



ASSOCIATED ENVIRONMENTAL SYSTEMS

HD Series

TEMPERATURE AND HUMIDITY FLOOR CHAMBER



Description:

The HD series floor standing chamber can create a wide range of temperature and relative humidity levels with the maximum being -65°C to 180°C and 20% to 98% RH. The chambers range from 1 cubic foot to 64 cubic feet.

Standard Features:

- Interior: All stainless steel type 304
- Exterior: Heavy gauge cold rolled steel with powder coat paint
- 3" access port and plug on right side wall
- Adjustable digital high temperature safety
- Watlow F4 programmable controller with RS232 interface
- 12" or 8" multipane viewing window in door
- Internal light with external switch
- Casters (set of 4)



HD Series

Specifications

Options:

- Custom Port Sizes
- Shelf Modification
- LN₂/CO₂ Cooling
- CO₂ Scrubber
- Air Dryer for Lower Humidity Range
- IEEE-488 Interface
- Ethernet Interface
- Dry Nitrogen Purge
- Programmable Chart Recorder
- Adjustable High/Low Temperature Safety
- Water Cooled Condenser
- Water Recycling System
- Water Demineralizer Cartridge
- Noise Reduction Package
- Touch Screen Control

HD – 400 Series (Sm.)

Temperature Range: -17°C to +180°C (0°F to +356°F)

Compressors: Copeland, Single Stage

Controller: Watlow F4 Programmable Controller with RS232 Communication

Model	Working Volume (cu. ft.)	Dimensions: (H" x W" x D")	Temp. Rise Time – Ambient to Upper Limit	Temp. Pull Down Time – Ambient to Lower Limit	Power Requirements
HD-405	5	Internal: 20 x 22 x 20 External: 69 x 31 x 44	40 min.	20 min.	1 Phase 220 Volt 60 Hz. 1 Phase 200 Volt 50 Hz.
HD-408	8	Internal: 24 x 24 x 24 External: 70 x 33 x 43	40 min.	25 min.	1 Phase 220 Volt 60 Hz. 1 Phase 200 Volt 50 Hz.
HD-410	10	Internal: 28 x 24 x 27 External: 71 x 33 x 52	40 min.	25 min.	1 Phase 220 Volt 60 Hz. 1 Phase 200 Volt 50 Hz.
HD-413	13	Internal: 28 x 28 x 28 External: 71 x 37 x 52	40 min.	25 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-421	21	Internal: 32 x 32 x 32 External: 72 x 41 x 54	40 min.	20 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.

HD – 500 Series (Sm.)

Temperature Range: -37°C to +180°C (-35°F to +356°F)

Compressors: Copeland, Single Stage

Controller: Watlow F4 Programmable Controller with RS232 Communication

Model	Working Volume (cu. ft.)	Dimensions: (H" x W" x D")	Temp. Rise Time – Ambient to Upper Limit	Temp. Pull Down Time – Ambient to Lower Limit	Power Requirements
HD-505	5	Internal: 20 x 22 x 20 External: 69 x 31 x 44	20 min.	35 min.	1 Phase 220 Volt 60 Hz. 1 Phase 200 Volt 50 Hz.
HD-508	8	Internal: 24 x 24 x 24 External: 70 x 33 x 43	20 min.	50 min.	1 Phase 220 Volt 60 Hz. 1 Phase 200 Volt 50 Hz.
HD-510	10	Internal: 28 x 24 x 27 External: 71 x 33 x 52	20 min.	35 min.	1 Phase 220 Volt 60 Hz. 1 Phase 200 Volt 50 Hz.
HD-513	13	Internal: 28 x 28 x 28 External: 71 x 37 x 52	20 min.	35 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-521	21	Internal: 32 x 32 x 32 External: 72 x 41 x 54	20 min.	35 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.

HD – 200 Series (Sm.)

