



REBEL APPLIED™ PACKAGED ROOFTOP

A REBEL BY NATURE. A DIFFERENTIATOR BY CHOICE



Model DPSA/DFSA
20 to 52 tons



LEARN MORE AT [DAIKINAPPLIED.COM](https://www.daikinapplied.com)

ROOFTOP PERFORMANCE THAT RISES ABOVE

Rebel Applied rises above its class with industry-leading high-performance design, maximum energy efficiency, lowest lifecycle cost, and unlimited configurability. Offering the latest in modular cabinet design flexibility, Rebel Applied is the ideal rooftop solution for both new construction and retrofit applications.

Highest Performance Design

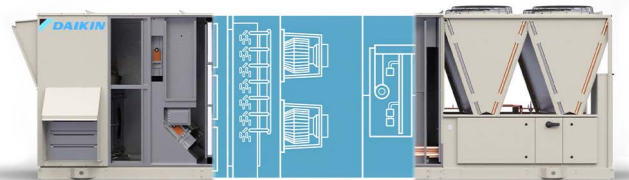
Capitalize on high-performance cabinetry featuring a Class 6 leakage rating at +/- 6" of static pressure (based on ASHRAE Standard 111) and a thermally broken design that eliminates energy-robbing direct conduction paths.

Maximum Energy Efficiency

Achieve superior energy savings with superior energy efficiency. With EERs exceeding 11.0 and IEERs up to 20.0 by incorporating the latest technologies, such as inverter scroll compressors, and variable load controls that optimize energy efficiency.

Unlimited Configurability

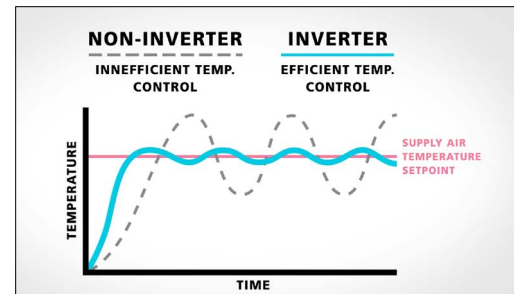
Gain unprecedented configuration flexibility to fit new applications or retrofit applications, replacing Daikin and competitor rooftop units with Rebel Applied's no transition curb, modular design that is up to 37% shorter and 30% lighter than legacy applied rooftops.



Lowest Total Lifecycle Cost

From installation through lifecycle maintenance, save money, time, and energy by qualifying for utility rebates with factory pre-commissioned controls, refrigeration monitoring sensors, ECM fans that eliminate belt/bearing maintenance, and dedicated equipment controls for remote monitoring.

Inverter Scroll Compressors



- High-Efficiency Inverter Compressors deliver astounding part load efficiencies as high as 20 IEER
- Smooth inverter based modulating control provides constant temperature and humidity control
- Modulating Inverter Compressor Technology dynamically responds to match the load of a building.
- Modulating Inverter Compressors eliminate the problematic control with the On/Off cycles of staged compressors, by delivering a constant, controlled amount of dehumidification to the space.

PUTTING THE IQ IN IAQ

Rebel Applied IAQ solutions are designed to deliver quality indoor air with sustainable, energy efficient technologies.

Building Contaminant Solutions

Occupant and building material emissions are a common IAQ issue for buildings. CO2 generated by space occupants is a common driver of ventilation rates and is one of the most common building contaminants to be managed. Off-gassing from furniture, building materials and the like introduces volatile organic compounds, like formaldehyde, into the air. Daikin technologies for building contaminants focus on ventilation that maximizes effective clean air changes in the space with the lowest energy consumption.

SORBENT VENTILATION TECHNOLOGY (SVT)

SVT is tested in accordance with ASHRAE 145.2 to remove CO2, VOCs and other contaminants using sorbent filtration. When applied using ASHRAE 62.1's IAQ Procedure (IAQP), SVT provides cleaner air and reduces HVAC energy use by up to 30%.

Better Air: Promote better IAQ by removing building and occupancy related contaminants.

Retrofit Flexibility: Increase occupancy of served spaces without requiring increases in building infrastructure.

Energy Cost: Reduce outdoor air by up to 80% and save up to 30% in HVAC energy use.

