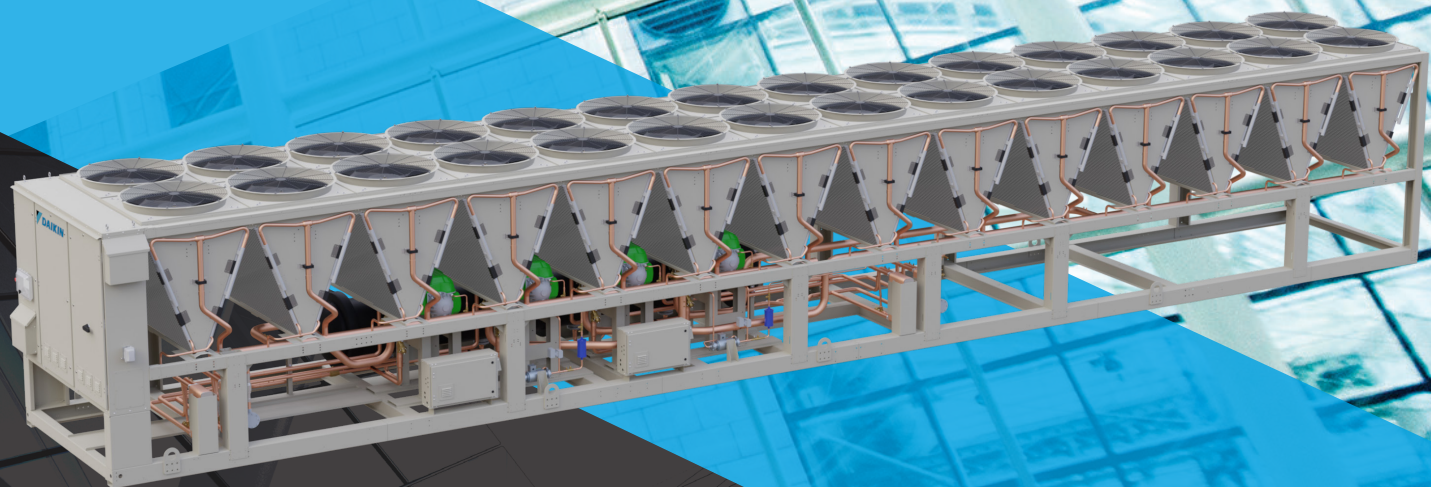


PATHFINDER[®] AWM

AIR-COOLED MAGNETIC BEARING CHILLER



- 400 - 600 TONS COOLING (DATA CENTER COOLING)
- LOW-GWP R-515B OR R-1234ze(E) REFRIGERANT

MEET YOUR MATCH FOR EFFICIENCY, SOUND AND SIZE



Model AWM chillers are an ideal solution for meeting low-GWP refrigerant requirements and optimized for low GWP HFC/HFO and Ultra-Low GWP HFO refrigerants R515B and R1234ze(E). Designed to align with evolving regulations and sustainability goals, AWM provides high efficiency without compromising performance. With premium energy efficiency and flexible refrigerant design supports compliance with current and future building codes, making it a smart, future-ready choice for eco-conscious cooling. AWM provides **industry-leading efficiency, reduced maintenance requirements and optimized performance** for data center cooling applications up to 600 tons.

CERTIFICATIONS



*Configurations available outside of AHRI ACCL Certification Program Scope

PERFORMANCE

- Heating and cooling
- 400 - 600 tons cooling
- R-515B/R-1234ze(E) Refrigerant
- Over 25% improvement in full load efficiency
- Over 15% (~16%) improvement in full load kW

FEATURES

- > ECM Fans
- > MicroTech® Unit Controller
- > RapidRestore® and Fast Loading technology

LINKS:



Video



Installation & Operation Manual

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Environmentally Friendly

Model AWM chillers are an environmentally friendly air cooled chiller solution, combining high efficiency, low-GWP refrigerant compatibility, and advanced technologies like variable speed drives and ECM Fan Motors. These features reduce energy consumption, lower greenhouse gas emissions, and support sustainable building practices. Optimized for data center applications, AWM delivers reliable performance while helping facilities meet environmental and regulatory goals.



