

CAT-729

JULY 2025



VERTICAL AND HORIZONTAL



- MODELS BCV, BCA, BCH
- 600-10,000 CFM

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THE INDUSTRY'S MOST

COMPACT FOOTPRINT







In architecture and design, no two buildings are created equal. Each structure presents its own unique set of challenges, from varying load requirements to fresh air delivery needs and other intricate design obstacles. At Daikin, we understand these complexities and are dedicated to providing innovative solutions tailored to your specific requirements.

Daikin Applied PreciseLine air handlers provide the definitive answer to air handling needs. Available in both vertical and horizontal configurations, PreciseLine is engineered to condition air at precise levels of up to 10,000 CFM. This versatility ensures that you can optimize air quality and comfort in any building, regardless of HVAC equipment space constraints you may face.

What sets PreciseLine apart is its compact footprint and energy-saving technologies that allow system designers and contractors to maximize their design capabilities, especially in tight spaces. By utilizing a series of smaller units, PreciseLine air handlers efficiently deliver fresh, conditioned air to dedicated areas within a building. This innovative approach not only enhances air quality but also provides significant operational cost savings, making it an attractive option for a wide range of building applications.

CERTIFICATIONS















PERFORMANCE



R-6.5 thermal value



006-100 sizes



600-10,000 cfm



.5-133 kW elect. heat



MERV 8 or 13 filtration

FEATURES



- DOAS/VRV integration
- 1" double wall, thermally broken, foam injected panels
- Energy recovery wheel
- > Economizer mixing box option

LINKS:



All Solutions Catalog



Product Website



Engineering Data

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Enviromentally Friendly

PreciseLine air handlers come equipped with advanced features like an energy recovery wheel and foam-injected, thermally-isolated cabinetry that minimizes energy loss while maximizing system efficiency – ultimately leading to reduced overall power consumption and lower carbon emissions. By effectively reducing heating and cooling loads, these air handlers contribute significantly to environmentally responsible building practices. Moreover, the compact design of PreciseLine air handlers allows for right-sized solutions that utilize fewer materials and resources, aligning perfectly with your green building goals. Implementing these units not only improves your building's energy efficiency, but also enhances your commitment to sustainability.



Space Savings

For today's fast-paced world, maximizing every square foot is crucial, especially in retrofit projects and compact mechanical rooms. Engineered with a compact footprint, the PreciseLine series stands out in Daikin's lineup, providing a powerful performance that meets airflow demands of up to 10,000 CFM. This innovative design ensures that even in the tightest of spaces, you do not have to compromise on efficiency or effectiveness.

The streamlined architecture of our compact PreciseLine air handers not only enhances airflow but also simplifies the logistics of transportation, handling and installation. Large vertical units allow for sections splits to fit through 36" doorways. This equates to accelerated project timelines and an overall reduction in cost, making PrecisceLine the optimum choice for owners, contractors and facility managers.

Industry-Leading Efficiency

Our innovative design features advanced fan array technology, utilizing multiple smaller fans for precise airflow control and significantly reduced energy consumption compared to traditional systems.

The modular design of PreciseLine units ensures each fan operates at peak efficiency, dynamically adjusting to meet building demands. With superior insulation and minimized air leakage, energy loss is drastically reduced, maintaining consistent temperatures throughout your facility.

Incorporating high-efficiency components, including coils and filters, further enhances performance by lowering static pressure and improving heat transfer. This holistic approach minimizes energy waste, leading to substantial operational cost savings and a reduced carbon footprint.



ADVANTAGES/TECHNOLOGIES



DESIGN FLEXIBILITY

THAT LOWERS OPERATING COSTS



Factory-Installed Controls

Traditional HVAC installations involve a complex array of components that require extensive setup and configuration. With PreciseLine, the controls are integrated directly into the air handler at the factory which drastically reduces installation time, enabling contractors to complete projects more quickly and efficiently.

