



BIOMEDICAL

# REFRIGERATORS

TEMPERATURE RANGE +2°C to +20°C

DIN  
13277



CONSTRUCTION	R-90i	R-138i	R-427i
<b>Outer Dimensions, HxWxD</b>	672x595x642	825x595x642	2002x595x642
<b>Inner Dimensions, HxWxD</b>	481x475x425	676x475x425	1850x475x425
<b>Weight Gross/Net, kg</b>	48 / 38	56 / 45	88 / 74
<b>Material Inner Cabinet</b>	ABS	ABS	ABS
<b>Material Outer Cabinet</b>	Painted Steel	Painted Steel	Painted Steel
<b>Insulation Thickness, mm</b>	50	50	50
<b>Insulation Type</b>	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane
<b>Air Distribution</b>	Dynamic	Dynamic	Dynamic
<b>Mobility</b>	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors
<b>Refrigerant, Type / gram</b>	R600a / 39	R600a / 47	R600a / 60
<b>Variable Speed Compressor</b>	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology
<b>Number of Probes</b>	4	4	4
<b>STORAGE</b>			
<b>Volume, Gross/net, L</b>	90 / 76	138 / 117	427 / 361
<b>Shelves, Full/half</b>	1/1	2/1	5/1
<b>Shelf material</b>	Perforated Alu	Perforated Alu	Perforated Alu
<b>Max Loading pr. Shelf, kg</b>	20	20	20
<b>PERFORMANCE &amp; OPERATION</b>			
<b>Temperature Range, C°</b>	+2 to +20	+2 to +20	+2 to +20
<b>Voltage, V</b>	230	230	230
<b>Frequency, Hz</b>	50 / 60	50 / 60	50 / 60
<b>Max Ambient, °C</b>	35	35	35
<b>Max Humidity, °C</b>	75	75	75
<b>Noise, dB</b>	46	44	40
<b>Energy Consumption, kWh / 24h</b>	0,290	0,334	0,438
<b>Instant Power Consumption</b>	PD 0,064 / Stable 0,025	PD 0,080 / Stable 0,025	PD 0,075 / Stable 0,025
<b>Heat Rejection</b>	40	46	61
<b>K-Value</b>	0,58	0,59	0,44
<b>Defrost</b>	Automatic	Automatic	Automatic

## SHARED ABILITIES

FEATURES		CONTROLLER & ALARMS	
<b>Lock</b>	Yes	<b>Controller</b>	i-Care, Touch screen
<b>LED Light</b>	Yes	<b>Controller language</b>	EN, DE, FR
<b>Battery Backup for Controller, 24h</b>	Yes	<b>USB Connection</b>	Yes
<b>Safety Thermostat</b>	Yes	<b>Logging</b>	Data, Alarms & Events
<b>Porthole</b>	Yes - Ø 20mm	<b>Temperature Graph</b>	Yes
<b>Dry Contact</b>	Yes	<b>High/Low Temp. Alarm</b>	Yes
<b>Reference bottle</b>	Yes	<b>Open Door Alarm</b>	Yes
<b>Door</b>	Solid	<b>Probe Failure Alarm</b>	Yes
<b>Door Features</b>	Automatic: Closure < 90° - Hold > 90°	<b>Power Failure Alarm</b>	Yes
<b>Door Reversibility</b>	Yes		