Low GWP Refrigerant

Model AWM chillers are built to meet today's low-GWP refrigerant needs, offering compatibility with R-515B an A1 classified refrigerant, or R-1234ze(E) an A2L classified refrigerant. Engineered to align with evolving regulations and sustainability targets, AWM delivers high efficiency without sacrificing performance. Its adaptable design ensures compliance with current and future refrigerant standards, making it a smart, future-ready choice for environmentally focused operations.

Industry-Leading Efficiency

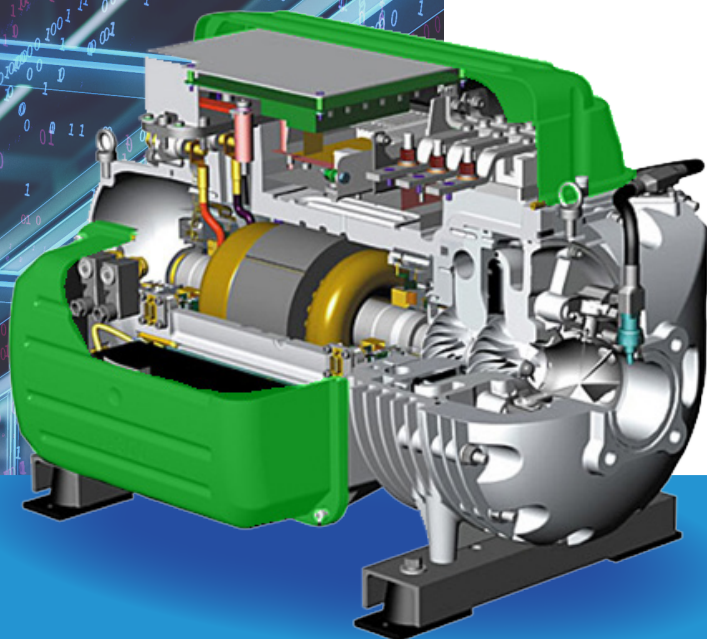
With a full load EER that exceeds the highest **ASHRAE 90.1 Path A Full Load efficiency standard by more than 80%**, **Model AWM** contributes to lower Annualized MLC as outlined and required by ASHRAE 90.4 for efficient data center design. Magnetic bearing compressor technology removes friction and eliminates the need for oil, reducing mechanical losses while improving overall system efficiency and enabling more stable, consistent performance across fluctuating load conditions. This results in up to 25% greater full load efficiency than traditional screw chillers.



MAGNETIC BEARING COMPRESSOR

Experience the next evolution in air-cooled chillers with the new model AWM featuring magnetic bearing compressor technology. This unites Daikin Applied's renowned air-cooled chiller platform with a **friction-free, oil-free, magnetic bearing compressor package**.

The result is a chiller designed for industry-leading efficiency, low maintenance and superior longterm savings in data center applications.