Sustainability: By reducing HVAC energy use by up to 30%, SVT offers a sustainable decarbonization solution that reduces indirect carbon emissions while enhancing building air quality.

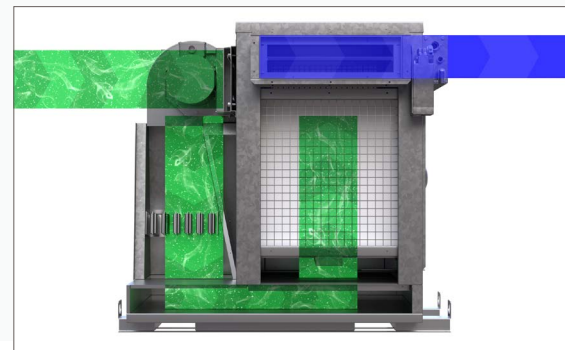
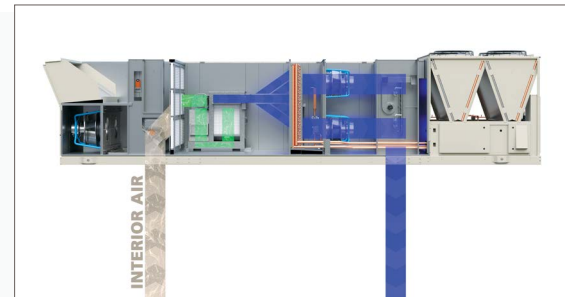


PHOTO-CATALYTIC-OXIDATION (PCO)

UVGI photons react with a Titanium Oxide (TiO2) mesh panel to create a powerful oxidizing agent called a hydroxyl radical. As the air passes through the UVGI powered catalyst, the radicals oxidize gaseous organic compounds such as odors and VOCs, reducing them to trace compounds, CO2 and H2O. PCO systems are ideal where ventilation loads are driven by non-occupancy related emissions like Casinos, Airports, and Office buildings.

Air Quality Sensing for IAQ Performance

IAQ SENSORS monitor indoor air quality in real-time and communicate with a building's BMS to deliver demand control ventilation based on the levels of CO2 and tVOC.

- Monitors Particulate Removal Performance with PM 0.5, 2, 4 and 10 sensing
- Monitors Air Cleaner Performance with tVOC and CO2 removal

