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www.helmerinc.com

Technical Data Sheet
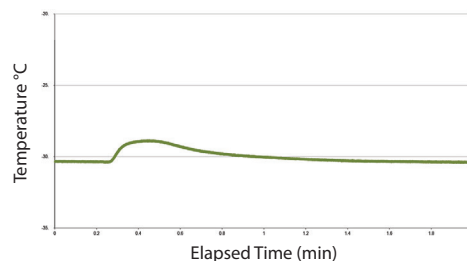## High-Performance, Medical-grade Freezer
Model: HBF125-GX, Horizon Series™ Plasma / Upright

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℃
Set-Point	-30℃
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℃ to +32℃ | +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

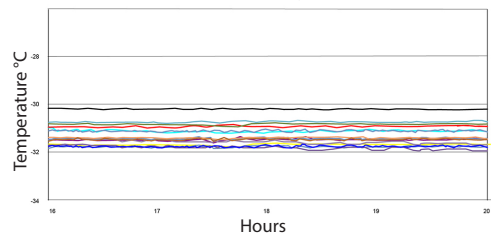|	
User Interface	LED digital display, ℃ or °F
Power Switch	On/Off
Controller Type	Microprocessor with alarm/monitor
Security	Lockable door, PIN access via optional access control
Control Sensor	RTD, stainless steel
Communication Port	Remote alarm contacts
Power Failure Alarm	Yes
High/Low Alarm	Yes, 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 | ℃	+/-2.0
Recovery to -29.5℃ after 1 min door opening | min	16
Stability | ℃	0.2
Energy consumption | kWh/day	8.77
Noise emission | dB	52
Heat rejection | BTU/hr	2356
Pull-down time to -30℃ | min	93

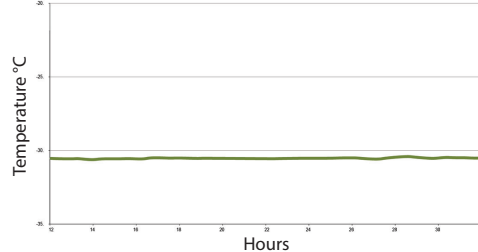All performance data from 25 cu ft freezer, 25℃ ambient, -30.0℃
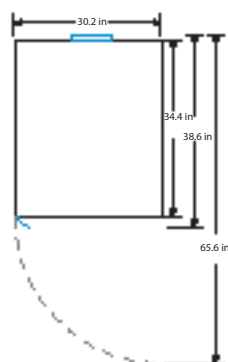

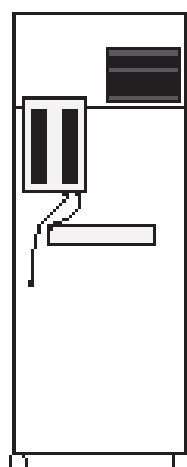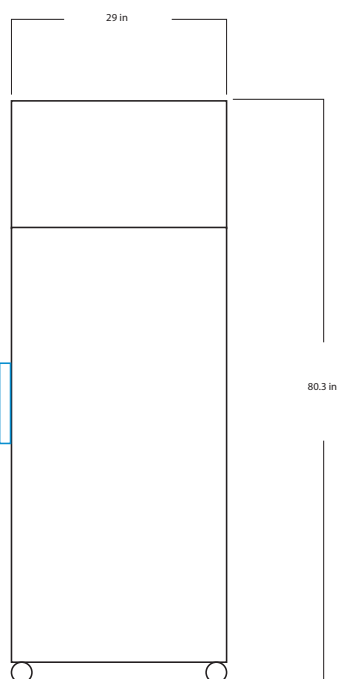Recovery after 1 minute door opening

Uniformity

Stability

Dimensions and Construction

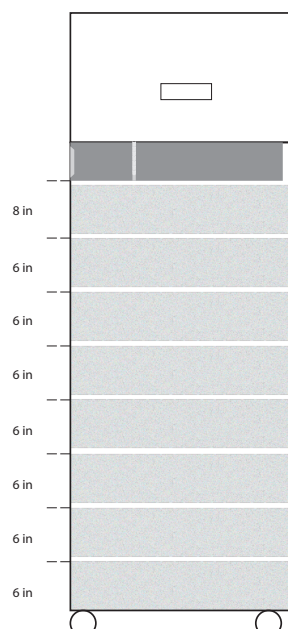|	
Interior (w x h x d)	24.7 x 58.1 x 30 in | 628 x 1476 x 762 mm
Exterior (w x h x d)	29 x 80.3 x 34.4 in | 737 x 2039 x 874 mm
Overall Exterior (w x h x d)	30.2 x 80.3 x 38.6 in | 766 x 2039 x 980 mm *Includes handle, electrical box and top cover *subtract 0.3" from depth for units prior to serial 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

TOP VIEW

FRONT VIEW

BACK VIEW

INTERIOR VERTICAL SPACING