



Main Features

Temperature range: -20°C up to -45°C	Cascade compressor cooling unit
HFC Ecological refrigerant type, CFC and HCFC free	Robust exterior structure in phosphated sheet steel
Insulation CFC and HCFC free	Interior chamber made of full stainless steel
Door closing with security key	Interior compartment doors
Alarm system with backup battery	LCD display with alarms and temperature memory log
Easy and fast maintenance	Height adjustable stainless steel shelves
Temperature backup emergency system (optional)	Reliable door gasket with quadruple sealing points

Ultra freezer Variations

Interior volume	Orientation	Nominal Voltage	Description	Model code	Model code with medical device certification
230	Upright	230 V 1 ~ 50 Hz	230 liters, upright opening door	45NV23	45ES23
390			390 liters, upright opening door	45NV39	45ES39
500			500 liters, upright opening door	45NV50	45ES50
650			650 liters, upright opening door	45NV65	45ES65
230	Chest	230 V 1 ~ 50 Hz	230 liters, chest opening door	45NR23	45ES23R
390			390 liters, chest opening door	45NR39	45ES39R
500			500 liters, chest opening door	45NR50	45ES50R

Upright models

Upright model	45NV23	45NV39	45NV50	45NV65
Performance Data Temperature				
Temperature range [°C]	-20...-45	-20...-45	-20...-45	-20...-45
Temperature variation at -45 °C [± K]	1.5	1.5	1.5	1.5
Warm-up time during power failure from -45 °C to -20 °C [min]	140	140	140	140
Warm-down time from 0 °C to -45 °C [min]	180	180	180	180
Interior Dimension				
Width [mm]	610	610	600	740
Depth [mm]	500	500	630	670
Height [mm]	760	1310	1310	1310
Exterior Dimension				
Width [mm]	840	840	840	980
Depth [mm]	750	750	880	900
Height [mm]	1420	1970	1970	1970
Measures				
Net capacity [L]	230	390	500	650
Net weight unit (without load) [kg]	200	280	320	390
Door data				
Service door [n°]	1	1	1	1
Interior compartment doors [n°]	2	4	4	4
Shelves data				
Fixed shelves [n°]	1	1	1	1
Adjustable shelves [n°]	2	3	3	3
Total shelves [n°]	3	4	4	4
Usable area, Width x Depth [mm]	44x59	57x59	57x59	73x66
Maximum load per shelf [kg]	50	50	50	50
Rack for cryoboxes data				
Total capacity of rack [n°]	8	16	16	20
Total capacity of cryoboxes 5.1 H size [n°]	144	240	320	400
Total capacity of cryoboxes 7.7 H size [n°]	96	144	192	240
Sound pressure level				
Sound pressure level [dB]	58, from one meter away			
Electrical data				
Rated Voltage [V]	230	230	230	230
Power Frequency [Hz]	50	50	50	50
Nominal Power [kW]	0.8	1.55	1.55	1.55
Unit Fuse [A]	10	10	10	10
Phase (nominal voltage)	1 ~	1 ~	1 ~	1 ~

Chest models

Chest model	45NR23	45NR39	45NR50
Performance Data Temperature			
Temperature range [°C]	-20...-45	-20...-45	-20...-45
Temperature variation at -45 °C [± K]	1.5	1.5	1.5
Warm-up time during power failure from -45 °C to -20 °C [min]	140	140	140
Warm-down time from 0 °C to -45 °C [min]	180	180	180
Interior Dimension			
Width [mm]	760	1310	1310
Depth [mm]	600	610	600
Height [mm]	500	500	630
Exterior Dimension			
Width [mm]	1000	1550	1890
Depth [mm]	840	840	840
Height [mm]	1090	1090	910
Measures			
Net capacity [L]	230	390	500
Net weight unit (without load) [kg]	190	270	310
Door data			
Service door [n°]	1	1	1
Interior compartment doors [n°]	-	-	-
Rack for cryoboxes data			
Total capacity of rack [n°]	20	36	36
Total capacity of cryoboxes 5.1 H size [n°]	160	288	360
Total capacity of cryoboxes 7.7 H size [n°]	100	180	360
Sound pressure level			
Sound pressure level [dB]	58, from one meter away		
Electrical data			
Rated Voltage [V]	230	230	230
Power Frequency [Hz]	50	50	50
Nominal Power [kW]	0.8	1.55	1.55
Unit Fuse [A]	10	10	10
Phase (nominal voltage)	1 ~	1 ~	1 ~