



BIOMEDICAL

ULTF-700

ULT TECHNICAL SPECIFICATIONS

The ultra low temperature long term freezer guarantees secure preservation of samples at -90°C. It offers low energy consumption and user-friendly operation.



-40°C
-90°C

Product Type		ULT (230V)
Color code handle / Color code housing		RAL 9003 / RAL 9003
MEASURES		
Interior volume, L		700
Net weight of the unit (empty), kg		289
Permitted load, kg		200
Permitted load of individual compartment, kg		50
Wall clearance back, mm		100
Wall clearance sidewise, mm		250
Mobility		4 wheels, 2 w. lock
INTERNAL DIMENSIONS		
Interior width, mm		890
Interior height, mm		1300
Interior depth, mm		605
DOORS		
Inner doors		2
Unit doors		1
HOUSING DIMENSIONS NOT INCL. FITTINGS AND CONNECTIONS		
Width net, mm		1110
Height net, mm		1966
Depth net, mm		938
PERFORMANCE DATA TEMPERATURE		
Temperature range, °C		-90...-40
Temperature variation at -80 °C, ± K		2.5
Temperature fluctuation at -80 °C, ± K		1.5
Cooling down time (min) from 22 °C to -80 °C		450
Warm-up time during power failure from -80 °C / -122 °F to -60 °C / -76 °F (min)		250
ELECTRICAL DATA		
Rated Voltage, V		230
Power frequency, Hz		50
Nominal power, kW		1.6
Unit fuse, A		10
Power plug standard		2m C13 CEE 7/7
Phase (Nominal voltage)		1~



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ENVIRONMENT SPECIFIC DATA	
Energy consumption at set-point -80 °C (kWh/24h)	8,1
Average heat dissipation at set-point (-80°C, Amb. 20°C)(W)	340
Sound-pressure level, dB(A)	47
LOAD-VARIANTS	
Freezer racks per compartment	6
Cryoboxes, 50 mm	528
FEATURES	
Alarm system, battery backed	Standard
Foam filled compartment door	Standard
Battery backup system CO2 (fully independent system)	Option
Shipping pallet (extra specified pallet)	Option(No additional article numbers; Only on request)
FIXTURES	
Shelves included/max. no. of shelves	3/13
ACCESSORIES	
5m power cable	C 13 BS 1363 British plug – 5023-0287
	C 13 CEE 7/7 European plug – 5023-0285
	C 13 type 13 Swiss plug – 5023-0286
Deicing kit consisting of de-icing tray, wiper and scraper	8012-1900
Grid shelf - For temperature range -40 °C to -60 °C, 3 provided in set, including shelf supports	8012-1904
Shelf, Incl. shelf supports, stainless steel	8012-1902
WLAN kit, wireless connection between ULT units and APT-COM4, LIMS or customer solution.	8012-2262
STANDARDS & APPROVALS	
Energy Star certified (3rd part)	Yes
Machinery directive (EN ISO 12100, EN ISO 13732-3, EN60204-1)	Yes
Applied voluntarily: EN61010-1, EN61010-2-11 (if wished, this could also be listed in the CE DoC)	Yes
Electromagnetic Compatability Directive 2014/30/EU (EN 61326-1)	Yes
RoHS Directive (EN IEC 63000:2018)	Yes
Compliant with DIN 13277	ULTs are validated referring to DIN DIN 12880; 2007-07
LABORATORY TEST MEASUREMENTS	
Pull down	450 min
Noise level	47dBA
Warm-up time by power failure	250 min
Temperature variation	2,5 K
Temperature fluctuation	1,5 K
Energy consumption	8,1 kW/24h



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SELLING POINTS

Lowest energy consumption in its class	8,1
Environmentally-friendly refrigerants	R290/R170
Thermal insulation with unique long-life VIPs	Vacuum insulation panels
Rust proof interior	Stainless steel 1.4016 grade
Individual safety concept	Option
Temperature range, °C	-90 °C to -40 °C
Compressor cooling	Cascade
Innovative door gasket	Reduce ice build-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)