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# REFRIGERATORS

TEMPERATURE RANGE +2°C to +20°C

DIN  
13277



CONSTRUCTION	R-90i Glass	R-138i Glass	R-427i Glass
Outer Dimensions, HxWxD	672x595x642	825x595x642	2002x595x642
Inner Dimensions, HxWxD	481x475x425	676x475x425	1850x475x425
Weight Gross/Net, kg	52 / 42	59 / 48	100 / 86
Material Inner Cabinet	ABS	ABS	ABS
Material Outer Cabinet	Painted Steel	Painted Steel	Painted Steel
Insulation Thickness, mm	50	50	50
Insulation Type	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane
Air Distribution	Dynamic	Dynamic	Dynamic
Mobility	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors
Refrigerant, Type / gram	R600a / 39	R600a / 47	R600a / 60
Variable Speed Compressor	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology
Number of Probes	4	4	4
STORAGE			
Volume, Gross/net, L	90 / 76	138 / 117	427 / 361
Shelves, Full/half	1/1	2/1	5/1
Shelf material	Perforated Alu	Perforated Alu	Perforated Alu
Max Loading pr. Shelf, kg	20	20	20
PERFORMANCE & OPERATION			
Temperature Range, C°	+2 to +20	+2 to +20	+2 to +20
Voltage, V	230	230	230
Frequency, Hz	50 / 60	50 / 60	50 / 60
Max Ambient, °C	32	32	32
Max Humidity, °C	65	65	65
Noise, dB	46	44	40
Energy Consumption, kWh / 24h	0,336	0,433	0,499
Instant Power Consumption	PD 0,068 / Stable 0,028	PD 0,082 / Stable 0,028	PD 0,08 / Stable 0,025
Heat Rejection	50	55	83
K-Value	0,69	0,69	0,70
Defrost	Automatic	Automatic	Automatic

## SHARED ABILITIES

FEATURES		CONTROLLER & ALARMS	
Lock	Yes	Controller	i-Care, Touch screen
LED Light	Yes	Controller language	EN, DE, FR
Battery Backup for Controller, 24h	Yes	USB Connection	Yes
Safety Thermostat	Yes	Logging	Data, Alarms & Events
Porthole	Yes - Ø 20mm	Temperature Graph	Yes
Dry Contact	Yes	High/Low Temp. Alarm	Yes
Reference bottle	Yes	Open Door Alarm	Yes
Door	Glass	Probe Failure Alarm	Yes
Door Features	Automatic: Closure < 90° - Hold > 90°	Power Failure Alarm	Yes
Door Reversibility	Yes		

Updated 03/2025



# ESSENTIAL LINE

TEMPERATURE RANGE +2°C to +10°C

DIN  
13277



CONSTRUCTION	R-281 Essential	R-350 Essential
Outer Dimensions, HxWxD	1560x595x595	1860x595x595
Inner Dimensions, HxWxD	1282x500x415	1550x500x415
Weight Gross/Net, kg	73 / 71	81 / 79
Material Inner Cabinet	White/PS	White/PS
Material Outer Cabinet	Painted steel	Painted steel
Insulation Thickness, mm	42	42
Insulation Type	Polyurethane with cyclopentane	Polyurethane with cyclopentane
Air Distribution	Dual Air Stream	Dual Air Stream
Mobility	2 feet front, 2 wheels back	2 feet front, 2 wheels back
Refrigerant, Type / gram	R600a / 50g	R600a / 50g
Variable Speed Compressor	No	No
Number of Probes	2	2
STORAGE		
Volume, Gross/net, L	281	350
Shelves, Full/half	4Full / 1Half	5Full / 1Half
Shelf material	Glass	Glass
Max Loading pr. Shelf, kg	25	25
PERFORMANCE & OPERATION		
Temperature Range, C°	+2 to +10 °C	+2 to +10°C
Voltage, V	230 V	230 V
Frequency, Hz	50 Hz	50 Hz
Max Ambient, °C	32°C	32°C
Max Humidity, °C	65%	65%
Noise, dB	45 dB	45 dB
Energy Consumption, kWh / 24h	0,826kWh/24h set 5°C	0,962kWh/24h set 5°C
Instant Power Consumption	PD 0,2 /Stable 0,18	PD 0,18 /Stable 0,16
Heat Rejection	-	-
Defrost	Yes - automatic	Yes - automatic

