

# Ultra-Aire™ SD12 Ventilating Dehumidifier

## Specification Data



### Dehumidifier

<b>Part Number:</b>	4033175		
<b>Blower:</b>	406 CFM @ 0.0" WG 374 CFM @ 0.2" WG 348 CFM @ 0.4" WG		
<b>Power:</b>	160 Watts @ 80°F and 60% RH		
<b>Supply Voltage:</b>	115 VAC – 1phase – 60 Hz		
<b>Current Draw:</b>	1.4 Amps		
<b>Energy Factor:</b>	3.1 L/kWh		
<b>Operating Range:</b>	Between 49°F and 95°F Max (Inlet Air Temperature)		
<b>Sized for:</b>	Up to 4,000 Sq. Ft. - Typical		
<b>Minimum Performance at:</b>	<b>80°F and 60% RH</b>	<b>70°F and 60% RH</b>	
Water Removal:	184 pints/day	150 pints/day	
Sensible Cooling:	4,300 BTUs/Hour	5,100 BTUs/Hour	
Efficiency:	6.6 Pints/kWh	6.0 Pints/kWh	
<b>Duct Connections:</b>	6" Round Inlet; 10" Round Inlet; 10" Oval Outlet		
<b>Air Filter:</b>	MERV-13, Standard Pleat		
Efficiency:	90% ASHRAE Dust Spot		
Size:	16" x 20" x 2"		
<b>Optional Air Filters:</b>	MERV-11, Standard Pleat		
Efficiency:	65% ASHRAE Dust Spot		
Size:	16" x 20" x 2"		
	MERV-14, Embossed Pleat (will need filter housing)		
Efficiency:	95% ASHRAE Dust Spot		
Size:	20" x 24" x 4"		
<b>Power Cord:</b>	9', 115 VAC, Ground		
<b>Internal Insulated Cabinet:</b>	Yes		
<b>Drain Connection:</b>	3/4" Threaded Female NPT		
<b>Refrigerant Type:</b>	R410A (Refer to manufacturers label for more information)		
Refrigerant Amount:	42 oz.		
<b>Line Set Requirements:</b>	50 feet (maximum)		
Liquid Line:	1/4"		
Gas Line:	3/8"		

Dimensions:	Unit With Collars	Unit Without Collars	Shipping
Width:	20 1/4"	20 1/4"	35"
Height:	21 3/4"	21 3/4"	44"
Length:	41 1/2"	37 3/4"	44"
Weight:	110 lbs.	109 lbs.	225 lbs.

### Condenser

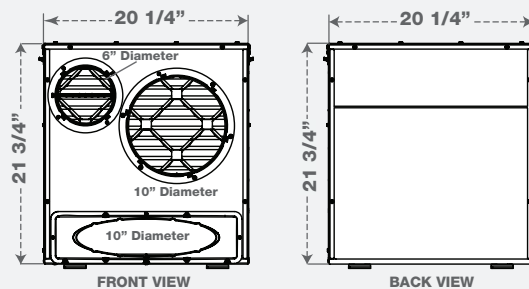
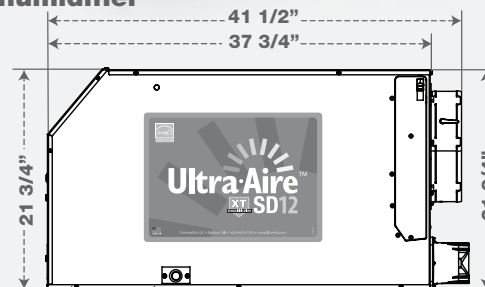
<b>Part Number:</b>	4033192
<b>Power:</b>	1080 Watts @ 80°F and 60% RH
<b>Supply Voltage:</b>	115 VAC – 1phase – 60 Hz
<b>Current Draw:</b>	9.7 Amps
<b>Minimum Circuit Ampacity:</b>	20 Amps
<b>Maximum Fuse / Breaker:</b>	20 Amps
<b>Refrigerant Type:</b>	R410A (Refer to manufacturers label for more information)
<b>Operating Range:</b>	40°F Min, 115°F Max
<b>Dimensions:</b>	10"W x 25.5"H x 33"L - 75 lbs.
<b>Power Cord:</b>	Hard-Wired



