

# REBEL® DPS

PACKAGED ROOFTOP SYSTEM WITH HEAT PUMP TECHNOLOGY  
AND LOW-GWP R-32 REFRIGERANT



- MODEL DPS
- 3 TO 31 TONS (UP TO 12,500 CFM)
- R-32 REFRIGERANT

# ADVANCED TECHNOLOGIES TO PROPEL PERFORMANCE AND SAVINGS



Experience industry-leading performance and climate comfort with the Rebel rooftop system. Featuring options up to 31 tons, Rebel's heat pump operates in temperatures as low as -10°F. This enables year-round heat pump use, dramatically reducing fossil fuel reliance and achieving a smaller carbon footprint. And by utilizing low-GWP R-32 refrigerant, Rebel delivers exceptional results without compromising performance, seamlessly aligning with environmental initiatives.

Engineered for exceptional efficiency, Rebel delivers up to 22.7 IEER and 55% savings above ASHRAE standards. This minimizes building energy consumption and actively supports LEED and other green building certifications. Plus, with a complete system payback in under two years, it provides substantial cost-savings.

To provide uninterrupted comfort, Rebel prioritizes serviceability. Its cabinet configurations are engineered with features for faster, more efficient service visits, minimizing downtime and keeping your unit running seamlessly for continuous comfort and optimal performance.

## CERTIFICATIONS



Member of  
**BACnet**  
International



**AHRI CERTIFIED**  
www.ahridirectory.org  
Water-Cooled Water Chilling and  
Heat Pump Water-Heating Packages  
AHRI Standards 350/350 and 551/551



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## PERFORMANCE

- Cooling and heat pump
- 3-31 tons
- Up to 12,500 cfm
- Low-GWP R-32 Refrigerant
- 22.7 IEER

## LINKS:



[Video](#)

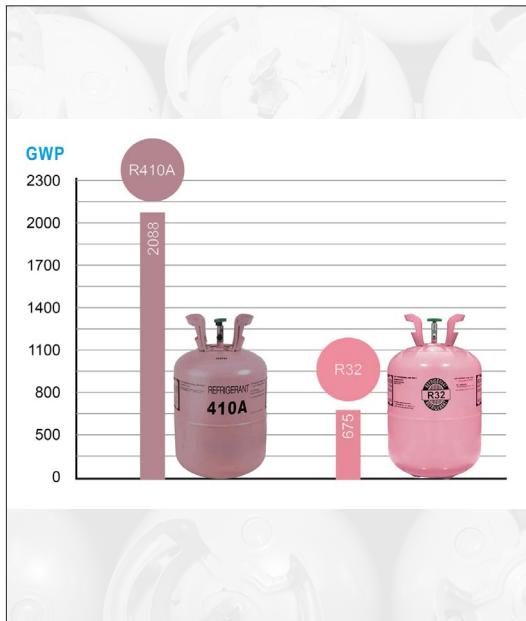
## Environmentally Friendly

Rebel's heat pump technology uses electricity to move heat, rather than generating it through gas-powered heating. This results in lower carbon emissions and a more environmentally sustainable heating and cooling solution for various climate regions and seasons. So much so, that many government financial incentives are available to encourage adoption of the technology.

The Rebel heat pump system utilizes advanced variable speed compressors and electronic commutated motor fans to enable precise temperature control while minimizing energy waste to ensure optimal performance, sustainable operation, and lessen impact on your building's financial budget.



## Low GWP Refrigerant



With a GWP of 675, R-32 contributes less to global warming potential compared to other refrigerants like R-410A. Because of R-32's excellent thermodynamic performance characteristics, an R-32 system could have up to 40% less charge than R-410A in certain applications, meaning you could reduce refrigerant usage in the equipment and potentially also reduce quantities leaking to the environment.