Temperature Range: -65°C to +180°C (-85°F to +356°F)

Compressors: Copeland, Cascade

Controller: Watlow F4 Programmable Controller with RS232 Communication

Model	Working Volume (cu. ft.)	Dimensions: (H" x W" x D")	Temp. Rise Time – Ambient to Upper Limit	Temp. Pull Down Time – Ambient to Lower Limit	Power Requirements
HD-205	5	Internal: 20 x 22 x 20 External: 69 x 31 x 44	20 min.	60 min.	1 Phase 220 Volt 60 Hz. 1 Phase 200 Volt 50 Hz.
HD-208	8	Internal: 24 x 24 x 24 External: 70 x 33 x 43	20 min.	60 min.	1 Phase 220 Volt 60 Hz. 1 Phase 200 Volt 50 Hz.
HD-210	10	Internal: 28 x 24 x 27 External: 71 x 33 x 52	20 min.	60 min.	1 Phase 220 Volt 60 Hz. 1 Phase 200 Volt 50 Hz.
HD-213	13	Internal: 28 x 28 x 28 External: 71 x 37 x 52	20 min.	60 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-221	21	Internal: 32 x 32 x 32 External: 72 x 41 x 54	20 min.	60 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.



HD Series

Specifications

Options:

- Custom Port Sizes
- Shelf Modification
- LN₂/CO₂ Cooling
- CO₂ Scrubber
- Air Dryer for Lower Humidity Range
- IEEE-488 Interface
- Ethernet Interface
- Dry Nitrogen Purge
- Programmable Chart Recorder
- Adjustable High/Low Temperature Safety
- Water Cooled Condenser
- Water Recycling System
- Water Demineralizer Cartridge
- Noise Reduction Package
- Touch Screen Control

HD – 400 Series (Lg.)

Temperature Range: -17°C to +180°C (0°F to +356°F)

Compressors: Copeland, Single Stage

Controller: Watlow F4 Programmable Controller with RS232 Communication

Model	Working Volume (cu. ft.)	Dimensions: (H" x W" x D")	Temp. Rise Time – Ambient to Upper Limit	Temp. Pull Down Time – Ambient to Lower Limit	Power Requirements
HD-427	27	Internal: 36 x 36 x 36 External: 81 x 54 x 74	20 min.	20 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-432	32	Internal: 38 x 38 x 38 External: 83 x 56 x 76	20 min.	20 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-449	49	Internal: 42 x 42 x 44 External: 87 x 60 x 82	20 min.	20 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-464	64	Internal: 48 x 48 x 48 External: 95 x 70 x 85	20 min.	20 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.

HD – 500 Series (Lg.)

Temperature Range: -37°C to +180°C (-35°F to +356°F)

Compressors: Copeland, Single Stage

Controller: Watlow F4 Programmable Controller with RS232 Communication

Model	Working Volume (cu. ft.)	Dimensions: (H" x W" x D")	Temp. Rise Time – Ambient to Upper Limit	Temp. Pull Down Time – Ambient to Lower Limit	Power Requirements
HD-527	27	Internal: 36 x 36 x 36 External: 81 x 54 x 74	20 min.	35 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-532	32	Internal: 38 x 38 x 38 External: 83 x 56 x 76	20 min.	50 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-549	49	Internal: 42 x 42 x 44 External: 87 x 60 x 82	20 min.	35 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-564	64	Internal: 48 x 48 x 48 External: 95 x 70 x 85	20 min.	35 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.

HD – 200 Series (Lg.)

Temperature Range: -65°C to +180°C (-85°F to +356°F)

Compressors: Copeland, Cascade

Controller: Watlow F4 Programmable Controller with RS232 Communication

Model	Working Volume (cu. ft.)	Dimensions: (H" x W" x D")	Temp. Rise Time – Ambient to Upper Limit	Temp. Pull Down Time – Ambient to Lower Limit	Power Requirements
HD-227	27	Internal: 36 x 36 x 36 External: 81 x 54 x 74	20 min.	70 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-232	32	Internal: 38 x 38 x 38 External: 83 x 56 x 76	20 min.	70 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-249	49	Internal: 42 x 42 x 44 External: 87 x 60 x 82	20 min.	70 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.
HD-264	64	Internal: 48 x 48 x 48 External: 95 x 70 x 85	20 min.	70 min.	3 Phase 220 Volt 60 Hz. 3 Phase 200 Volt 50 Hz.