



# **VariCool® Renovator**

## **SWUD Replacement**



- **42 to 80 Tons**
- **Variable Air Volume**
- **Water-Cooled**
- **EC Impeller Fans**

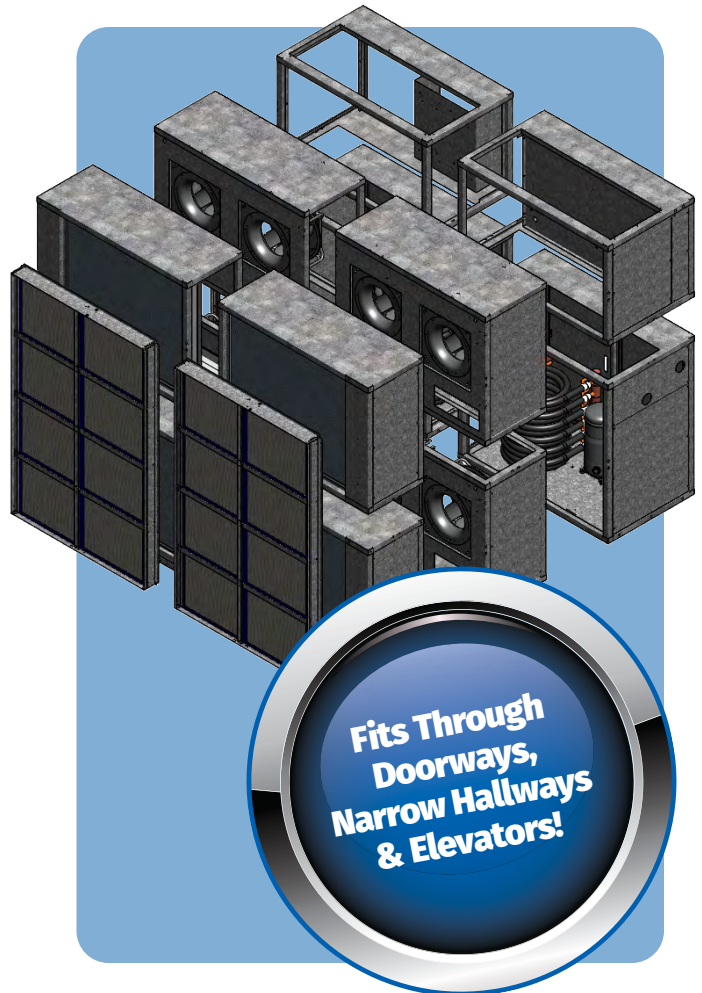
Unique Solutions for All-Indoor HVAC Projects



## Developed as a Direct Replacement for Trane® SWUD Units

During the 1980's and 90's, Trane® SWUD units were installed in thousands of buildings throughout the USA. In most cases these Variable Air Volume and Constant Volume Systems units were installed while the building was being erected and the walls were built around the units enclosing them inside mechanical rooms or other hard to access spaces. Now years have gone by and the Trane® SWUD units are reaching the end of their lifespan. This presents a problem as well as an opportunity. While the old AC units can be disassembled and removed, it is quite another thing to bring in a suitable replacement unit. Building managers are routinely told they need to demolish an outside wall or roof and hire a crane to accomplish the replacement task. The expense and logistics to replace the Trane® SWUD units can be enormous leading to much frustration to the end user.

The **United CoolAir Renovator** was developed as a solution for the numerous Trane® SWUD units that are in need of replacement. The Renovator is designed to be a direct replacement for SWUD units 42 through 80 tons. These self-contained water-cooled units are shipped in multiple sections and fit through a standard 36" door or smaller, all while maintaining their original factory charge. The Renovator maintains the original Trane® SWUD footprint while simultaneously eliminating the cost of rigging, permits and tenant disruptions, resulting in cost and time savings for clients.



### FEATURES

- 42 to 80 tons
- Water-Cooled
- Dual Scroll Compressors
- Interlaced Evaporator Coils
- Premium Efficiency Motors
- Double Sloped Stainless Steel Drain Pan
- Hot Gas Bypass (each circuit)
- Lift Off Hinged Panels
- Marvel Premium Microprocessor Control
- 3D-Intelliclamp Cabinet Section Connectors
- BAS ready – BACnet, ModBus or LonWorks capable
- EC Empeller Fans
- Factory charged & tested
- Shipped knocked down - ready for installation

## Avoid Requirements that Lead to Extra Expense

### Expensive Equipment, Rigging or Permits

Our units fit thru standard doors, hallways & elevators eliminating crane rentals, rigging crews & permits.



