## **CHEST ULT FREEZER**

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



DIMENSIONS	
Outer Dimensions HxWxD, mm	831x1260x608
Inner Dimensions HxWxD, mm	624x1100x440
Weight Gross/Net, kg	100 / 78
Material inner cabinet	Painted Steel
Material outer cabinet	Painted Steel
Packaging weight, kg	22
Packaging dimensions HxWxD, mm	900x1313x725
Insulation thickness	80
Insulation type	Polyurethane with Cyclopentane
Mobility	Standard: 4 castors with brakes
Refrigerant, Type / gram	Nature R2 / 143
Variable Speed Compressor	No
Internal Air Distribution	Static
Number of probes	1
CONTROLLER	
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	
Volume, Gross/Net, L	296 / 284
Cryobox "2 capacity	216
2 ml vials capacity	21.600
Inner lids	Yes
FEATURES	
Lock	Yes
LED light	No
Battery Backup for Controller, 24h	Yes

1

No

Yes

No

Solid

Yes - Ø 12,5 mm

VIP (Vacuum Insulated Panel)

Door frame heater

Porthole

Door

**Dry Contact** 

Vacuum valve

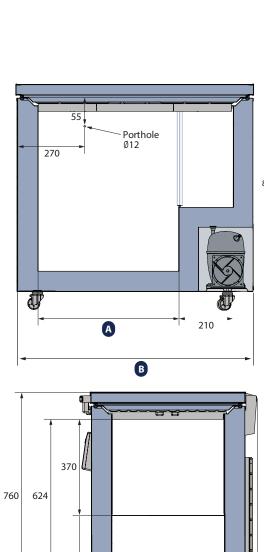
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Voltage/Frequency	Voltage/Hz	230V/50Hz		
Max Ambient	°C	25°C		
Max Humidity	% rh	65%		
PERFORMANCE				
All data in RT20°C				
Temperature Range	°C	-20 to -86		
Uniformity in performance - difference between top and bottom	°C	+/- 1,2		
Pull down time	Minutes	130 min to -75°C		
Hold over time	Minutes	72 min to -60°C		
Noise	dB	55		
Energy Saving Mode	kWh/24h	7,041 kWh/24h Set -70		
Energy Consumption, kWh / 24h	kWh/24h	9,855 kWh/24h Set -82		
Energy year	kWh/year	3597,1 kWh/y Set -82°C		
Instant Power Consumption	kW	PD 0,710-0,550/Stable 0,520		
Heat Rejection*	W	450		
U-Value	W/m^2 K	0,2		
COOLING COMPONENTS				
Refrigerant/Amount (gram)		Nature R 2/143gr		
Number of compressors	pcs	1		
Variable 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		

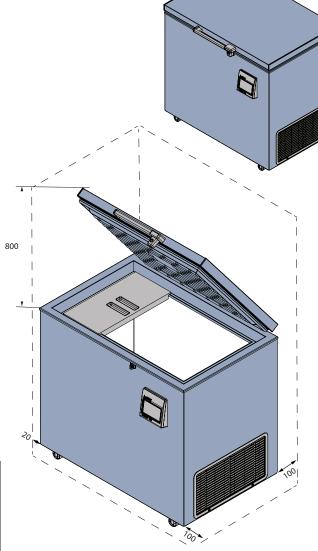
<sup>\*</sup> Heat Rejection is defined as average power based on energy consumption, rounded up to nearest 50W.

## CHEST ULT ERFEZER

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ΗВ



MODEL	A	В
ULTF-C198i	550	920
ULTF-C296i	890	1260
ULTF-C383i	1190	1560

All measurements in mm.

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



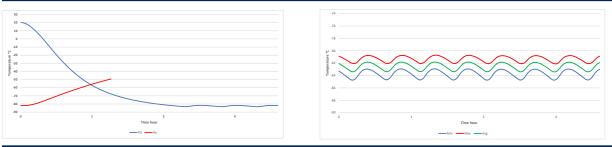
440 608

698 Handle & Hinge incl The chest design is an economical choice, that preserves cold well due to the horizontal lid.

SENSOR POSITION					М	ODEL		ULTF-C296I			
	FRONT VIEV	W	TOP VIEW		Test type			10-point test			
			1_3 2_4		Те	st environm	ent			conditions, oty cabinet	
1_	3 5	2_4		Ambient temperature			erature	20°C			
			5_10 Set-point Sensor used  6_8 7_9 Installation		Humidity				60%		
6_	8 10	7_9			Se	t-point				-82°C	
					Sensor used			25gr tinned brass formed as a cylinder with a diameter of 15,2 mm			
					Appliance installed according to instruction manual conditions						
					Re	Refrigerant				Nature R 2	
SENSOR TEMPERATURE											
Sensor position	Pl	P2	Р3	P4	P5	P6	P7	P8	P9	P10	
Max	-81,5	-82,7	-82,9	-82,3	-82,1	-80,7	-81,6	-80,9	-82	-81,3	
Avg.	-82,4	-83,5	-83,8	-83,2	-82,7	-81,4	-82,2	-81,5	-82,7	-82,1	
Min.	-83,3	-84,5	-84,7	-84,2	-83,5	-82,1	-82,9	-82,3	-83,6	-83	

## WARM UP & PULL DOWN

## **CYCLIC OPERATION**



TYPICAL PERFORMANCE IN AMBIENT 20°C - EMPTY CABINET		
Avg. cabinet temperature	-82,5℃	
Peak variation from set-point	+/- 1,2°C	
Stability in avg.	0,8°C	
1 min. door open recovery to -75°C avg. temperature	∢ min.	
Cycle rate on/off	30 / 7 min.	
Duty cycle	77,3%	
Energy consumption - Normal mode	9,85 kWh/day	
Energy consumption - Energy saving mode	7,04 kWh/day	
Pull down time to -75°C avg. temperature	130 min.	
Hold over time from -82°C to -60°C	72 min.	
Heat rejection	642 W	