Being a pure, single-component refrigerant, R-32 can't lose its composition like a blended refrigerant and is well suited to retain its quality over time. It can be topped off and recharged in the field in both liquid and gas phases; because the composition doesn't change, it's easy to clean and reuse on site. R-32 can be reclaimed and recycled with a simple cleaning process, as compared to blends with less stable HFOs that must be distilled to their pure compounds and then remixed.

Compared to R-410A and R-454B, R-32 has several advantages when it comes to Life Cycle Climate Performance (LCCP). Its lower leakage and service charge result in reduced emissions during use, contributing to a lower overall LCCP. Additionally, R-32's ease of reclamation comparatively showcases lower potential for overall emissions at the end of its lifecycle.

## Industry-Leading Performance

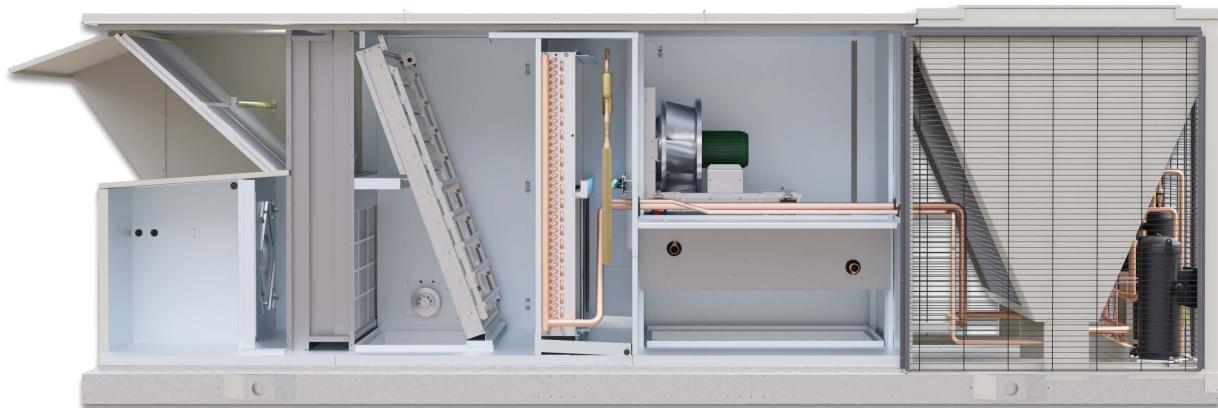
If you are a commercial building owner, facility manager, or specifying engineer with demanding rooftop performance criteria, you need the best performance. With a Daikin Rebel rooftop system you'll experience outstanding energy efficiency, unwavering performance, low-audible sound, superior comfort control and dehumidification, while benefitting your bottom line from substantial cost-savings.

Producing an astounding 22.7 IEER and 55% energy savings above ASHRAE's 90.1 standard, Rebel generates efficiencies previously unachievable in a commercial rooftop system. Rebel's exceptional performance makes it ideal for any low-rise commercial building like schools, offices, grocery, or retail stores, as well as 100% outdoor air, VAV with duct pressure control, single-zone VAV, and VRV applications.

Up to **22.7** IEER

## **DOAS OR ECONOMIZER**

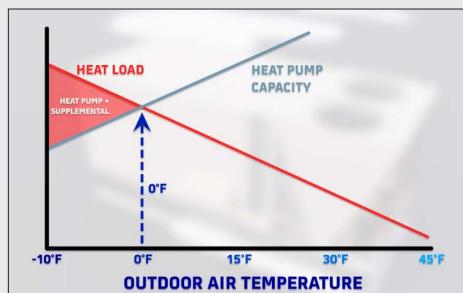




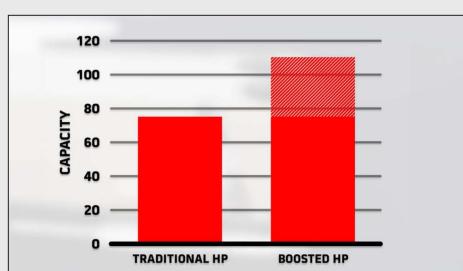
## SUSTAINABLE HEAT PUMP TECHNOLOGY WITH HIGHER CAPACITY FOR COLD CLIMATE APPLICATIONS

### Direct Expansion (DX) Heat Pump

The Rebel HVAC Rooftop System offers the flexibility of both heating and cooling capabilities. By utilizing direct expansion heat pump technology, this system can efficiently provide heating during colder months and cooling during warmer months. This versatility eliminates the need for separate heating and cooling systems, making the Daikin Rebel an ideal choice for various applications in varying climates and locations.



