ULTRA-LOW TEMPERATURE FREEZER

# UCF-29.6-86-UL

## 838 L (29.59 cu ft) -86°C Ultra-Low Temperature Freezer

This ultra-low temperature freezer uses a cascade refrigeration system with two SECOP compressors to hold -40°C to -86°C in an 838 L cabinet. A 7" LCD touch screen, USB data download, RS232/485 remote alarm access, and CE and UL certification support long-term storage of vaccines, enzymes, cell lines, tissues, reagents, and reference standards.

- **Cascade cooling.** R-290 and R-170 cascade system reaches -86°C at cabinet center.
- **Dual SECOP compressors.** Two hermetic compressors drive the high and low stages.
- **Touch screen control.** 7" LCD touch screen with microprocessor control and USB data download.
- **Broad alarm coverage.** Temperature, power, door, filter, and battery alarms with 72 h backup.
- **High sample capacity.** Holds 24 racks, 600 2" boxes, or 60,000 2 mL samples.

MODEL UCF-29.6-86-UL



| -86 to -40 °C | 838 L | 3 | 24 | 60,000 |
|---|---|---|---|---|
| TEMPERATURE RANGE | EFFECTIVE CAPACITY | ADJUSTABLE STAINLESS SHELVES | RACK CAPACITY | 2 ML SAMPLE CAPACITY |

## Technical Specifications

Model **UCF-29.6-86-UL**

### TEMPERATURE

| | |
|---|---|
| Temperature range | -40°C to -86°C |
| Recommended setpoint | -70°C to -80°C |
| Factory default | -80°C |
| Cooling performance | -86°C at cabinet center (32°C ambient, no load) |
| Ambient temperature | 10 to 32°C |

### REFRIGERATION

| | |
|---|---|
| System | Cascade system, direct cooling |
| Refrigerant | High: R-290, Low: R-170 |
| Compressors | SECOP, 2, hermetic type |
| Defrost | Manual |

### CONTROLS AND ALARMS

| | |
|---|---|
| Controller | Microprocessor |
| Display | 7" LCD touch screen |
| Data | USB download of recent 10000 temperature records |
| Remote alarm | RS232/485 |
| Alarms | High/low temperature, power failure, abnormal voltage, sensor error, door ajar, filter, thermostat failure, low battery, condenser clean, high ambient |
| Alarm backup | 72 h, lead-acid DC12V 7000mAh battery |

### CABINET

| | |
|---|---|
| Capacity | 838 L / 29.59 cu ft |
| Interior | SUS304 |
| Exterior | Color sprayed steel |
| Inner doors | Foamed SUS304, 2 |
| Insulation | PURF + VIP |
| Shelves | 3 adjustable stainless steel, 40kg/shelf |
| Access port | 1 / 25 mm |
| Noise | 53 dB |

### ELECTRICAL

| | |
|---|---|
| Power supply | 110V / 120V 60Hz |
| Power | 720W |
| Current | 8.64A |
| Energy use | 16.47 kWh/24h |
| Certification | CE, UL |

### DIMENSIONS

| | |
|---|---|
| Exterior (W×D×H) | 46" × 45" × 78.5" (1179 × 1135 × 1994.5 mm) |
| Interior (W×D×H) | 35" × 28.2" × 51.6" (894 × 718 × 1310 mm) |
| Package (W×D×H) | 50" × 43" × 86" |
| Net weight | 918 lb |
| Shipping weight | 918 lb |

### ORDERING INFORMATION

| CATALOG NO. | DESCRIPTION | ELECTRICAL |
|---|---|---|
| **UCF-29.6-86-UL** | Ultra-Low Temperature Freezer<br>-40°C to -86°C, 838 L / 29.59 cu ft | 110V / 120V 60Hz<br>720W, 8.64A |

### IDEAL APPLICATIONS

Vaccines · Enzymes · Cell lines · Tissues · Biobanking · Pharmaceuticals



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