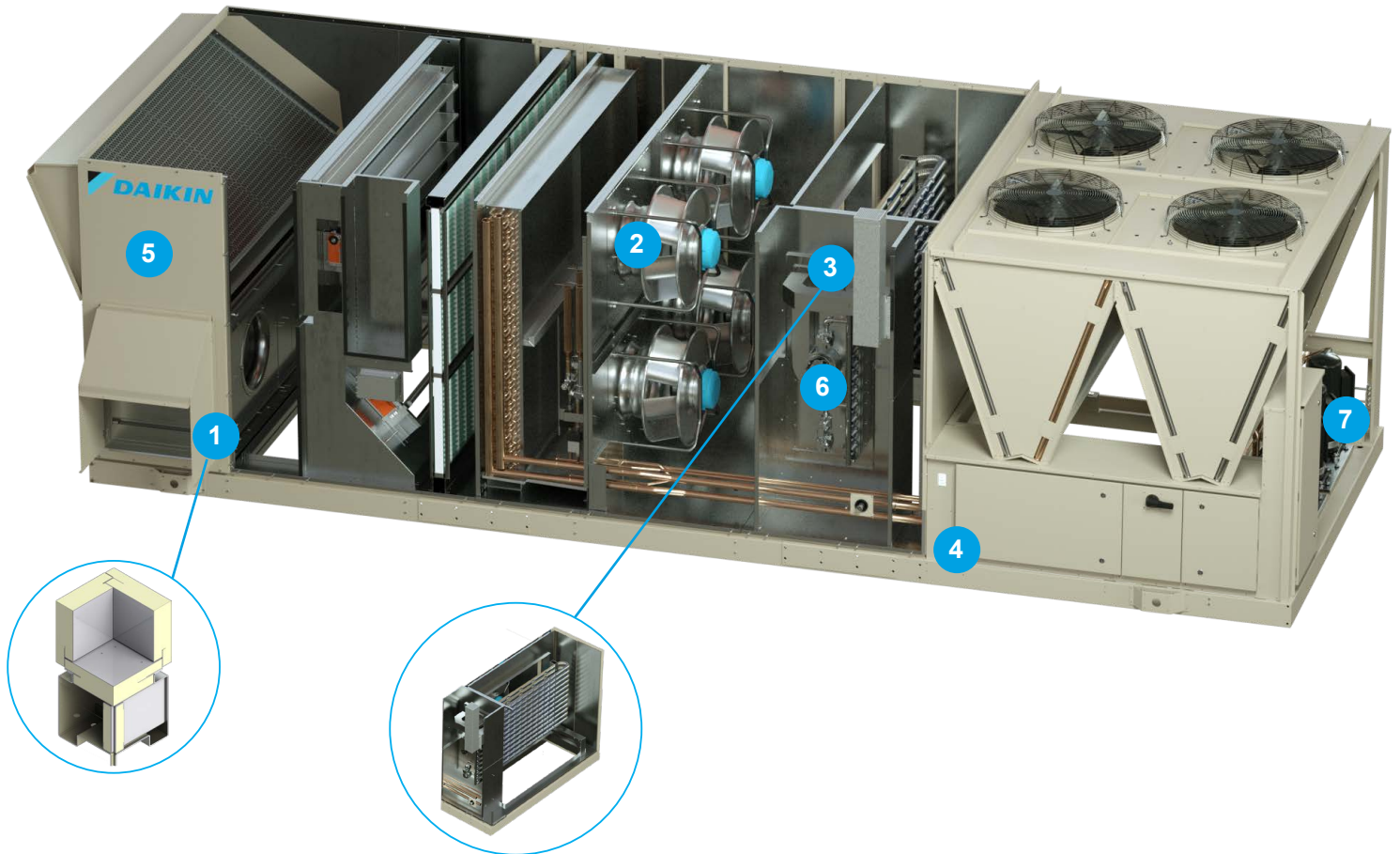
Pathogens

The COVID-19 pandemic has taught us to consider HVAC's role in pathogen spread and mitigation. Two of the technologies with the most known pathogen data are Ultra-Violet Germicidal Irradiation (UVGI) and high efficiency filtration.

FILTRATION: Rebel Applied has configurable filtration with cartridge filters up to MERV 16 and HEPA final filters. High efficiency filtration is the number one way to reduce infection risk of airborne pathogens.

ULTRA-VIOLET GERMICIDAL IRRADIATION: Factory-mounted UV lights are available in coil cleaning intensity to keep coils clean of harmful microbial growth or airstream disinfection intensity to deactivate airborne pathogens as they pass through the air tunnel.

CONSTRUCTION FEATURES & BENEFITS



1 THERMAL BREAKS: Eliminate energy-robbing direct conduction paths with integral panel thermal breaks.

LOW AIR LEAKAGE: Raise efficiency with a class-exclusive air leakage of <math><0.5\%</math> at design air flow and static pressure.

2 ECM FAN ARRAY: Eliminate fan belt and bearing maintenance costs while maximizing efficiency with modulating and redundant ECM fan arrays.

3 GAS HEAT: Increase energy savings and efficiencies with a 100°F temperature rise furnace that includes modulating options ranging from 5:1 to 100:1 turndown.

4 CONFIGURABLE DESIGN: Eliminate transition curbs and optimize serviceability and access with 4" incremental lengths that simplify retrofit applications.

5 R-13 CABINETRY: Save operational costs and improve IAQ with double-wall foam construction rated for applications up to 8" of static pressure; save maintenance time with quality piano hinged doors, each with a single lockable handle.

