

# Direct Drive Blower Coil Case Study



## DISCOVER...

how IEC Direct Drive Blower Coils achieved energy efficiency and building automation renovation goals of a historical building in Salt Lake City, Utah.

Project: Hines Kearns Building | Product: Direct Drive Blower Coils | Location: Salt Lake City, Utah

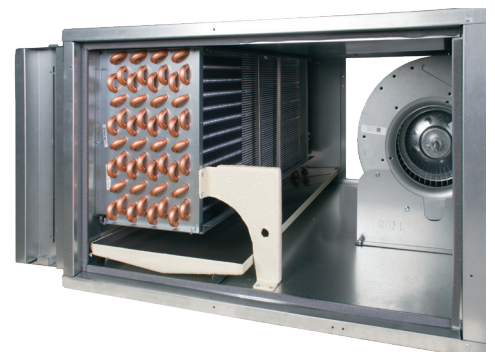


### THE CHALLENGE:

Built over 100 years ago, the Kearns Building stands as a historic office building in the heart of Salt Lake City's Business District. Initial renovations of the 10-story building were completed in 1991. However, changing business and tenant demands helped facilitate the latest renovations. The goal for this new renovation project was to install the latest HVAC, electrical, and plumbing technology while utilizing automation and energy efficient options. "This particular project was designed with efficiency in mind and versatility to accommodate future tenants and changing floor plans," explains J.D. Baranowski of Midgley-Huber, Inc.

### THE SOLUTION:

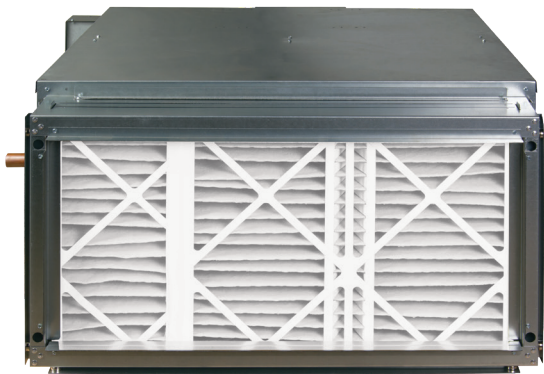
The upgraded HVAC system for the Kearns building incorporated IEC® (International Environmental Corporation) Direct Drive Blower Coil units. Direct Drive Blower Coils help reduce operating and maintenance costs by eliminating components associated with older belt-drive technologies. The Direct Drive models come standard with energy efficient EC (electronically commutated) Motors, providing more efficient airflow through variable speed programming. The EC Motors also feature a soft-start feature, reducing inrush current and providing quieter operation.



Energy Efficient | Quiet Operation | Less Maintenance | Extended Service Life

## Building Automation System Compatibility

The Kearns Building renovation team required IEC's Direct Drive Blower coils to tie into the new Building Automation System to maintain maximum comfort to each space and adjust air delivery throughout the day, based on occupancy. When the Building Automation System sensors detect a change is needed in temperature of the area, the System communicates to each IEC unit through a 0-10VDC proportional signal, telling the unit to adjust the fan speed level.



## Compact Design & Simple Service Access

Space was a challenge for this renovation due to the building's age. The height between floors was not as accommodating as newer buildings. Therefore, the smaller Direct Drive units (sizes 06-10) were able to fit within the limited space in the ceiling. The universal filter frame worked seamlessly in the small spaces by offering tool-free access from the sides and bottom for horizontal models, making filter changes quick and easy. For this project, engineers selected a 2" filter, however if they needed to change the size in the future, the universal filter frame fits 1", 2" and 4" sizes with minimal modifications.

## Product Selection Tools

Selecting the right blower coil units was critical to the design process. "The process from selection, to approval, to ordering and delivery was very smooth. The Ratings Program was used to make a preliminary selection based on the scheduled information. These selections proved that IEC could meet the design criteria from the engineer specifications. Next, the online configurator tool (EnCompass) was used to select all accessories and verify performance to match the heating and cooling loads as well as all necessary function", recalls Baranowski.

The team also utilized IEC's extensive online library of technical information, specifications, drawings and product options available for selection through the website and EnCompass.

"The IEC fan coils are rugged with superior quality, usually translating to higher cost, which was not the case when compared to competitors. The fit and function [of the direct drive blower coils] works great for new construction, renovations, and replacement in existing spaces," concluded Baranowski.



“ This particular project was designed with efficiency in mind and versatility to accommodate future tenants and changing floor plans. ”

– J.D. Baranowski  
Midgley-Huber, Inc.

To learn more about IEC Direct Drive Blower Coils, visit [iec-okc.com/products](http://iec-okc.com/products).

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