

Thermo Scientific Revco High Performance Laboratory Refrigerators

Featuring IntrLogic Microprocessor Control

Our selection of general purpose laboratory refrigerators offers cabinet sizes to fit a variety of space needs and storage volume requirements.



Left to right: Models REL-2304, REL-404 and REL-5004. Shown with optional casters and temperature recorders. Optional glass doors are available. Model REL-404 shown with optional finished countertop.



Our REL series refrigerators feature the IntrLogic microprocessor control system, positive airflow systems, industrial quality cabinet construction and extra-strength refrigeration compressors selected for industrial, clinical and scientific use.

IntrLogic Microprocessor Control

Our REL series lab refrigerators feature enhanced digital electronic technology designed to simplify operation and deliver greater accuracy (see pages 4 and 5).

- Adjustable temperature control, range +1°C to +8°C, factory pre-set to +4°C
- Icon-based controls and displays include graphic references for universal operation
- Setpoint security with key-operated triple-position master switch controls power to all systems for added safety
- Audible/visual warnings for over-temperature, undertemperature and power failure, with visual status reports on critical functions
- Graphic thermometer confirms

proper operation at-a-glance, shows normal, high or low temperature condition; steady green for normal, flashing top bar for overtemperature, flashing bulb for undertemperature

- Advanced defrost sensor manages the defrost cycle, minimizing trace amounts of frost build-up to maintain refrigeration coil efficiency
- Enlarged digital display, resolution to within 0.1°C, improves visibility
- Alarm silence, ringback and automatic reset functions
- Push-button alarm test verifies sensor continuity
- Battery backup assures control panel function during power failure
- Remote alarm contacts are included on all models



REL-404 undercounter refrigerator.

ORDERING INFORMATION

General Purpose Laboratory Refrigerators

Temperature Range: +1°C to +8°C, factory preset to +4°C (auto defrost)

Model No.	Cu.Ft. (L)	Voltage (Hz)	Amps/ Breaker (Plug)	Cabinet	Door	Shelves	Int. Dimensions* H x D x W inches (mm)	Ext. Dimensions* H x D x W inches (mm)	Ship Weight lb (kg)
REL-404A REL-404V	4.9 (133)	115 (60) 230 (50)	8.0/15 (P1) 6.0/15 (P7)	undercounter	single, solid	3	20.0 x 20.0 x 20.0 (500 x 500 x 500)	33.4 x 26.0 x 24.0 (850 x 660 x 610)	212 (96)
REL-1204A REL-1204V	11.5 (326)	115 (60) 230 (50)	9.4/15 (P1) 6.0/15 (P7)	space saver	single, solid	4	52.0 x 21.0 x 20.0 (1320 x 530 x 500)	71.9 x 28.8 x 24.0 (1830 x 740 x 610)	280 (127)
REL-2304A REL-2304D REL-2304V	23.3 (659)	115 (60) 208/230 (60) 230 (50)	9.4/15 (P1) 6.0/15 (P4) 6.0/15 (P7)	upright	single, solid	4	58.0 x 29.0 x 24.0 (1470 x 730 x 610)	77.5 x 35.5 x 28.0 (1970 x 910 x 720)	405 (184)
REL-3004A REL-3004D REL-3004V	29.2 (826)	115 (60) 208/230 (60) 230 (50)	9.4/15 (P1) 6.0/15 (P4) 6.0/15 (P7)	upright	single, solid	4	58.0 x 29.0 x 30.0 (1470 x 730 x 760)	77.5 x 35.5 x 34.0 (1970 x 910 x 870)	435 (197)
REL-4504A REL-4504D REL-4504V	45.8 (1297)	115 (60) 208/230 (60) 230 (50)	15.0/20 (P2) 8.5/15 (P4) 8.5/15 (P7)	upright	double, sliding glass	8	58.0 x 26.0 x 52.0 (1470 x 660 x 1320)	77.5 x 35.0 x 56.5 (1970 x 890 x 1440)	670 (304)
REL-5004A REL-5004D REL-5004V	51.1 (1447)	115 (60) 208/230 (60) 230 (50)	15.0/20 (P2) 8.5/15 (P4) 8.5/15 (P7)	upright	double, solid	8	58.0 x 29.0 x 52.0 (1470 x 730 x 1320)	77.5 x 35.5 x 56.5 (1970 x 910 x 1440)	585 (265)
REL-7504A REL-7504D REL-7504V	78.8 (2231)	115 (60) 208/230 (60) 230 (50)	16.0/20 (P2) 10.5/15 (P4) 10.5/15 (P7)	upright	triple, solid	12	58.0 x 29.0 x 81.0 (1470 x 730 x 2050)	77.5 x 35.5 x 85.0 (1970 x 910 x 2160)	805 (365)

