

Ultra-Aire™ 90H Ventilating Dehumidifier

The **Ultra-Aire 90H** is a high-efficiency, whole-house ventilating dehumidifier designed to provide exceptional indoor air quality and comfort in the home. The UA 90H is ENERGY STAR® rated and capable of removing 90 pints of water per day.

The UA 90H is designed for areas up to 2,200 square feet. The unit features a well insulated, compact horizontal cabinet for the ultimate in quiet operation.



ULTRA-AIRE 90H SPECIFICATIONS

Part Number:	4029820
Blower:	240 CFM @ 0.0" WG 220 CFM @ 0.4" WG
Supply Voltage:	110 -120 Volt – 60 Hz.
Current Draw:	6.7 Amps
Energy Factor:	2.5 L/kWh
Operating Range:	56°F Min, 100°F Max (inlet Air Temperature)
Sized For:	2200 Square Foot Typical
Minimum Performance @ 80°F and 60% RH:	
Water Removal:	90 Pints/Day
Efficiency:	5.3 Pints/kWh
UA-90H Duct Connections:	
6" Round Inlet	
10" Round Inlet	
10" Round Outlet	
Filter Efficiency:	Standard MERV-11 (65% ASHRAE Dust Spot) Optional MERV-14, (95% ASHRAE Dust Spot)
Power Cord:	7.5', 115V With Ground
Drain Connection:	3/4" Threaded NPT
UA-90H Dimensions:	15 3/4"W x 20 7/8"H x 40 1/2" L – 92lbs.

OPTIONAL ACCESSORIES

4026161 Merv 11 Standard Filter 14" x 14"x 1"

Optional Filter Box Dimensions:

24"L x 19 15/16"H x 14 1/4" W

Optional Filter Box Duct Connections:

6" and 10" Round Inlet

10" Round Outlet



One of the best Limited Warranties in the industry today –

1 YEAR 100% – All Parts and Labor
5 YEARS 100% – Condenser, Evaporator, and Compressor only (with certain limitations)

ULTRA-AIRE 90H INSTALLATION OPTIONS

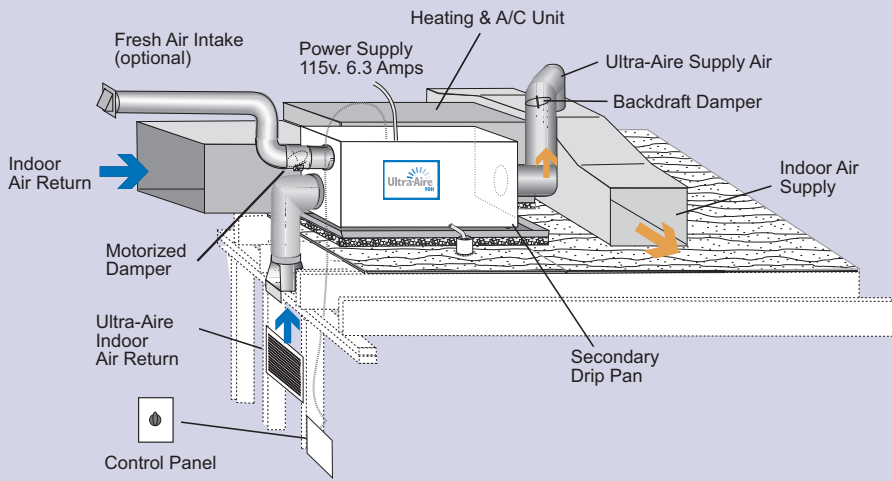
Control Options	Part Number
DEH 3000 - Digital Control	4028539
DEH 3000R - Digital Control	4028407
Ducting Options	
6", 2 wire 24 volt Electric Air Damper	4023672
10" Backdraft Damper	4024375
10" Starting Collar (Included w/ Unit)	N/A
6" Outside Air Intake Vent (Not Provided)	N/A
Insulated 6" Air Duct (Flex) - 25 ft.	4020128
Insulated 10" Air Duct (Flex) - 25 ft.	4022126
Condensate Pump Kit	4026451