## SHARED ABILITIES

FEATURES		CONTROLLER & ALARMS	
Lock	Yes	Controller	Danfoss
LED Light	Yes	Controller language	No language. only 3 digits
Battery Backup for Controller, 24h	Yes	USB Connection	No
Safety Thermostat	No	Logging	-
Porthole	Yes - Ø 12,7 mm	Temperature Graph	No
Dry Contact	No	High/Low Temp. Alarm	Yes
Reference bottle	No	Open Door Alarm	Yes
Door	Glass	Probe Failure Alarm	Yes
Door Closure	Yes	Power Failure Alarm	-
Door Reversibility	Yes		



BIOMEDICAL

# ULTF LONG TERM

TEMPERATURE RANGE -40°C to -90°C

DIN  
13277



CONSTRUCTION	ULTF-500	ULTF-700
Outer Dimensions, HxWxD	1966x826x938	1966x1110x938
Inner Dimensions, HxWxD	1300x606x605	1300x890x605
Weight Gross/Net, kg	247	289
Material Inner Cabinet	Stainless steel	Stainless steel
Permitted load [kg]	200	200
Permitted load of individual compartment (kg)	50	50
Wall clearance back [mm]	100	100
Wall clearance sidewise [mm]	250	250
Mobility	4 wheels, 2 w. lock	4 wheels, 2 w. lock
Refrigerant, Type	R290/R170	R290/R170
STORAGE		
Volume, Gross/net, L	477	700
Shelves included/max. no. of shelves	3/13	3/13
PERFORMANCE & OPERATION		
Temperature Range, C°	-90 to -40	-90 to -40
Voltage, V	230	230
Frequency, Hz	50	50
Nominal power, kW	1,6	1,6
Unit fuse, A	10	10
Noise, dB	47	47
Energy Consumption, kWh / 24h	7,9	8,1
Power plug standard	2m C13 CEE 7/7	2m C13 CEE 7/7

## SHARED ABILITIES

FEATURES	
Compressor cooling	cascade
Innovative door gasket	reduce ice built-up
Detachable inner doors	stainless steel
Zero-voltage alarm contact	in-house alarm system
Internal data logger	USB read out
Ethernet interface	yes
Access ports	2x Ø28mm rear
Shipping pallet	without forklift
Packaging	Recyclable
Powder-coating	Solvent free
Recovery time after 1 min door opening (to -80°C)	~18 minutes (empty)

Also available in 120 V / 60 Hz, UL standards.



# FREEZERS

TEMPERATURE RANGE -5°C to -25°C

DIN  
13277



CONSTRUCTION	F-90i	F-138i	F-427i
Outer Dimensions, HxWxD	672x595x642	825x595x642	2002x595x642
Inner Dimensions, HxWxD	481x475x425	676x475x425	1680x475x425
Weight Gross/Net, kg	54 / 44	60 / 49	99 / 85
Material Inner Cabinet	ABS	ABS	ABS
Material Outer Cabinet	Painted Steel	Painted Steel	Painted Steel
Insulation Thickness, mm	50	50	50
Insulation Type	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane
Air Distribution	Dynamic	Dynamic	Dynamic
Mobility	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors	Standard: Adjustable Feet Option: Castors
Refrigerant, Type / gram	R600a / 38	R600a / 43	R290 / 80
Variable Speed Compressor	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology	Yes - Adaptive Cooling Technology
Number of Probes	2	2	2
STORAGE			
Volume, Gross/net, L	90 / 76	138 / 117	427 / 335
Shelves, Full/half	1/1	2/1	5/1
Shelf material	Perforated Alu	Perforated Alu	Perforated Alu
Max Loading pr. Shelf, kg	20	20	20
PERFORMANCE & OPERATION			
Temperature Range, C°	-5 to -25	-5 to -25	-5 to -25
Voltage, V	230	230	230
Frequency, Hz	50 / 60	50 / 60	50 / 60
Max Ambient, °C	35	35	30
Max Humidity, °C	65	65	65
Noise, dB	40	45	50
Energy Consumption, kWh / 24h	1,1	1,419	3,773
Instant Power Consumption	PD 0,120 / Stable 0,046	PD 0,120 / Stable 0,052	PD 0,220 / Stable 0,150
Heat Rejection	110	120	260
K-Value	0,59	0,59	0,44
Defrost	Automatic	Automatic	Automatic

