



BIOMEDICAL

ULTF-C74i

CHEST ULT FREEZER

The chest design is an economical choice, that preserves cold well due to the horizontal lid.

-20°C
-86°C



DIMENSIONS	VALUE
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	80
Insulation type	Polyurethane with Cyclopentane
Mobility	Standard: 4 castors with brakes
Refrigerant, Type / gram	Nature R2 / 121
Variable Speed Compressor	No
Internal Air Distribution	Static
Number of probes	1
CONTROLLER	VALUE
Controller	i-Care, Touch screen
Controller language	EN, DE, FR
USB Connection	Yes
Logging	Data, Alarms & Events
Temperature graph	Yes
High/Low temp. Alarm	Yes
Open door alarm	No
Probe failure alarm	Yes
Power failure alarm	Yes
STORAGE	VALUE
Volume, Gross/Net, L	74 / 71
Cryobox "2 capacity	40
2 ml vials capacity	4.00
Inner lids	Yes
FEATURES	VALUE
Lock	Yes
LED light	No
Battery Backup for Controller, 24h	Yes
VIP (Vacuum Insulated Panel)	No
Perimeter Heater	No
Porthole	Yes - Ø 12,5 mm
Dry Contact	Yes
Vacuum valve	No
Door	Solid



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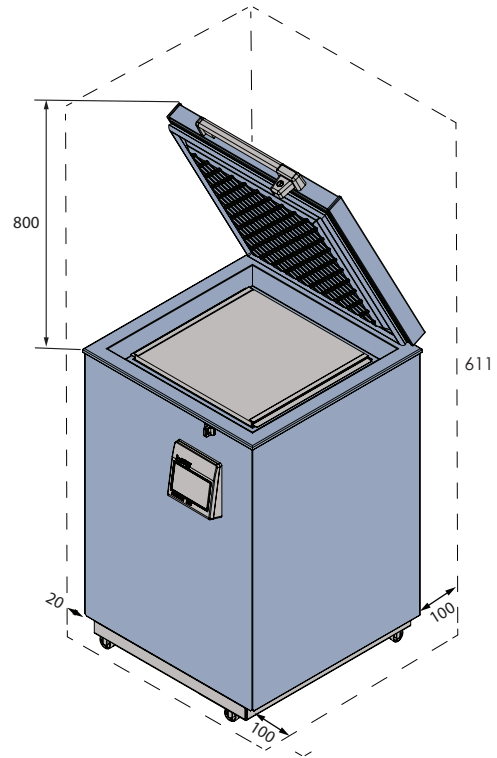
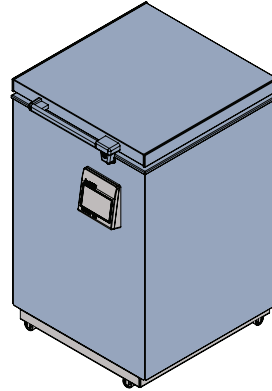
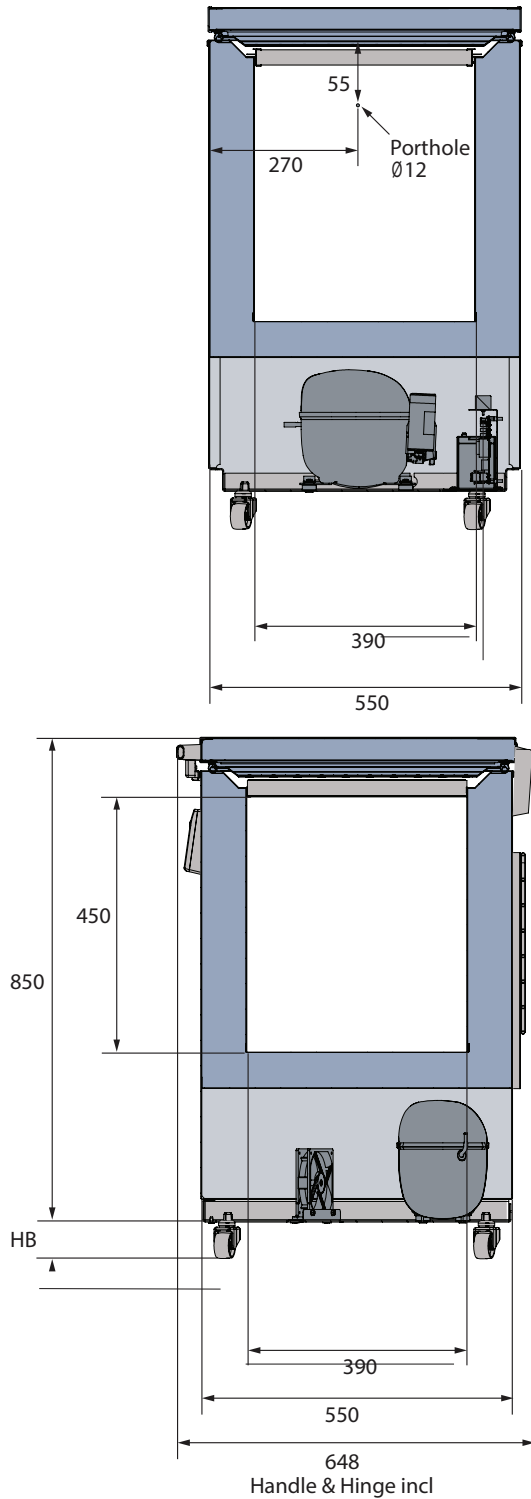
PERFORMANCE	UNIT	VALUE
All data in RT20°C		
Temperature Range	°C	-20 to -86
Uniformity in performance - difference between top and bottom	°C	+/- 0,9
Pull down time	Minutes	72min to -75°C
Hold over time	Minutes	64 min to -60°C
Noise	dB	54
Energy Saving Mode	kWh/24h	4,018 kWh/24h Set -70
Energy 24 hours	kWh/24h	5,325 kWh/24h Set -82
Energy year	kWh/year	1943,25 kWh/y Set -82°C
Instant Power Consumption	kW	PD 0,540-0,370/Stable 0,340
Heat Rejection	W	370
U-Value	W/m ² K	0,19
COOLING COMPONENTS		VALUE
Refrigerant/Amount (gram)		Nature R 2/121gr
Number of compressors	pcs	1
Varibel speed compressor	Yes/No	No
Internal air distribution (type of)		Static
Evaporator Fan	Yes/No/Variable	No
Condenser Fan	Yes/No/Variable	Yes
Number of probes	pcs	1
Defrost	Yes/No	No