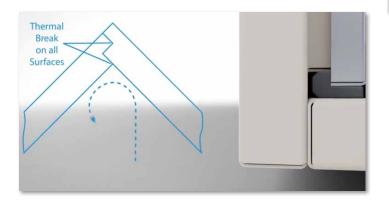
Factory-installed controls also allows PreciseLine to operate in standalone mode or integrate seamlessly with Building Automation Systems (BAS). For facilities that require independent operation, the air handler can function autonomously, providing reliable climate control without the need for additional systems. Conversely, for those facilities looking to enhance energy management and system performance, the BAS integration facilitates centralized monitoring and control.

Factory-Installed Valve Packages

PreciseLine is configurable for both two-pipe and four-pipe hydronic systems (sizes 006–020), making them suitable for a wide range of building applications. Each valve package is fully assembled and leak tested within the cabinet to ensure quality and performance. For faster installation, water connections terminate outside the cabinet, allowing for quick and straightforward field hookup. Additionally, all valve piping is accessible through a single service panel, simplifying maintenance and reducing downtime for routine inspections or repairs.



ADVANTAGES/TECHNOLOGIES



Thermal Break Insulated Panels

PreciseLine air handlers are engineered with a galvanized double-wall construction, featuring 1" foam injection that elevates thermal resistance to an impressive R-6.5. This innovative design not only optimizes energy efficiency but also ensures superior temperature control. By effectively maintaining cooler air during the cooling season and warmer air in heating mode, these air handlers contribute to a more comfortable indoor environment. The ability to maintain consistent temperatures with less energy translates to lower utility bills and a more environmentally-friendly operation.

Economizer/Mixing Box

An economizer and mixing box option allows PreciseLine to use outside air for cooling when conditions are favorable, reducing reliance on mechanical cooling and lowering energy consumption. By integrating fresh outside air into the system, economizers can help dilute indoor pollutants and enhance ventilation, leading to better indoor air quality. Mixing boxes also enable the blending of return air with outside air, helping to maintain more consistent temperature and humidity levels throughout the space for optimum comfort levels.



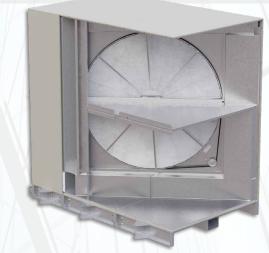
HVAC Integration

PreciseLine air handlers can connect directly to Daikin VRV® systems or Daikin DCSA model condening units, allowing for efficient refrigerant flow and minimizing the need for extensive ductwork. By utilizing air handlers that can be placed closer to the conditioned space, the need for long duct runs is significantly diminished. This not only reduces material and labor costs but also minimizes energy losses typically

Energy Recovery Wheel

By capturing and transferring heat and moisture between the exhaust and incoming airstreams, an optional energy recovery wheel reduces the load on heating and cooling systems. The desicant wheel not only lowers energy consumption and operating costs, but also helps maintain consistent indoor comfort, making it an ideal choice for applications focused on sustainability and efficiency.

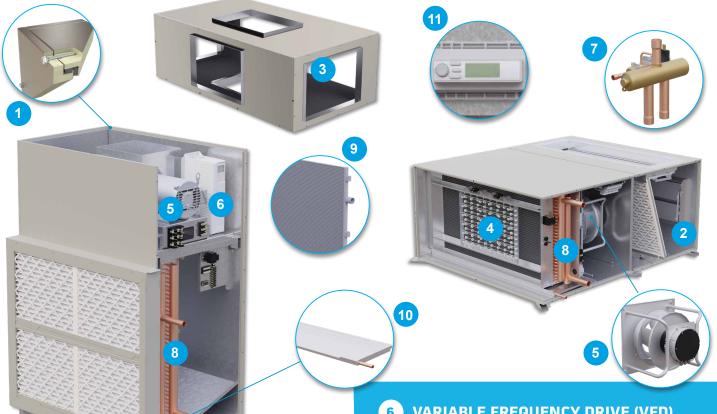
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FEATURES & OPTIONS

HORZ./VERT.

