



VariCool EZ-Fit[®]

with Energy Recovery Wheel



- 2,500 –21,000 CFM
- Variable Air Volume
- Water-Cooled
- Water Source Heat Pump
- DOAS (Dedicated Outdoor Air System)
- Air-Cooled with Remote Condenser

Unique Solutions for All-Indoor HVAC Projects

Modular DOAS Air Conditioning Systems

The VariCool EZ-Fit is a self-contained, modular air conditioning system for use with floor-by-floor variable air volume applications. It is engineered and manufactured specifically for installation in renovation and retrofit projects and provides the ultimate **All-Indoor Solution** for challenging HVAC applications.

The VariCool EZ-Fit design consists of three distinct sections that easily mate to form a system module. The module consists of a fan section, evaporator coil section and condensing section. Single modules are available in 12-15 ton, 20-25 ton, 30-35 ton and 40-45 ton sizes. Dual modules together form systems as large as 90 tons of cooling.

Sections are assembled during manufacturing and evacuated, charged, tested, and then separated for shipment of individual sections. The use of resealable refrigerant fittings allow the unit to be shipped split without losing the charge. All module sections are joined together using innovative 3D-Intelliclamp connectors which ensure perfect component alignment. The result is a lower installed cost without any sacrifice of system reliability.



FEATURES

- 2,500 –21,000 CFM
- Water-Cooled or Water Source Heat Pump
- Dual Scroll Compressors/Module
- Interlaced Evaporator Coils
- Premium Efficiency Motors
- Double Sloped Stainless Steel Drain Pan
- Hot Gas Bypass (each circuit)
- Lift Off Hinged Panels
- Belt Drive Airfoil DWDI Blower with Backward Inclined Blades (12-25 Ton Modules)
- ECM Fans
- Factory Mounted VFD Controllers
- Microprocessor Control
- 3D-Intelliclamp Cabinet Section Connectors

Individual sections fit through standard 3-0 doors or smaller and into most elevators. They can also be maneuvered down narrow hallways which means no modifications or alterations to the building are needed and installation time is quicker and less costly to accomplish.

As with all United CoolAir systems, a wide variety of features are standard and a host of options allow every system to be tailored to the specific project at hand.

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.



Equipment Damage Due to Weather

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



Roofcurbs or Roof Penetration

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



Possibility of Theft or Vandalism

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



Field Piping, Brazing, Evacuation or Charging

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



Field Testing of Installed Product

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



Excessive Downtime when Replacing Old Systems

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



Outdoor Servicing of Product

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



Architectural Damage to Building

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



Major Ductwork or Electrical Modifications

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



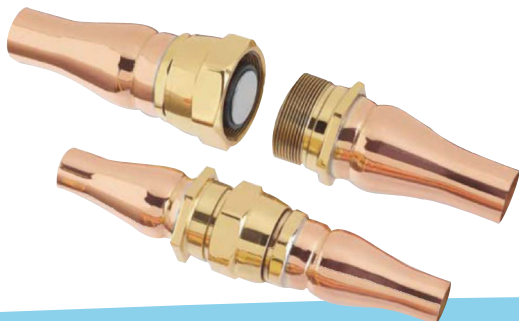
No Compromise in Performance with Built-to-Order Design

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



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.

Ideal for Renovation and Replacement Projects

The VariCool EZ-Fit with Energy Recovery Wheel (ERV) modular design and standard features provide the ideal retrofit and replacement design for many projects. However, to provide the ultimate product solution United CoolAir always offers an extensive list of options to further match each VariCool EZ-Fit ERV unit to the specific application requirements. These options are designed to optimize performance while minimizing installation complexity, time and expense. The Recovery Wheel adds greater efficiency and DOAS capability to an already exceptional product.

POPULAR OPTIONS

- ECM Fans
- Variable Speed Compressor
- BMS Interface
- High Efficiency Filters
- Double Wall Construction
- Water Side Economizer
- Hot Water, Steam, or Electric Heat
- 2" and 4" Pre and Final Filters
- Internally Isolated DDP Fan Systems
- Direct Drive Parallel Fan Systems
- Painted Cabinets



