

Helmer Scientific, Noblesville, Indiana www.helmerinc.com

Technical Data Sheet High-Performance, Medical-grade Freezer

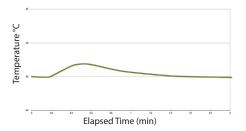
Model: HBF125-GX, -35° Horizon Series™ Plasma / Upright

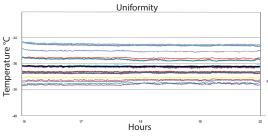
Application, Rating, & Electrical Data		
Application	Storage of blood plasma and other medical and scientific products	
Storage Volume	25.2 cu ft (714 L) 464 plasma boxes	
Temperature Range	-15° to -35°C	
Set-Point	-35℃	
Electrical Power	115V 60Hz 220-240V 50/60Hz	
Maximum Current	6.6A 3.1A	
Facility Supply Rating	Branch circuit with earth ground, meeting plug/cord ratings as well as local electrical safety codes and requirements 110-120V AC: 15 A (minimum) 220-240V AC: 10 A (minimum)	
Power Plug/Power Cord Length	NEMA 5-15 hospital-grade 115V 60Hz, 8 to 10 ft (2.4-3.0m) Inquire about additional plug/cord options	
Certification/Agency Listing	QPS (Certified to UL and CSA Standards) IEC/UL61010-2-011: 2016 IEC 61010-1:2010, AMD1:2016	
Energy Star	Yes, ENERGY STAR® Certified High Performance Freezer	
Indoor/Outdoor Use	Indoor use only, non-residential	
Application Environment	Non-corrosive, non-flammable, non-explosive	
Ambient Operating Temperature	+15°C to +32°C +59°F to +90°F	
Refrigeration		
Refrigeration System	VCC compressor-based, forced-air hydrocarbon	
Compressor	Hermetic, variable speed (VCC). Rated speed range: 1600-5000 rpm	
Condenser Type	Air-cooled fin and tube, sealed	
Expansion Device	Cap tube	
Evaporator Type	Direct expansion with forced-air fin and tube	
Defrost Method	Automatic	
Refrigerant	R290, Propane, EU F-Gas and EPA SNAP compliant	
Controller / Configuration Settings	;	
User Interface	LED digital display, °C or °F	
Power Switch	On/Off	
Controller Type	Microprocessor with alarm/monitor	
Security	Lockable door, PIN access via optional access control	
Control Sensor	RTD, stainless steel	
Communication Port	Remote alarm contacts	
Power Failure Alarm	Yes	
High/Low Alarm	Yes, fully adjustable	
Door Ajar Alarm	Yes	
Min/Max Temperature	Yes, display and reset	
Chart Recorder	Yes, integrated, 4" (102 mm) diameter, inkless pressure-sensitive charts, backup battery	
Temperature Monitoring	Yes, 4 oz bottle with screw cap	
Battery Backup	Yes, 9 volt, non-rechargeable, lithium	

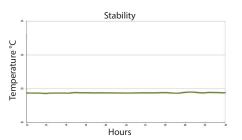
Performance Characteristics (normal operating conditions)		
Uniformity °C	+/-2.0	
Recovery to -34.5°C after 1 min door opening min	46	
Stability °C	0.2	
Energy consumption kWh/day	8.77*	
Noise emission dB	56.5	
Heat rejection BTU/hr	2750	
Pull-down time to -35°C min	141	

All performance data from 25 cu ft freezer, 25°C ambient, -35.0°C *Performance data from 25 cu ft freezer, 25°C ambient, -30.0°C

Recovery after 1 minute door opening









Dimensions and Construction		
Interior (w x h x d)	24.7 x 58.1 x 30 in 628 x 1476 x 762 mm	
Exterior (w x h x d)	29 x 80.3 x 34.4 in 737 x 2039 x 874 mm	
Overall Exterior (w x h x d)	30.2 x 80.3 x 38.6 in 766 x 2039 x 980 mm *Includes handle, electrical box and top cover *Subtract 0.3" from depth for units prior to serial number 2150000	
Insulation	Sustainable, US EPA and SNAP approved foam	
Exterior/Interior Finish	Bacteria-resistant powder-coating	
Door	1, solid, right-hinged	
Access Port	Top Access Port- for external monitoring probe(s) (0.75 in 19 mm diameter)	
Interior Storage (w x h x d)	8 drawers, liquid-tight, plus Cold-Shield™, stainless steel, adjustable 21.5 x 3.8 x 26.7 in 546 x 98 x 679 mm	
Casters	Yes, swivel-locking	
Integrated Access Control	Optional - electromagnetic-lock with PIN entry via keypad	
Net Weight	521 lb 237 kg	
Shipping Weight	611 lb 278 kg	
Clearance Requirements	Minimum of 8" (203mm) above and 3" (76mm) behind unit for proper ventilation, clearance, and feature access	
Options Accessories	Integrated access control, Stainless steel interior, Chart paper, Leveling feet, Remote alarms, Floor and Wall bracket kit, Seismic anchoring kit, Storage trays, Ventilated drawers, Drawer dividers, Left-hinge door, Certificate of calibration, Temperature validation, Validation guide (IQ/OQ), Extended warranty	
Warranty	Rel.i™ Warranty - 3 years compressor, 2 years parts, 1 year labor Outside US and Canada- Contact your distributor for warranty information	



