



MLR-352H-PA

Drosophila/Plant Growth Chamber

MLR-352H-PA

10.4 cu.ft. | 294 L

EPA SNAP Compliant Refrigerants

The PHCbi brand humidified Drosophila/Plant Growth Chamber is designed to accurately reproduce and control a variety of temperature, humidity and light combinations. Twelve programmable steps allow simulation of environmental conditions, while fifteen variable intensity fluorescent lamps create uniform lighting. Temperature range is +5°C to 50°C with humidity range of 60% to 90%.

Efficient Performance

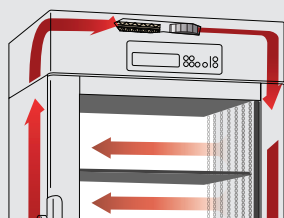
High performance refrigeration and humidity systems deliver a stable environment with excellent recovery after door openings. Natural refrigerants help achieve facility sustainability objectives by minimizing any environmental impact without compromising cooling performance. An ultrasonic vapor generator and membrane humidity sensor provides accurate humidity on demand.

Programmed Temperature, Lighting

Up to ten programs can be stored in the microprocessor memory, each with up to 12 steps over time. Programs can be cyclical, step and repeat, step to constant setpoint or any combination of temperature and time over the condition range. Ramp up, down, and dwell points can be established and repeated to individual protocols. Lights can be programmed over a range of combinations.

Cabinet Design

Slim profile cabinet makes efficient use of available floor space. Robust cabinet construction with corrosion-resistant stainless steel surfaces simplify cleaning and eliminate rust due to high humidity. Four wire and one solid shelf are fully adjustable for a multitude of configurations. Access port and door lock come standard.



Positive Airflow

The forced-air circulation creates precise temperature and humidity uniformity throughout all levels of the cabinet. Airflow is halted automatically upon door openings to mitigate environmental changes. Positive airflow enhances recovery of all parameters following door openings. Magnetic gasket helps maintain a completely sealed inner chamber.



Microprocessor Control

Performance is managed by a microprocessor controller with memory back-up. Inputs and displays are through an LCD alphanumeric LCD viewscreen via touchpad entry for setpoints and programming. Pop-up menus display current parameters and status of temperature, direct humidity, lights, door ajar and alarm deviations.



SNAP Compliant Refrigerants

New generation SNAP compliant, low flammability HFO refrigerants assure low environmental impact. The use of SNAP compliant refrigerants underscores enhances performance and reliability while supporting facility sustainability objectives. For information on SNAP refrigerants visit www.epa.gov/snap.



Model MLR-352H-PA

Lamps

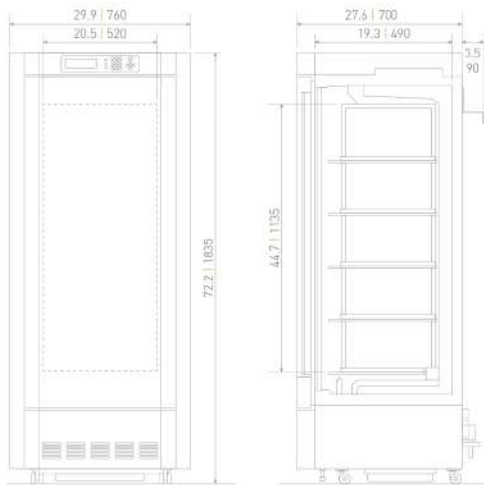
High efficiency fluorescent lamps are arranged in programmable banks of five lamps in the door, left and right side interior. Lamps are programmable in up to 6 combinations from zero to 15 lamps on.

Defrost

The growth chamber includes a user-selectable automatic or manual defrost system. A condensate evaporator eliminates the need for a drain.

Dimensions

Unit : inch | mm



Dimensions		MLR-352H-PA
Exterior Dimensions (W x D x H)	inches mm	29.9 X 27.6 x 72.2 760 x 700 x 1835
Interior Dimensions (W x D x H)	inches mm	20.5 x 19.3 x 44.7 520 x 490 x 1135
Volume	cu.ft. liters	10.4 294
Net Weight	lbs kg	518 235
Performance		
Warranty ¹⁾		2 years parts & labor
Cooling Performance	°C	10°C to 50°C (light on); 5°C to 50°C (light off)
Temperature Uniformity	°C	±2.5°C (light on), ±1.0°C (light off)
Humidity	%	60% R.H. to 90% R.H. – lights off
Humidity Uniformity	%	+/-5%
Control		
Controller		Microprocessor
Display		LCD - alpha numeric viewscreen
Temperature Sensor		Thermistor
Humidity Sensor		Capacitive
Programming – Temperature, Humidity and Lights		12 steps (10 patterns), 98 cycle or limitless clock mode: 00:00–23hours 59 minutes; timer mode: 00:01–99 hours 59 minutes
Refrigeration		
Refrigeration System		Single compressor
Compressor	w	1 (325 output)
Filter	qty	1 (removable, cleanable)
Refrigerant ²⁾		SNAP approved R-513A
Evaporator		Main, cooling chamber
Sub-Evaporator		Lower rear, lowers humidity
Insulation Material		Rigid polyurethane foamed-in place
Defrost		Automatic or manual (when required)
Condensate Evaporator		Bottom mount, removable, cleanable
Conditioning System		
Method		Fan forced air
Heater	w	1 (381)
Construction		
Exterior		Painted steel
Interior		Stainless steel
Light	qty	5 (door), 5 (right Side), 5 (left side) 40W fluorescent
Wire Shelves – Adjustable ³⁾	qty	4 (upper)
Shelf – Dimension (W x D)	inches mm	18.3 x 17.7 465 x 450
Max. Load per Shelf	lbs kg	55 25
Wire Shelf ³⁾	qty	1 (lower)
Shelf – Dimension (W x D) ⁴⁾	inches mm	14.0 x 15.6 355 x 395 (w/ stainless steel cover)
Max. Load per Shelf	lbs kg	55 25
Access Port Location		Top, left corner
Leveling Feet - Adjustable	qty	4
Casters	qty	4
Alarms (V=Visual Alarm, B=Buzzer Alarm, R=Remote Alarm)		
Power Failure		R
High Temperature		B-R
Low Temperature		B-R
Filter		V-B-R
Humidity Sensor		V-B-R
Door Open		V-B-R
Remote Alarm Contacts		DC 30V 2 A (normally open, normally closed, common)
Power Supply		115V, 1Ø, NEMA 5-15P; requires NEMA 5-15 R receptacle
Frequency	Hz	60
Noise Level	dB(A)	45, light off 47, lights on
Options		
Water Supply Reservoir		Included
Supply Hose		Included
Optional Communication System		
Wireless, cloud-based, automatic data management		LabAlert® Monitoring System

¹⁾ Current warranty offered at time of printing and may be subject to change; US and Canada only

²⁾ Compliant with SNAP Acceptability Determination https://www.epa.gov/sites/production/files/2016-09/documents/snap_notice_31_factsheet.pdf

³⁾ Wire shelves with polyester coating

⁴⁾ Wire shelf with polyester coating and stainless cover

Note: Design or specification may be subject to change without notice. The unit with CE Mark complies with EC directives.

Specifications are subject to change without notice.

For latest specification information contact PHC Corporation of North America at info@us.phchd.com.



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