6 HEAT OPTIONS: Meet application and utility needs with options for gas, electric, hot water, and steam heat.

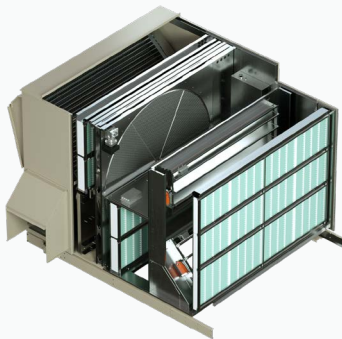
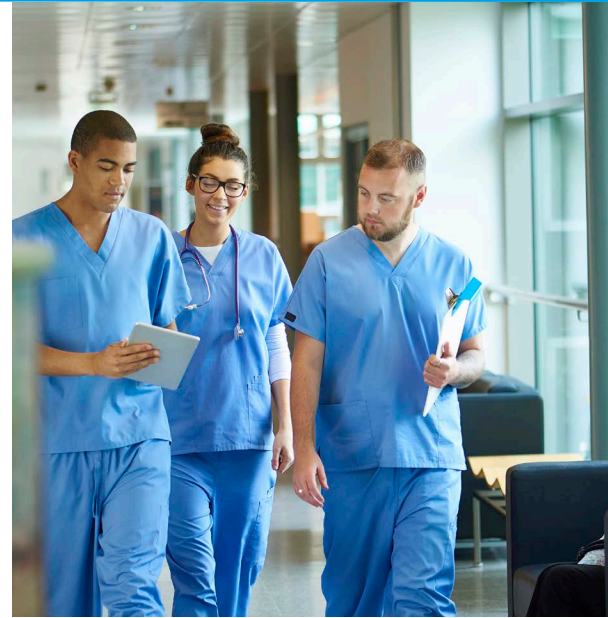
7 HIGH EFFICIENCY SCROLL COMPRESSORS: Reduce power consumption and increase discharge air temperature control to maximize operating efficiencies.

APPLICATION SOLUTIONS: Cater to requirements with feature-rich flexibility that includes backdraft dampers, sound attenuators, blenders, final filter sections, and more...

HEALTHCARE

Maximize patient health outcomes with flexible Indoor Air Quality features tailored for medical office buildings, outpatient clinics, hospitals, nursing homes, and other healthcare facilities:

- **UV LIGHTS** keep coils clean of harmful microbial growth.
- **ECM FAN ARRAYS** are designed for N+1 redundancy to prevent down time during service events.
- **STAINLESS STEEL LINERS** and **COIL CASINGS** promote equipment longevity and ease of cleaning.
- **DOUBLE-SLOPED STAINLESS STEEL DRAIN PAN** prevents standing, stagnant water.
- **MERV 14, 16, and HEPA FILTERS** provide options for final filtration.
- **HUMIDIFIER GRIDS** are factory installed and help optimize indoor humidity in dry climates to limit viral and bacterial activity.



Energy Recovery Wheel and Filtration

EDUCATION

Optimize learning environments with Rebel's extremely quiet operation and configurable outside air management components designed to bring in fresh, filtered, quality indoor air for students and faculty staff:

- **ENERGY RECOVERY WHEELS** are factory installed and lower the operating costs associated with the large percentages of outside air in education applications.
- **SOUND Baffles, ATTENUATORS,** and **CONDENSER FANS** provide quiet operation critical to learning environments.
- **OUTSIDE AIR MONITORING** measures flow to manage and ensure ventilation and direct feedback for optimized outside air control.
- **FILTRATION** options promote high Indoor Air Quality with filtration efficiencies ranging from MERV 8 to MERV 16.

OFFICE BUILDINGS

Gain class-leading efficiency with features designed to lower Rebel Applied's total lifecycle operating costs while ensuring a peaceful, comfortable, and more collaborative working environment:

- **DAIKIN BUILDING CONTROLS** provide remote monitoring and enhanced visibility to over 150 data points like filter pressure monitoring, energy management, and refrigeration service diagnostics help to manage operation and enhance serviceability.
- **ECM FAN ARRAYS** eliminate belt/bearing maintenance.
- **EFFICIENCY** matches site goals to maximize return on investment with efficiencies exceeding the 2023 minimums and allowing options for CEE Tier 1, 2, and 3 rebates.
- **SOUND Baffles, ATTENUATORS,** and **QUIET CONDENSER FANS** provide low audible operation critical to office working environments.



FOR MORE INFORMATION ABOUT OUR COMPLETE OFFERING OF HVAC SYSTEMS AND SOLUTIONS, VISIT DAIKINAPPLIED.COM TO FIND AN OFFICE NEAR YOU.