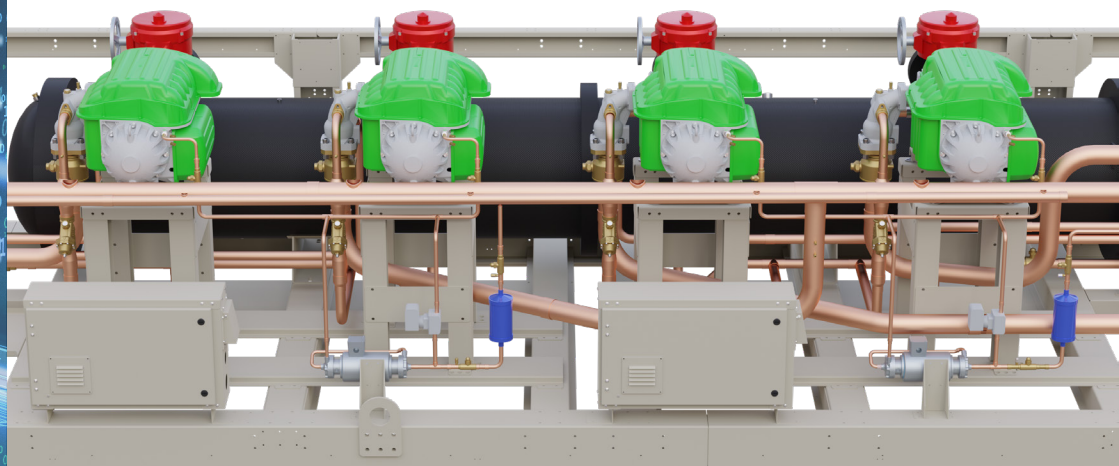


Benefits of Magnetic Bearing Compressors

Optimized Energy Use: Friction-free magnetic bearings improve efficiency across varying loads, supporting energy-sensitive environments like data centers.

Consistent Heat Transfer: Oil-free operation eliminates fouling, maintaining peak heat exchanger performance over the life of the system.

Precision Capacity Control: Variable speed operation delivers tight temperature control to support critical cooling demands.



RAPIDRESTORE[®]

Following a power loss event, Model AWM has the best solution in the industry with RapidRestore. Using RapidRestore, AWM surpasses other chillers' **quick start-up and fast loading** abilities in record times.

