



REF20 Upright blood bank refrigerators

Features

Powerful refrigeration system and superior plenum air distribution

- modular refrigeration system with microprocessor controller provides a ± 1 C (1.8 F) performance throughout
- industry-exclusive plenum air distribution delivers cold air at six different levels
- frost-free and auto-evaporating condenser
- meets AABB, ARC and FDA standards for blood storage at 4 C

User-friendly interface

- 7" LCD capacitive touchscreen digital temperature display available in user-programmable C or F
- integral event and data logging with easy downloading via convenient USB port

Protection for your valuable products

- audible and visual high/low temperature, door open, power failure, low battery alarms
- integral 6.00" (15.24 cm) 7-day chart recorder standard with 50 Celsius charts
- dry contacts for remote alarming

Superior drawer system for easy, trouble-free rolling

- six full-extension stainless steel drawers store up to (312) 450 ml bags
- stainless steel roller bearings and S-track design eliminate binding and uneven
- drawers and slides lift out without tools for easy cleaning
- track/drawer interface minimizes risk of catching product tubing in slides

Full stainless steel cabinet and high quality components

- full stainless steel interior and exterior provide resistance to rust and corrosion
- quick-connect RTD product temperature probe easily accessible inside storage cabinet
- dished stainless floor contains spills for easy clean up
- heavy-duty dual casters roll easily and lock securely
- 2.75" (6.98 cm) of CFC-free foam insulation throughout

Heavy-duty door for ease of use and energy savings

- dual-pane glass door with ADA-compliant full length locking handle
- energy-efficient low-E glass coating to reduce energy loss by 30 - 50% compared to non-coated glass
- glass remains condensation-free to 27 C (80 F) at 60% RH and eliminates need for heated doors in most applications
- self-closing hinges lock open at 90 degrees for easy loading

Model configurations					
Storage system	Hinging	Heated door	Keypad	Door style	Item number
6 drawers	right	yes	yes	glass	REF20-BB-RHTKPG
6 drawers	right	yes	no	glass	REF20-BB-RHT00G
6 drawers	right	no	yes	glass	REF20-BB-R00KPG
6 drawers	right	no	no	glass	REF20-BB-R0000G
6 drawers	left	yes	yes	glass	REF20-BB-LHTKPG
6 drawers	left	yes	no	glass	REF20-BB-LHT00G
6 drawers	left	no	yes	glass	REF20-BB-L00KPG
6 drawers	left	no	no	glass	REF20-BB-L0000G

Job

Item

Features (continued)

Cool, energy-efficient LED lights

- full length LED light bars illuminate all drawers
- instant-on LEDs eliminate delay of fluorescent lights and deliver longer life
- energy-efficient LEDs allow products to be placed next to lights
- auto on with door opening; ON/OFF front panel switch

Warranty

- 2 years parts, 5 years compressor parts, 2 years labor

Factory-installed options

Left-hinged door, facing unit (right-hinged door standard)

Integral keypad and electronic locking system with keyed access manual override

Heated glass door and frame (recommended for ambients above 27 C (80 F), 60% RH)

NOTE: Factory-installed options must be specified at time of order – for details contact factory or your local sales representative.

Accessories

Quick-connect replacement RTD temperature probe with ISO 17025 certificate of traceable calibration (item# 01140458)

Replacement 7-day chart recorder paper, C (item# 00980870)

Replacement 7-day chart recorder paper, F (item# 00980888)

Replacement chart recorder pens, set of 6 (item# 00918813)

Glycerine, 16 oz (item# 00959296)

Additional key (item# 00945436)

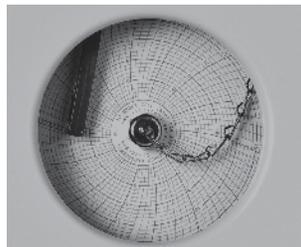
Wall bracket kit, seismic anchoring (item# 00927194)

NOTE: Accessories ship separately.

Touchscreen display



Integral 6.00" (15.24 cm) 7-day chart recorder



Specification

Nominal capacity	19.7 cu ft
Ventilation clearance	10.00" (25.4 cm) top, 2.00" (5.08 cm) back

Exterior

W1 Width	29.75" (75.6 cm)
D1 Depth with handle	30.50" (77.5 cm)
H1 Height with casters	79.50" (201.9 cm)
Casters	(4) swiveling dual wheel casters with toe locks
D2 Door swing	56.50" (143.5 cm)

Interior

Height	55.94" (142.1 cm)
Lighting	(2) energy efficient full length LED lights
Storage system	(6) full-extension stainless steel drawers with shielded roller bearings and stainless S-tracks
Overall drawer dimensions	23.50" W x 20.71" L x 4.05" D (59.7 x 52.6 x 10.29 cm)
Inside drawer dimensions	22.50" W x 19.94" L x 3.00" D (57.2 x 50.6 x 7.62 cm)
Space between drawers	8.00" (20.32 cm)
Working load rating per drawer	59 lb (27 kg)
Max. load rating per drawer	88 lb (40 kg)

Door configurations

Door	dual-pane glass door
Door lock	cylinder type with one key
Door handle	ADA-compliant, full length handle
Door hinges	torsion rod self-closing with 90° hold open feature
Gasket	magnetic dart style (replaceable)

