



ULTF-37i

ULT TECHNICAL SPECIFICATIONS



| DIMENSIONS | | VALUE |
|----------------------------------|--|---|
| Dimension HxWxD (D incl. handle) | | 631x630x675 (745) |
| Dimension inner HxWxD | | 433x439x271 |
| Weight Gross/Net, kg | | 70 / 59 |
| Package weight | | 11 |
| Packaging dimensions HxWxD | | - |
| Material inner cabinet | | Stainless steel |
| Material outer cabinet | | Painted Steel |
| Insulation type | | Polyurethane with Cyclopentane |
| Insulation thickness | | 80 |
| Type of packaging | | Cardboard, EPS, PE, wood |
| Mobility | | Standard: Adjustable Feet / Option: Castors |
| FEATURES | | VALUE |
| Lock | | <input checked="" type="checkbox"/> |
| LED light | | <input checked="" type="checkbox"/> |
| Battery backup | | <input checked="" type="checkbox"/> |
| Porthole | | <input checked="" type="checkbox"/> |
| Porthole size | | 20 mm |
| Dry contact | | <input checked="" type="checkbox"/> |
| Door reversibility | | <input type="checkbox"/> |
| Vacuum valve | | <input checked="" type="checkbox"/> |
| VIP (Vacuum Insulated Panel) | | <input checked="" type="checkbox"/> |
| STORAGE | | VALUE |
| Capacity (L) | | 37 |
| ALARMS | | VALUE |
| High / Low temperature | | <input checked="" type="checkbox"/> |
| Open door | | <input checked="" type="checkbox"/> |
| Power failure | | <input checked="" type="checkbox"/> |
| Probe failure | | <input checked="" type="checkbox"/> |
| COOLING | | VALUE |
| Refrigerant | | Nature R / 96 |
| Noise | | < 48 |
| Voltage | | 230V |
| Frequenze | | 50/60 Hz |
| Temperature range | | -20 / -86 |
| Ambient condition | | 25 °C |



ULTF-37i

ULT TECHNICAL SPECIFICATIONS

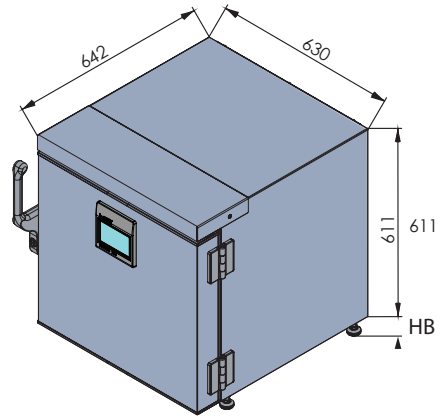
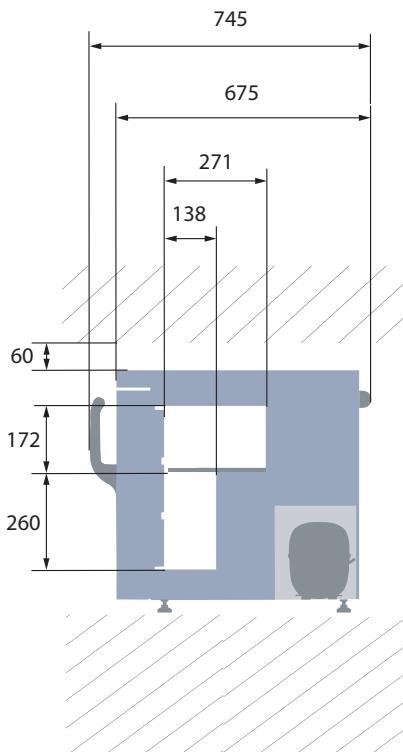
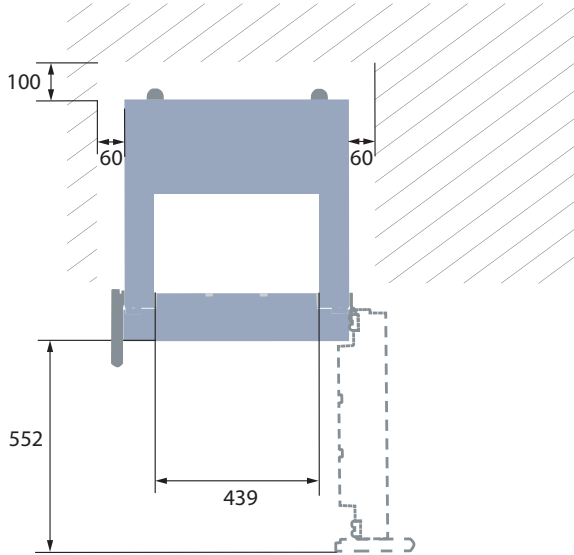
BIOMEDICAL

