

# Sentinel HDi90 Dehumidifier

## Specifications

Features	Sentinel HDi90
cETL	✓
Compressor Type	Rotary
More Thorough, and More Quick	✓
Ducting options	✓
Condensate Pump	✓
Auto Defrosting	✓
Easy handling	✓
Water full protection	✓
Environmental R32 Refrigerant	✓
Automatic humidistat control	✓
Memory Starting	✓
Rare earth alloy Tube Evaporator	✓
Continuous Model	✓
HVAC Remote System	✓
Optional Remote Controller	✓
Low Temperature	✓
Bypass Air sensor	✓

Specifications	Sentinel HDi90
Power	115 V / 60 Hz
Current	5.56 A
COP	2.69 L/kWh
Size For	Up to 2,600 sq.ft.
Filter	Pre Filter (Optional MERV-8 Filter)
Air flow	210 CFM, 350 CMH
Sound Pressure Level	< 58 dBA
Feet	Adjustable Feet
Refrigerant	R32
Draining	Condensate Pump
Defrosting Control System	Auto Defrosting
Functioning Temperature Range	33.8 - 104 °F
Functioning Humidity Range	35 - 90%
Capacity	90 Pints
DOE (60°F, 60% RH)	47.71 PPD
Weight	70.5 lbs
Dim (L × W × H)	23.2 × 15.2 × 17.7 in
Loading quantity	20": 180 Sets; 40": 412 Sets; 40" HQ: 515 Sets

## Application

The **Sentinel HDi90** Dehumidifier has cETL approved.

The **Sentinel HDi90** dehumidifier is designed specifically for crawl spaces and basements. Low noise level, great COP, 2.69 L/kWh (115 V / 60 Hz) and huge capacity 90 PPD at AHAM condition. The **Sentinel HDi90** supplements the air conditioning system in the summer time and maintains humidity levels balanced of the year.

**Installation flexibility** makes the unit ideal for almost any application. No conventional dehumidifier can perform as efficiently and effectively in basements and crawl spaces as

**Sentinel HDi90**. It is the best choice for residential work and restoration jobs, and suitable for household, shops, storage areas, industrial institutions and garage applications etc... The remote control design makes this unit an ideal choice for places where remote sensing and controlling is required. Optional duct mounting flanges reduce the installation time when connecting to an existing / new ducting systems.



## Key Design Features

- Supper COP
- 2.69 L/kWh (115 V / 60 Hz)
- Rugged Condensate Pump (Developed only for Dehumidifier)
- Coated Coils with Stainless Side Plate
- Quick Access to Pump and Main Board
- Smallest Size
- HVAC Remote System

## Additional Features

- Engineered for low temperature operation and the air flow issues that crawl spaces present
- Ducting options for divided spaces
- Remote Control equipped
- Heavy-Duty Condensate Pump
- Quick connector to Pump(the pump can be taken out freely just full out the quick connector)



Pump



Return Duct Kit



Clean Air Filter



Optional MERV-8 Filter

EFFICIENT • LARGE CAPACITY • POWERFUL

INDUSTRY • RESIDENTIAL HOMES • STORES • RESTORATION

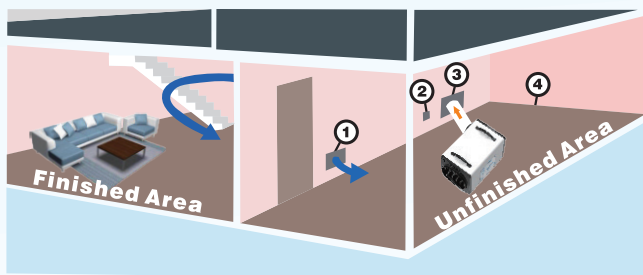
Crawlspace&Basement Dehumidifiers >>

# Sentinel HDi90 Dehumidifier

Applications	Sentinel HDi90
Crawlspaces	✓
Shops / Bars	✓
Museums / Sports Halls	✓
Water Damage Restoration	✓
Computer Rooms	✓
Basements	✓