## SHARED ABILITIES

FEATURES		CONTROLLER & ALARMS	
Lock	Yes	Controller	i-Care, Touch screen
LED Light	Yes	Controller language	EN, DE, FR
Battery Backup for Controller, 24h	Yes	USB Connection	Yes
No-Frost System™	Yes	Logging	Data, Alarms & Events
Door frame heater	Hot gas	Temperature Graph	Yes
Porthole	Yes - Ø 20mm	High/Low Temp. Alarm	Yes
Dry Contact	Yes	Open Door Alarm	Yes
Reference bottle	No	Probe Failure Alarm	Yes
Door	Standard: Solid	Power Failure Alarm	Yes
Door Features	Automatic: Closure < 90° - Hold > 90°		
Door Reversibility	Yes		



# ULT FREEZERS

TEMPERATURE RANGE -20°C to -86°C



BIOMEDICAL



CONSTRUCTION	ULTF-7i	ULTF-37i	ULTF-51i	ULTF-91i
Outer Dimensions, HxWxD	732x457x650	631x630x675	836x699x720	836x947x720
Outer Depth, incl. handle	720	745	790	790
Inner Dimensions, HxWxD	310x150x145	433x439x271	310x360x445	310x640x445
Weight Gross/Net, kg	83 / 63	70 / 59	108 / 82	137 / 102
Material Inner Cabinet	Stainless steel	Stainless Steel	Stainless steel	Stainless steel
Material Outer Cabinet	Painted Steel	Painted Steel	Painted Steel	Painted Steel
Insulation Thickness, mm	120	80	120	120
Insulation Type	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane
Air Distribution	Yes	No	Yes	No
Mobility	4 x adjustable feet	Standard: Adjustable Feet Option: Castors	2 x adjustable feet, 2 x castors	3 x adjustable feet, 3 x castors
Refrigerant, Type / gram	Nature R	Nature R2 / 96	Nature R	Nature R
Variable Speed Compressor	Yes	Yes - Adaptive Cooling Technology	Yes	Yes
Internal Air Distribution	Static	Static	Static	Static
Number of Probes	2	2	2	2
STORAGE				
Volume, L	7	37	50	88
PERFORMANCE & OPERATION				
Temperature Range, C°	-20 to -86	-20 to -86	-20 to -86	-20 to -86
Voltage, V	100-240V	100-240V	100-240V	100-240V
Frequence, Hz	50 / 60	50 / 60	50 / 60	50 / 60
Max Ambient, °C	32	32	32	32
Max Humidity, °C	65	65	65	65
Noise, dB	< 48	46	< 48	< 48
Energy Consumption, kWh / 24h	2,94 kWh/24h Set -80	3,251 kWh/24h Set -82	4,34 kWh/24h Set -80	5,22 kWh/24h Set -80
Instant Power Consumption	PD 0,300/Stable 0,190	PD 0,550/Stable 0,270	PD 0,600/Stable 0,280	PD 0,650/Stable 0,280
Heat Rejection	N/A	306	N/A	N/A
U-Value	N/A	0,19	N/A	N/A
Defrost	No	Manual	No	No

## SHARED ABILITIES

FEATURES		CONTROLLER & ALARMS	
Lock	Yes	Controller	i-Care, Touch screen
LED Light	No	Controller language	EN, DE, FR
Battery Backup for Controller, 24h	Yes	USB Connection	Yes
VIP (Vacuum Insulated Panel)	Yes	Logging	Data & Alarms
Door frame heater	Electric	Temperature Graph	Yes
Porthole	Yes - Ø 20mm	High/Low Temp. Alarm	Yes
Dry Contact	Yes	Open Door Alarm	Yes
Vacuum Valve	Yes	Probe Failure Alarm	Yes
Door	Solid	Power Failure Alarm	Yes
Door Reversibility	No	Condenser Fan Alarm	Yes

