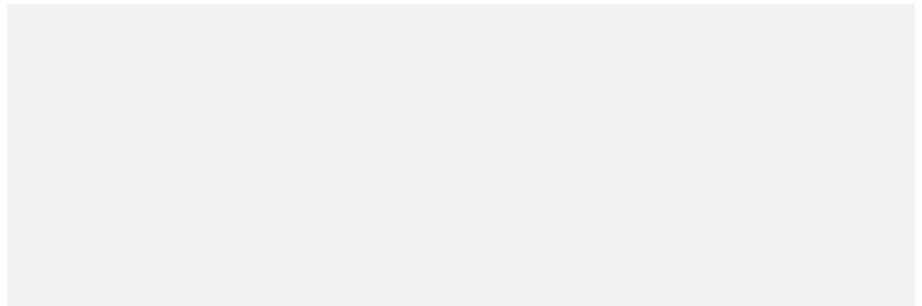


MDF DU E

I E

at ral Refrigerants

Upright Free er



Efficient Refrigeration

at rally occ rring hydrocar on refrigerants provide more efficient cooling d e to their high latent heat of evaporation s ell as improved performance this leads to red ced po er cons mption and energy costs

Inverter Technology

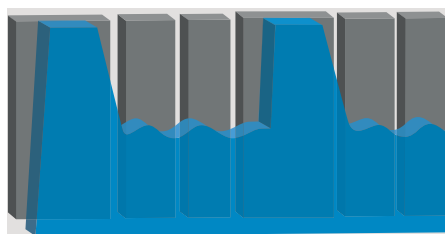
The MDF DU I E U T Free er contains Inverter ompressors that ma imise cooling performance nder different conditions and contri te to red cing the energy cons mption of the free er

Intelligent Interface

The E latch ma es access to stored samples even easier colo r D to ch panel allo s f ll ser control even ith gloved hands hile the US port ma es transferring logged data to a simple and convenient



Environmentally Friendly
Ideal for la oratories loo ing to red ce their car on footprint and environmental impact to comply ith s staina ility policies



Uniform Sample Storage
Inverter compressors provide optim m sta ility hile ality of design ens res relia ility Ideal for samples that are sensitive to temperat re fl ct ations



Easy Data Monitoring
Important information s ch as free er temperat re door opening times and alarm history is logged for monitoring in applications

VIP ECO

Natural Refrigerants -86°C Upright Freezer



Inverter Compressors

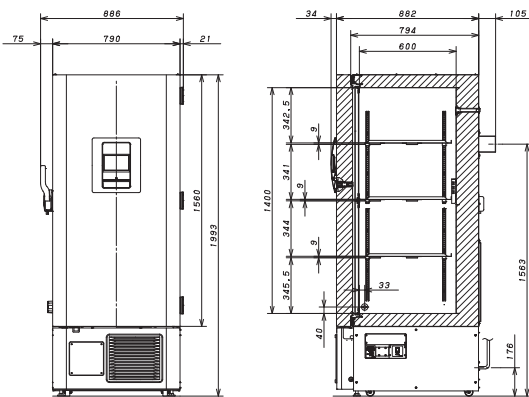
While conventional freezers use single speed compressors which cycle on and off, the MDF-DU502VH VIP ECO ULT Freezer contains inverter compressors that can run at different speeds to maximise cooling performance under different conditions. Combined with hydrocarbon refrigerants, these compressors ensure the most efficient energy use and reduced heat output.

Efficient & Flexible Sample Storage

The combination of VIP PLUS vacuum insulation and an enhanced cabinet design with insulated outer door, ensures optimum temperature uniformity, while the reduced wall thickness maximizes storage capacity. Multiple shelf configurations allow a variety of storage options. Organize your samples by transferring your current inventory racks.

Innovative Cabinet Design

The enhanced cabinet design with chamfered edges reduces footprint for use in multi freezer laboratories.



MDF-DU502VH-PE

EEA, Switzerland and Turkey only



For medical use

The MDF-DU502VH-PE is certified as a Class IIa Medical Device (93/42/EEC and 2007/47/EC). Applicable countries: Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Ireland, Italy, Liechtenstein, Luxembourg, Malta, the Netherlands, Spain, Switzerland and the United Kingdom only



For laboratory use

Applicable countries: EEA countries, Switzerland and Turkey

Model Number		MDF-DU502VH-PE
External dimensions (W x D x H) ¹⁾	mm	790 x 882 x 1993
Internal dimensions (W x D x H)	mm	630 x 600 x 1400
Volume	litres	528
Net weight	kg	246
Capacity	2" boxes	384
Performance		
Cooling performance ²⁾	°C	-86
Temperature setting range	°C	-40 to -90
Temperature control range ²⁾	°C	-40 to -86
Control		
Controller		Microprocessor, non-volatile memory
Display		LCD Touch Screen
Temperature sensor		Pt-1000
Refrigeration		
Refrigeration system		Cascade
Compressors	W	2 x 750
Refrigerant		HC
Insulation material		PUF / VIP Plus
Insulation thickness	mm	80
Construction		
Exterior material		Painted Steel
Interior material		Painted Steel
Outer door	qty	1
Outer door lock		Y
Inner doors	qty	2
Shelves	qty	3
Max. load - per shelf	kg	50
Max. load - total ³⁾	kg	415
Vacuum release port		2 (1 automatic, 1 manual)
Access port	qty	3
- position		back x 1, bottom x 2
- diameter	∅ mm	17
Casters	qty	4 (2 leveling feet)
Alarms (V = Visual Alarm, B = Buzzer Alarm, R= Remote Alarm)		
Power failure		V-B-R
High temperature		V-B-R
Low temperature		V-B-R
Filter		V
Door open		V-B
Electrical and Noise Level		
Power supply	V	230
Power consumption ⁴⁾	kWh/24h	6.7
Frequency	Hz	50
Noise level ⁵⁾	dB [A]	< 52
Options		
Small inner door kit	set of 5	MDF-5ID5-PW ⁶⁾
Small inner door kit	set of 4	MDF-5ID4-PW
Liquid CO ₂ back-up		MDF-UB7-PW
Temperature recorders		
- Circular type		MTR-G85C-PE ⁷⁾
- Chart paper		RP-G85-PW
- Ink pen		PG-R-PW
- Continuous strip type		MTR-85H-PW ⁷⁾
- Chart paper		RP-85-PW
- Ink pen		DF-38FP-PW
- Recorder housing		MDF-S3085-PW

Appearance and specifications are subject to change without notice.

¹⁾ Exterior dimensions of main cabinet only, excluding handle and other external projections - See dimensions drawings for full details.

²⁾ Air temperature measured at freezer centre, ambient temperature +30°C, no load.

³⁾ Max. load is the total of the load distributed over all shelves (3)

and chamber bottom surface. The weight is the maximum load for chamber inside and does not account for maximum load on casters equipped with product.

⁴⁾ Typical data - individual units may vary and power consumption will depend on loading and operating conditions. Freezer set-point

-80°C, ambient temperature 23°C, unloaded, 230V 50Hz power supply.

⁵⁾ Nominal value - Background noise 20dB[A].

⁶⁾ Usable storage capacity will be 384 x 2" boxes with installation of MDF-5ID5-PW and additional shelf.

⁷⁾ Requires sensor cover MTR-DU7005F-PW.



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