SIZES 006-050



- **CABINET**
 - Themal break design prevents air leakage
 - Double-wall, foam injected
 - R-6.5 thermal resistant
- **MIXING BOX/ECONOMIZER**
 - Introduces fresh outdoor air to meet indoor air quality requirements (ASHRAE 62.1)
 - Uses free-cooling outdoor air when favorable vs. mechanical cooling
- **MULTI-DIRECTION DISCHARGE PLENUM**
 - Sound attenuation package
 - Final filters up to MERV 13
- **ELECTRIC SUPPLEMENTAL HEAT**
 - 1/2 kW to 39 kW heat or supplemental heat
 - Single point power with factory safeties
 - Single stage or SCR control
- **HIGH-EFFICIENCY FANS**
 - Thermallhy protected, fully-modulating
 - Plenum EC fans (030-050)
 - FC EC fans (006-020
 - FC NEMA ODP motors with VFD (030-050)

VARIABLE FREQUENCY DRIVE (VFD)

- Variable speed matches air requirements
- Precise temperaure/humidty control
- Soft starts extend eqiupment life
- Quiet for sound-sensitive applications

2-WAY/3-WAY VALVE PACKAGES

- 0-10VDC modulating control for variable volume pumping applications
- 24VAC open/close control with fan coil style thermostats

8 MULTIPLE COIL OPTIONS

- VRV primary with hot gas reheat
- 2, 4, 6, or 8 row primary
- 1, 2 row reheat or preheat secondary
- Stainless steel casings resist corrosion

9 HOT GAS REHEAT

- Superior humidity control, enhanced comfort
- For 100% OA, VAV and single-zone applications

10 STAINLESS STEEL DRAIN PAN

- Double sloped prevents standing water
- ASHRAE 62.1 compliant

UNIT CONTROLLER

- Factory installed and tested
- Stand-alone or BAS integratino

HORZ./VERT.

FEATURES & OPTIONS



1 CABINET

- Themal break design prevents air leakage
- Double-wall, foam injected, R-6.5 thermal resistant

2 MIXING BOX/ECONOMIZER

- Introduces fresh outdoor air to meet indoor air quality requirements (ASHRAE 62.1)
- Uses free-cooling outdoor air when favorable vs. mechanical cooling

3 MULTI-DIRECTION DISCHARGE PLENUM

- Sound attenuation package
- Final filters up to MERV 13

4 ELECTRIC SUPPLEMENTAL HEAT

- 1 kW to 84 kW, single-point power
- Single stage or SCR control

5 HIGH-EFFICIENCY FANS

- Thermally protected, fully modulating
- EC plenum fans/EC forward-curved fans
- FC NEMA ODP motors with VFD

6 ENERGY RECOVERY WHEEL

- Recovers up to 70% of lost energies
- ASHRAE 62.1 compliant

- Precise temperaure/humidty control
- Soft starts, quiet operation

8 2-WAY/3-WAY VALVE PACKAGES

- 0-10VDC modulating control for variable volume pumping applications
- 24VAC open/close control with fan coil style thermostats

9 MULTIPLE COIL OPTIONS

- VRV primary with hot gas reheat
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10 HOT GAS REHEAT

- Superior humidity control, enhanced comfort
- 100% OA, VAV and single-zone applications

