



Unique Solutions for All-Indoor HVAC Projects



- C-Series
- C13-Series
- VertiCool™ Aurora
- VertiCool™ Classic
- VariCool® EZ-Fit

- VariCool®
- OmegaAir™
- Portable Cooling and Heating Units
- Customized Units



A Letter from United CoolAir's President



We are All-Indoor Solutions

Since 1988, we have been a family-owned and operated American company. Our start came with the creation of air conditioning units built to meet extremely high standards for the U.S. Military. Since then, we have evolved into a full service provider of truly unique and often complex HVAC systems. All of our units are built-to-order and adapt to different requirements while providing the latest in control and design technologies.

The addition of our new training facility and UCA University has allowed our sales and marketing staff to continuously educate our distributors on the uses and application of our products so that they can also better serve you.

Most importantly, UCA systems provide an All-Indoor Solution. Their modular sections have consistently been designed with standard widths and heights in mind. They can be taken through 3-0 doors, around corners, down hallways and placed into service elevators which minimizes expensive handling, rigging, or permits.

I encourage you to read the summary of our Total Installed Cost Advantages on page 3 of this brochure.

Looking towards the future, United CoolAir will continue to meet and exceed demands for more efficient systems because we strive to stay ahead of the latest trends in our industry and we listen to our customers.

UCA Employees are Our Greatest Asset

When you purchase from United CoolAir, you are partnering with a team of incredibly talented, experienced, hard-working and dedicated individuals. Our employees' attention to detail and craftsmanship is second to none. They take great pride in what they do. After all, they have been doing it for more than 25 years!

We care about each other and that ultimately helps us care even more about our customers.

Neil R. Tucker
President, United CoolAir Corporation



Total Installed Cost Advantages

Avoid Requirements that Lead to Extra Expense

Expensive Equipment, Rigging or Permits

- Equipment can be shipped in sections
- Fits easily through standard doors, hallways, and into elevators
- Minimizes the need for crane rentals, rigging crews, and municipal permits

Roofcurbs or Roof Penetration

- Eliminates expensive curb equipment cost
- Reduces installation labor
- Eliminates possible roof water damage

Field Piping, Brazing, Evacuation or Charging

- Factory charged and utilizes
- Resealable Refrigerant Fittings
- Reduces installation labor
- Faster installation and commissioning

Excessive Downtime when Replacing Old Systems

- Sectional shipments accelerate installation
- Can be installed off-hours and on weekends
- Shipment can be made to coincide with installation schedules

Architectural Damage to Building

- Eliminates expenses for code approvals
- Requires no rigging holes through building walls
- Minimizes any type of building alteration

Compromise in Performance With Built-to-Order Design

- Units are built to exact requirements
- Avoids purchase of excess capacity from standard product offerings
- Extensive list of configurations and options

Equipment Damage Due to Weather

- All equipment is installed indoors
- Avoids premature replacement costs due to weather wear and/or damage
- Eliminates downtime due to severe storms

Possibility of Theft or Vandalism

- Eliminates expensive repairs and replacements due to theft and vandalism
- Enhances building security by eliminating interruption to service
- Eliminates extra cost for cages and special alarms

Field Testing of Installed Product

- Minimizes field testing as units are functionally tested prior to shipment
- Reduces labor and speeds installation
- Assures trouble-free start-ups

Outdoor Servicing of Product

- Outdoor/premium service expense in extreme weather completely eliminated
- Improves reliability
- Eliminates roof safety issues

Major Ductwork or Electrical Modifications

- Units ordered to closely match existing duct and utility locations
- Major installation, labor and time savings

Exterior Condensing System

- Eliminates rooftop and pad installation space and cost
- Water-Cooled and Chilled Water configurations eliminate unsightly equipment outdoors



