drosophila

Percival model DR-36VL

applications

- Designed especially for drosophila rearing
- Many other applications exist for this product Please compare your own requirements to the specifications listed below.

percival's intellus ultra controller

- Controls temperature, lighting, humidity (optional) and CO₂ (optional)
- Single-board electronic solid-state design includes 10 key membrane keypad with LED indicators and vacuum fluorescent display
- Programs can be configured to run in real time or elapsed time
- Ramping and non-ramping program methods available for each programming mode
- Multiple programs can be linked creating complex environmental profiles
- Optional Intellus Web Server allows monitoring and controlling of chamber via web browser (requires Internet Explorer 6.0+) (this option allows for remote monitoring and programming of chamber including alerts and current condition updates for up to five e-mail addresses)

Please refer to www.percival-scientific.com for additional information regarding the control system.

lighting system

- Four 32W fluorescent lamps vertically mounted on each side of shelf
- Intensity programmable up to 80 μ moles/m²/s of light irradiance measured @ 6" from lamps on 1 on/off light event
- Programming and control of the lighting is done via Intellus real time controller



cabinet construction

- Interior constructed of 22-gauge electro-zinc plated steel
- Exterior constructed of 18-gauge exterior electro-zinc plated steel
- Welded seams and joints on outer and inner shells
- Inner shell supported by non-compressing/non-thermal conducting material locking inner liner in place without a metal-to-metal bond to outer case
- Chamber is completely self-contained
- Overall wall thickness is 2" (5.1 cm)
- One 1¼" diameter access port on R.H. wall
- Chamber floor equipped with floor drain and hose assembly
- Contains caster assembly and adjustable leveling legs to compensate for floor uneveness in the lab

DR-36VL specifications (subject to change without notice)

Temp Range with all lights on	Interior Space		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimension				ns height		Light Intensity 6" from lamps unless otherwise noted	Tiers
°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm	µmoles/m²/s	
4-44±0.5	29.7	0.8	23.6	2.2	9.5	24.1	33.5	85.1	33.6	85.4	77.2	196.1	80	5

drosophila Percival model DR-36VL

insulation

 Woodless construction using CFC free insulation (overall wall thickness is 2" [5.1 cm], ample insulation for maintenance of stated temperature range)

door

 One door opening 29.2" x 57.5" (74 cm x 146 cm) provides full access to the chamber interior (magnetic gasket provides a tight seal to door frame)

interior space

 \bullet 29.7 ft³ (0.8 m³) with work area of 23.6 ft² (2.2 m²) provided on five tiers

shelving

- Five tiers of white epoxy coated steel wire shelving (each shelf is 27"D x 25.1"W [68.6 cm x 63.8 cm])
- Shelves are supported by shelf clips allowing ½" vertical adjustments
- Maximum clearance between shelves is 9.5" (24.1 cm) per tier with all five shelves installed (and the water pan humidifier as standard)
- Maximum clearance between shelves is 10.5" (26.7 cm) (without the water pan humidifier)

finish

• Interior and exterior painted with highly reflective, environmentally friendly, high temperature baked white powder coating

refrigeration

- ¼ h.p. self-contained air-cooled condensing unit with hot gas bypass system for continuous compressor operation, extended life and close temperature control (this continuous running condensing unit ensures precise temperature control by alternately cycling refrigerant and hot gas to coil; this also prolongs life of compressor, and eliminates risk of ice build up in coil)
- Top mounted refrigeration system allows easy access for maintenance (e.g. cleaning)
- As heat is rejected, it rises and is dissipated into room without having any effect on inside temperature of cabinet
- Solenoid valves have extended stem for quiet and long life operation
- Ceiling mounted evaporator coil incorporates twin air circulation fans in aluminum housing (heat rejection to ambient [standard chamber] = 3500 BTU/hr.)
- Coil is phenolic coated to prolong the life of chamber from the acidic environment that can be created by drosophila

temperature range

• 4°-44°C (±0.5°C) lights on and 2°-44°C (±0.5°C) lights off

temperature safety limit controls

- (Experiment Protection) Adjustable high and low temperature controls, audible alarms, and visual indicators provided
- Controls shut down all power to the chamber, activating alarms (when the temperature returns to the normal range the system will automatically reset)

humidity control

- Additive humidity control of higher than ambient to 85% (±10%) lights on for set temperatures between 15° to 30°C
- Humidity control of higher than ambient to 90% (±10%) lights off for set temperatures between 15° to 30°C

convenience receptacles

 Two 115/1/60 convenience receptacles provided inside chamber

electrical service requirements

- 115/1/60 15 amps (total) for standard chamber (power cord and grounded plug provided)
- Humidity system requires a de-mineralized water supply line which terminates to a ½" MPT connector