11 STAINLESS STEEL DRAIN PAN

- Double sloped prevents standing water
- ASHRAE 62.1 compliant

12 UNIT CONTROLLER

- Factory installed and tested
- Stand-alone or BAS integration

13 SECTION SPLITS (VERTICAL UNITS)

· Fit through 36" doors, simplifies installation

AIR HANDLERS

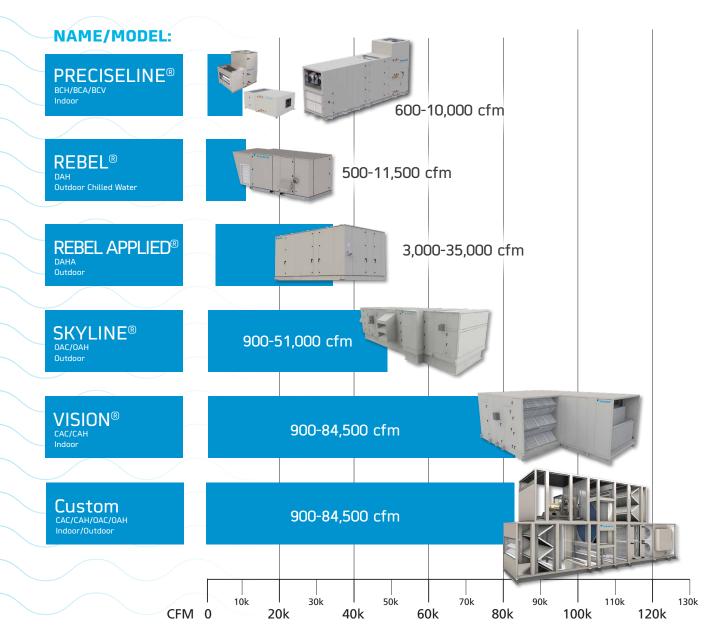
COMPLETE, ULTIMATE FLEXIBILITY

Daikin Applied indoor and outdoor air handlers are used to condition and circulate large volumes of air throughout a space via ductwork and are part of a system using either a chiller with cooled water or a condensing unit in a direct expansion (DX) system.









VERTICAL MARKETS/APPLICATIONS









HEALTHCARE

PreciseLine's advanced filtration, including MERV 13 options, and features like easy-to-clean cabinets and stainless steel drain pans, improve indoor air quality crucial for minimizing pathogens and ensuring a healthier environment. The compact design and flexible configurations allow for efficient installation in space-constrained facilities, aiding retrofits. Additionally, energy-efficient components, such as R-6.5 insulation and direct-drive fans, reduce operational costs. Sound attenuation packages also contribute to a quieter, more comfortable healing environment for patients and staff.

GOVERNMENT & OFFICE BULDINGS

PreciseLine's compact design and flexible configurations optimize space utilization, ideal for new builds and retrofits. These systems enhance indoor air quality through superior filtration and features that prevent microbial growth. They deliver remarkable energy efficiency with advanced controls, heat recovery, and high thermal resistance, leading to reduced operating costs and lower carbon footprints. Additionally, PreciseLine provides precise temperature and humidity control, fresh air ventilation, and quiet operation, ensuring a comfortable and productive environment for occupants.

EDUCATION

PreciseLine creates healthy, comfortable learning environments through superior indoor air quality and precise temperature/humidity control. Their compact design and flexible configurations are ideal for diverse educational spaces, from individual classrooms to entire campuses. Features like energy recovery and intelligent controls minimize running costs and environmental impact, supporting energy efficiency goals. Additionally, low noise operation ensures minimal disruption, promoting a focused learning atmosphere.







LEARN MORE



REPAIR SERVICES

Breakdowns happen and when your equipment has an issue, time is of the essence. Call us at 800-432-1342 to get Daikin Service professionals dispatched quickly and minimize downtime. Your local team is backed by nearly 100 years of experience to alleviate undue stress in your operations.

- 24/7 Emergency Service
- System Repairs & Assessments
 (Ancillary Equipment: Boilers, Cooling Towers)
- Equipment Diagnostics
- Technical Troubleshooting
- Building Automation & Controls
- OEM & Generic Parts/Supply
- All Equipment Types & Brands

PLANNED MAINTENANCE SERVICES

Daikin Applied's service technicians can perform all of the vital maintenance your system needs to ensure your equipment is running at peak efficiency. From proper cleaning to software upgrades and necessary maintenance, our techs will maximize your system to help extend the life of your equipment.