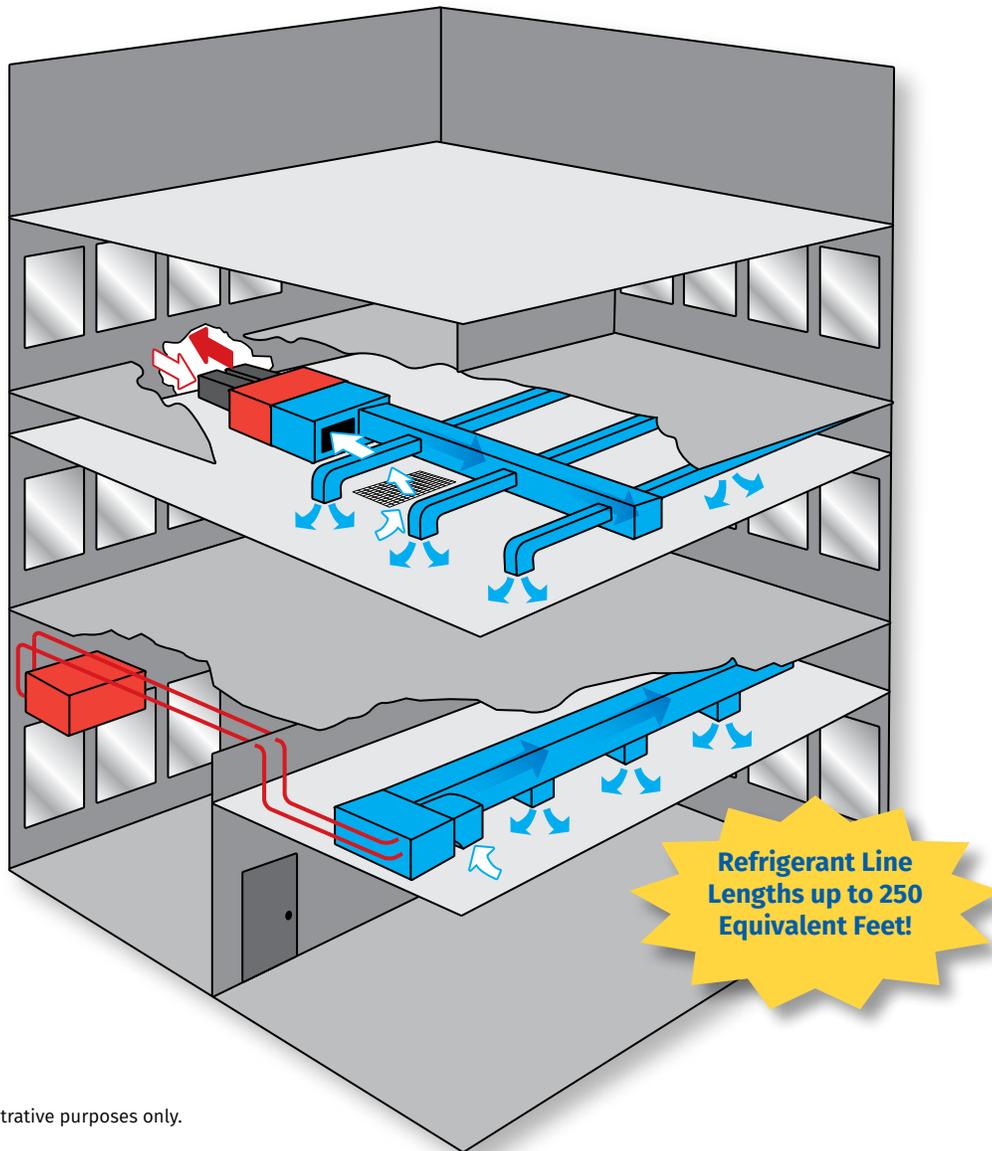
Resealable Refrigerant Fittings

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.

Air-Cooled, Water-Cooled Packaged System or Split System

Flexibility and efficiency are paramount in today's buildings. The ability to split air conditioning units, retrofit for final installation or simply to move the unit

into location, are assets that are extremely beneficial for historical sites and for renovation or replacement projects.



Not to scale. For illustrative purposes only.



C-Series and C13-Series

The horizontal models are available as the traditional C-Series style and the C13-Series. Units are of the horizontal hanging type for plenum installation and can also be slab mounted or vertically stacked with the evaporator section on top, saving space. **The horizontal indoor condensing section can be split from the evaporator**

section, reducing ducting requirements. Systems are available in Air-Cooled, Water-Cooled, Chilled Water and Heat Pump versions. Flexible configurations allow it to be used for renovation and replacement projects much easier, converting it quickly to fit the specific application.