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# CHEST FREEZERS

TEMPERATURE RANGE -25°C to -45°C



CONSTRUCTION	VT146	VT206	VT306	VT406	VT546
<b>Outer Dimensions, HxWxD</b>	885x725x605	885x923x605	885x1265x605	885x1562x605	932x1664x665
<b>Inner Dimensions, HxWxD</b>	635x560x440	635x760x440	635x1100x440	635x1400x440	670x1500x500
<b>Weight Gross/Net, kg</b>	54,4 / 50,5	63,4 / 58,4	73,2 / 67,6	83,2 / 77,2	109 / 93
<b>Material Inner Cabinet</b>	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel
<b>Material Outer Cabinet</b>	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel
<b>Insulation Thickness, mm</b>	80	80	80	80	80
<b>Insulation Type</b>	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane
<b>Mobility / Castors</b>	Yes	Yes	Yes	Yes	Yes
<b>Refrigerant, Type</b>	R290	R290	R290	R290	R290
<b>Number of compressors</b>	1	1	1	1	1
<b>Internal Air Distribution</b>	Static	Static	Static	Static	Static
<b>Number of Probes</b>	1	1	1	1	1
STORAGE					
<b>Volume, Gross/net, L</b>	140	198	296	384	495
<b>Baskets</b>	1	1	1	1	3
<b>Basket material</b>	Steel coated with plastic powder	Steel coated with plastic powder	Steel coated with plastic powder	Steel coated with plastic powder	Steel coated with plastic powder
<b>Inner lids</b>	No	No	No	No	No
PERFORMANCE & OPERATION					
<b>Temperature Range, C°</b>	-25 to -45	-25 to -45	-25 to -45	-25 to -45	-25 to -45
<b>Frequency, Hz</b>	50	50	50	50	50
<b>Max Ambient, °C</b>	30	30	30	30	30
<b>Max Humidity, °C</b>	55	55	55	55	55
<b>Energy Consumption, kWh / 24h</b>	in 20 °C, 1,865	in 20 °C, 3,14	in 25 °C, 3,74	in 25 °C, 4,09	in 20 °C, 4,158
<b>Defrost</b>	No	No	No	No	No

## SHARED ABILITIES

FEATURES	CONTROLLER & ALARMS	
<b>Lock</b>	Yes	<b>Controller</b> XR30CX
<b>LED Light</b>	No	<b>Controller language</b> No language - only 3 digits
<b>Battery Backup for Controller, 24h</b>	No	<b>USB Connection</b> No
<b>Porthole</b> Yes - Ø 12 mm		<b>Logging</b> No
<b>Dry Contact</b>	No	<b>Temperature Graph</b> No
<b>Door</b> Solid		<b>High/Low Temp. Alarm</b> Yes
<b>Door Reversibility</b> N/A		<b>Open Door Alarm</b> No
		<b>Probe Failure Alarm</b> Yes
		<b>Power Failure Alarm</b> No



# CHEST FREEZERS

TEMPERATURE RANGE -40°C to -60°C



CONSTRUCTION	VT75	VT147	VT207	VT307	VT407	VT547
<b>Outer Dimensions, HxWxD</b>	870x555x555	885x725x605	885x923x605	885x1265x605	885x1562x605	932x1664x665
<b>Inner Dimensions, HxWxD</b>	465x390x390	635x560x440	635x760x440	635x1100x440	635x1400x440	670x1500x500
<b>Weight Gross/Net, kg</b>	48,2 / 42,2	54,6 / 50,7	62 / 57	75,8 / 70,8	86,4 / 80,4	116 / 100
<b>Material Inner Cabinet</b>	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel
<b>Material Outer Cabinet</b>	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel	Painted Steel
<b>Insulation Thickness, mm</b>	80	80	80	80	80	80
<b>Insulation Type</b>	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane	Polyurethane with cyclopentane
<b>Mobility / Castors</b>	No	Yes	Yes	Yes	Yes	Yes
<b>Refrigerant, Type</b>	Nature R	Nature R	Nature R	Nature R	Nature R	Nature R
<b>Number of compressors</b>	1	1	1	1	1	1
<b>Internal Air Distribution</b>	Static	Static	Static	Static	Static	Static
<b>Number of Probes</b>	1	1	1	1	1	1