Conventional heat pump technology struggle to meet building loads in cold climates—often requiring large, inefficient electric heaters to provide supplemental heat. That's why we set out to develop a new generation of heat pump technology that delivers high levels of performance in the coldest of conditions. As outdoor temperatures decrease, a typical building's heating demand increases. Simultaneously, as the outdoor temperature decreases, the heat pump's output capacity decreases forcing the remaining heat load to be supplemented by a gas or electric heat source.



Unlike traditional heat pumps that have limited heating capacity at low ambient temperatures, Daikin's inverter compressor technology overcomes this challenge by boosting the compressors heating output on the coldest days. This allows our heat pumps to satisfy building demand during colder conditions in turn reducing the capacity and run time of supplemental heat, providing a more efficient solution that lowers the electrical load and produces fewer carbon emissions when compared to electric resistance heating.

Typically, replacing gas equipment with electric alternatives can double a building's electrical needs, leading to higher installation costs. Rebel tackles this challenge by leveraging existing wiring and isolating new loads on smaller circuits, reducing installation costs. Additionally, Rebel offers configurable auxiliary electric heat limits and emergency backup controls, further minimizing peak electrical load.



## Energy Recovery

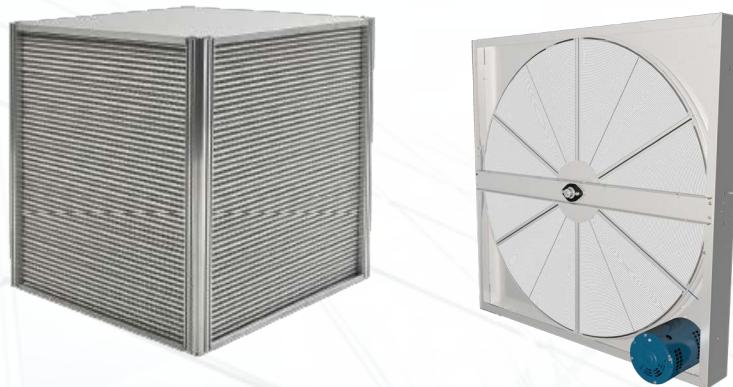
By incorporating an energy recovery wheel or fixed plate heat exchanger energy recovery system, Rebel can help improve overall energy efficiency by recovering and reusing energy that would otherwise be wasted. This can result in significant energy savings, particularly for facilities with high heating or cooling demands.

**Energy Savings:** Improves overall energy efficiency by recovering and reusing energy that would otherwise be wasted

**Equipment Savings:** Allows for a 30% downsize of the cooling system

**Eco Friendly:** Lower energy consumption translates to reduced greenhouse gas emissions

**Comfort:** Maintains a consistent indoor temperature and air quality while helping regulate humidity levels to ensure fresh air is supplied to the building



## EC Fan Motors

Compared to traditional AC fan motors, EC motors deliver significantly higher efficiency and substantial energy cost savings. This is attributed to two key innovations: permanent magnets which eliminate energy losses associated with generating magnetism, and advanced electronic controls that enable direct energy conversion and variable speed operation. These technologies work together to create a solution that minimizes energy waste and reduces the cooling load.