| OPERATING CONDITIONS | | |
|---|--------------------|--------------------------|
| Voltage/Frequency | Voltage/Hz | 230V, 50/60Hz |
| Max Ambient | °C | 43 |
| Max Humidity | % rh | 65 |
| PERFORMANCE | | |
| PERFORMANCE | UNIT | VALUE |
| All data in RT25°C | | |
| Temperature Range | °C | -20 to -86 |
| Uniformity in performance - difference between top and bottom | °C | +/- 2,5 |
| Pull down time | Minutes | 84 min. to -75°C |
| Hold over time | Minutes | N/A |
| Noise | dB | < 48 |
| Energy Consumption, kWh / 24h | kWh/24h | 2,94 kWh/24h Set -80 |
| Energy year | kWh/year | 1186,6kWh/y Set -82°C |
| Instant Power Consumption | kW | PD 0,300/Stable 0,190 |
| Heat Rejection | W | N/A |
| U-Value | W/m ² K | N/A |
| COOLING COMPONENTS | | |
| | | VALUE |
| Refrigerant/Amount (gram) | | Nature R 2/96gr |
| Number of compressors | pcs | 1 |
| Varibel speed compressor | Yes/No | Yes |
| Internal air distribution (type of) | | Static |
| Evaporator Fan | Yes/No/Variable | No |
| Condenser Fan | Yes/No/Variable | Yes |
| Number of probes | pcs | 2 |
| Defrost | Yes/No | No |
| CONTROLLER | | |
| | | VALUE |
| Controller | y/n/optional | yes |
| Controller type | | i-Care touch |
| USB Connection | y/n | yes |
| Data connection | USB | yes |
| Controller abilities | | logging of data & alarms |
| Controller languages | | EN, DE, FR |
| Temperature curve in controller | y/n | yes |



ULTF-37i

ULT TECHNICAL SPECIFICATIONS

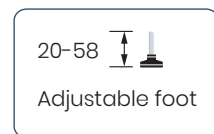
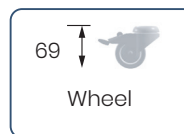


DIMENSIONS

| | |
|------------------------|-----|
| Height, mm | 631 |
| Width, mm | 630 |
| Depth, mm | 675 |
| Depth incl. handle, mm | 745 |

All measurements in mm.

HB: Height of base
(HB is adjustable when given value is xx-xx)

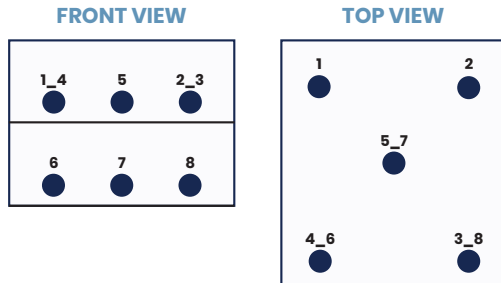




ULTF-37i

ULT TECHNICAL SPECIFICATIONS

SENSOR POSITION



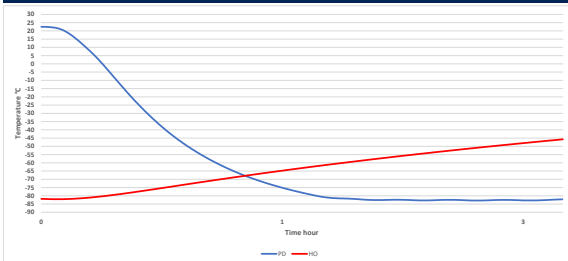
MODEL ULTF-37i

| | |
|----------------------------|---|
| Test type | 8-point test |
| Test environment | Controlled conditions, empty cabinet |
| Ambient temperature | 20°C |
| Humidity | 60% |
| Set-point | -82°C |
| Sensor used | 25gr tinned brass formed as a cylinder with a diameter of 15,2 mm |
| Installation | Appliance installed according to instruction manual conditions |
| Refrigerant | Nature R 2 |

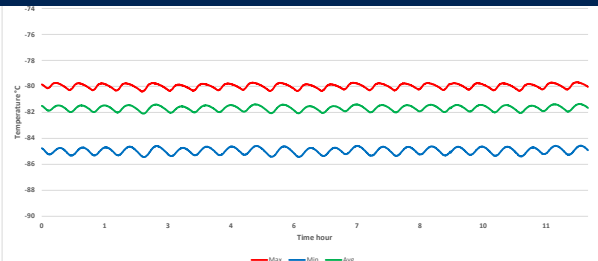
SENSOR TEMPERATURE

| Sensor position | P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Max | -79,7 | -80,2 | -80,1 | -79,9 | -80 | -83,1 | -83,1 | -84,6 |
| Avg. | -80 | -80,5 | -80,4 | -80,2 | -80,3 | -83,5 | -83,6 | -85 |
| Min. | -80,4 | -81 | -80,8 | -80,5 | -80,7 | -84,1 | -84,1 | -85,4 |

WARM UP & PULL DOWN



CYCLIC OPERATION



TYPICAL PERFORMANCE IN AMBIENT 20°C - EMPTY CABINET

| | |
|--|-----------------|
| Avg. cabinet temperature | -81,7°C |
| Peak variation from set-point | +/- 2,5°C |
| Stability in avg. | 0,5°C |
| 1 min. door open recovery to -75°C avg. temperature | 20 min. |
| Cycle rate on/off | 25,7 / 6,7 min. |
| Duty cycle | 78,7% |
| Energy consumption - Normal mode | 3,25 kWh/day |
| Energy consumption - Energy saving mode | 2,92 kWh/day |
| Pull down time to -75°C avg. temperature | 84 min. |
| Hold over time from -82°C to -60°C | 105 min. |
| Heat rejection | 306 W |