



PGW40

WALK-IN

PLANT GROWTH

DATA SHEET

CONVIRON®



PGW40 WALK-IN



PLANT GROWTH

Product Overview/Applications

The PGW40 equips the researcher with a walk-in environment accessible from two large doors on the front of the chamber. This model is ideally suited for research involving taller classified plants. The extended growth height ensures that most plants can be grown to full maturity within a moderate to high light regime. Also available with the PGW40 are low-temp options for running the chamber at temperatures below the standard 4°C. A defrost option is also available which prevents a temperature rise during the defrost cycle.

Lighting

The standard lighting system for the PGW40 generates mid-level light intensity using both fluorescent and halogen incandescent lamps. The result is a light spectrum ideally suitable for plant growth. Lamp groups can be programmed separately allowing for multiple lighting levels while Conviron's manually adjustable *Lightright™* canopy enables the researcher to easily raise and lower the lamps to the proper height above the plants. Higher light intensities are available on this model.

Airflow

Airflow for the PGW40 is distributed uniformly upward using Conviron's innovative *Unifloor®* air distribution plenum. The unit includes fresh air intake and exhaust ports which are adjustable to allow up to 55 ft³/min (1.55m³/min.) of air exchange.

Refrigeration

Cooling for the PGW40 is provided by a self-contained water-cooled condensing unit with hot gas bypass for continuous compressor operation. An electronic modulating valve provides tight temperature control while ensuring quiet operation. Pressure transducers are included for monitoring the status of the refrigeration system. Alternative refrigeration methods are available depending on site-specific and/or user-defined requirements. Consult the factory for heat rejection information and other refrigeration options.

Experiment Protection

User programmable "set and forget" alarms track the chamber's operation versus user-defined set points. This allows for exceptionally accurate monitoring without the need for adjustment every time the set point is redefined. Backup "high/low" alarms provide a further level of protection while visual and audible notification is provided when any alarm is activated. Contacts for connection to a building management system are also included.

Key Product Attributes

- Large and accessible growth space for higher light mature plants
- Conviron's *Lightright™* canopy height adjustment system for enhanced flexibility of light intensity
- Efficient growth area-to-footprint ratio



Performance Data

Temperature Range (°C)	Interior Capacity	Growth Area	Growth Height	Exterior Dimensions (WxDxH)	Light Intensities (6in. from lamp)	Electrical Service
10 – 45 lights on	203ft³	41.5ft²	76"	140" x 70" x 102"	1400 µmoles/m²/s	120/208-3Ø-60Hz
4 – 40 lights off	(7443l)	(3.86m²)	(1930mm)	3556 x 1780 x 2590 (mm)	@ 25°C	230/400-3Ø-50Hz

CONVIRON MODEL PGW40

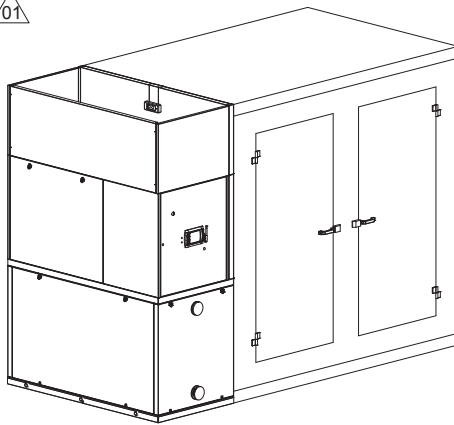
PLANT GROWTH CHAMBER



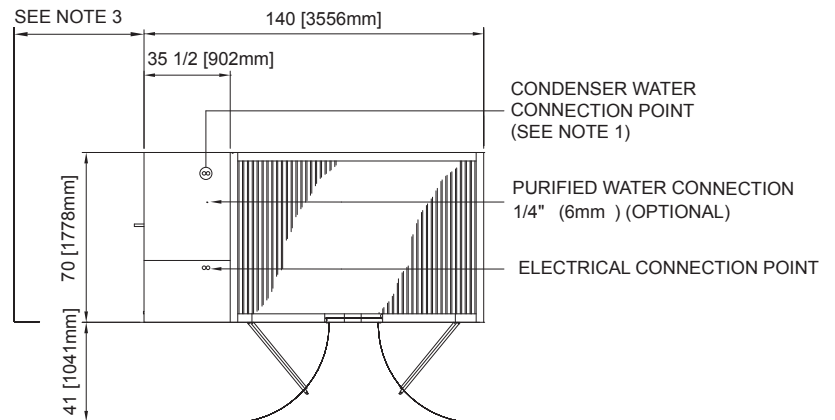
NOTES:

1. STANDARD REFRIGERATION SYSTEM IS WATER COOLED (7/8"Ø (22mmØ) CONNECTION).
2. LENGTH AND WIDTH DIMENSIONS $\pm 1/2$ (12mm). HEIGHT DIMENSION ± 1 " (25mm). DO NOT SCALE DRAWING.
3. PLEASE CONTACT FACTORY FOR RECOMMENDED CLEARANCE REQ'D FOR SERVICE AND INSTALLATION.
4. LEFT HAND CONTROL SHOWN.

