Listing and Certification	FDA listed Class II medical device, 21CFR part 820 compliant, ETL, CETL Listed (certified to UL471 standard, hydrocarbon refrigerant safety)
Optional Accessories	Additional 8 <sup>th</sup> drawer per door, Chart paper, Mounting anchor, Upper solid ballast, Lower glycerol bottle kit (factory install only), IQ/OQ/PQ

Refrigeration System	
Compressor	Hermetic, variable speed (VSC). Rated speed range: 2000-4500 rpm
Refrigerant	EPA SNAP compliant, R290
Condenser	Fin and tube design, high efficiency fan
Evaporator	Fin and tube design, high efficiency fan
Defrost	Cycle optimized, automatic

#### Certifications

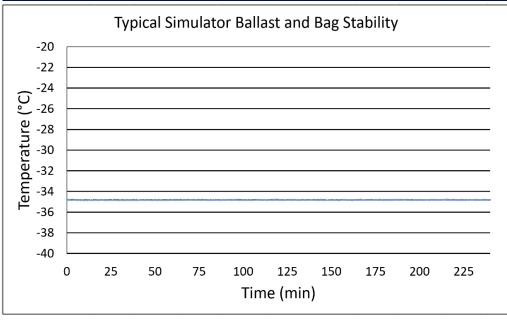


Temperature Probes				
Probe	Ave	Min	Max	
1	-35.5	-35.6	-35.4	
2	-35.3	-35.4	-35.3	
3	-35.4	-35.5	-35.3	
4	-35.1	-35.2	-35.0	
5	-36.5	-36.5	-36.4	1
6	-36.4	-36.5	-36.3	
7	-36.5	-36.6	-36.5	
8	-36.4	-36.4	-36.3	
9	-36.7	-36.8	-36.7	
10	-36.5	-36.6	-36.5	
11	-36.8	-36.9	-36.8	
12	-36.9	-37.0	-36.9	
13	-37.3	-37.4	-37.2	<b>_</b>
14	-36.8	-36.9	-36.8	
15	-36.2	-36.3	-36.1	
Bal	-34.8	-34.9	-34.8	
Bag	-34.8	-34.9	-34.8	



## Temperature Charts

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Uniformity <sup>1</sup> (Cabinet air)	+/- 1.1°C
Stability <sup>2</sup> (Cabinet air)	+/- 0.1°C
Maximum temperature variation (Cabinet	+/- 1.1°C
air)	
Stability <sup>2</sup> (Simulator ballast)	+/- 0.1°C
Stability <sup>2</sup> (Simulator bag)	+/- 0.1°C
Temperature Rise after Short Door	Temperature did not exceed -34.5°C at any probe
Openings	
Recovery after 1 min Door Opening	All probes under -29.6°C throughout opening
Energy Consumption	8.69 KWh/day <sup>3</sup>
Average Heat Rejection	14.32 KWh/day (320 BTU/h) <sup>3</sup>
Noise Pressure Level (dBA)	46 or less installed

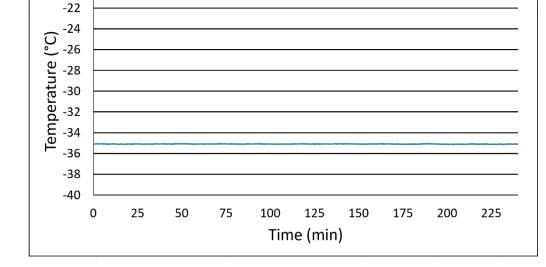
Controller, Configuration, Alarms and Monitoring				
Controller technology	Proportional Integral Derivative (PID) microprocessor with LCD display			
Battery Backup	24V high capacity battery, controller, all alarms active, temperature monitoring DAQ and event logging active on battery backup			
Digital Communication	RS-485 (MODBUS)			
Chart Recorder	6" paper, inkless			
Temperature setpoint range	-15°C to -35°C			
Display probe	Calibrated, stainless steel			
External alarm connection	State switching remote alarm contacts			
Alarms	Visual and audible indicators, Power failure, Temperature sensor failure, Battery voltage monitor and replacement, High / Low temperature, Door ajar			
Simulator ballast	Upper probe: 4 oz. (120 ml) bottle, 50% glycerol mixture. Lower probe: Solid thermal media			

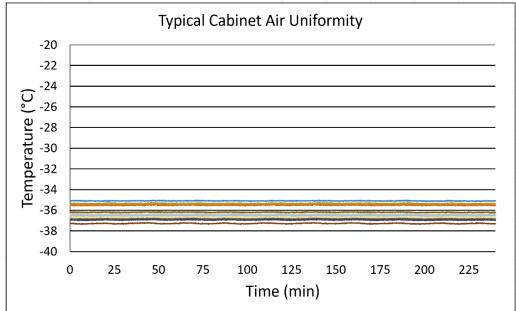
Performance data acquired at 22°C ambient, -35°C nominal set point in an empty cabinet with drawers using validation ballast probes, during stabilized steady state operation and a DAQ sampling rate of one measurement every 10 seconds

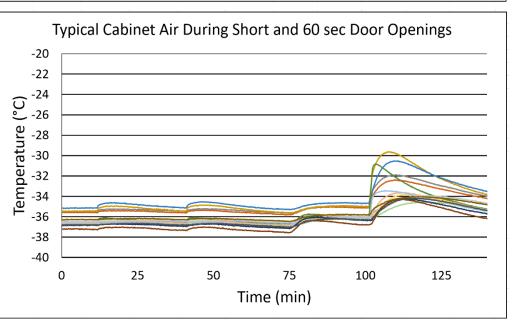
1 - Uniformity is defined as the maximum variance in temperature across all probes at any point in time over the testing period

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

3 - 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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# Images



Dimensions						
	Width	Depth	Height	Door Swing	Total open Depth	
Exterior	54"	36 3/8"	81 1/2"	24 7/8"	59 3/8"	
Interior	49 1/8"	26 1/2"	59"			