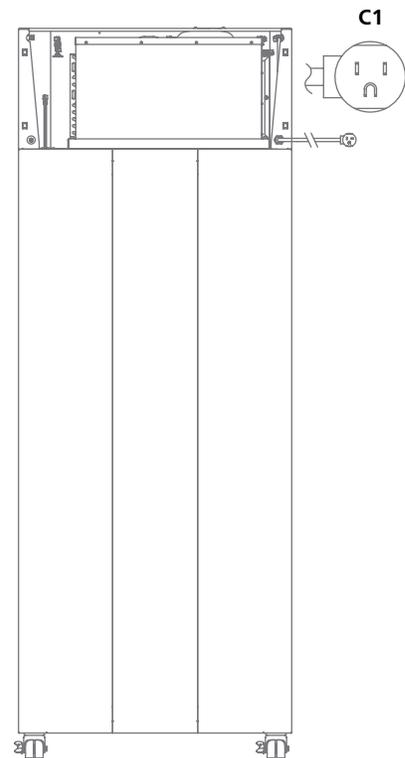
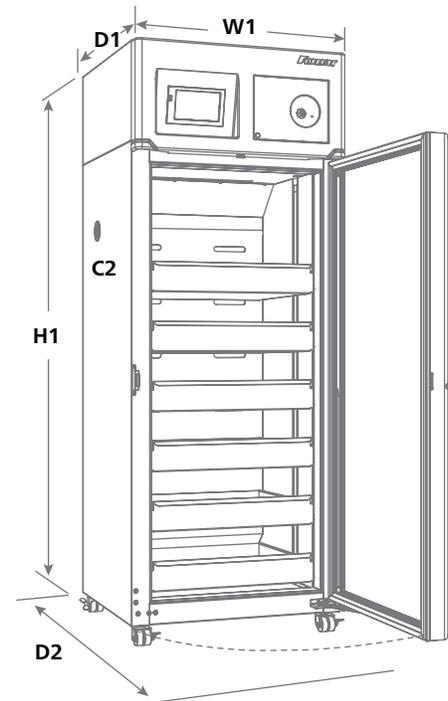
Electrical

C1 Electrical	8.4 run load amps, NEMA 5-15 115 V/60/1 (103 - 132 V) 90° hospital-grade plug. Max. fuse 15 amps, 9' (2.7 m) cord.
----------------------	--

Controls

Temperature display	7" LCD capacitive touchscreen digital temperature display available in user-programmable C or F
C2 3rd party probe access	soft access port on left side of cabinet
Product temperature display probe	(2) quick-connect RTD (± 0.4 C, ± 0.7 F)
Temperature probe calibration	top probe calibration in 0.1° increments
Password protection PIN	4 digit password to prevent interface setting/selection changes
Date and time	programmable
Product simulation bottle size	(2) 125 ml
Refrigeration and defrost probes	NTC thermistor type
Refrigeration cycle with probe error	factory set at 4 min on, 8 off, user adjustable
Programmable operating range	2.2 to 10 C (36 to 50 F)
Factory preset	3.3 C

Dimensional drawing



FOLLETT HEALTHCARE is trademark of Follett LLC.
FOLLETT is a registered trademark of Follett LLC, registered in the US.
Follett reserves the right to change specifications at any time without obligation.

Alarming

High and low product temperature alarm (top probe)	audible and visual, user programmable set points in C or F
Power failure alarm	audible and visual
Door ajar alarm	audible and visual
Probe error alarm	audible and visual
Alarm mute	10 minute ring-back
Alarm volume	0-10 scale
Low battery alert	audible and visual
Back-up battery status	shows voltage level
Min/max temperature log	shows highest and lowest product temperature since last reset occurred
Remote contacts	NO/NC standard, located behind front panel

Data logging

Information log	graphs or displays temperature data and displays chronological event data (50,000 data points)
Data export	USB export capabilities

System performance

Top-to-bottom temperature consistency	± 1 C (1.8 F)
Refrigeration system	integral top-mounted module with 1/3 hp compressor and air-cooled condenser
Refrigerant and charge	Non-CFC R134a refrigerant, 11.4 oz
Air circulation system	ducted air to each storage level through back plenum openings, front face return
Air temperature pull down	24 to 5 C (75 to 41 F) in 40 minutes
Product simulation bottle temperature pull down	24 to 5 C (75 to 41 F) in 120 minutes
Energy consumption	5.4 kWh/day (auto-off defrost)
BTU/hr normal heat rejection, includes duty cycle (75 F ambient)	955 BTU/hr (280 Watts)
BTU/hr maximum (total) heat rejection, continuous operation (75 F ambient)	3185 BTU/hr (933 Watts)

Shipping

Shipping size	43.00" W x 35.00" D x 82.00" H (109.2 x 88.9 x 208.3 cm)
Approximate refrigeration module net weight	62 lb (28 kg)
Approximate net weight	390 lb (177 kg)
Approximate ship weight	475 lb (215 kg)

NOTE: For indoor use only

SHORT FORM SPECIFICATION: Upright refrigerator with 19.7 cu ft of nominal capacity. To include (6) full-extension stainless steel drawers with shielded roller bearings and stainless S-tracks. Environmentally responsible R134a refrigeration system to include an integral top-mounted module with 1/3 hp compressor and air-cooled condenser. 7" LCD capacitive touchscreen with user selectable C or F. Event and data logging with USB download capability. Air circulation system to duct air through back plenum openings with front face return. Storage area to be insulated with CFC-free, high density polyurethane foam. 9' (2.7 m) power cord with NEMA 5-15 90° hospital-grade plug. UL listed.

REF20 upright blood bank refrigerators