It's not a dream home without

Ultra-Aire™

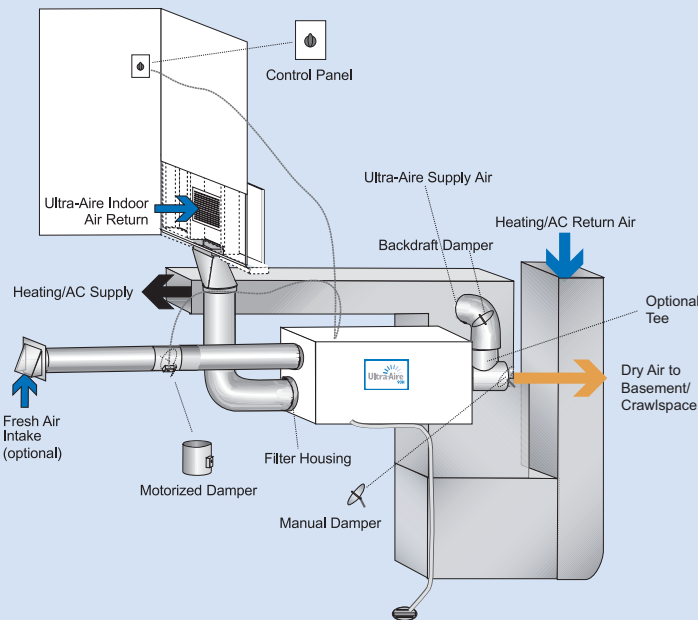
Ultra-Aire™ 90H Installation Options

ULTRA-AIRE 90H ATTIC INSTALLATION



1. The indoor air return should come from an open area on the first floor or main level of the home / building.
2. The Ultra-Aire supply can be ducted into the forced air system past the air conditioning coil. The duct connection should be perpendicular to the air flow. You may also run an independent supply directly from the dehumidifier into a large open room. Depending on the application, multiple returns and or supplies may be needed.
3. The optional six inch fresh air intake should be located at least six feet away from any exhaust ports, such as, dryer, range hood, or combustion device exhaust. Intake location should be consistent with local codes.
4. A section of flex duct or vibration absorbing duct should be located between the connections of the Ultra-Aire ductwork and the forced air system ductwork. (When ducting into the forced air systems)
5. A back draft damper should be installed when ducting into the forced air system. This prevents counter-flow of the A/C supply air through the UA 90H. A back draft damper is not needed when ducted independently.
6. If placed over a finished area, a secondary drip pan is recommended

ULTRA-AIRE 90H BASEMENT OR CRAWLSPACE INSTALLATION



1. Indoor air return should come from an open area of the first or second floor.
2. The Ultra-Aire supply should be ducted into the forced air system supply beyond the air conditioning coil. The duct connection should be perpendicular to the air flow.
3. An optional ten inch tee fitting with an adjustable blade damper on the straight run may be attached at the Ultra-Aire supply. This allows for increased air flow to the basement/crawlspace during the summer months.
4. The optional six inch fresh air intake should be located at least six feet away from any exhaust ports, such as, dryer, range hood, or combustion device exhaust. Intake location must be consistent with local codes.
5. A section of flex duct or vibration absorbing duct should be located between the connections of the Ultra-Aire ductwork and the forced air system ductwork.
6. The backdraft damper prevents counter-flow of the A/C supply air through the Ultra-Aire 90H.

Please Note: Therma-Stor does not recommend drawing air from the return ducting system and discharging into the supply, because it could reduce the capacity and may cause potential counterflow through the unit. Preferred installation is to draw air from a separate intake duct located in the central part of the home. Duct the outlet air into the supply duct for distribution throughout the home. A backdraft damper prevents air from the supply duct from being pushed backward through the Ultra-Aire 90H when central (A/C) fan is on and the Ultra-Aire fan is off.