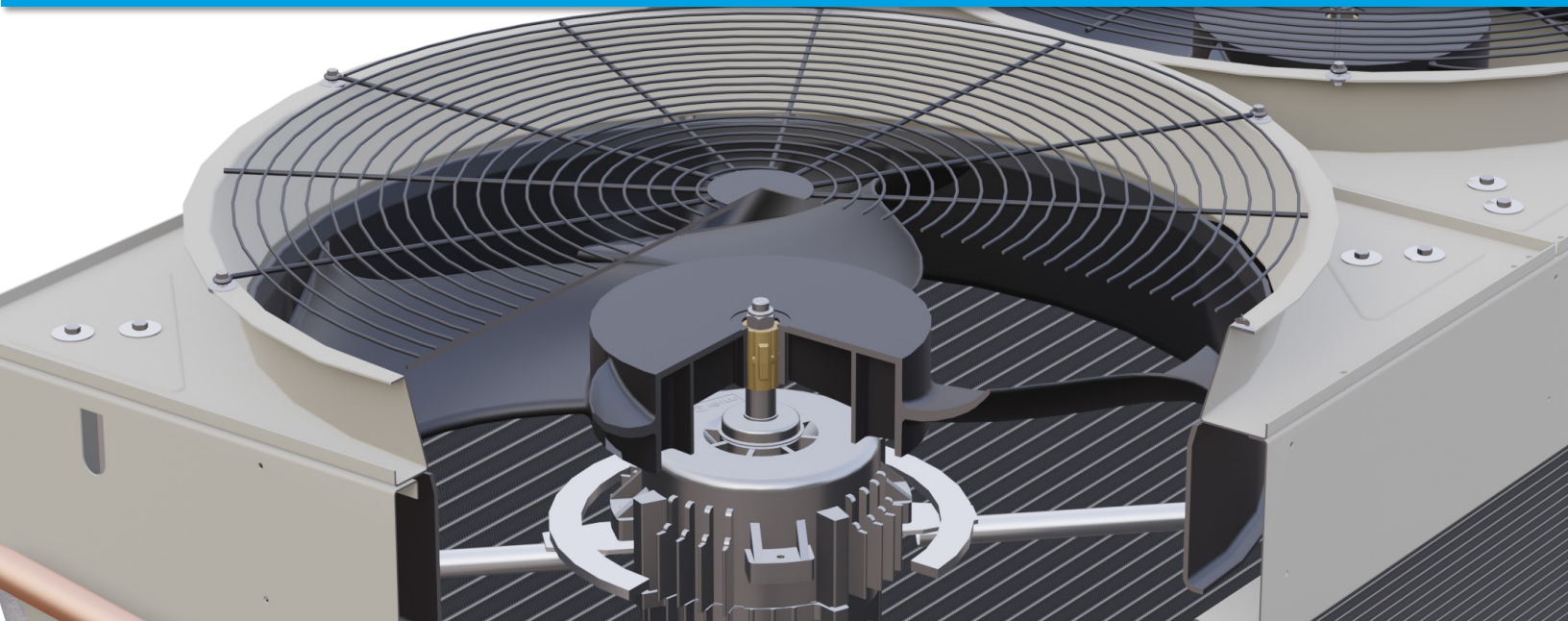
ECM FAN MOTORS

Daikin's electronically commutated motors (ECM) are advanced fan motor technologies that combine a **permanent magnet** (PM) rotor with integrated variable speed control to deliver precise, efficient airflow. Enabling real-time speed adjustments based on system demand.

This approach reduces mechanical losses, improves reliability, and minimizes maintenance requirements. Daikin ECM motors operate on 3-phase power and can integrate with building control systems to optimize performance dynamically, delivering up to **15% fan energy savings** compared to conventional motor and belt-driven configurations.

In applications such as data centers, where uptime and efficiency are essential, Daikin ECM fan motors provide a distinct advantage. The ability to precisely modulate airflow supports consistent temperature control across fluctuating load conditions, helping protect sensitive equipment and reduce the risk of hot spots.

Improved energy performance contributes to lower operating costs and supports sustainability goals, while the simplicity of a direct drive design enhances reliability and reduces downtime. This makes ECM-equipped air chiller units well-suited for mission-critical environments, while remaining effective across a wide range of commercial and industrial applications.



FLOODED EVAPORATOR

Daikin's flooded evaporator design is engineered to maximize heat transfer and overall system efficiency within the AWM air-cooled chiller. By maintaining optimal refrigerant coverage across the heat exchange surface, the system operates with **greater consistency** and **stability** in magnetic bearing chiller applications.

This approach allows the chiller to absorb heat more effectively, **reducing the workload** on the compressor and **improving overall performance**. With less internal resistance and more efficient refrigerant movement, the system operates at more favorable conditions, which directly contributes to energy savings.

The result is a highly efficient, dependable solution that supports lower operating costs while delivering consistent cooling performance across a wide range of conditions.