### Roofcurbs or Roof Penetration

Removes expensive curb equipment & installation labor cost reducing possible roof water damage.



### Field Piping, Brazing, Evacuation or Charging

Factory charged & utilizing Resealable Refrigerant Fittings speeds installation & commissioning.



### Excessive Downtime when Replacing Old Systems

Sectional shipments accelerate installation and can be installed off-hours or weekends.



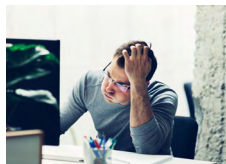
### Architectural Damage to Building

Eliminates expenses for code approvals and minimizes any type of building alteration.



### Compromise in Performance With Built-to-Order Design

Built to exact requirements with extensive list of configurations and over 100 options.



### Equipment Damage Due to Weather

All indoor installation avoids premature replacement costs & downtime due to weather damage.



### Possibility of Theft or Vandalism

Eliminates expensive repairs & replacements due to theft & vandalism enhancing building security.



### Field Testing of Installed Product

Minimizes field-testing as units are tested prior to shipment reducing labor speeding installation.



### Outdoor Servicing of Product

Outdoor/premium service expense in extreme weather completely eliminated, improving reliability while removing roof safety issues.



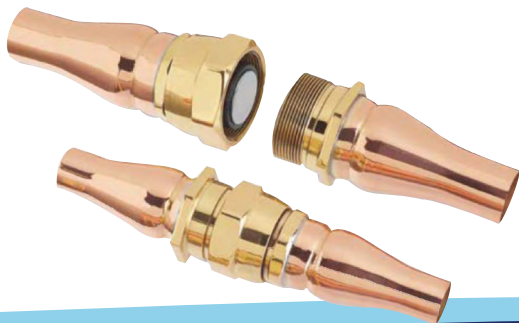
### Major Ductwork or Electrical Modifications

Units ordered to closely match existing duct and utility locations leading to labor and saving time.



### Exterior Condensing System

Eliminates rooftop & pad installation space & cost.



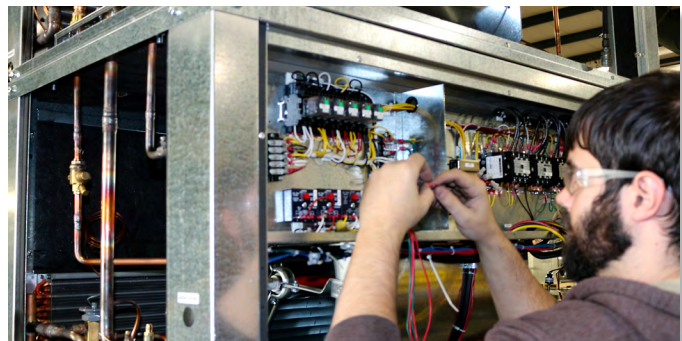
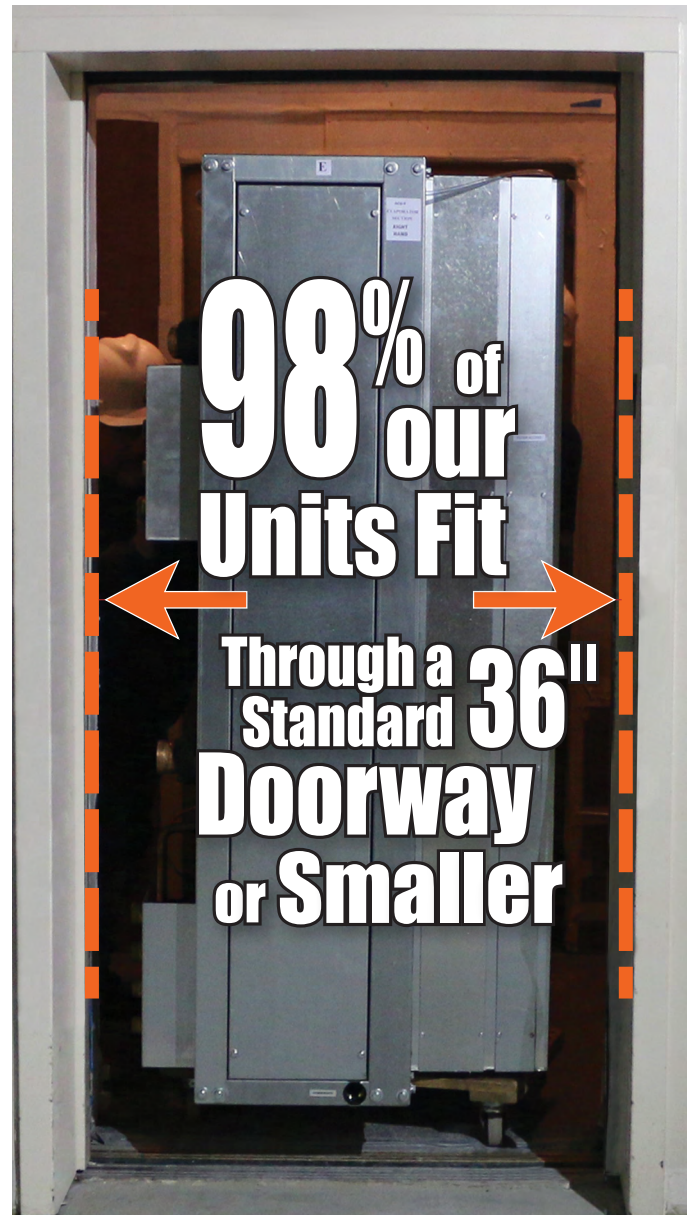
### Resealable Refrigerant Fittings

