

ULTF-91i

ULT TECHNICAL SPECIFICATIONS

Multi voltage.



-20°C
-86°C

Products are subject to change due to enhancements and continuous development. Vestfrost Solutions reserve the right to alter any information, without further notice.

DIMENSIONS

Outer Dimensions HxWxD, mm	836x947x720
Depth incl. door handle	790
Inner Dimensions HxWxD, mm	310x640x445
Weight Gross/Net, kg	137 / 102
Material inner cabinet	Stainless steel
Material outer cabinet	Painted Steel
Packaging weight, kg	35
Packaging dimensions HxWxD, mm	1030x1040x850
Insulation thickness	120
Insulation type	Polyurethane with Cyclopentane
Mobility	3 x adjustable feet, 3 x castors
Refrigerant, Type / gram	Nature R 2/149gr

FEATURES

Lock	☒
LED light	☐
Battery Backup for Controller, 24h	☒
Porthole	☒
Porthole size	20 mm
Dry contact	☒
Door reversibility	☐
Vacuum valve	☒
VIP (Vacuum Insulated Panel)	☒

STORAGE

Capacity (L)	88
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ALARMS

High / Low temperature	☒
Open door	☒
Power failure	☒
Probe failure	☒

COOLING

Refrigerant	Nature R
Noise	< 48
Voltage	100-240 V
Frequency	50/60 Hz
Temperature range	-20 / -86
Ambient condition	25 °C

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Voltage/Frequency	Voltage/Hz	100-240 V, 50/60Hz
Max Ambient	°C	32
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	+/- 2,5
Pull down time	Minutes	103 min. to -75°C
Hold over time	Minutes	N/A
Noise	dB	< 48
Energy Consumption, kWh / 24h	kWh/24h	5,22 kWh/24h set -80°C
Energy year	kWh/year	1905kWh/y set -80°C
Instant Power Consumption	kW	PD 0,650/Stable 0,280
Heat Rejection*	W	250
U-Value	W/m ² K	N/A
COOLING COMPONENTS		
Refrigerant/Amount (gram)		Nature R 2/149gr
Number of compressors	pcs	1
Variable speed compressor	Yes/No	Yes
Internal air distribution (type of)		Static
Evaporator Fan	Yes/No/Variable	No
Condenser Fan	Yes/No/Variable	Yes
Number of probes	pcs	2
Defrost	Yes/No	No
CONTROLLER		
Controller	y/n/optional	Yes
Controller type		i-Care touch
USB Connection	y/n	Yes
Data connection	USB	Yes
Controller abilities		Logging of data & alarms
Controller languages		EN, DE, FR
Temperature curve in controller	y/n	Yes

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

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FRONT VIEW

1

2

3

6

5

4

7

8

9

TOP VIEW

1.7

4

2.5.8

6

3.9

MODEL

Test type

Test environment

Ambient temperature

Humidity

Set-point

Sensor used

Installation

Refrigerant

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8-point test

Controlled conditions, empty cabinet

25°C

60%

-82°C

25gr tinned brass formed as a cylinder with a diameter of 15,2 mm

Appliance installed according to instruction manual conditions

Nature R

SENSOR TEMPERATURE

Sensor position	P1	P2	P3	P4	P5	P6	P7	P8	P9						
Max	-78,8	-79,6	-79,8	-80,1	-80,5	-81,0	-83,1	-83,0	-83,6						
Avg.	-77,7	-78,4	-78,7	-78,9	-79,5	-80,1	-82,1	-81,8	-82,4						
Min.	-78,3	-79,1	-79,3	-79,5	-80,0	-80,6	-82,6	-82,4	-83,0						

WARM UP & PULL DOWN

CYCLIC OPERATION

Temp

40

20

0

-20

-40

-60

-80

-100

0

0,5

1

1,5

2

2,5

3

3,5

4

Pull down

Holdover

Temp

40

20

0

-20

-40

-60

-80

-100

0

5

10

15

20

25

Ambient

min

max

avg

TYPICAL PERFORMANCE IN AMBIENT 25°C – EMPTY CABINET

Avg. cabinet temperature at -82°C setpoint	-81,1°C
Uniformity	+/- 2,5°C
Stability	1,1°C
1 min. door open recovery to -75°C	32 min.
Cycle rate -82°C setpoint on/off	50/5 min./min.
Duty cycle -82°C setpoint	90%
Energy consumption	5,22 kWh/day
Pull down time to -75°C avg. temperature	103 min.
Hold over time from avg. -82°C to -60°C	102 min.
Heat rejection	250 W

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