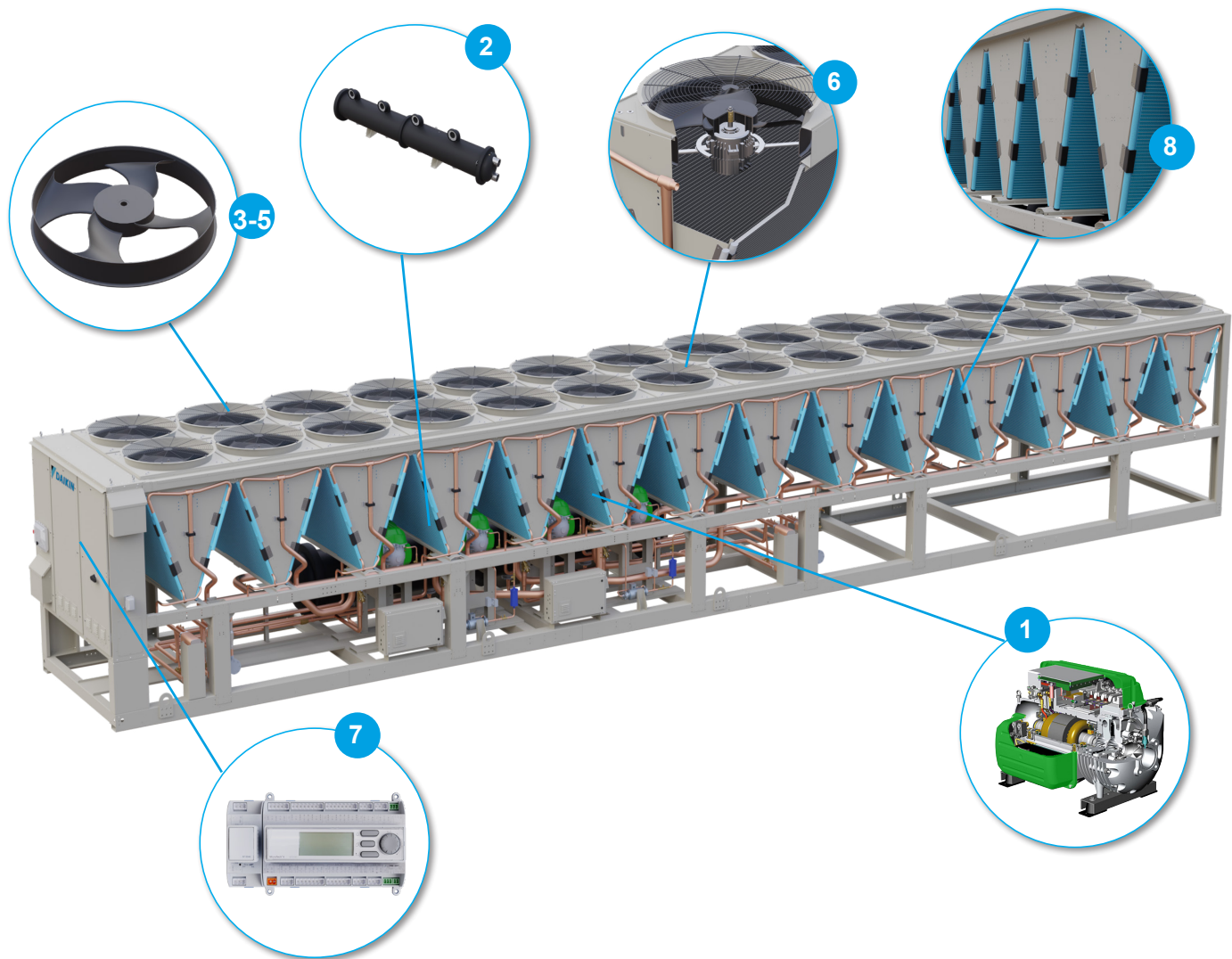
DESIGNED FOR DATA CENTER SOLUTIONS

Designed to meet the demanding requirements of modern data centers, this air-cooled chiller combines configurable performance, advanced free-cooling capabilities and magnetic bearing compressor technology to deliver reliable, energy-efficient operation.

The integrated closed-loop free-cooling system harnesses cool outdoor air to reduce compressor workload while helping **eliminate the need for glycol beyond the unit**, minimizing contamination risk and supporting efficient operation in colder climates.

Paired with a friction-free, oil-free magnetic bearing compressor design and flexible system configurability, AWM provides **industry-leading efficiency, reduced maintenance requirements and optimized performance** for mission-critical cooling applications up to 600 tons.





1 MAGNETIC BEARING COMPRESSOR:
Designed for industry-leading efficiency, low maintenance and superior long-term savings in data center applications.

2 FLOODED EVAPORATOR: Optimizes refrigerant heat transfer performance in magnetic bearing chillers.

3 HIGH EFFICIENCY FAN MOTOR:
Optional Fan Motor: Options for fixed speed and fully variable speed EC fan motors increase efficiency and sound levels with EC motors yielding much quieter operation as ambient temperatures fall.

4 COMPOSITE FAN: Rivetless, fiberglass composite design with integrated shroud design won't degrade or corrode over the lifetime of the unit.

5 OPTIONAL REDUCED SOUND MODE:
Reduces fan speed for quieter day/night operation. Enable/disable via time schedule to optimize for best performance or lowest sound.

