

Datasheet

Features	
Lock	Yes
LED Light	No
Battery Backup for Controller, 48h	Yes
VIP (Vacuum Insulated Panel)	No
Perimeter Heater	No
Porthole	Yes - Ø 12,5mm
Dry Contact	Yes
Vacuum Valve	No
Door	Solid
Door Reversibility	N/A

Construction	
Outer Dimensions, HxWxD	921x550x550
Inner Dimensions, HxWxD	450x390x390
Weight Gross/Net, kg	73 / 50
Material Inner Cabinet	Painted Steel
Material Outer Cabinet	Painted Steel
Insulation Thickness, mm	80
InsulationType	Polyurethane with Cyclopentane
Air Distribution	N/A
Mobility	Standard: 4xCasters with brakes
Refrigerant, Type / gram	Nature R2 / 121
Variable Speed Compressor	No
Internal Air Distribution	Static
Number of Probes	7/ 2/ 1

Controller & Alarms	
Controller	i-Care, Touch screen
Controller language	EN, DE, FR
USB Connection	Yes
Logging	Data, Alarms & Events
Temperature Graph	Yes
High/LowTemp. Alarm	Yes
Open Door Alarm	No
Probe Failure Alarm	Yes
Power Failure Alarm	Yes



-20°C -86°C



Biomedical ULT Freezer

Complexity made simple Info center







Storage	
Volume, Gross/net, L	74 / 71
Shelf	N/A
Cryobox "2 capacity	40
2 ml vials capacity	4.000
Inner lids	Yes

Performance & Operation					
Temperature Range, C°	-20 to -86				
Voltage, V	220				
Frequence, Hz	50				
Max Ambient, °C	30				
Max Humidity, °C	65				
Noise, dB	54				
Energy Consumption, kWh / 24h	5,3				
Instant Power Consumption	PD 0,540 / Stable 0,340				
Heat Rejection	370				
K-Value	0,19				
Defrost	Manual				



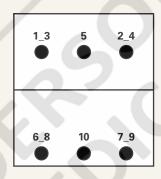


Temperature Mapping

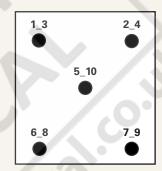
Test overview	
Test type	10-point test
Test environment	Controlled conditions, empty cabinet
Ambient temperature	20°C
Humidity	60%
Set-point	-82°C
Sensors used	25gr tinned brass formed as a cylinder with a diameter of 15,2mm
Installation	Appliance installed according to instruction manual conditions
Refrigerant	Nature R 2

Sensor position

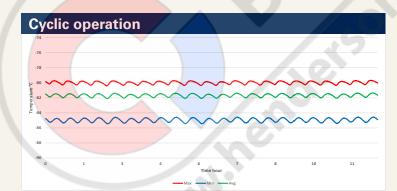
Front View



Top View



Sensor temperature										
Sensor position	P1	P2	P3	P4	P 5	P6	P 7	P8	P9	P10
Max.	-83,9	-85,3	-85,2	-84,9	-85,6	-85	-85	-84,5	-85	-84,6
Avg.	-84,5	-85,9	-85,8	-85,5	-86,2	-85,6	-85,5	-85	-85,6	-85,1
Min.	-85,1	-86,5	-86,2	-86,2	-86,9	-86,3	-86,3	-85,6	-86,3	-85,7



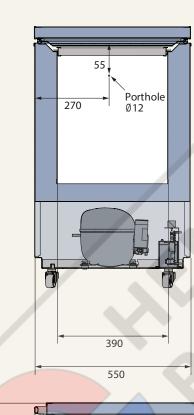


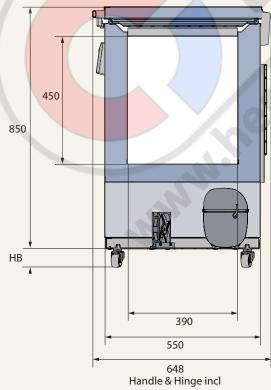
Typical performance data					
Avg. cabinet temperature	-85,5°C				
Uniformity	+/- 0,9°C				
Stability in avg.	1,0°C				
1 min. door open recovery to -75°C avg. temperature	6 min.				
Cycle rate on/off	16 / 7 min.				
Duty cycle	68 %				
Energy consumption - Normal mode	5,32 kWh/day				
Energy consumption - Energy saving mode	4,01 kWh/day				
Pull down time to -75°C avg. temperature	72 min.				
Hold over time from -82°C to -60°C	64 min.				
Heat rejection	370 W				

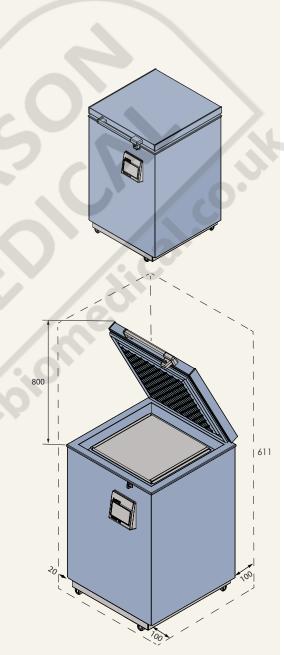


Dimensions









All dimensions in milimeter

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





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