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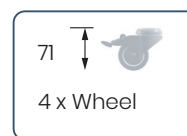
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All measurements in mm.

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



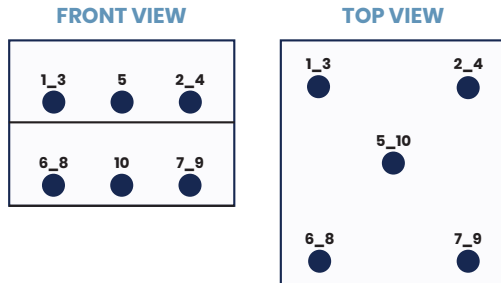


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SENSOR POSITION



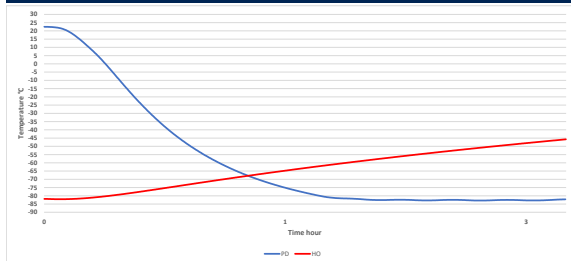
MODEL ULTF-C74I

Test type	10-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

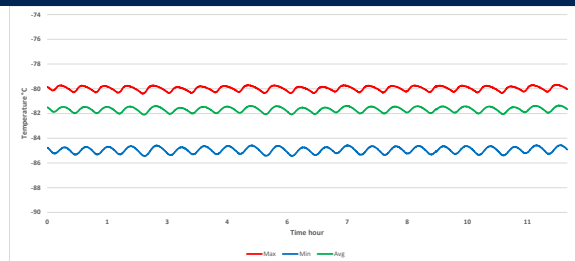
SENSOR TEMPERATURE

Sensor position	P1	P2	P3	P4	P5	P6	P7	P8	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

WARM UP & PULL DOWN



CYCLIC OPERATION



TYPICAL PERFORMANCE IN AMBIENT 20°C - EMPTY CABINET

Avg. cabinet temperature	-85,5°C
Peak variation from set-point	+/- 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