



-86°C ULT FREEZER | NU-99338J

-86 ULTRA-LOW TEMPERATURE FREEZERS

SPECIFICATIONS

| | |
|---------------------------------|---|
| Model | NU-99338J |
| Interior Volume | 338 L / 11.9 ft ³ |
| Exterior Dimensions (W x D x H) | 812 x 893 x 1846 mm / 32.0 x 35.2 x 72.7 in |
| Interior Dimensions (W x D x H) | 465 x 630 x 1165 mm / 18.3 x 24.8 x 45.9 in |
| Temperature Range | -40°C to -86°C |
| Net Weight | 238 kg / 525 lbs |
| Noise (dB(A)) | 50 |

PERFORMANCE

| | |
|---|-------------|
| Temperature Uniformity | ± 5°C |
| Temperature Accuracy | ± 1°C |
| Cool Down Time (25°C ambient to -80°C) | 195 Minutes |
| Warm Up Time (25°C ambient -80°C to -50°C) | 200 Minutes |
| 1 Min Door Open Recovery Time (25°C ambient running temp -75°C) | 25 Minutes |

CONSTRUCTION

| | |
|-------------------------------------|--|
| Insulation | VIP+CFC Free Foaming Agent |
| Exterior Door Seal | Quadruple Seal on the Outside Door [A] |
| Interior Door Seal | Single Seal on all Interior Doors [B] |
| Shelves/Capacity/Dims/Material | 3 stainless steel adjustable shelves [C] 441 mm (W) x 597 mm (D) 17.75 in. (W) x 23.50 in. (D) Max capacity per shelf: 50 kg / 110.2 lbs |
| Casters | All-direction caster with fixing stand |
| Exterior Material | Color Coating Cold Plate Steel |
| Interior Material | Color Coating Electric Zinc Steel Plate |
| Door Thickness | 90mm / 3.5 in. |
| Cabinet Thickness | 130 mm / 5.1 in. |
| Inner Doors | Two [D] |
| Condenser Type | Enhanced Micro-Channel & Forced-Air Cooled |
| Fan Brand | EBM |
| Back Up Battery For Alarm Functions | High/low temperature, power failure, door open, sensor failure, high ambient temperature, hot condenser, and low battery alarms |



NuAire, Inc. | (763) 553-1270 | NUAIRE.COM



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REFRIGERATION

| | |
|------------------------------|--|
| Refrigeration System Type | Direct cooling |
| Compressor Type/Brand/Number | Hermetic Reciprocating Type / SECOP / 2 |
| Compressor Capacity (W) | 950 |
| Evaporator Type | Cold Wall With Enhanced Heat Transfer Treatment |
| Defrost Method | Manual |
| Refrigerant Charge/Flammable | R290 in 1st Stage / R290 + R170 Mix in 2nd Stage / Flammable |

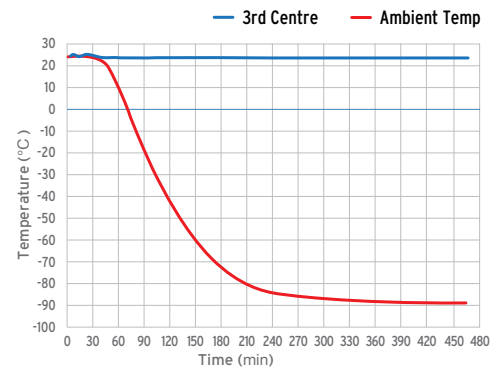
CONTROLS & SYSTEM FEATURES

| | |
|---------------------------------|--|
| Control Panel Location | Eye-level |
| Power Switch | On-Off with Circuit Breaker |
| Controller Type | Microprocessor Control, LED Display, USB Data Export |
| Setpoint Security | Yes |
| Controller Sensor | PT100 |
| Remote Alarm Terminals | Remote Alarm Port, RS232 / RS485 (Optional) |
| Adjustable High/Low Temp Alarms | Adjustable |
| Auto Voltage Safeguard | Included |

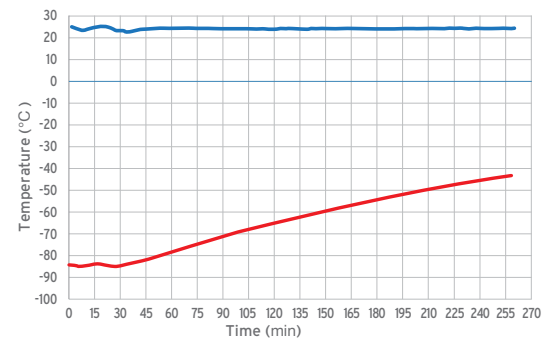
ENVIRONMENTAL & ELECTRICAL

| | |
|--|------------------------------------|
| Electrical Power* | GA = 115V / 60Hz |
| * Add letter suffix to model number to indicate electrical specifications. NU-99338JE = 230V / 60Hz | G = 220V / 60Hz E = 230V / 50Hz |
| Power (W) | 900 |
| Power Consumption (kW-hr/day) | 7.5 |
| Electrical Current (A) | 7.5 |
| Building Supply Rating (A) | 16 |
| Power Cord Length (m) | 2.5 |
| Heat Rejection (BTU/day) | 25591 |
| Ambient Temperature | 10°C ~ 32°C |
| Quality Assurance | UL, cUL |