* Published interior volumes are nominal; useable cu.ft. (L) capacities may be offset by shelves, drawers, blower coils, or cabinet protrusions. For specific cabinet dimensions and allowances, or for verification of clearance tolerances, contact our sales representatives. Product performance may be affected by ambient temperature conditions, humidity conditions, sample loading preferences, and frequency of door openings. Contact our sales representatives for specific inquiries regarding your application.

Cabinet Construction and Inventory System

- High-density, CFC-free urethane foam insulation protects cabinet from ambient temperature fluctuations and minimizes operating costs
- Positive, forced-air circulation maintains temperature uniformity at all shelf levels
- Directional airflow assures quick recovery after door openings
- Interior cabinet lights with door-activated on/off switch, plus independent switch on control panel for 11.5 cu.ft. (326 L) and larger models
- Model REL-4504 features independent switch activated lights only; under-counter model REL-404 does not have lights
- Self-closing doors close against closed-cell peripheral gasket
- Door locking provision on all models except REL-4504
- Full-length door handle(s) on all models except sliding door model REL-4504

- Interior and exterior surfaces are finished with a high-impact powder paint coating
- Epoxy-coated, open wire shelves, adjustable in 1" (25 mm) increments; no tools required
- 2" (50 mm) casters standard on model REL-4504
- Adjustable leveling feet standard
- 1" (25 mm) access port standard on model REL-404

Refrigeration System

- Heavy duty, industrial-grade, hermetically sealed compressors
- Automatic defrost maintains optimum cooling capacity
- Automatic condensate removal; no drain lines required

Optional Accessories

- Voltage safeguard, free standing
- Built-in 6" (152 mm), 7-day circular chart recorder (free-standing on REL-404)

- Access port, 2" (50 mm) diameter, with cover
- Stainless steel interior and exterior surfaces
- 2" (50 mm) casters
- Additional shelves
- Full-view glass doors, double pane construction (standard on REL-4504)
- Heated glass doors and door swing variations are available on most models
- Finished countertop for REL-404



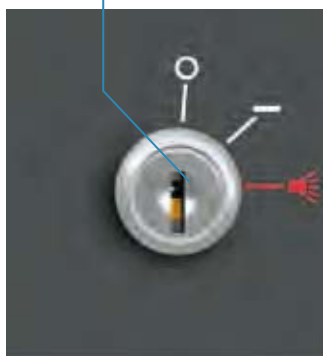
REL-5004 refrigerator shown with optional casters and temperature recorder.

Thermo Scientific IntrLogic Controller Simplifies Operation, Improves Reliability

Intuitive
Graphics and
Microprocessor
Technology

Setpoint Security

Key-operated triple position switch for main power and alarm; locks in temperature and alarm setpoints to minimize setpoint error and prevent tampering



Instrument-Grade Components

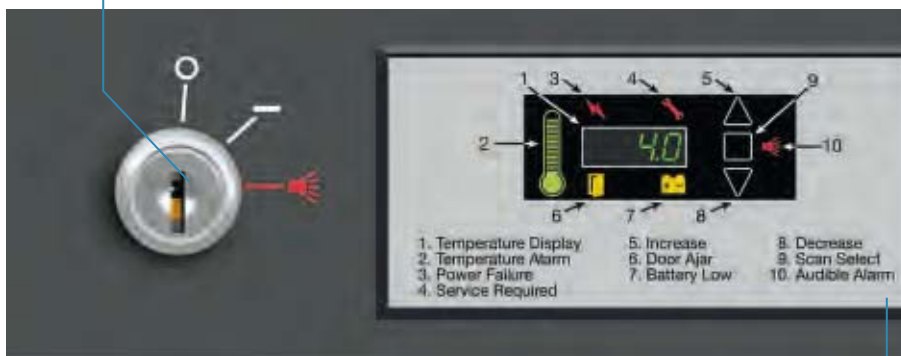
Electronic components and sub-systems are selected for performance and reliability under demanding laboratory conditions

