





Product Type	ULT (230\
Color code handle / Color code housing	RAL 9003 / RAL 900
MEASURES	
Interior volume [L]	70
Net weight of the unit (empty) [kg]	28
Permitted load [kg]	20
Permitted load of individual compatment (kg)	Ę
Wall clearance back [mm]	10
Wall clearance sidewise [mm]	25
Mobility	4 wheels, 2 w. loo
INTERNAL DIMENSIONS	
Interior width [mm]	88
Interior height [mm]	130
Interior depth [mm]	60
DOORS	
Inner doors	
Unit doors	
HOUSING DIMENSIONS NOT INCL. FITTINGS AND CONN	ECTIONS
Width net [mm]	I I
Height net [mm]	196
Depth net [mm]	90
- spanne game	
PERFORMANCE DATA TEMPERATURE	
Temperature range [°C] Temperature variation at -80 °C [±K]	-902
Temperature fluctuation at -80 °C [± K]	2
Cooling down time (min) from 22 °C to -80 °C	
Warm-up time during power failure from -80 °C / -122 °F to -60 °C / -76 °F [min]	45
warm-up time during power failure from -oo -c/-122 *F to -oo -c/-76 *F [min]	25
CLEOTRICAL DATA	
ELECTRICAL DATA	
Rated Voltage [V]	23
Power frequency [Hz]	Ę
Nominal power [kW]	
Unit fuse [A]	
Power plug standard	2m Cl3 CEE 7
Phase (Nominal voltage)	





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
	923
FEATURES	
Alarm system, batterybacked	standard
Foam filled conpartmen door	standard
Battery back-up system (CO2)	standard
Shipping pallet (extra specified pallet)	option(no additional article numbers;
	only on request)
FIVTURE	
FIXTURES	
Shelves included/max. no. of shelves	3/13
ACCESSORIES	
	C 13 BS 1363 British plug – 5023-0287
5m power cable	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 Compability 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	
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Pull down	450 min
Noise level	47dBA
Warm-up time by power failure	250 min
Temperature variation	2,5 K
Temperaturre flucturation	1,5 K
Energy consumption	8,1 kW/24h





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 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