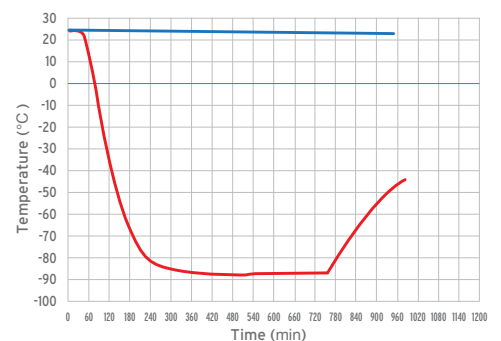
TYPICAL PERFORMANCE CHARACTERISTICS (25°C AMBIENT)



Temperature Cool Down Curve



Temperature Recovery Curve



Comprehensive Curve





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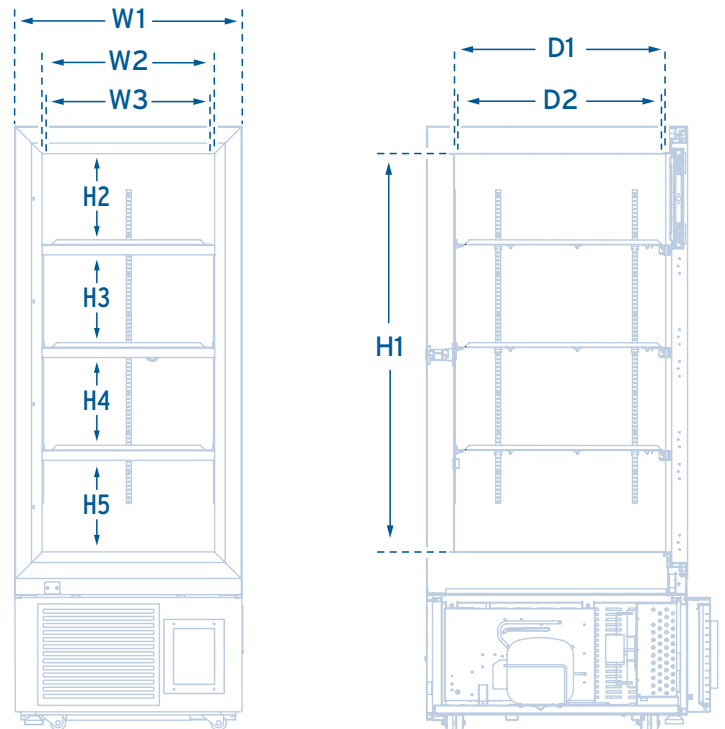
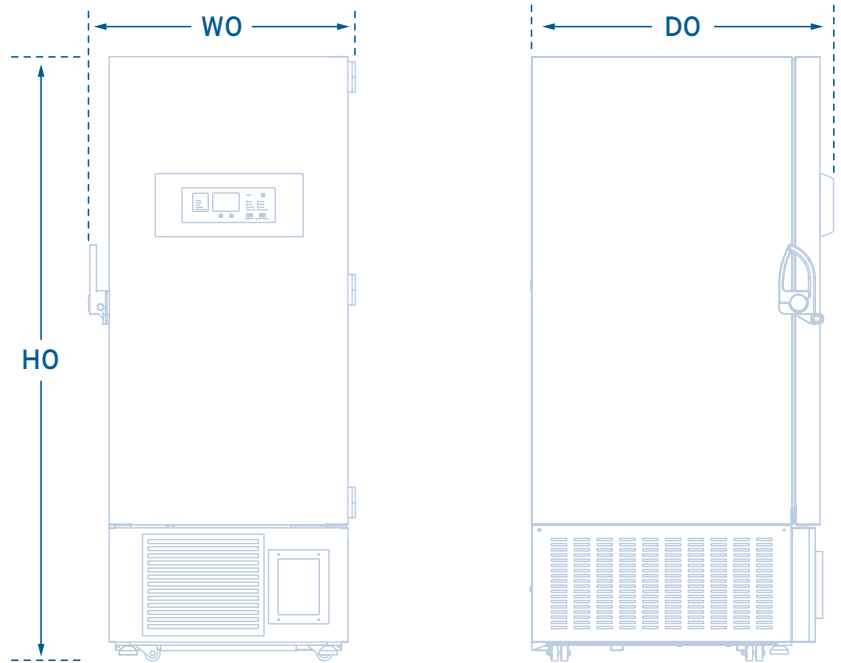
PRODUCT DIMENSIONS

| W0 | W1 | W2 | W3 | H0 |
|--------|--------|--------|--------|---------|
| 812 mm | 725 mm | 465 mm | 447 mm | 1846 mm |

| H1 | H2 | H3 | H4 | H5 |
|---------|--------|--------|--------|--------|
| 1165 mm | 245 mm | 298 mm | 298 mm | 245 mm |