- 1 to 15 Tons C-Series
- 2 to 10 Tons C13
- Air-Cooled, Water-Cooled, Chilled Water, Water Source Heat Pump or Air Source Heat Pump
- Factory Charged
- All sizes fit through a standard 36" doorway

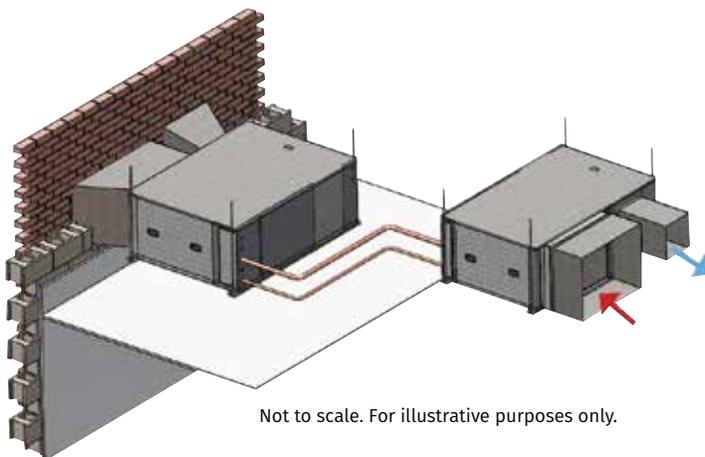


C13-Series



C-Series

Split System



Not to scale. For illustrative purposes only.