- Regularly Scheduled Maintenance
- Seasonal Startup & Shutdown
- System Diagnostics
- Condenser Cleaning
- Air Filters
- On-site System Inspections

PREDICTIVE SERVICES

Predictive maintenance services anticipate failures before they happen to mitigate the risk of catastrophic failure. For those who have in-house maintenance capabilities, Daikin Service can also guide your team and be on standby for more complex technical needs with predictive maintenance.

- Oil & Refrigerant Analysis
- Vibration Analysis
- System Diagnostics
- Eddy Current Testing
- Infrared Analysis
- Combustion Analysis
- IAQ Assessments
- Laser Alignments
- Bearing Analysis

PROACTIVE SERVICES

With proactive maintenance services, we support you with proven experts, offerings and processes to ensure customers get the help they need from a trusted advisor.

- Building Operations Review
- Contingency Planning









LOCAL PARTS INVENTORY. LOCAL EXPERTISE.

When you need OEM or generic parts to repair your HVAC system, you need them quickly. Daikin Service has an expansive inventory and a centralized distribution center to get the right parts to you faster than ever before. To mitigate downtime, we have 80 locations (and counting) across North America to help you take care of your critical parts demand.



- ONE-STOP SHOP FOR ALL OEM & GENERIC PARTS
- NATIONAL LOCATION/DISTRIBUTION NETWORK
- CENTRALIZED DISTRIBUTION
- FACTORY-AUTHORIZED REPLACEMENT PARTS
- SAME-DAY SHIPPING ON MOST ORDERS
- EXPERT SUPPORT
- RELIABLE PERFORMANCE
- WALK-IN STORE LOCATIONS
- EXTENDED COMPONENT WARRANTIES (VFDS, COMPRESSORS, MOTORS)







CHILLERS | AIR CONDITIONERS | DEHUMIDIFIERS | HEATING | POWER

EMERGENCY RENTALS

When your equipment fails, limiting downtime is mission critical. Daikin Applied provides quick delivery and installation of reliable rental products to help you weather the outage. We're here to help get you back up and running, and can provide a turnkey solution.

- Industry-leading efficiency and proven technology
- 24-hour turnaround on available inventory
- 8-hour average set up with on-site experts
- Comprehensive package, including pumps, flexible water piping connection and electrical hookups

EQUIPMENT FOR PLANNED SITUATIONS

Forming a contingency plan in the event of an outage can help you quickly get operations back to normal and limit financial loss, and help you breathe easier when the unexpected happens. Selecting the right-sized equipment is just one part of the process. The best contingency plans start by assessing and understanding your financial risk, and then using this information to drive the rest of your plan. Our Rental Solutions experts can specify the supplemental cooling system required to support any situation you're experiencing.

- System maintenance
- Building expansion
- Server room heat generation
- Seasonal/staff heat load swings
- Contingency plans

SUPPLEMENTAL CAPACITY

When the demand of your facility or process exceeds your current system's capacity because of record-high temperatures or changes to cooling requirements, Daikin temporary rentals can be used to increase your heating or cooling output. By eliminating the need to purchase additional equipment that might be only used part of the year, you save on capital expenditures.

STANDBY

Standby for critical applications and processes is another efficient use for temporary rental equipment. A temporary system is sometimes used to back up manufacturing and chemical processes, or when a hospital's required system redundancy has been reduced.

COMPLETE HVAC SYSTEM SOLUTIONS

SELF-CONTAINED | ROOFTOPS | COILS | CONDENSING UNITS

AIR HANDLERS | WATER-COOLED CHILLERS | AIR-COOLED CHILLERS

MODULAR CENTRAL PLANTS | SITELINE BUILDING CONTROLS

UNIT HEATERS | FAN COILS | AIR PURIFIERS | WATER SOURCE HEAT PUMPS

VARIABLE AIR VOLUME UNITS | UNIT VENTILATORS



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