

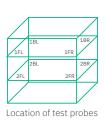


Technical Data Sheet Lab Grade Refrigerator Model: FLR105 / Undercounter

Application, Rating, and Electrical Data				
Application	Precision temperature storage for biopharmaceutical and life science research applications			
Storage Volume	5.3 cu ft   (150 L)			
Temperature Range	+2°C to +10°C			
Set Point	+4°C			
Electrical Power	115V 60Hz   220-240V 50/60Hz			
Maximum Current	1.4A   0.85A			
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/UL61010-2-01: 2016   IEC 61010-1:2010, AMD1:2016			
Energy Star	Yes, ENERGY STAR® Certified High-Performance Refrigerator			
ADA Compliant	Yes, fits under standard 34" high ADA compliant countertop			
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: 1300-4000 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	R600a, EPA SNAP and EU F-Gas compliant natural hydrocarbon refrigerant

Controller / Configuration Settings				
User Interface	LED digital display, °C or °F			
Power Switch	On/Off			
Controller Type	Microprocessor with alarm/monitor			
Security	Lockable exterior door, locking interior drawers available as an accessory			
Control Sensor	RTD, stainless steel			
Communication Port	Remote alarm contacts			
Power Failure Alarm	Yes			
High/Low Alarms	Yes, fully adjustable			
Door Ajar Alarm	Yes			
Min/Max Temperature	Yes, display and reset			
Temperature Monitoring Ballast	Yes, maintenance-free anodized aluminum solid ballast thermal buffer			
Battery Back-up	Yes, 9 volt, non-rechargeable, lithium			



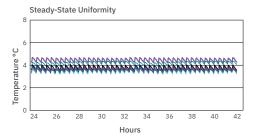
Typical Temperature Map

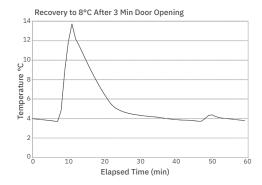
5	cu	ft.	Tem	perature	Map (	(°C)

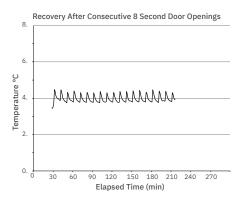
	1BL	1BR	1FL	1FR	2BL	2BR	2FL	2FR
Avg	3.6	3.5	4.1	3.9	4.5	3.8	4.4	3.9
Max	4.2	4.3	4.5	4.3	4.8	4.4	4.6	4.4
Min	3.2	3.1	3.7	3.6	4.2	3.4	4.1	3.6

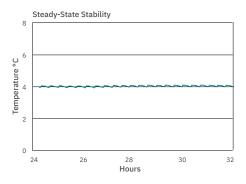
Performance Characteristics (normal operating conditions)			
Uniformity   °C	+/-1.0		
Recovery to 8°C after 3 min door opening   min	9		
Stability   °C	0.82		
Energy Consumption   kWh/day	1.2		
Noise emission   dB	42		
Heat rejection/emission   BTU/hr	460		
Pull-down time to 4°C   min	36		

All performance data from 5 cu ft refrigerator, 24.8 ambient, 4.0°C













Dimensions and Construction				
Interior (w x h x d)	19.5 x 19.9 x 22.8 in   496 x 505 x 580 mm			
Exterior (w x h x d)	24 x 31.5 x 26.7 in   610 x 798 x 678 mm *Add 2.5" to the height if choosing optional casters			
Overall Exterior (w x h x d)	24.3 x 31.9 x 27.8 in   616 x 809 x 705 mm *Includes leveling feet at lowest level, door handle, user interface, and access panels * The maximum height added with leveling feet at highest level or casters installed is 2" (51 mm)			
Insulation	EPA SNAP and EU F-Gas compliant insulation and foaming agents			
Exterior/Interior Finish	Bacteria-resistant powder-coating			
Door	Glass door, right hinge			
Access Port	Rear Access Port- for external monitoring probe(s) (0.75 in   19 mm diameter)			
Interior Storage (w x d)	2 ventilated, powder coated shelves, adjustable 17.9 x 21.3 in   454 x 541 mm, 100 lb   46kg max capacity/shelf			
Mobility	Easily movable locking casters			
Net Weight	174 lb   79 kg			
Shipping Weight	235 lb   107kg			
Clearance Requirements	Minimum 3" (76 mm) behind unit for plug/cord and feature access Front ventilation eliminates the need for top or side clearance			
Available Accessories	Remote alarms, remote lock adapter kit, floor and wall seismic bracket kits, stacking kit, pedestal, storage trays, locking interior drawers, certificate of calibration, temperature validation, validation guide (IQ/OQ), extended warranty			
Certificate of Calibration	Yes, available as an option, generated with an ISO 17025 certified, NIST traceable thermometer			
Warranty	3 years compressor, 2 years parts, 1 year labor (Outside US/Canada: Please consult with your local representative for labor warranty information.)			