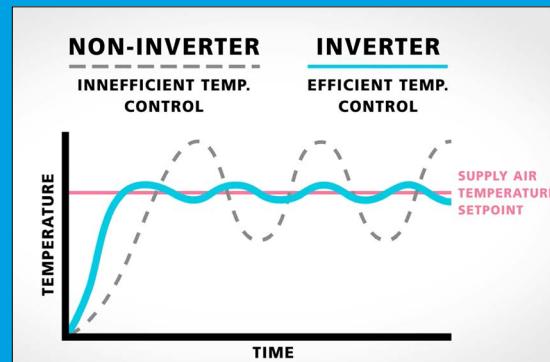
Additionally, ECM fans require minimal maintenance. Their technologically advanced design eliminates the need for mechanical maintenance on belts and bearings, contributing to reliable performance throughout their extended lifecycle.

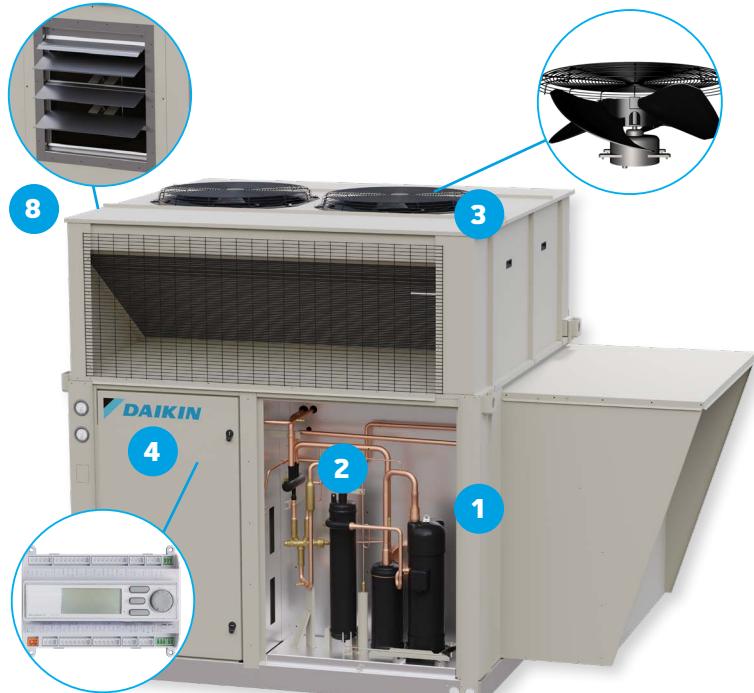


Up to  
**70% LESS**  
Energy Consumption\*

## Inverter Scroll Compressors

Daikin inverter compressors are designed to operate at variable speeds, making them energy-efficient. Unlike traditional compressors that operate at fixed speeds, inverter compressors can adjust their power output according to the cooling requirements. By continuously regulating the compressor's speed, they ensure that only the required amount of energy is consumed, resulting in significant energy savings. This not only lowers your electricity bills and reduces your carbon footprint, but it also delivers precision air temperature and humidity control, making it the environmentally friendly choice.





## B CABINET

7-17 tons

### 1 VARIABLE SPEED INVERTER SCROLL COMPRESSOR

- Optimum comfort via modulating capacity control
- Exceptional part-load efficiencies
- Improves comfort with outstanding discharge air temperature control

### 2 VARIABLE SPEED HEAT PUMP

- More economical than gas heat during winter
- Back-up heat options for extreme cold weather and defrost operation
- Greater comfort control via modulating capacity
- Dual fuel gas heat option maximizes heat pump use by running simultaneous gas heat to meet demand at low ambients

### 3 DIRECT-DRIVE VARIABLE SPEED ECM OR VFD FAN MOTORS

- Increase system reliability and efficiency by eliminating belts and bearing setscrews
- Increase energy savings at light-load conditions
- Superior fan efficiencies with backward-inclined design
- Supply and exhaust flow measuring options

### 4 MICROTECH® UNIT CONTROLLER

- Simplified BAS integration with BACnet® or LONMARK® communications
- Improved serviceability with intuitive unit diagnostics