TYPICAL APPLICATIONS

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

Nominal Tons	Total MBH	Sensible MBH	SUPPLY CFM	EXH. CFM	GPM	WHEEL EAT	WHEEL LAT	REF SYS CAP @ 55 LAT	TOTAL CAP @ 55 LAT	NOTES
*** SINGLE MODULE ***										
10	245.5	129.6	3000	3000	30	95.0 / 78.0	78.8 / 65.6	8.1	20.5	10-15T Cabinet
12	327.3	172.8	4000	4000	36	95.0 / 78.0	79.9 / 67.0	12.5	27.3	10-15T Cabinet
15	409.1	216.0	5000	5000	45	95.0 / 78.0	81.5 / 68.4	17.7	34.1	10-15T Cabinet
20	490.9	259.2	6000	6000	60	95.0 / 78.0	79.9 / 66.9	18.6	40.9	20-25T Cabinet
25	572.8	302.4	7000	7000	75	95.0 / 78.0	81.1 / 68.1	24.2	47.7	20-25T Cabinet
25	654.6	345.6	8000	8000	75	95.0 / 78.0	80.7 / 67.7	26.7	54.5	30-35T BOX, 25T COMPS
30	736.4	388.8	9000	9000	90	95.0 / 78.0	81.2 / 68.1	31.1	61.4	30-35T Cabinet
35	818.2	432.0	10000	10000	105	95.0 / 78.0	81.6 / 68.6	36.1	68.2	30-35T Cabinet
*** DUAL MODULE ***										
30	900.0	475.2	11000	11000	90	95.0 / 78.0	79.6 / 66.6	33.1	75.0	40-50T DUAL Cabinet, 30T DUAL COMPS
40	981.9	518.4	12000	12000	120	95.0 / 78.0	79.9 / 66.9	37.2	81.8	40-50T DUAL Cabinet
40	1063.7	561.6	13000	13000	120	95.0 / 78.0	80.1 / 67.2	41.4	88.6	40-50T DUAL Cabinet
50	1145.5	604.8	14000	14000	150	95.0 / 78.0	81.1 / 68.1	48.4	95.5	40-50T DUAL Cabinet
50	1227.3	648.0	15000	15000	150	95.0 / 78.0	81.4 / 68.4	53.2	102.3	40-50T DUAL Cabinet
50	1309.1	691.2	16000	16000	150	95.0 / 78.0	80.7 / 67.7	53.4	109.1	60-70T DUAL Cabinet, 50T DUAL COMPS
60	1391.0	734.4	17000	17000	180	95.0 / 78.0	80.9 / 67.9	57.7	115.9	60-70T DUAL Cabinet
60	1472.8	777.6	18000	18000	180	95.0 / 78.0	81.2 / 68.1	62.2	122.7	60-70T DUAL Cabinet
70	1554.6	820.8	19000	19000	210	95.0 / 78.0	81.4 / 68.4	67.3	129.6	60-70T DUAL Cabinet
70	1636.4	864.0	20000	20000	210	95.0 / 78.0	81.6 / 68.6	72.2	136.4	60-70T DUAL Cabinet
70	1718.2	907.2	21000	21000	210	95.0 / 78.0	81.8 / 68.8	77.0	143.2	60-70T DUAL Cabinet

Case Study

OWENSBORO HIGH SCHOOL

OWENSBORO, KY

Owensboro Chose the VariCool EZ-Fit System for a Successful Replacement Project

When a middle school in Owensboro Kentucky needed a replacement for their existing DOAS units, the United CoolAir EZ-Fit was the perfect replacement. Thermal Equipment Sales, specified the popular EZ-Fit unit and UCA made it even more efficient by pairing with an Energy Recovery Wheel (ERW). First, we used a 15-ton EZ-Fit Water Source Heat Pump, modified for 100% outside air.



Optimum efficiency was accomplished by use of a variable-speed compressor on the lead circuit. Also added was a special evaporator coil, modulating hot gas reheat and a brazed plate Heat Exchanger – HX. Additionally, we added ECM fans on both the supply and the exhaust air streams. Finally, the sequence of operation was customized to meet the project specifications.

For the ease of moving into the building, the unit shipped in multiple sections (3 for the unit and 5 for the wheeled cabinet). The school district have ordered 2 additional units of 12 & 25 tons each. The new units will be built with the same configuration/features and will ship soon. Completing the change-out over the weekend was an added benefit.



Visit www.unitedcoolair.com or call the factory at 717-843-4311 for more information



Basic Model Designation



EXAMPLE:

$\frac{VZ}{a}$ $\frac{W}{b}$ $\frac{R}{c}$ $\frac{20}{d}$ $\frac{G}{e}$ $\frac{3}{f}$ $\frac{A}{g}$ $\frac{T}{h}$ $\frac{A}{i}$ $\frac{A}{j}$ $\frac{30}{k}$ - $\frac{A}{l}$ - $\frac{X}{m}$

a.	"VZ" = VariCool EZ-Fit				
b.	"W", "CW" or "A" "W" = Water-Cooled "CW" = Chilled Water Air Handler "A" = Air Cooled w/ Remote Air Cooled Condenser				
c.	"R", "L" or "D" Module Quantity/ Style "R" = Right Hand Single Module "L" = Left Hand Single Module "D" = Dual Module				
d.	"12", "15", "20", "25", "30", "35", "40" or "45" Nominal Cooling Capacity in Tons (Single Module) "24", "30", "40", "50", "60", "70", "80" or "90" Nominal Cooling Capacity in Tons (Dual Module)				
e.	"G" Common to all				
f.	"3", "4" or "5" Indicates Power Supply "3" = 208/230-3-60 "4" = 460-3-60 "5" = 575-3-60				
g.	"AS", "A", "B", "D", "-" "AS" = One Compressor "A" = Two Compressors "B" = Three Compressors "D" = Four Compressors "-" = No Compressors / Chilled Water Unit				
h.	"T" Traditional Cabinet "C" Custom Cabinet				
i.	"A" or "-" "A" = R410a Refrigerant "-" = No Refrigerant / Chilled Water Unit				
j.	"A", "B", "C" Blower Type "A" = DWDI Blower "B" = Parallel Direct Drive Fan "C" = ECM Fans				
k.	Nominal Heat kW				
l.	"A", "C" "R" or "S" Evaporator Air Path Note: For side discharge, single module only. Contact factory for details.				
m.	"X" = Special Configuration				

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

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
CoolAir**
All-Indoor Solutions

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