Applications	Sentinel HDi90
Hotel / Motel	✓
Offices	✓
Laboratories	✓
Museums	✓
Storage Areas	✓
Restaurants	✓

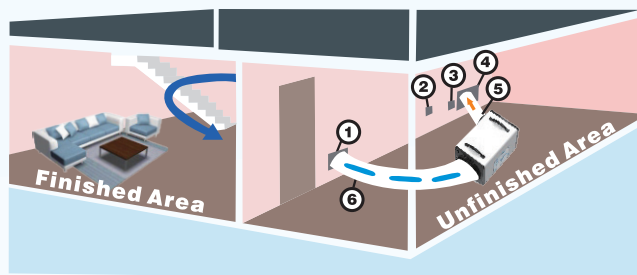
## Installation of a Sentinel HDi90 with a Supply Kit Only



1. Passive Return Vent
2. Remote Control (mounts on opposite Wall in Finished Area, Energize the sensor on Remote Control)
3. Supply Grill
4. Supply / Discharge Duct Work

- Place the **Sentinel HDi90** in unfinished area of the basement near a drain access (condensate will be drained out via Pump).
- Connecting the Duct Tube on Collar, supply the dry air from the dehumidifier to a large and open area in finished section of the basement.
- Place a return grill / passive vent on the other side of the wall that separates the finished and unfinished areas. This will allow circular air flow go through the basement.
- The passive grill will prevent the unfinished room from being placed under a negative pressure and also allow the dehumidifier to focus on keeping the unfinished area dry as well.
- The Remote Control can be used For normal Retome function, to insulate the Noise of Unit, and Also can be used at the Sensor Switch, you can choose the humidity sensor between Unit and remote Control.
- Be sure to keep all doors open in the basement to help with proper air circulation (Bedrooms, Bathrooms, etc.)

## Installation of a Sentinel HDi90 with a Supply and Return Kit



1. Return Grill
2. Remote Control (mounts on opposite Wall in Finished Area, Energize the sensor on Remote Control)
3. Optional Wall Mount Dehumidistat (mounts on opposite wall in finished area)
4. Supply Grill
5. Supply / Discharge Duct Work
6. Return / Intake Duct Work

- Place the **Sentinel HDi90** in unfinished area of the basement near a drain access (condensate will be drained out via Pump).
- Connecting the Duct Tube on Collar, supply the dry air from the dehumidifier to a large and open area in finished section of the basement.
- Place a return grill / passive vent on the other side of the wall that separates the finished and unfinished areas. This will allow circular air flow go through the basement.
- The passive grill will prevent the unfinished room from being placed under a negative pressure and also allow the dehumidifier to focus on keeping the unfinished area dry as well.
- The Remote Control can be used For normal Retome function, to insulate the Noise of Unit, and Also can be used at the Sensor Switch, you can choose the humidity sensor between Unit and remote Control.
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## Proven Performance

The **Sentinel HDi90** dehumidifier is an effective solution to environmental control problems. This unit is of high capacity which can operate at high efficiency to remove moisture from the air through the refrigeration process. The high-efficiency rotary compressor ensures the maximum extraction with the lowest running costs. Tight spaces are no problem for the **Sentinel HDi90** dehumidifier. Its compact size works perfectly in low crawlspaces and small basements without sacrificing power or performance. Designed to fit in a variety of small spaces, the **Sentinel HDi90** provides multiple installation options with great flexibility.

**Sentinel HDi90** has the humidity sensor in bypass air design which makes the short-cycling go away and has quick access to internal service. Customers can do it by themselves and service become easy. With excellent airflow, multiple ducting options, and aside sliding filter and some amazing engineering. The unit removes the maximum 90 pints of water per day (AHAM) while with current draw 5.56 amps. It is one of the smallest and lightest dehumidifier on the market. This unit is equipped with an auto defrosting system that ensures a quick and efficient clearing of ice from the coil at the minimum operating temperature of 33.8°F.

The small compact size makes the unit an ideal choice for installations where space is limited in crawl spaces and basements etc.