  

STORAGE						
<b>Volume, Gross/net, L</b>	74	140	198	296	384	495
<b>Baskets</b>	1	1	1	3	4	3
<b>Basket material</b>	Steel coated with plastic powder	Steel coated with plastic powder	Steel coated with plastic powder	Steel coated with plastic powder	Steel coated with plastic powder	Steel coated with plastic powder
<b>Inner lids</b>	No	No	No	No	No	No

  

PERFORMANCE & OPERATION						
<b>Temperature Range, C°</b>	-40 to -60	-40 to -60	-40 to -60	-40 to -60	-40 to -60	-40 to -60
<b>Frecuence, Hz</b>	50	50	50	50	50	50
<b>Max Ambient, °C</b>	30	30	30	30	30	30
<b>Max Humidity, °C</b>	55	55	55	55	55	55
<b>Energy Consumption, kWh / 24h</b>	in 25 °C, 2,24	in 20 °C, 3,707	in 20 °C, 3,12	in 20 °C, 5,562	in 20 °C, 7,077	in 20 °C, 5,775
<b>Defrost</b>	No	No	No	No	No	No

## SHARED ABILITIES

FEATURES		CONTROLLER & ALARMS	
<b>Lock</b>	Yes	<b>Controller</b>	XR30CX
<b>LED Light</b>	No	<b>Controller language</b>	No language - only 3 digits
<b>Battery Backup for Controller, 24h</b>	No	<b>USB Connection</b>	No
<b>Porthole</b>	Yes - Ø 12 mm	<b>Logging</b>	No
<b>Dry Contact</b>	No	<b>Temperature Graph</b>	No
<b>Door</b>	Solid	<b>High/Low Temp. Alarm</b>	Yes
<b>Door Reversibility</b>	N/A	<b>Open Door Alarm</b>	No
		<b>Probe Failure Alarm</b>	Yes
		<b>Power Failure Alarm</b>	No





BIOMEDICAL

# CHEST ULT

TEMPERATURE RANGE -20°C to -86°C



CONSTRUCTION	ULTF-C74i	ULTF-C198i	ULTF-C296i	ULTF-C383i
<b>Outer Dimensions, HxWxD</b>	921x550x550	831x920x608	831x1260x608	831x1560x608
<b>Inner Dimensions, HxWxD</b>	450x390x390	624x760x440	624x1100x440	624x1400x440
<b>Weight Gross/Net, kg</b>	73 / 50	80 / 63	100 / 78	112 / 86
<b>Material Inner Cabinet</b>	Painted Steel	Painted Steel	Painted Steel	Painted Steel
<b>Material Outer Cabinet</b>	Painted Steel	Painted Steel	Painted Steel	Painted Steel
<b>Insulation Thickness, mm</b>	80	80	80	80
<b>Insulation Type</b>	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane	Polyurethane with Cyclopentane
<b>Air Distribution</b>	N/A	N/A	N/A	N/A
<b>Mobility</b>	Standard: 4xCasters with brakes	Standard: 4xCasters with brakes	Standard: 4xCasters with brakes	Standard: 4xCasters with brakes
<b>Refrigerant, Type / gram</b>	Nature R2 / 121	Nature R2 / 90	Nature R2 / 143	Nature R2 / 161
<b>Variable Speed Compressor</b>	No	No	No	No
<b>Internal Air Distribution</b>	Static	Static	Static	Static
<b>Number of Probes</b>	1	1	1	1
STORAGE				
<b>Volume, Gross/net, L</b>	74 / 71	198 / 189	296 / 284	383 / 368
<b>Cryobox "2 capacity</b>	40	117	216	282
<b>2 ml vials capacity</b>	4.000	11.700	21.600	28.200
<b>Inner lids</b>	Yes	Yes	Yes	Yes
PERFORMANCE & OPERATION				
<b>Temperature Range, C°</b>	-20 to -86	-20 to -86	-20 to -86	-20 to -86
<b>Voltage, V</b>	230	230	230	230
<b>Frequence, Hz</b>	50	50	50	50
<b>Max Ambient, °C</b>	30	25	25	25
<b>Max Humidity, °C</b>	65	65	65	65
<b>Noise, dB</b>	54	55	55	55
<b>Energy Consumption, kWh / 24h</b>	5,325	5,994	9,855	9,957
<b>Instant Power Consumption</b>	PD 0,540-0,370/ Stable 0,340	PD 0,370-0,320 /Stable 0,300	PD 0,710-0,550 /Stable 0,520	PD 0,810-0,600 /Stable 0,532
<b>Heat Rejection</b>	370	375	642	670
<b>U-Value</b>	0,19	0,2	0,2	0,2
<b>Defrost</b>	Manual	Manual	Manual	Manual