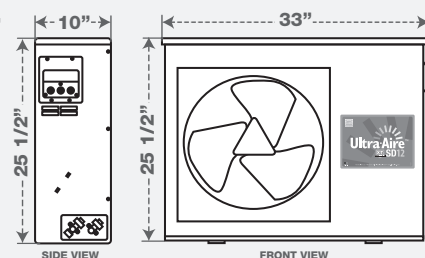
PATENTS:  
D570,988  
8,069,681

4033170

### Dehumidifier



### Condenser



### Optional Accessories

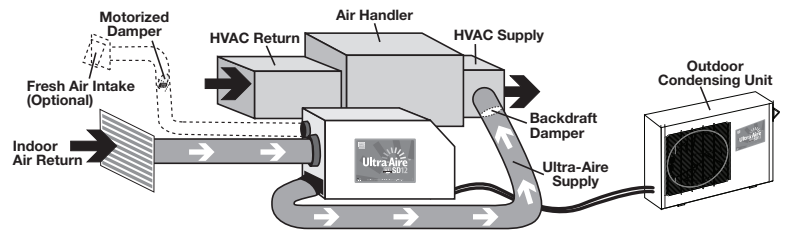
4028539	DEH 3000 Control
4028407	DEH 3000R Control (with remote)
4037723	MERV-13 Filter (16" x 20" x 2")
4037733	MERV-13 Filters 4-Pack
4037734	MERV-13 Filters 12-Pack
4021475	MERV-11 Filter (16" x 20" x 2")
4027420	MERV-11 Filters 4-Pack
4027424	MERV-11 Filters 12-Pack
4025287	MERV-14 Filter Housing
4024370	MERV-14 Filter (20" x 24" x 4")
4029087	MERV-14 Filters 3-Pack
4028614	Pump Kit
4036685	Hang Kit
4023672	6" Motorized Damper
4026859	6" Flex Duct 25'
4020128	6" Flex Insulated Duct 25'
4020656	6" Inlet Hood
4024375	10" Gravity Damper
4026969	10" Flex Duct 25'
4022126	10" Flex Insulated Duct 25'
4028399	10" Oval to Round Adapter

# Ultra-Aire™ SD12 Split Dehumidifier

## Recommended Installations

### Dedicated Return to HVAC Supply

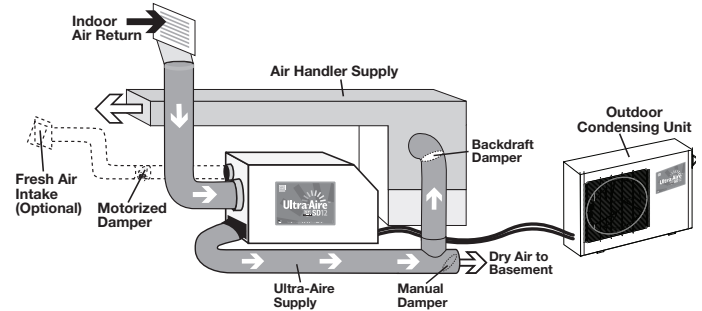
- Create a separate return for the Ultra-Aire SD12 in a central area of the building.
- Duct the supply of the Ultra-Aire SD12 to the air supply of the HVAC system with a back draft damper.
- Supply a line set suitable for use with R410A refrigerant to connect the indoor unit to the outdoor unit. **The maximum allowable length of the line set is 50 feet.** Braze the lines to the dehumidifier and the condensing unit.



### Whole House and Basement/Crawlspace

#### Dedicated Return to HVAC Supply

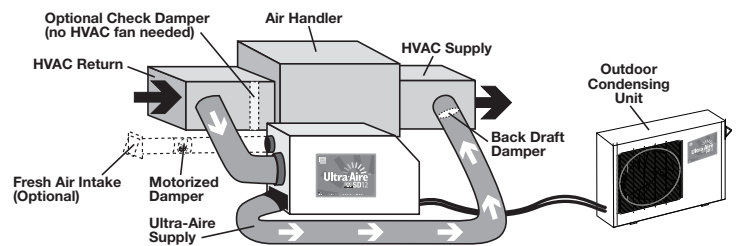
- Duct the supply of the Ultra-Aire SD12 to a 10" x 10" x 10" tee damper that is 20 percent open to the basement/crawlspace.
- Duct the other side of the tee to the air supply of the existing HVAC system with a backdraft damper.
- Supply a line set suitable for use with R410A refrigerant to connect the indoor unit to the outdoor unit. **The maximum allowable length of the line set is 50 feet.** Braze the lines to the dehumidifier and the condensing unit.



## Alternative Installations

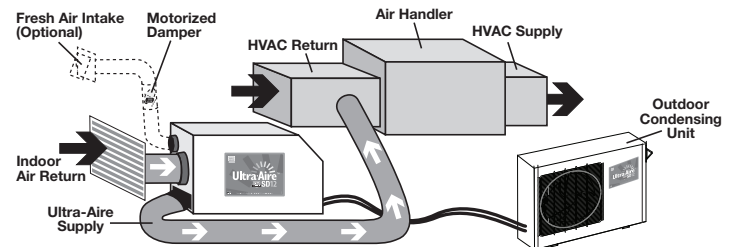
### HVAC Return to HVAC Supply

- Check Damper should be in place between the Return and Supply connections of the dehumidifier.
- If Check Damper is not in place, the A/C fan must turn on when the dehumidifier is in operation.
- Supply a line set suitable for use with R410A refrigerant to connect the indoor unit to the outdoor unit. **The maximum allowable length of the line set is 50 feet.** Braze the lines to the dehumidifier and the condensing unit.



### Dedicated Return to HVAC Return

- Create a separate return for the Ultra-Aire SD12 in a central area of the building.
- Installing the supply air from the Ultra-Aire SD12 in the return of the HVAC system requires the HVAC fan to run when the Ultra-Aire SD12 is operating.
- Supply a line set suitable for use with R410A refrigerant to connect the indoor unit to the outdoor unit. **The maximum allowable length of the line set is 50 feet.** Braze the lines to the dehumidifier and the condensing unit.



### HVAC Return to HVAC Return

- Check Damper should be in place between the Return and Supply connections of the dehumidifier.
- If Check Damper is not in place, the A/C fan must turn on when the dehumidifier is in operation.
- Supply a line set suitable for use with R410A refrigerant to connect the indoor unit to the outdoor unit. **The maximum allowable length of the line set is 50 feet.** Braze the lines to the dehumidifier and the condensing unit.

