# -86°C Ultra-low Freezer

## QuickCool Pro Series

Model: MDF-86V588E

## Applications

The -86°C ultra-low temperature freezers are designed for the long-term preservation of viruses, germs, vaccines, biological tissues and organs, special food, medicines, reagents, etc.

## Features

- ■ Accurate temperature controller, setting temperature range of -40 to -86°C
- ■ 7-inch touch screen display, accuracy of 0.1 °C.
- ■ Suggested ambient temperature: +10 to 32°C.
- ■ Stainless steel inner chamber for friendly use and easy cleaning.
- ■ Brand compressor to ensure excellent stability of the cooling system.
- ■ Patented refrigeration technology, high-efficiency mixed gas for the cooling system.

## Security

- ■ Safety door lock to prevent unauthorized access.
- ■ 72h built-in backup battery to power the controller and save temp. data when power failure or system error.
- ■ Visual and audible alarm system: High/low temperature, sensor failure, controller error, etc.
- ■ Power failure protection: turn-on delay of the cooling system after power failure.
- ■ Controller error protection: the cooling system will remember the normal working cycle and keep working depending on this memory when the controller or two sensors failed.

## Humanized design

- ■ Adjustable shelves for easy storage.
- ■ Casters with stoppers for easy moving and fixation.
- ■ Special-designed service-free drainage system.

## Specifications

| Model NO. | MDF-86V588E |
|---|---|
| **Main Specifications** | |
| Temperature Range | -40 ~ -86 ℃ |
| Ambient Temperature | 10~32℃ |
| Capacity (L/Cu. Ft.) | 588 / 20.77 |
| Noise | 53 dB |
| Cold Rack Max. Loading Capacity (pcs) | 255D Rack / 16 |
| 2' Cold Box Max. Loading Capacity (pcs) | 400 |
| 0.5~2ml Vials Max. Loading Capacity (pcs) | 40,000 |
| **Control and Power** | |
| Controller / Display | Microprocessor / 7' Touch Screen |
| Sensor | PTC |
| Voltage and Frequency | 220V±10%, 50/60Hz |
| Power | 1500 W |
| Electric Current | 10.35 A |
| Power Consumption (kWh/24h) | 16.02 |
| **Audible and Visual Alarms** | |
| High / Low Temp. Alarm | Yes |
| Power Failure Alarm | Yes, 72h |
| Sensor Error Alarm | Yes |
| Controller Error Alarm | Yes |
| Door Ajar Alarm | Yes |
| Abnormal Voltage Alarm | Yes |
| Abnormal Ambient Temp. Alarm | Yes |
| Battery Error Alarm | Yes |
| Condenser Error / Filter Net Clean Alarm | Yes |
| **Refrigeration** | |
| Refrigeration / Defrost Type | Direct Cooling / Manual |
| Compressor (Brand/pcs) | SECOP / 2 |
| Refrigerant / Weight (kgs) | R4001 / 320g |
| **Cabinet** | |
| External / Internal Door (pcs) | Foamed Solid Door x 1 / Foamed Solid Door x 2 |
| Adjustable Shelf (pcs) | 3 |
| Exterior / Interior Cabinet Material | Coated Steel / Stainless Steel |
| Insulation Material | PURF (δ100mm) and Vacuum Insulation Panel (VIP) |
| Door Lock | Yes |
| Test Hole (pcs) | 2 |
| Castors (pcs) | 4 |
| **Accessories** | |
| USB Data Download Port | Yes |
| Remote Alarm Port | Yes |
| RS485 Port | Yes |
| Temperature Datalogger | Optional |
| Temperature Printer | Optional |
| Temperature Chart Recorder | Optional |
| Protective Gloves | Optional |
| LN2/CO2 Backup System | Optional |
| **Dimensions** | |
| Interior Dimensions (W×D×H) | 606×738×1310 mm |
| Exterior Dimensions (W×D×H) | 891×1155×1995 mm |
| Packing Dimensions (W×D×H) | 975×1185×2200 mm |
| Net / Gross Weight | 283 / 346 kgs |
| Package | Plywood box with pallet |

* Due to continuous product upgrades, the above specifications are for reference only. For the latest specifications, please contact us.