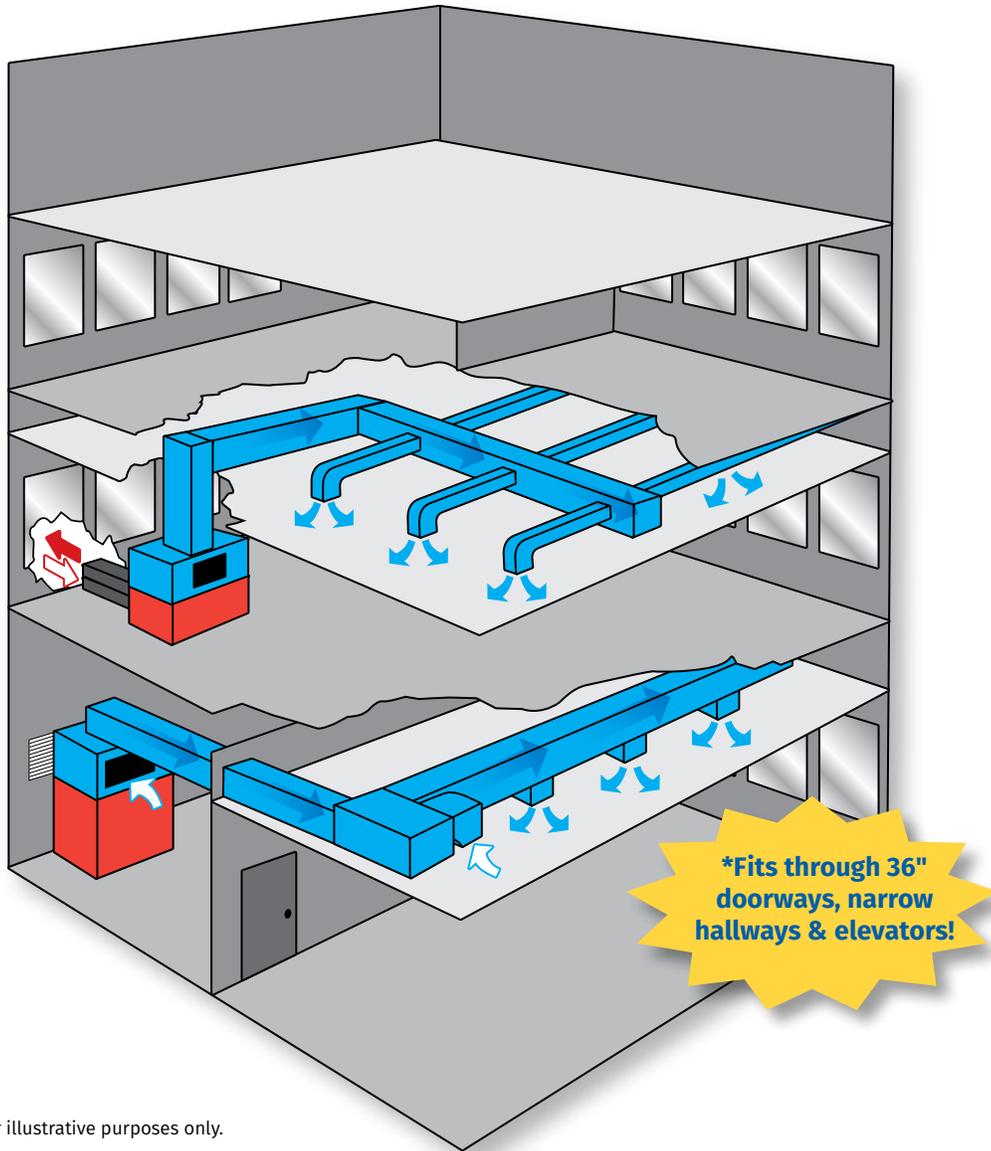
FEATURES

- High-Efficiency Scroll Compressors
- Belt-Driven Blowers
- Adjustable Variable Pitch Pulleys
- Resealable Refrigerant Fittings
- Stainless Steel Evaporator Drain Pan
- Easy Service Access

Air-Cooled, Water-Cooled or Chilled Water Packaged System

Flexibility and efficiency are paramount in today's buildings. The ability to split air conditioning units, either for final installation or simply to move the unit

into location, are assets that are extremely beneficial for vertical floor by floor equipment renovation or replacement projects.



Not to scale. For illustrative purposes only.
*Most Models

VertiCool Aurora™ and Classic™

The VertiCool is a self-contained vertical system that is available in two series: the Classic and the Aurora. These floor-mounted units are particularly suited for tenant fit-out and for easy replacement of older units. Evaporator discharge air can be either top, front or rear, ducted or free blow. Heat rejection is accomplished using either

Air-Cooled or Water-Cooled condensing sections. The splittable feature helps to get the units into facilities for renovation projects, and the availability of multiple air path configurations make it easier to adapt the unit without extensive field alterations.

- 3 to 35 Tons
- Factory Charged
- Air-Cooled, Water-Cooled, Chilled Water, or Water Source Heat Pump
- 3-15 Ton fit through a standard 36" doorway



Aurora



Classic

- 3 to 30 Tons
- Factory Charged
- Air-Cooled, Water-Cooled, Chilled Water, or Water Source Heat Pump
- 3-25 Ton fit through a standard 36" doorway

FEATURES

- High-Efficiency Scroll Compressors
- Belt-Driven Blowers
- Adjustable Variable Pitch Pulleys
- Resealable Refrigerant Fittings
- Stainless Steel Evaporator Drain Pan
- Easy Component Access



The VariCool® is a modular Variable Air Volume (VAV) system.

These floor-mounted systems are designed for easy replacement of existing floor-by-floor VAV or constant volume units with minimal modifications to current building structures. Each module is equipped with resealable refrigerant fittings and a factory charge of R-410a. This means that no field piping, brazing, evacuation or charging is required, resulting in a lower installed cost.

The VariCool® EZ-Fit is an **ideal system for renovation and replacement projects**. Individual sections fit through standard 36" doorways 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.



High-Capacity Evaporator Coil

Row-split evaporator configuration provides uniform and precise leaving air temperatures under a variety of operating conditions.

Blower Assembly

Plenum blower with pillow block type bearings having an expected life of 200,000 hours.

Refrigeration Module

All critical components are located outside the air stream so the unit can be serviced without disturbing the airflow/performance.

Now Available *Danfoss*



The Optional Danfoss Variable Speed Compressor can now be integrated into our VariCool® EZ-Fit Units.

FEATURES

- Dual Scroll Compressors Per 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 (12-25 Ton Modules), DDP Blowers (30-35 Ton Modules)
- Backward Inclined Blades
- Factory Mounted VFD Controllers
- Marvel™ Plus Microprocessor Control
- Variable Speed Compressor
- Optional ECM Fans

VariCool VAV and EZ-Fit

The unit is designed as a floor-by-floor air conditioning system offering flexibility for tenant fit-out as well as tighter tenant control of space conditions. A wide variety of options make the VariCool® VAV your best choice for large space conditioning management. Reliable controls and Variable Frequency Drives (VFD) ensure smooth air

flow adjustment and consistent comfort levels for any application. Units are shipped in multiple sections for easier and faster site delivery, and **arrive fully charged resulting in a total installed cost advantage.** The rigid frame and 2" insulation makes for quiet operation and a long, trouble-free operating life.