Service Parameters

Touchpad sequence allows override access to control function defaults for troubleshooting functions

Modular Control Design

Self-contained control housing integrated into main control panel for efficient maintenance, as required



IntrLogic control panel is standard on Revco refrigerators and freezers (except BOD models).

Microprocessor-Based Control

IntrLogic microprocessor manages setpoint and actual conditions to provide the highest level of security for the stored product

Automatic Defrost System

Defrost sensor manages automatic defrost cycle (manual defrost models excluded)

IntrLogic Guide

Offers information at-a-glance for all control and display functions

Power Down Mode

During power failure digital display dims to conserve backup battery

Thermo Scientific Revco lab refrigerators and freezers include enhanced digital electronic technology designed to simplify operation and deliver greater accuracy.

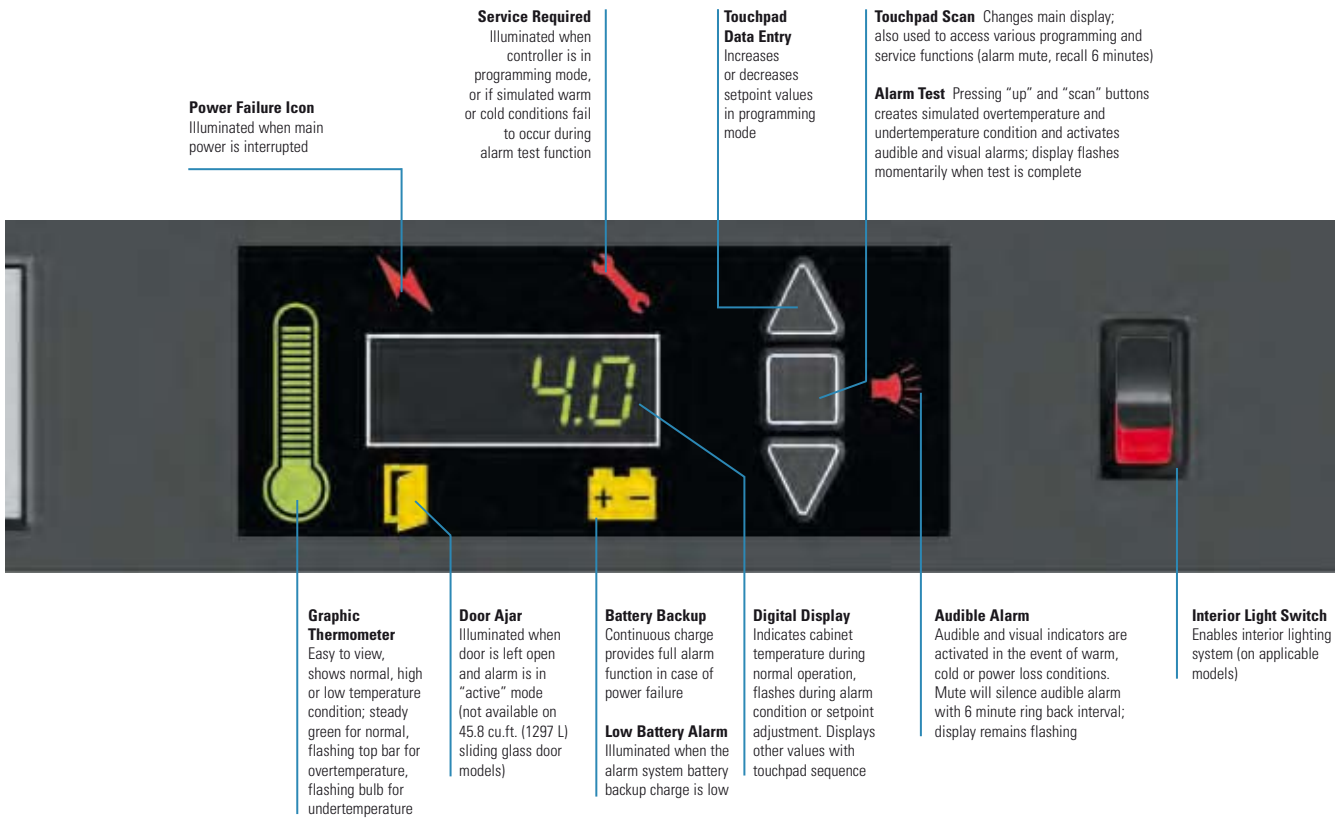
- Icon-based controls and displays include graphic references for universal operation
- Setpoint security with key-operated triple-position master switch controls power to all systems for added safety
- A graphic thermometer confirms proper operation at-a-glance, shows normal, high or low temperature condition; steady green for normal, flashing top bar for overtemperature, flashing bulb for undertemperature
- Auto defrost models feature an advanced defrost sensor which manages the defrost cycle, minimizing trace amounts of frost build-up to maintain refrigeration coil efficiency

