



DR Series

WALK-IN

DEW ROOM CHAMBER

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Product Overview

Convion's DR Series dew rooms are uniquely designed for testing in a high (100% RH) humidity, or 'saturated' or 'mist', environment. A typical application in plant pathology, for example, is the testing of plants infected with disease where the high humidity promotes disease propagation. Dew rooms provide horizontal airflow with air discharge via a perforated side wall plenum. Lighting on the standard configuration is for visibility purposes only. To achieve the high humidity levels, the system employs (pre-coil) primary spray nozzles, which spray continuously, as well as a (post-coil) secondary cycling spray nozzles programmed by the user. Stainless steel is used on the interior for corrosion prevention.

Lighting

The DR Series chamber contains only visibility lighting in the standard configuration. These include two vapour-proof double lamp T8 fluorescent light fixtures located on each side of the entrance door on the interior front wall.

Airflow

Uniform airflow is introduced to the growth area in a horizontal airflow pattern discharged from a perforated side wall plenum. Air circulation is provided by in-line centrifugal fans employing a corrosion-proof housing and permanently sealed motor.

Refrigeration

Cooling for the DR series is provided by a chilled water conditioning system to provide cooling/heating temperature control. The system uses an electronic modulating valve resulting in precise temperature control. 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 temperature 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 temperature protection. Humidity alarming utilizes a fixed user-programmable set point below 100% RH. Visual and audible notification is provided when an alarm is activated. Contacts for connection to a building management system are also included.

Key Product Attributes

- High humidity produces saturated environment
- Stainless steel interior
- Chilled water conditioning system
- Product certifications/markings; c_{CSA}_{US}



Performance Data

	Temperature Range (°C)	Interior Capacity	Exterior Dimensions (WxDxH)	Electrical Service
DR1411	18°C to +28°C	790 ft ³ 22,470l	162" x 128" x 110" 4115 x 3240 x 2800 (mm)	120/208-3Ø-60Hz 230/400-3Ø-50Hz

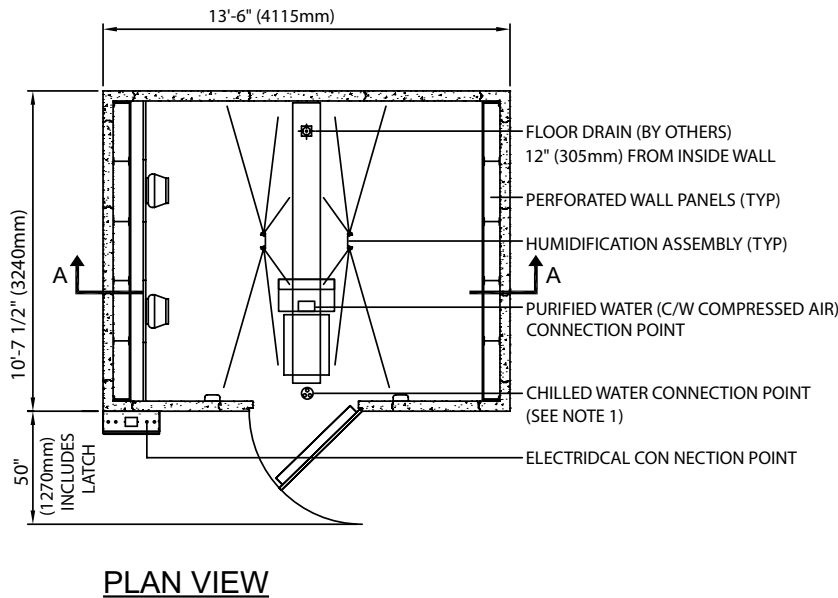
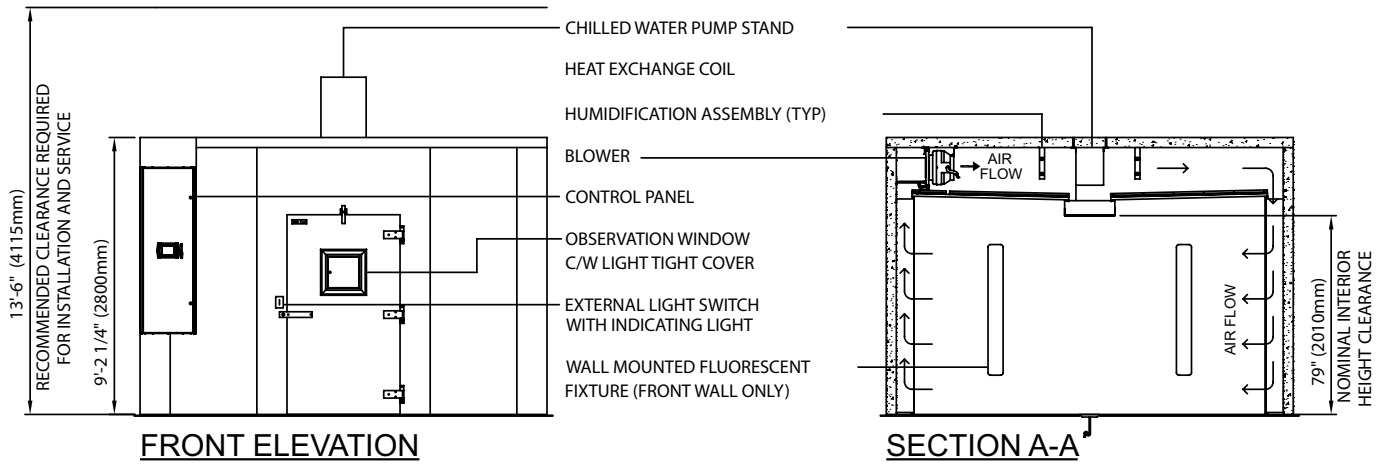
Note: Additional sizes available on request.

CONVIRON MODEL DR SERIES

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NOTES:

1. STANDARD REFRIGERATION SYSTEM IS CHILLED WATER @45°F (7°C), SUPPLY AND RETURN LINES 1"Ø (25mmØ).
2. DEPTH DIMENSION IS CHAMBER SIZE ONLY. DIMENSION DOES NOT INCLUDE DOOR LATCH.
3. LENGTH AND WIDTH DIMENSIONS ±1/4 (6mm). HEIGHT DIMENSION ±1" (25mm).



DR1411

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