- 12 to 45 Ton Single Modules
- 24 to 90 Ton Dual Modules
- Modular Floor-by-Floor Systems
- Ships In 3 to 8 Sections
- Water-Cooled, Chilled Water or Water Source Heat Pump
- Multiple Cabinet Dimensions

Fits through 36" doorways, narrow hallways & elevators!



Modular Unit Shown with optional DDP fans

EZ-Fit



VariCool VAV

- 9 to 70 Tons
- Modular 3 Piece Design
- Factory Charged
- Water-Cooled, Chilled Water or Water Source Heat Pump
- 100% DOAS Configurations
- Down-flow Configuration Available

FEATURES

- Scroll Compressors
- Row-Split Evaporator Coils
- Premium Efficiency Motors
- Double Sloped Stainless Steel Drain Pan
- Hot Gas Bypass (each circuit)
- Lift Off Hinged Panels
- Spring Isolated Plenum Fan and Motor
- Factory Mounted VFD
- Marvel™ Plus Microprocessor Control



The 100% outside air OmegaAir system is designed specifically for indoor installations.

It provides air flow capabilities from 150 CFM up to 3000 CFM of room neutral air (70°F to 72°F with 50% RH) or conditioned air to 55°F. The low CFM range is ideal for independent zoning of spaces with different outside air demands. Air dew point design temperatures are lower than standard air conditioners to remove the maximum amount of moisture before delivery to the space.

An OA3 microprocessor controller monitors and controls every aspect of the unit's operation for year-round performance. The OmegaAir system accurately delivers precise air temperature and humidity regardless of the changing outside air conditions. It is an excellent choice for renovation projects where outside mounting is unavailable or not desirable. Inside mounting enhances the architectural integrity of the building while bolstering security concerns for the unit.



OmegaAir vertical units have a small footprint.

- Vertical or Horizontal Configurations
- 150 to 3,000 CFM
- Building Management System Compatible (optional interface card)
- Designed Specifically for Indoor Installations
- Water-Cooled or Air-Cooled
- Air-Cooled with Indoor Ducted Condenser or Remote Outdoor Condenser
- All sizes fit through a standard 36" doorway



The OmegaAir horizontal configuration saves valuable floor space when ceiling mounted.



Air-Cooled
Remote Condenser
(Indoor or Outdoor)
Outdoor shown

FEATURES

- OA3 Microprocessor
- Optional Electric Heat
- Single Point Power
- Sloped Stainless Steel Drain Pan
- Interlaced Evaporator Coil
- Hot Gas Bypass
- Rugged Cabinet Construction and Finish
- No Thermal Bridging
- Easy Access Design
- Isolated Components
- Fast, Easy Connection
- Draw-through Airflow
- Internally Mounted Condensate Trap
- 2" Thermal/Acoustic Insulation
- Modulating Hot Gas Reheat
- Optional Digital Scroll Compressors



A Variety of Options and Configurations

CABINET

Vertical Stacked

Refrigerant / Water Piping Connections

Split Shipment Cabinets

Remote Condenser

Utility Connection Location

Outdoor Modification Kit

Shell & Tube Heat Exchanger

Cupro Nickel Heat Exchanger

CONDENSER

Brazed Plate Heat Exchanger

BMS Interface Cards

Marvel Expansion Module

Marvel S



Marvel J

Marvel Plus

MICROPROCESSOR

Phase Reversal Relay

Magnahelic Gauge

Johnson Controller w/ SCR

Dry Contacts

Humidistat

Remote ON/OFF

Drain Pan Overflow Switch

Programmable Wall Mounted Thermostat

Wall Mounted Thermostat

Wall Mounted Sensors

Anti-Short Cycle Timer

Painted Heresite Coated Acoustic Foam Insulation

Perforated Wall Construction

Various Air Paths

Reduced Height Water-Cooled Section

Evaporator Section Stand

High Static Pressure

BLOWER

DDP Fans (Varicool EZ-Fit)

Variable Frequency Drives

Marine Duty Regulating Valve

OVER 100

OPTIONS!

