FARRAR™ | TRANE TECHNOLOGIES™

Technical Data Sheet
Lab Grade Refrigerator
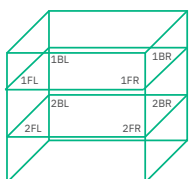Model: FLR105 / Undercounter

CiK SOLUTIONS
IMPROVING QUALITY

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

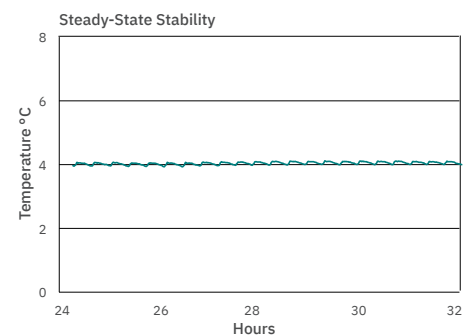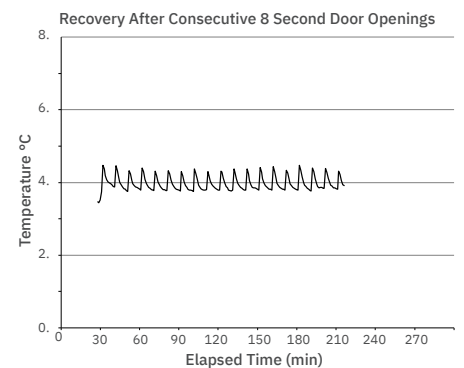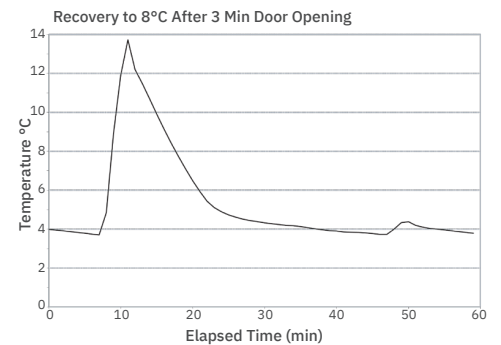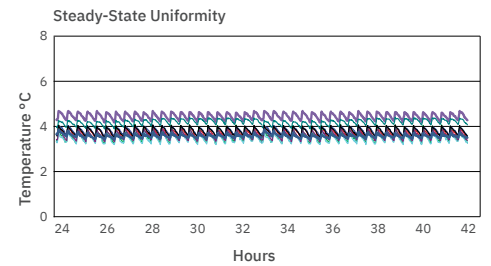|	
User Interface	LED digital display, °C or °F
Power Switch	On/Off
Controller Type	Microprocessor with alarm/monitor
Security	Lockable exterior door, locking interior drawers available as an accessory
Control Sensor	RTD, stainless steel
Communication Port	Remote alarm contacts
Power Failure Alarm	Yes
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. Temperature 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

Location of test probes

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

Steady-State Uniformity

Recovery to 8°C After 3 Min Door Opening

Recovery After Consecutive 8 Second Door Openings

Steady-State Stability

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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.)

FRONT VIEW

24
31.9
24.3

BACK VIEW

TOP VIEW

24
26.7
27.8
48.7

INTERIOR
VERTICAL SPACING

4.9
8

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