Most models feature Resealable Refrigerant Fittings. Unit sections can be shipped split or split in the field without losing the factory charge resulting in no field brazing and a total installed cost advantage. Mating male and female fittings used on the refrigerant lines allow units to be evacuated, charged and leak tested prior to shipment. Modular sections can then be separated for rigging and installation and then reconnected for system operation.

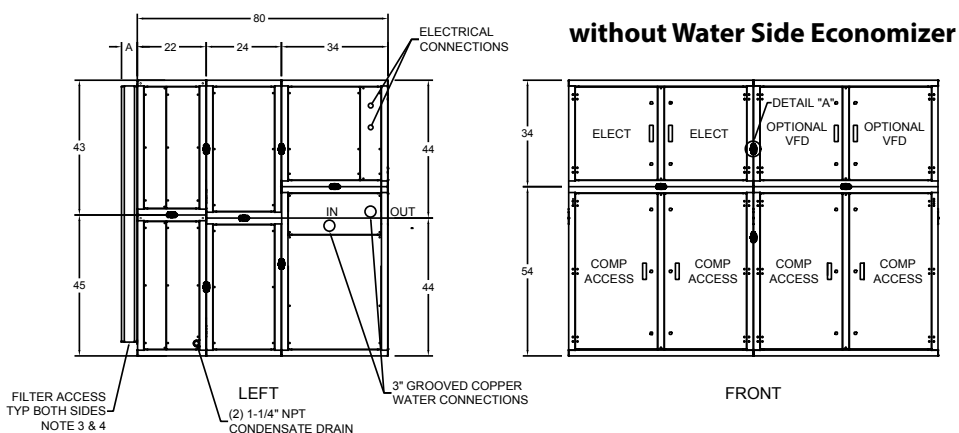
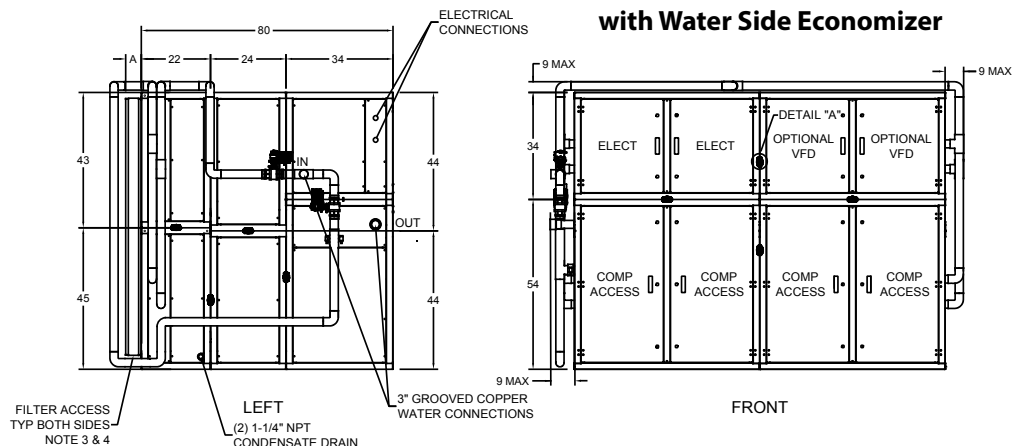