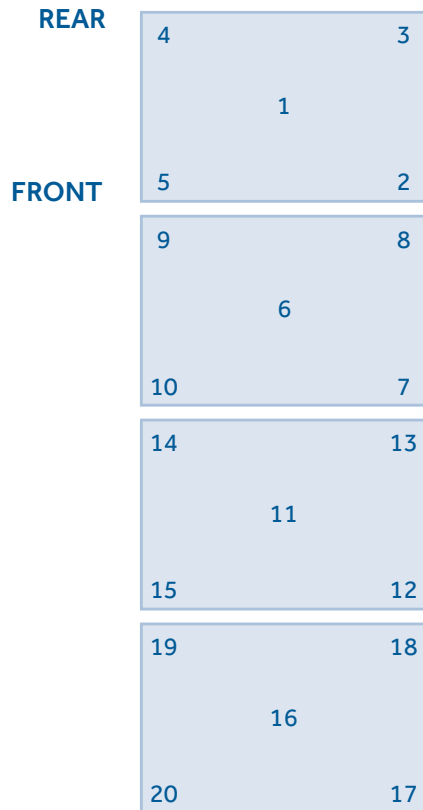
| D0 | D1 | D2 |
|--------|--------|--------|
| 893 mm | 630 mm | 615 mm |

- W0 - Total Width
- W1 - Freezer Width
- W2 - Inner Cabinet Width
- W3 - Shelf Width
- D0 - Total Depth
- D1 - Inner Cabinet Depth
- D2 - Shelf Depth
- H0 - Total Height
- H1 - Inner Cabinet Height
- H2 - 1st Compartment Height
- H3 - 2nd Compartment Height
- H4 - 3rd Compartment Height
- H5 - 4th Compartment Height

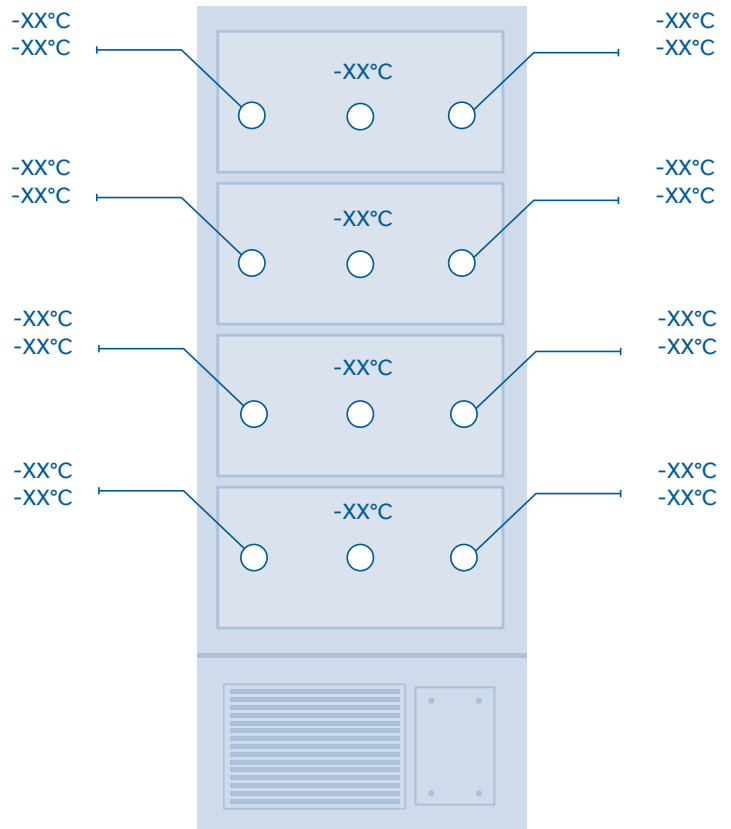


TYPICAL CABINET TEMPERATURE MAP

TOP VIEW OF SHELVES



FRONT VIEW OF SHELVES



| °C | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Max. | -80.2 | -78.0 | -77.8 | -77.8 | -77.8 | -79.3 | -79.5 | -79.6 | -79.4 | -79.5 |
| Min. | -83.0 | -82.1 | -82.5 | -82.2 | -82.0 | -81.9 | -83.2 | -83.8 | -83.9 | -83.4 |
| Avg. | -81.6 | -80.1 | -80.2 | -80.0 | -79.9 | -80.6 | -81.4 | -81.7 | -81.7 | -81.5 |

| °C | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Max. | -78.7 | -79.2 | -78.7 | -79.5 | -78.8 | -77.1 | -78.0 | -78.6 | -78.9 | -78.1 |
| Min. | -80.8 | -81.9 | -81.6 | -82.7 | -81.6 | -79.2 | -81.0 | -81.8 | -82.0 | -81.1 |
| Avg. | -79.8 | -80.6 | -80.2 | -81.1 | -80.2 | -78.2 | -79.5 | -80.2 | -80.5 | -79.6 |