CONTROLS

Kele Module w/ Multiple Compressors

Freezestat

Air Flow Switch

High Heat Limit

Unit Mounted Sensors

Buck / Boost Transformer

Steam Coil

COIL

Chilled Water Coil

Free Cooling Coil

Tubular Electric Heat / Reheat

Waterside Economizer

Open Wire Electric Heat

Heresite Coated Coil Copper / Copper

Supply / Return Air Grille

Filter Rack

4" Merv 11

4" Merv 8

2" Merv 8

2" Merv 11

Direct Drive

FILTER

Condenser Filter Box

2" Merv 13

4" Merv 13

COMPRESSOR

Dual vs. Single Compressor

Crankcase Heater

Digital Scroll Compressor

Compressor Acoustic Cover

Liquid Receiver

Hot Gas Reheat

Hot Gas Bypass Shutoff Valve

External Hot Gas Bypass

Quench Valve

REFRIGERANT

Firestat

Smoke Detector

Water Flow Switch

Liquid Line Shutoff Valve

Suction Line Accumulator

Non-Fused Disconnect

Flooded Low Ambient Control

Oil Separator

Resealable Refrigerant Fittings

Dirty Filter Switch

VFD Low Ambient Control

Dehumidistat

Electronic Head Pressure Control Valve

Modulating Hot Gas Bypass

Interconnect Kits

ACCESSORIES

Condensate Pump

Steam Canister Humidifier

A Complete Range of Reliable State-of-the-Art Control Solutions

Our microprocessor-based control systems consist of 4 distinct product arrays that can be applied depending on customer needs and wants. Proven in a wide variety of applications, the Marvel line of controls is flexible, complete, and available for most installations – includ-

ing BMS projects. Programmable controllers, user interfaces, pre-programmed software, and a broad variety of optional plug-in boards have all been pre-engineered to provide a control system that is right for the complexity of the application at hand.

MARVEL J™



- Entry Level Basic System
- Temp / Humidity Control
- Up to 2 Stages of Heat/Cool
- 2 Temp / Humidity Sensors
- 2 Modulating Analog Outputs
- Can be Password Protected
- Auto Daylight Savings
- Built In Help Menus
- Fan Status, Cooling Stages, and Heating Stages
- Loss of Airflow
- On Screen Displays of Demands

MARVEL S™



- Medium Capacity Full-Featured System
- Configurable Inputs / Outputs
- Up to 3 Stages Compressors and 4 Stages Heat
- Suitable for Heat Pump Systems
- MagnaCool Option

*Plus All Marvel J Features

MARVEL PLUS™



- Largest Capacity Full-Featured System
- Configurable Inputs / Outputs
- Additional Modes of Operation including:
 - *Variable Air Volume
 - *Digital Scroll Compressors
 - *Variable Speed Compressor

*Plus All Marvel J and S Features

WALL CONTROL PANEL



OA3™



- Designed Exclusively for 100% Outside Air Applications
- O/A Temperature & RH Sensor
- Supply Air Temperature Sensor
- Space Temperature & Humidity Sensor
- Space Humidity Reset Function to Reset Supply Dew-point Set Point

*Plus All Marvel J Features

FEATURES

- State-of-the-Art Hardware
- Complete Family of Controls
- Flexibility and Reliability
- Basic A/C Systems to Complex VAV Projects
- Building Management System Interface
- In-house Programming
- Functionally Tested Prior to Shipment

Manufactured for Specific Applications

Flexible Features Separate United CoolAir from the Rest

- Units designed with flexibility in mind
- Tailored to meet specific job requirements
- Optimizes valuable floor space
- Multiple heat rejection options and air path configurations
- Environmentally-friendly green refrigerant R-410a



Quality Units Built-to-Order

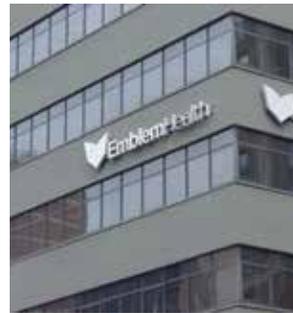
- Functional tests are conducted on every unit
- Use of readily available off-the-shelf components simplifies maintenance
- Limited warranty, one (1) year on parts and five (5) years on compressors

APPLICATIONS

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

A VARIETY OF NOTABLE CUSTOMERS

- Empire State Building
- Trump Towers
- PepsiCo®
- Starbucks®
- Coach™
- FedEx®
- Dunkin' Donuts®
- New York University
- JPMorgan Chase & Co.
- Marriot® Hotels
- Hampton® Inn
- EmblemHealth
- Macy's®
- Verizon®
- Pier 1 Imports®
- Home Depot®
- Johnson & Johnson
- Carlo's Bakery (Cake Boss)
- AT&T®
- Rockefeller Center
- Chipotle® Mexican Grill
- Columbia University



United CoolAir manufactures a variety of portable air conditioning and heating units marketed under the Therm-Air brand. These mobile systems are the most cost-effective solution for a wide variety of temporary cooling and heating applications. Therm-Air units are flexible, dependable, reliable and durable.

