

VIP Pro Series -86°C Ultra-Low Freezers

MDF-C8V1-PE



VIP pro



Space saving Ultra-Low freezer

- V.I.P. technology maximises storage capacity
- Filterless structure makes cleaning unnecessary
- Alarms secure valuable samples safety
- Space-saving design enables effective use of laboratory space
- Low noise design
- Achieves energy savings of approx. 40%*

*PANASONIC comparison

Discovery powered by
precision

-86°C Ultra-Low Freezers MDF-C8V1-PE

VIP **pro**

Panasonic VIP Series ultra-low freezers represent the industry's most complete combination of refrigeration, control, alarm, monitoring and accessibility for product safety at -86°C. Ideal for sample storage in repositories, hospitals, clinics and medical research facilities, the VIP Series is designed to reduce energy consumption and save space.

High efficiency insulation using VIP technology

Panasonic's patented VIP PLUS technology has resulted in a revolutionary vacuum insulation cabinet construction that reduces wall thickness by approximately one half and achieves up to 30% more storage capacity than conventionally insulated freezers of the same footprint. This technology allows the MDF-C8V1 to require a small installation space with a great storage capacity.

New cooling circuit enables filterless structure

A new cooling circuit makes the inconvenient customer maintenance procedure of filter cleaning unnecessary.

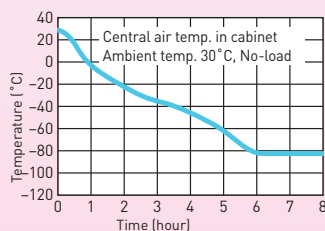
Newly developed single-compressor system

Use of a newly developed single-compressor system achieves an approximately 40% reduction in power consumption and enables low-noise operation.

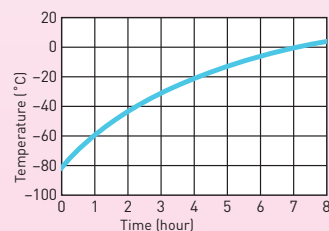
Sample security

- Alarm lamp and buzzer offer secure warning of power failure or abnormal temperature increase.
- High and low temperature warning provides an audible and visual alarm when the temperature deviates more than $\pm 5^{\circ}\text{C}$ to $\pm 20^{\circ}\text{C}$ (adjustable) from the set point.
- Alarm ring-back function ensures the buzzer will resume operation should alarm conditions continue after it is silenced.
- Microprocessor-controlled filter-clog check function protects the refrigeration circuit.
- The rugged, one-handed outer door latch allows a padlock to be used to securely protect valuable samples.
- Control panel with digital display for easy operation.

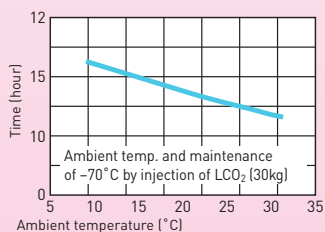
Pull-down characteristics



Pull-up characteristics during power failure



CO₂ backup system operation characteristics



VIP Pro Series		
Characteristics		
PUF = Rigid polyurethane foamed insulation V = Visual alarm B = Buzzer alarm R = Remote alarm		
MODEL		MDF-C8V1-PE
Dimensions		
External dimensions (W x D x H)	mm	550 x 685 x 945
Internal dimensions (W x D x H)	mm	405 x 490 x 425
Effective capacity	litres	84
Net weight (approx)	kg	67
Performance		
Cooling performance ¹⁾	°C	-80
Temperature setting range	°C	-55~-85
Temperature control range ¹⁾	°C	-60 ~ -80
Control		
Controller		Microprocessor Non-volatile memory
Display		LED
Temperature sensor		Pt-1000
Refrigeration		
Refrigeration system		Auto-cascade
Low-stage compressor	W	400
Low-stage refrigerant		HFC Mixed
Insulation material		PUF / VIP Plus
Insulation thickness	mm	70
Alarms		
Power failure		V-B-R
High temperature		V-B-R
Low temperature		V-B-R
Filter		Filterless design
Construction		
Exterior material		Painted steel
Interior material		Painted steel
Inner door/lid	qty	1
Outer door/lid lock		Y
Max. load - total	kg	100
Access port	qty	2
- position		Back/Bottom
- diameter	∅ mm	17
Casters	qty	4 [2 leveling feet]
Electrical and noise level		
Power supply		230V 50Hz Single phase
Noise level ²⁾	dB	47
Options		
Liquid CO ₂ Back-up		CVK-UB4-PW ³⁾
Liquid N ₂ Back-up		CVK-UBN2-PW
Temperature recorders		
- Circular type [-100°C to +40°C]		MTR-G85C-PE ⁴⁾
- Chart paper		RP-G85-PW
- Ink pen		PG-R-PW
- Continuous strip type [-100°C to +50°C]		MTR-85H-PW
- Chart paper		RP-85-PW
- Ink pen		DF-38FP-PW
- Recorder housing		MDF-S3085-PW
RS485 interface module		MTR-480-PW

notes: ¹⁾ Air temperature measured at freezer centre, ambient temperature +30°C, no load
²⁾ Nominal Value
³⁾ Requires Mounting Plate MDF-UBK-PW
⁴⁾ Requires Sensor Cover MTR-C8-PW

Appearance and specification are subject to change without notice.

Panasonic

for more information:

www.biomedical.panasonic.eu