IntrLogic Control Alarm Sequence

Event	Audible Alarm	Visual Alarm	Self Corrected Event	Remote Alarm Contacts Activated	
Overtemperature	continuous*			slow flash, icon only	yes
Undertemperature	continuous*			slow flash, icon only	yes
Power Loss	continuous*			slow flash, icon only	yes
Door Ajar	delay				no
Low Battery	no				no
Service Required	no				no

Audible and visual warnings for door ajar, low alarm battery, system maintenance and power failure provide immediate status of critical functions. A push-button alarm test verifies sensor continuity, while the battery backup assures system readiness. The enlarged digital display improves visibility, taking the guesswork out of setpoint and performance management.

*Mute will silence audible alarm with 6-minute ring back interval; display remains flashing. Moving triple position key switch to middle position disables alarm and audible and visual warnings.



Laboratory Quality Cabinet Construction

Our refrigerators and freezers are available in 10 sizes, from compact 4.9 cu.ft. (133 L) undercounter models to spacious, triple-door 78.8 cu.ft. (2231 L) cabinets. All models are built to meet UL, CUL, CE and TUV standards for safety.

- Hermetically sealed refrigeration compressor, air-cooled condenser and automatic condensate removal for auto defrost models
- An efficient, high-capacity air circulation system optimizes top-to-bottom temperature uniformity, accelerates temperature recovery following door openings, and accommodates insertion of warm product
- CFC-free refrigerants, insulation and product packaging
- Depending on model selection, standard or optional shelves, drawers, temperature recorders, cabinet casters and other accessories are available to meet most laboratory needs

Laboratory Refrigerator and Freezer Selection Guide

Automatic Defrost Models	Cu.Ft. (L)	4.9 (133)	6.1 (173)	11.5 (326)	20 (566)	23.3 (659)	29.2 (826)	45.8 (1297)	51.1 (1447)	78.8 (2231)
Chromatography Refrigerators						IntrLogic	IntrLogic	IntrLogic	IntrLogic	IntrLogic
General Purpose Lab Refrigerators		IntrLogic		IntrLogic		IntrLogic	IntrLogic	IntrLogic	IntrLogic	IntrLogic
Blood Bank Refrigerators		IntrLogic		IntrLogic		IntrLogic	IntrLogic		IntrLogic	
Pharmacy Refrigerators				IntrLogic		IntrLogic	IntrLogic		IntrLogic	
General Purpose Lab Freezers, -30°C		IntrLogic		IntrLogic		IntrLogic	IntrLogic		IntrLogic	
Plasma Freezers, -30°C		IntrLogic		IntrLogic		IntrLogic	IntrLogic		IntrLogic	
Refrigerated Incubators, Programmable					micro					
Refrigerated Incubators, Non-Programmable			micro		micro					
Manual Defrost Models										
Enzyme Freezer, -20°C						IntrLogic				
General Purpose Freezer, -20°C						IntrLogic				

Remote alarm contacts are included on all models.