6 ENHANCED FAN DECK:
Allows variation of the footprint and efficiency of the unit independent of the capacity required.

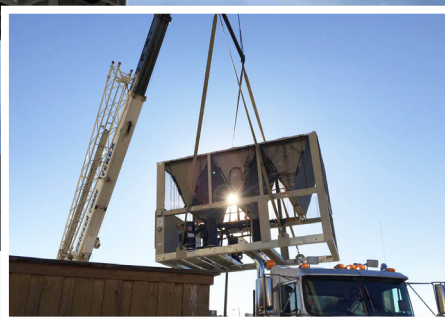
7 MICRITECH® UNIT CONTROLLER:
Monitors unit operating status, provides fault protections and intuitive setpoint adjustments. BACnet® or Modbus® data communication options provide easy and affordable integration into a building automation system (BAS) of choice.

8 EPOXY COATED COILS:
Industry-leading corrosion resistance and reliability, ideal for coastal and industrial applications. Rated for 10,000 hours of ASTM B117-90 salt-spray testing and coil-related maintenance is reduced. All-aluminum construction resists galvanic corrosion and supports efficient, long-lasting performance.

AIR-COOLED CHILLERS

COMPLETE, ULTIMATE FLEXIBILITY

Chillers make cold water or water/glycol fluid mixture to cool buildings or processes. An air cooled chiller rejects heat absorbed from the building or process directly to the outdoor air using refrigerant to air coils and fans that blow outdoor air directly over those coils.



APPLICATIONS

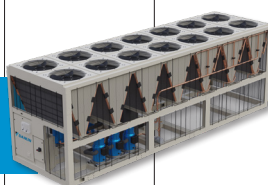
- ▶ *DATA CENTERS
- ▶ HEALTHCARE
- ▶ OFFICE BUILDINGS
- ▶ HIGHER EDUCATION
- ▶ HOSPITALITY

NAME/MODEL:

TRAILBLAZER®

AGZ
Scroll compressor

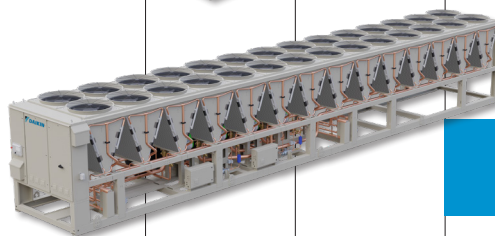
30-230 tons



OIL-FREE

*AWM
Magnetic bearing compressor
*FOR DATA CENTERS ONLY

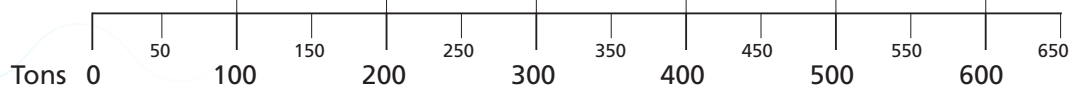
400-600 tons



PATHFINDER®

AWV
Screw compressor

100-565 tons



MAINTAIN AND REPAIR

PROTECTIVE MAINTENANCE SERVICES

[LEARN MORE](#)



RTU 12

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**

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**

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**

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**



LEARN MORE



RENTAL SOLUTIONS

KEEPING YOU UP AND RUNNING

[LEARN MORE](#)



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

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.

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

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

ROOFTOPS | HEAT PUMPS | CONDENSING SYSTEMS | COILS
SELF-CONTAINED | CONNECTED BUILDING CONTROLS | AIR HANDLERS
UNIT HEATERS/FAN COILS | VARIABLE AIR VOLUME
WATER SOURCE HEAT PUMPS | UNIT VENTILATORS
WATER-COOLED CHILLERS | MODULAR SOLUTIONS
AIR-COOLED CHILLERS



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LEARN MORE AT
DAIKINAPPLIED.COM