### 5 ELECTRONIC EXPANSION VALVES

- Deliver optimum control of superheat
- Prevent liquid refrigerant compressor slugging
- Increase efficiencies by lowering head pressure

### 6 HINGED ACCESS DOORS

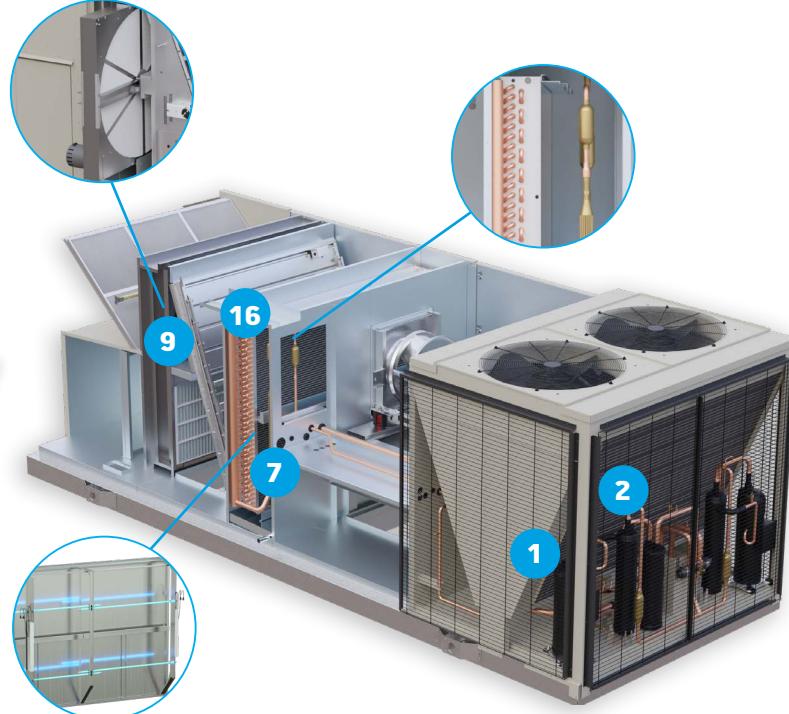
- Optional full length, lockable door handles
- Simple drain pan access

### 7 UV LIGHTS:

- Reduce airborne pathogens for improved IAQ
- Minimize maintenance frequency by reducing microbial growth

### 8 SIDE DISCHARGE OPTION:

- Increased design flexibility for tight spaces and simplified maintenance



## C CABINET

16-31 tons

### 9 100% OUTDOOR AIR OPTION

- Low-leak dampers, double-wall blades, edge and jam seals improve energy savings
- Efficient modulating compressor, hot gas reheat and 100°F temperature rise furnace
- Up to 80°F electric heat temperature rise

### 10 ENERGY RECOVERY

- Recovers exhausted heat and moisture energy
- Up to 40% more energy savings
- Unitary construction quickens service
- Reduces commissioning time with single-point power connect
- Simplifies operation with integrated unit control