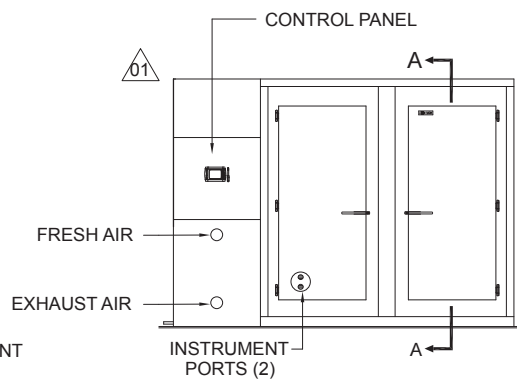
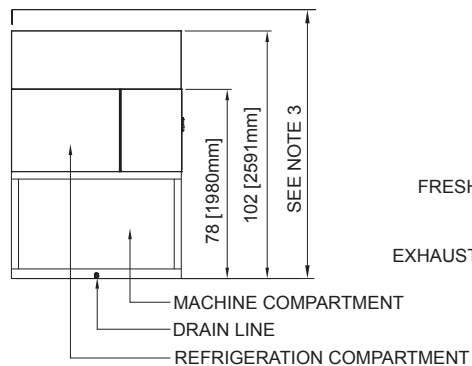
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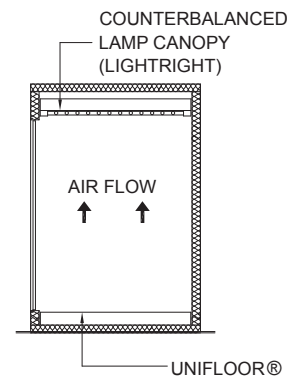
ISOMETRIC VIEW



TOP VIEW



FRONT VIEW



SECTION A-A

PGW40 PLANT GROWTH CHAMBER

DATE ISSUED: 03/20/12

DRAWING NO. 239025

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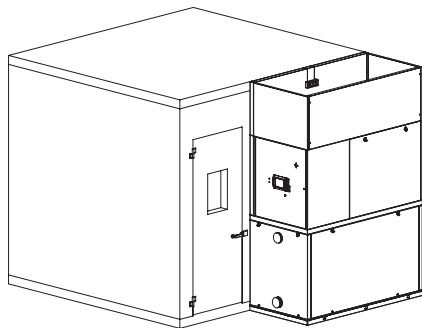
CONVIRON MODEL PGV40

PLANT GROWTH CHAMBER

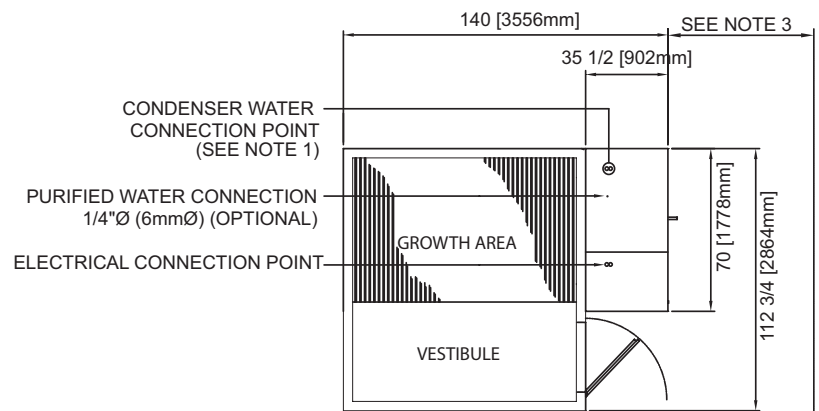


NOTES:

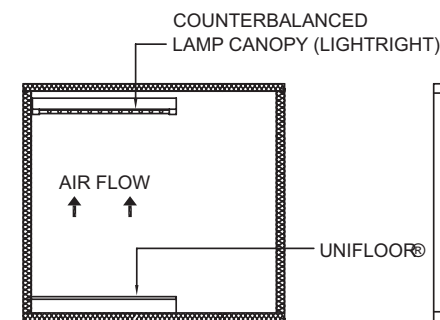
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3. PLEASE CONTACT FACTORY FOR RECOMMENDED CLEARANCE REQ'D FOR SERVICE AND INSTALLATION.
4. RIGHT HAND CONTROL SHOWN.



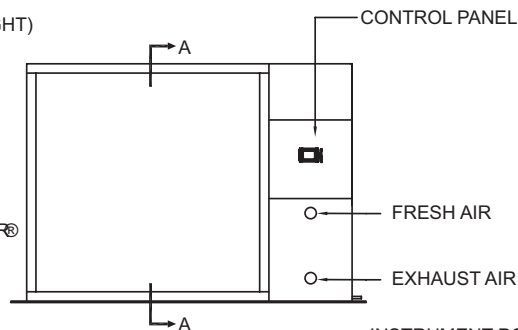
ISOMETRIC VIEW



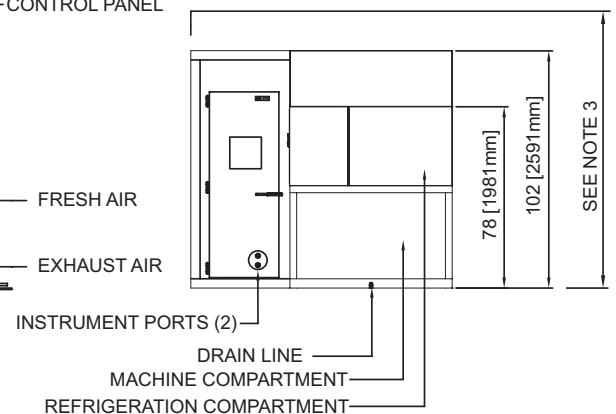
TOP VIEW



SECTION A-A



FRONT VIEW



PGV40 PLANT GROWTH CHAMBER

DATE ISSUED: 03/25/11

DRAWING NO. 245546

CE Management System Certified to ISO 9001

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