

## Ultra Low Temperature Freezers

### Technical Data

#### UF 455 G



#### UF 755 G



Gross volume	16 cubic feet	26.60 cubic feet
Net volume	15.54 cubic feet	25.89 cubic feet
External dimensions (H x W x D)	57.1 x 35.8 x 37.4 inch	78.4 x 35.8 x 37.4 inch
External dimensions (H x W x D), without door	57.1 x 35.8 x 31.5 inch	78.4 x 35.8 x 31.5 inch
Inner dimensions (H x W x D)	32 x 28.75 x 30 inch	53.3 x 28.75 x 30 inch
Net weight (with standard equipment)	440 lbs	506 lbs
Operation & control panel (microprocessor-controlled)	Gold electronic 2008	Gold electronic 2008
Set temperature (preset)	-82°C	-82°C
Set temperature (setting range) can be adjusted in steps of 0.5 °C	-20°C to -86°C	-20°C to -86°C
Temperature cold alarm limit (preset)	-90°C	-90°C
Temperature warm alarm limit (preset)	-65°C	-65°C
Temperature alarm limits (setting range). The alarm setting ranges can be adjusted in steps of 0.5°C. The chosen limits must at least be around 5 °C ± the set temperature.	-65°C to -90 °C	-65°C to -90 °C
Control sensor	PT1000 2-WIRE 1/3DIN CL.B	PT1000 2-WIRE 1/3DIN CL.B
Precision (at -80°C)	± 0.97°C	± 0.97°C
Display sensor	as option PT1000 2-WIRE 1/3DIN CL.B	as option PT1000 2-WIRE 1/3DIN CL.B
Precision (at -80°C) in reference body with reference fluid 100 ml DOW coming 200-5CST (Silicon Oil)	± 0.97°C	± 0.97°C
Voltage	208-220 V / 60Hz	208-220 V / 60Hz
Power	1200 W	1200 W
Energy consumption	17.50 kWh /24h	19.00 kWh /24h
Heat emission	680 Kcal/h / 790 watts	680 Kcal/h / 790 watts
Compressor running time	60%	65%
Noise level (at 3.25' height & 3.25' distance)	< 62 dB(A)	< 62 dB(A)
Accu data/function time of the control panel when power failure	12V -7 AH / 48 hours	12V -7 AH / 48 hours
Climate class (ambient temperature range)	N (+16°C to +32°C)	N (+16°C to +32°C)
Relative humidity (at +32°C ambient temperature)	≤ 70%	≤ 70%
Defrosting technique	manual	manual
Refrigerant type (1st step/2nd step)	R404a / R508b+R170	R404a / R508b+R170
Door insulation (polyurethane foam + Vaccum Insulation Panels)	2.6 inch PU + 0.79 inch VIP	2.6 inch PU + 0.79 inch VIP
Casing insulation (polyurethane foam + Vaccum Insulation Panels)	2.8 inch PU + 0.79 inch VIP	2.8 inch PU + 0.79 inch VIP
Thermal Resistance (R-value)	1.0224 @ +20°C	1.0224 @ +20°C
Hold over time (from -84°C to -60°C), empty	120 min	120 min
First Stage Compressor/Second Stage Compressor	1.5 HP / 1.5 HP	1.5 HP / 1.5 HP
GMP - clean room classification	class ISO6/EC GMP B	class ISO6/EC GMP B
Material inner body and inserts	Stainless steel (304 SS)	Stainless steel (304 SS)
Material internal doors	ABS (Plastic)	ABS (Plastic)
Material outer casing and door	Galvanized sheet steel (ST02Z-AZ150)	Galvanized sheet steel (ST02Z-AZ150)
Color outer casing	White (similar to RAL9010)	White (similar to RAL9010)
Color internal doors	Grey (similar to RAL7035)	Grey (similar to RAL7035)
Color contrasts	Blue (similar to RAL5002)	Blue (similar to RAL5002)
CFC/HCFC free	Yes	Yes
Certificate	GS/CE/c CSA us/GMP/Ex/ISO	GS/CE/c CSA us/GMP/Ex/ISO
NEMA Plug Reference	6-15P	6-15P
NEMA Receptacle Required	6-15R	6-15R

### Interior Equipment & Options

Stainless steel compartment division/inserts	3 compartments / 2 inserts ●	5 compartments / 4 inserts ●
Separate internal doors in order to minimize the loss of cold	3 ●	5 ●
Cryo Racks H50	2" racks = 300 boxes ○	2" racks = 500 boxes ○
Cryo Racks H75	3" racks = 225 boxes ○	3" racks = 375 boxes ○
ST-Rack, maximum	15	25
DCU - Dometic Communication Unit	○	○
DMN Software package	○	○
Ambient temperature sensor	○	○
Potential-free contact in case of "power failure"	●	●
Integrated inlet for external sensor (installed by customer)	●	●
Smooth castors with stabilizers for optimum flexibility of movement	●	●
Integrated temperature recorder in the form of a circular chart recorder, recording range: -100°C to -50°C	for 24 hours or 7 days ○	for 24 hours or 7 days ○
CO <sub>2</sub> BackUp/Emergency cooling system	internal ○	internal ○
Ice scraper	●	●
Water cooling (external) via connection to customer's on-site water supply/refrigeration by circulation	○	○
Door hinge right	●	●
Door hinge left	○	○

● standard / ○ optional / C = Compartments / R = Racks - All values were measured at +25°C ambient temperature and without load (with inertial mass).