## SHARED ABILITIES

FEATURES	CONTROLLER & ALARMS		
<b>Lock</b>	Yes	<b>Controller</b>	i-Care
<b>LED Light</b>	No	<b>Controller language</b>	EN, DE, FR
<b>Battery Backup for Controller, 24h</b>	Yes	<b>USB Connection</b>	Yes
<b>VIP (Vacuum Insulated Panel)</b>	No	<b>Logging</b>	Data, Alarms & Events
<b>Door frame heater</b>	No	<b>Temperature Graph</b>	Yes
<b>Porthole</b>	Ø 12,5 mm	<b>High/Low Temp. Alarm</b>	Yes
<b>Dry Contact</b>	Yes	<b>Open Door Alarm</b>	No
<b>Vacuum Valve</b>	No	<b>Probe Failure Alarm</b>	Yes
<b>Door</b>	Solid	<b>Power Failure Alarm</b>	Yes
<b>Door Reversibility</b>	N/A		

Updated 03/2025



# ULT FREEZER

TEMPERATURE RANGE -20°C to -86°C



BIOMEDICAL



CONSTRUCTION		VTS 098
Outer Dimensions, HxWxD		830x595x585
Inner Dimensions, HxWxD		675x430x425
Weight Gross/Net, kg		87 / 61
Material Inner Cabinet		Stainless Steel
Material Outer Cabinet		Painted Steel
Insulation Thickness, mm		80
Insulation Type		Polyurethane with Cyclopentane
Air Distribution		N/A
Mobility		Standard: 4xAdjustable feet
Refrigerant, Type / gram		Nature R2 / 109
Variable Speed Compressor		No
Internal Air Distribution		Static
Number of Probes		1
STORAGE		
Volume, Gross/net, L		92 / 92
Shelves		3
Cryobox "2 capacity		63
2 ml vials capacity		
Inner lids		No
PERFORMANCE & OPERATION		
Temperature Range, C°		-20 to -86
Voltage, V		230
Frequence, Hz		50
Max Ambient, °C		25
Max Humidity, °C		65
Noise, dB		57
Energy Consumption, kWh / 24h		6,562
Instant Power Consumption		PD 0,750-0,4/Stable 0,330
Heat Rejection		393
U-Value		0,18
Defrost		Manual

FEATURES		CONTROLLER & ALARMS	
Lock	Yes	Controller	Dixell
LED Light	Yes	Controller language	No language - only 3 digits
Battery Backup for Controller, 24h	Yes	USB Connection	Yes
VIP (Vacuum Insulated Panel)	Yes	Logging	Data, Alarms & Events
Door frame heater	No	Temperature Graph	No
Porthole	No	High/Low Temp. Alarm	Yes
Dry Contact	Yes	Open Door Alarm	Yes
Vacuum Valve	Yes	Probe Failure Alarm	Yes
Door	Solid	Power Failure Alarm	Yes
Door Reversibility	N/A		

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