As with our commercial units, United CoolAir portable cooling and heating equipment can be tailored to your specific requirements. Each unit is manufactured to meet rigid requirements with a proven record of long life under demanding conditions. United CoolAir portable equipment provides an excellent ROI over less expensive modified commercial units that last only a year or two.

Vertical Cooling Only or Cooling/Heating

- 3 - 30 Tons Cooling
- * Up To 60 kW Heating
- * Free Blow Plenum or Ducted Air Supply

Horizontal Cooling Only Cooling/Heating/ Dehumidification

- 3 - 15 Tons Cooling
- * Up To 45 kW Heating
- * Pod Mounted or Casters
- Narrow Portable 5 & 12 Ton
- * 29.5" Wide
- * Fits through a Standard 36" Doorway
- 20 - 30 Tons Cooling
- * Up To 60 kW Heating
- * Base, Pod or DOT Approved Trailer Mounted

5 Ton Narrow Available as Heat Pump



Horizontal Heating

- 15 - 60 kW
- * Casters
- * Duct Collars
- Up To 150 kW
- * Pod Mounted
- * Duct Collars
- * Stackable for Storage
- Narrow Portable 5 Ton Heat Pump
- * 29.5" wide

In-line Heaters | In-line Blowers

- | | |
|---|---|
| <ul style="list-style-type: none"> ■ 30 - 150 kW * (3) Models * Skid Mounted * Duct Collars | <ul style="list-style-type: none"> ■ 5000 CFM * Horizontal Cabinet * Casters * Duct Collars |
|---|---|

FEATURES

- Vertical and Horizontal Units
- Cooling Only, Cooling with Heat and Heating Only
- Ducted or Free Blow
- 4-Way Forklift Pod & Corner Lifting Brackets
- Quarter Turn Latches on Access Panels
- Premium White Powder Coat Finish
- Stainless Steel Hardware
- Welded Construction
- Insulated Cabinet Sections

*Products can be configured with several features and a variety of options. Contact United CoolAir to discuss special features, paints, and custom cabinets.

United CoolAir designs and manufactures specialty air conditioning systems for specific space, function and operating requirements. These are highly specialized units that can be used as standalone units or as a component part of an OEM system. For one-of-a-kind comfort and precision cooling applications, United CoolAir Corporation also designs and manufactures custom air conditioning systems. We work closely with OEMs to provide solutions that meet unique cooling requirements.



Ground Support Air Conditioning Units for Aircrafts



Disaster Recovery Unit



Truck Cab Conditioning



CoolSpot Ductless



High Ambient UPS Cooler / DX & Chilled Water



VertiCool Space Saver



Mobile Print Facility



Mobile Shooting Range

 **MagnaCool Precision Cooling Package**

For projects that require precision temperature and humidity control, United CoolAir offers the MagnaCool™ close tolerance package. This includes a microprocessor controller, clean and efficient electronic steam canister humidifier and electric reheat as standard components. The MagnaCool bundled option sets are available on several product families providing flexibility for your diverse applications.



Wall Control Panel



Marvel™ S Microprocessor



Electronic Steam Canister Humidifier

Electronic steam canister humidifier nominally rated at 2 lbs./hr. per ton of cooling provides pure, particle-free humidity to the conditioned space.

The sealed canister complies with ASHRAE recommendations by eliminating open pans with standing water in the air stream.



Unique Solutions for All-Indoor HVAC Projects



VertiCool Classic
Vertical, 3 - 30 Ton

VertiCool Aurora
Vertical, 3 - 35 Tons

VariCool®
VAV, 9 - 70 Tons

VariCool® EZ-Fit
VAV, 12 - 90 Tons

OmegaAir Vertical
100% Outside Air, 1 - 15 Tons



Portable Cooling and Heating Units
3-30 Tons

C13-Series Horizontal
2 - 10 Tons

C-Series Horizontal
1 - 15 Tons

OmegaAir Horizontal,
100% Outside Air, 1 - 15 Tons

Special Configuration
Engineered to Order

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!



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