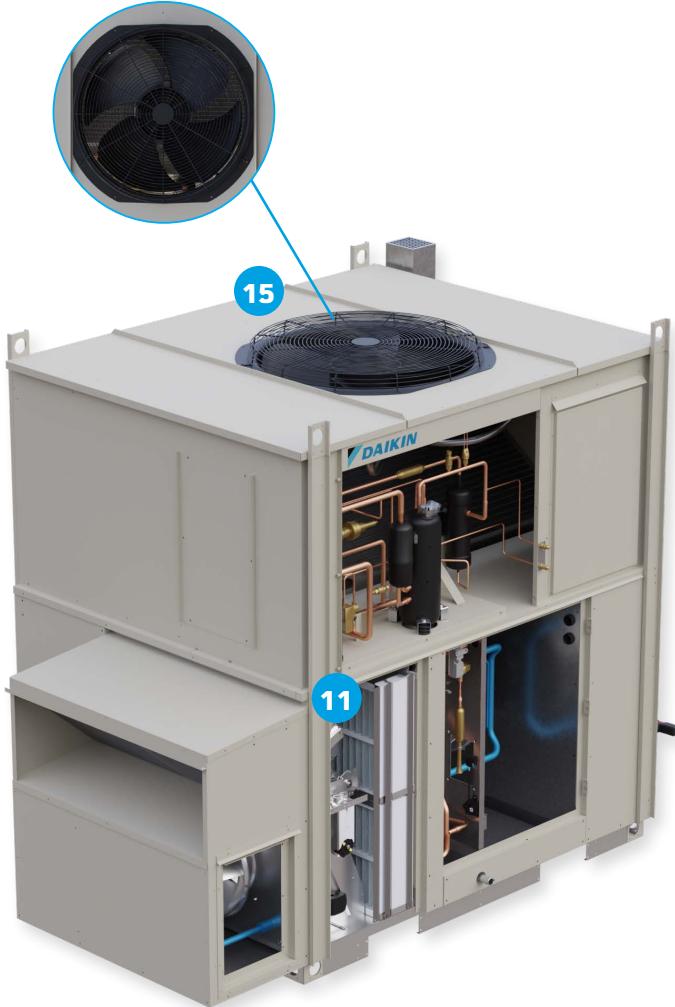
### 11 2" AND 4" SLIDE-OUT FILTER RACKS

- Quick serviceability with easy filter change-outs
- MERV 8 prefilters, MERV 11-14 after-filters
- 4" factory-installed filters

### 12 ROOF-MOUNTED CONDENSER:

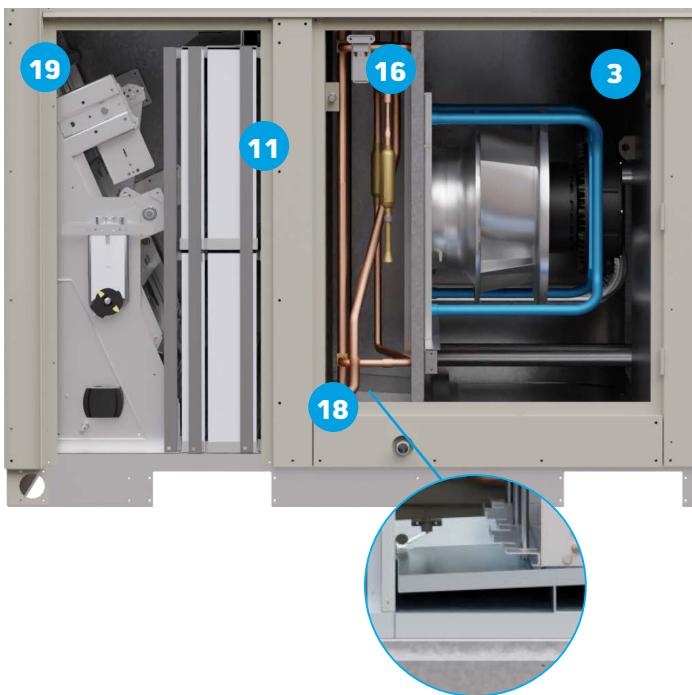
- Provides industry leading footprint

# FEATURES & BENEFITS



## A CABINET

3-6 tons



### 13 SUPPLEMENTAL HEAT

- Gas furnace with up to 12:1 turndown
- Electric heat with SCR
- Hot water heat

### 14 DOUBLE-WALL FOAM CABINET

- Provides for fiber-free air stream
- Energy efficient R7 and R13 foam-injected panels
- Optional stainless steel liners for corrosion protection

### 15 LOW AUDIBLE CONDENSER FAN

- Low ambient energy savings with variable speed ECM motor(s)
- Fully modulating head pressure control

