PHCbi

Life Science Innovator Since 1966

PERFORMANCE by the NUMBERS

24°C AMBIENT		MDF-DU703VHA-PA 76637-152 115V	MDF-DU702VHA-PA 76305-598 115V	MDF-DU700ZHA-PA 77294-404 115V
Daily Energy Consumption[1] (Six Door Openings) kWh/Day	-70°C Setpoint	4.9	6.3	6.5
	-80°C Setpoint	6.01	8.8	8.35
Steady State Energy Consumption kWh/Day	-70°C Setpoint	4.5	5.9	6.2
	-80°C Setpoint	5.4	8.2	7.9
ENERGY STAR® MDEC[2] kWh/Day/cu.ft.		0.21	0.29	0.29
Interior Uniformity,[3] Average Steady State	-70°C Setpoint	±3.0°C	±3.0°C	±3.0°C
	-80°C Setpoint	±3.0°C	±3.0°C	±3.0°C
Temperature Recovery[4]	-70°C Setpoint	10 min	8 min	8 min
	-80°C Setpoint	8 min	8 min	8 min
BTU/Hr Output, Nominal	-70°C Setpoint	640	838	791
	-80°C Setpoint	768	1165	1118

ENERGY STAR

Rigorously Tested.

Performance Without Compromise.



VIP® ECO SMART | VIP® ECO | FrostLess

Independently Tested and Documented

The ENERGY STAR Certified VIP ECO SMART, VIP ECO, and FrostLess models deliver ENERGY STAR leading energy efficiency as tested by 3rd party testing agency. They are designed and rigorously tested for reliable storage of biologicals without compromise.

Learn More. www.phchd.com/us/biomedical/ultra-low-temperature-freezers

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Compare for Yourself:

PHCbi MAKE / MODEL	AMBIENT TEMP.	SETPOINT -70°C	SETPOINT -80°C	ADDITIONAL NOTES
MDF-DU703VH-PA | 76637-152 | 115V	Energy Consumption, kWh/Day[1] (MDEC [2]: **0.31** kWh/Day/cu.ft.)			5-YEAR PARTS & LABOR WARRANTY ***Warranty: PHC Corporation of North America offers 5-year, parts and labor warranty protection on VIP ECO SMART series Ultra-Low Temperature Freezers (United States only).***
	24°C	**4.9** (Daily)	**6.01** (Daily)	
		4.5 (Steady State)	**5.4** (Steady State)	
	Interior Uniformity[3], Average Steady State			
		3.0 (°C)	**3.0** (°C)	
	Temperature Recovery[4]			
		10 (min.)	**8** (min.)	
	BTU / Hr Output, Nominal			
		640	**768**	

PHCbi MAKE / MODEL	AMBIENT TEMP.	SETPOINT -70°C	SETPOINT -80°C	ADDITIONAL NOTES
MDF-DU702VHA-PA | 76305-598 |115V	Energy Consumption, kWh/Day[1] (MDEC [2]: **0.29** kWh/Day/cu.ft.)			5-YEAR PARTS & LABOR WARRANTY ***Warranty: PHC Corporation of North America offers 5-year, parts and labor warranty protection on VIP ECO Series Ultra-Low Temperature Freezers (United States only).***
	24°C	**6.3** (Daily)	**8.8** (Daily)	
		5.9 (Steady State)	**8.2** (Steady State)	
	Interior Uniformity[3], Average Steady State			
		3.0 (°C)	**3.0** (°C)	
	Temperature Recovery[4]			
		8 (min.)	**8** (min.)	
	BTU / Hr Output, Nominal			
		838	**1165**	

PHCbi MAKE / MODEL	AMBIENT TEMP.	SETPOINT -70°C	SETPOINT -80°C	ADDITIONAL NOTES
MDF-DU700ZHA-PA | 77294-404 | 115V	Energy Consumption, kWh/Day[1] (MDEC [2]: **0.29** kWh/Day/cu.ft.)			5-YEAR PARTS & LABOR WARRANTY ***Warranty: PHC Corporation of North America offers 5-year, parts and labor warranty protection on FrostLess Series Ultra-Low Temperature Freezers (United States only).***
	24°C	**6.5** (Daily)	**8.35** (Daily)	
		6.2 (Steady State)	**7.9** (Steady State)	
	Interior Uniformity[3], Average Steady State			
		3.0 (°C)	**3.0** (°C)	
	Temperature Recovery[4]			
		8 (min.)	**8** (min.)	
	BTU / Hr Output, Nominal			
		791	**1118**	

About This Data

- Data reflects independent testing to ENERGY STAR specifications based on the variable differential cascade refrigeration system with variable speed compressors, proprietary control algorithms, and natural refrigerants. BTU data is based on internal factory testing.
- PHCbi brand models were tested with standard features only, including inner doors (which increase the door opening duration during the open door testing), air-cooled condensers. No accessories, options or modifications were added to influence test outcomes.

ENERGY STAR

ENERGY STAR Certification Numbers 4790599804, 4788723268, and 4790998194. Learn more about our ENERGY STAR Certified products at www.phchd.com/us/biomedical/energy-star.

[1] Energy consumption per day, EPA Test, Version 1.1, Section 7, Reporting, G2c.

[2] Maximum daily energy consumption per cu.ft.

[3] Overall average for all recorded interior temperature measurements at setpoints of -70°C or -80°C. Based on single unit testing at 3rd party testing lab.

[4] Based on inner door opening time of 15 seconds. Recovery defined as majority of probes within 5 degrees of set temperature.

PHCbi

PHC Corporation of North America

Specifications are subject to change without notice. Performance data herein is based on independent testing at time of publication.

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