

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



DIMENSIONS				
Outer Dimensions HxWxD, mm	831x1560x608			
Inner Dimensions HxWxD, mm	624x1400x440			
Weight Gross/Net, kg	112 / 86			
Material inner cabinet	Painted Steel			
Material outer cabinet	Painted Steel			
Packaging weight, kg	26			
Packaging dimensions HxWxD, mm	900x1613x725			
Insulation thickness	80			
Insulation type	Polyurethane with Cyclopentane			
Mobility	Standard: 4 castors with brakes			
Refrigerant, Type / gram	Nature R2 / 161			
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	383 / 638			
Cryobox "2 capacity	282			
2 ml vials capacity	28.200			
Inner lids	Yes			
FEATURES				
Lock	Yes			
LED light	No			
Battery Backup for Controller, 24h	Yes			
VIP (Vacuum Insulated Panel)	No			
Door frame heater	No			
Porthole	Yes - Ø 12,5 mm			
Dry Contact	Yes			
Vacuum valve	No			
Door	Solid			

20°C

86°

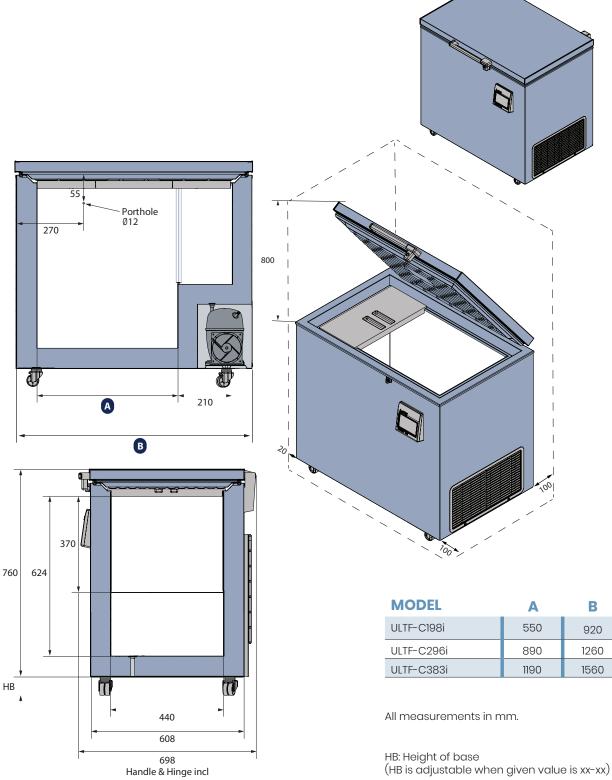


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Voltage/Frequency	Voltage/Hz	230V/50Hz		
Max Ambient	°C	25°C		
Max Humidity	% rh	65%		
PERFORMANCE				
All data in RT20°C				
Temperature Range	°C	-20 to -86		
Uniformity in performance - difference between top and bottom	°C	+/- 1,1		
Pull down time	Minutes	138min to -75°C		
Hold over time	Minutes	69 min to -60°C		
Noise	dB	55		
Energy Saving Mode	kWh/24h	7,424 kWh/24h Set -70		
Energy Consumption, kWh / 24h	kWh/24h	9,957 kWh/24h Set -82		
Energy year	kWh/year	3634,3 kWh/y Set -82°C		
Instant Power Consumption	kW	PD 0,810-0,600/Stable 0,532		
Heat Rejection*	W	450		
U-Value	W/m^2 K	0,2		
COOLING COMPONENTS				
Refrigerant/Amount (gram)		Nature R 2/161gr		
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	es/No/Variable Yes		
Number of probes	pcs	1		
Defrost	Yes/No	No		

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





71 **7 7** 4 x Wheel

3



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SENSOR POSITION					Μ	MODEL ULTF-C38			-C383I		
FRONT VIEW TOP VIEW		Те	Test type		10-point test						
	-				Test environment		ent	Controlled conditions, empty cabinet			
1	3 5	2_4	ē			nbient temp	erature			20°C	
		-	5_10 • 6_8 7_9		Hu	Humidity		60%			
6	8 10	7_9			Set-point				-82°C		
		•			Se	nsor used		25gr tinned brass formed as a cylinder with a diameter of 15,2 mm			
		l			In	stallation			e installed a tion manua		
					Refrigerant			Nature R 2			
SENSOR TEMPERATURE											
Sensor position	Pl	P2	P3	P4	Р5	P6	P7	P8	P9	P10	
Max	-80,9	-81,5	-81,7	-80	-80,3	-79,9	-79,7	-80,7	-81,7	-80,8	
Avg.	-81,5	-82,2	-82,3	-80,8	-80,8	-80,4	-80,1	-81,2	-81,7	-80,8	

-81,5

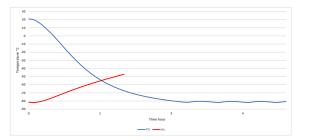
-81

CYCLIC OPERATION

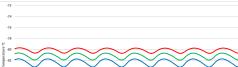
WARM UP & PULL DOWN

-82,3

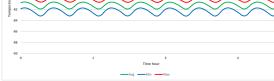
Min.



-83



-80,7



-81,8

-82,5

-81,6

TYPICAL PERFORMANCE IN AMBIENT 20°C - EMPTY CABINET

-81,6

-83,2

Avg. cabinet temperature	-81,2°C
Peak variation from set-point	+/- 1,1°C
Stability in avg.	0,6°C
1 min. door open recovery to -75°C avg. temperature	<1 min.
Cycle rate on/off	25 / 7 min.
Duty cycle	75%
Energy consumption - Normal mode	9,95 kWh/day
Energy consumption - Energy saving mode	7,42 kWh/day
Pull down time to -75°C avg. temperature	138 min.
Hold over time from -82°C to -60°C	69 min.
Heat rejection	670 W