### 16 DEHUMIDIFICATION CONTROL

- Free heat using modulating hot gas reheat
- Tight humidity control without over-cooling the space
- Maintains desired indoor dew point temperatures
- Two point control: Leaving coil (compressor control setpoint) and leaving unit (hot gas reheat coil control setpoint) provides simultaneous control over humidity and temperature

### 17 LOW RADIATED NOISE

- Noise dampening enclosed compressor
- Quiet ECM or VFD fan motors
- Reduced motor speed and harmonics at part-load

### 18 STAINLESS STEEL, DOUBLE-SLOPED DRAIN PAN

- Prevents corrosion and standing water for higher IAQ
- Overflow protection switch
- Simple cleaning with hinged door access

### 19 ECONOMIZER

- Free cooling when outdoor conditions prevail
- Meets local requirements for fresh air provision
- Integrates operation with mechanical cooling
- Increases efficiency with demand control ventilation
- Superior ventilation control with outdoor air monitor

### 20 OUTDOOR AIR DAMPER CONTROL

- Building pressure override automatically opens dampers
- Monitor ensures precision airflow
- Efficient integrated operation with mechanical cooling
- Maintains ventilation with demand control
- Superior ventilation control with outdoor air monitor

### 21 DECARBONIZATION:

- Dedicated electric heat power circuit to reduce retrofit challenges
- Emergency/auxiliary electric heat controls to limit MCA/MROPD and lower installed cost

### 22 R-32 REFRIGERANT:

- Environmentally-friendly refrigerant with a low GWP of 2 and Group A2 safety classification



## EDUCATION

By delivering precision temperature and humidity control, Rebel fosters optimal learning environments where comfort and productivity thrive. Additionally, its capability for DOAS applications and pre/post MERV filtration ensure fresh, healthy air for students and staff.



## GOVERNMENT

For government facilities seeking to prioritize sustainability and cost-effectiveness, Rebel offers compelling advantages. Delivering up to 20.6 IEER, Rebel significantly minimizes building energy consumption which translates to lower operating costs and actively contributes toward LEED certification. Going beyond efficiency, Rebel aligns with environmental initiatives and regulations through its use of low-GWP R-32 refrigerant.



## HEALTHCARE

With features and benefits designed to optimize indoor air quality and maximize occupant comfort, Rebel helps maximize patient health outcomes for healing. With precision temperature control tailored for comfort, Rebel serves as an effective solution for medical office buildings, outpatient clinics, hospitals, nursing homes, and other healthcare facilities.



## MANUFACTURING

Withstanding the vibrations and shockwaves common in manufacturing processes, Rebel's durable cabinet construction protects vulnerable components from environmental stresses, ensuring both performance and stability. For processes demanding precise temperature control, Rebel helps create and maintain an optimal indoor environment.

# ROOFTOP SYSTEMS SOLUTIONS



NAME/MODEL:

REBEL®  
DPS  
Commercial



3-31 ton

REBEL APPLIED™  
DPSA  
Packaged

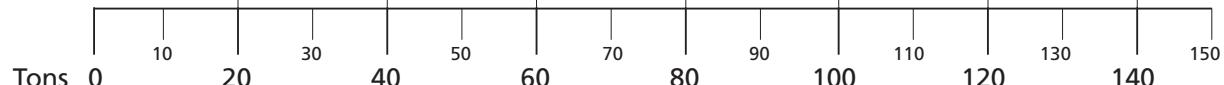
20-150 ton  
(Larger sizes available mid-2024)



MAVERICK® II  
MPS  
Commercial



30-50 ton



LEARN MORE AT

**DAIKINAPPLIED.COM/PRODUCTS/ROOFTOP-SYSTEMS**



## MAINTAIN AND REPAIR

PROTECTIVE MAINTENANCE SERVICES

[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**

### 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**





## PARTS & SUPPLIES

OEM AND GENERIC AFTERMARKET SOLUTIONS

[LEARN MORE](#)



### 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)





# 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

### 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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**DAIKINAPPLIED.COM**