## APPLICATIONS

- Schools/Universities
- Office Spaces
- High Rise Buildings
- Lobbies
- Conference Rooms
- Elevator Rooms
- Hospitals/Clinics
- Clean Rooms
- Telecommunications
- Computer Rooms
- Hotels/Casinos
- Industrial / Caustic
- Retail Stores
- Bars/Taverns
- Restaurants
- Theaters
- Night Clubs
- Fitness Centers
- Churches
- Convention Halls
- Manufacturing Facilities
- Animal Shelters
- Historical Buildings



## Renovator Unit Dimensions



### WATER-COOLED PERFORMANCE DATA

Nominal Tons	Total MBH	Sensible MBH	CFM	GPM
42	513	415	16800	126
46	553	450	18400	138
52	685	531	20800	156
58	692	566	23200	174
65	857	665	26000	196
72	871	709	28800	216
80	1,011	774	29800	240

Subject to change

## Ideal for Renovation and Replacement Projects

The basic VariCool Renovator modular design and standard features provide the ideal retrofit and replacement design for many projects. However, it does not always provide the ideal product solution and that is why United CoolAir offers an extensive list of options to further match each VariCool Renovator unit to the specific application requirements. These options are designed to optimize performance while minimizing installation complexity, time and expense.

### POPULAR OPTIONS

- Variable Speed Compressor
- BMS Interface
- High Efficiency Filters
- Double Wall Construction
- Water Side Economizer
- Lead Circuit Digital Scroll Compressors
- Painted Cabinets



### TYPICAL APPLICATIONS

- Healthcare Facilities
- Universities/Schools
- High Rise Buildings
- Office Buildings
- Commercial/Retail Centers
- Laboratories
- Lobbies
- Conference Rooms
- Churches



# Basic Model Designation



**EXAMPLE:**

$\frac{R}{a}$     $\frac{W}{b}$     $\frac{42}{c}$     $\frac{G^*}{d}$     $\frac{D}{e}$     $\frac{3}{f}$     $\frac{A}{g}$    -    $\frac{X}{h}$

- |    |                                                                                      |                                  |
|----|--------------------------------------------------------------------------------------|----------------------------------|
| a. | "R" = VariCool Renovator                                                             |                                  |
| b. | "W" = Water Cooled<br>"A" = Air Cooled with Remote Condenser<br>"CW" = Chilled Water |                                  |
| c. | "42", "46", "52", "58", "65", "72", "80"                                             | Nominal Tonnage                  |
| d. | G3 = 208/230-3-60<br>G4 = 460-3-60                                                   | Voltage                          |
| e. | "D" = 4 Compressors                                                                  | Quantity of Refrigerant Circuits |
| f. | "3"                                                                                  | Cabinet Series                   |
| g. | "A" = R410A<br>"–" = No Refrigerant / Chilled Water Unit                             | Refrigerant Type                 |
| h. | "X" = Special Configuration                                                          |                                  |

Not all combinations of Basic Model Designations are valid. Check with the factory for correct model identification.

## Dimensionally Identical Direct SWUD Replacement



**Trane® SWUD**



**VariCool Renovator**

**VariCool Renovator Replaces Trane® 42–80 SWUD Models**

TRANE is a federally registered trademark of Trane International Inc.



# Unique Solutions for All-Indoor HVAC Projects



**VertiCool Aurora**  
Vertical, 3 - 35 Tons



**VariCool® Renovator**  
42 - 80 Tons



**VariCool® EZ-Fit**  
VAV, 12 - 90 Tons



**Alpha Aire Horizontal & Vertical**  
100 - 500 CFM



**Portable Cooling and Heating Units**  
3-30 Tons



**C13-Series Horizontal**  
2 - 10 Tons



**C-Series Horizontal**  
1 - 15 Tons  
Special Configuration  
Engineered to Order



**OmegaAir Horizontal & Vertical**  
100% Outside Air  
150 - 3000 CFM

Authorized Distributor:



## LIMITED WARRANTY

United CoolAir Units are backed by a 1 year limited warranty on parts and a 5 year limited warranty on the compressor (labor not included). Maintenance items such as filters and belts are excluded under this limited warranty.

## FACTORY TESTED

All units are functionally run tested before shipment to ensure a trouble-free start-up and unit commissioning. Industry proven components are used throughout to enhance system reliability and peace of mind.



Scan to learn more  
about all of our  
products!

 **UNITED  
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All-Indoor Solutions

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