

Opening Doors for Sustainable Schools with VRF

HVAC Systems Are Linked to Environmental Impact

When K-12 schools account for 5% of commercial building energy consumption and accrue \$8 billion in utility bills,¹ eco-friendly solutions are a necessity. Fortunately, there's an option that makes your choice easier than ever: Toshiba Carrier VRF u-Series Systems.

What is

VRF?

VRF (Variable Refrigerant Flow) is a unique HVAC system that uses refrigerant and smart technology to heat or cool commercial spaces. It's easy to install, use and maintain—the entire system can be run from a central location. And, it's flexible and efficient; ideal for various project and facility types and buildings with a range of heating and cooling needs.

Whether you have a single school building or a large campus, Toshiba Carrier VRF u-Series Systems can help you create more comfortable spaces—with long-term, positive impacts on the environment.



Heat Recovery
MMYF-U*



Heat Pump
MMYH-U*

* Select sizes available as Elite Heat models

¹ Facility Executive. (2023). ESG and HVAC: Improving K-12 Schools.

² Oak Ridge National Laboratory. (2016). Evaluation of Variable Refrigerant Flow Systems Performance.

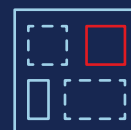
All-Electric Systems—A Smart Solution for Schools



Deliver up to **51% energy savings** compared to traditional systems.²



Heat and/or cool occupied spaces to **decrease energy consumption**.



Seamlessly integrate with current Building Automation Systems (BAS).

VRF Systems Provide Many Benefits for K-12 Schools



Superior Sustainability

Because Toshiba Carrier VRF u-Series Systems are fully electric, they are more eco-friendly than fossil-fuel-based systems. Occupancy

sensors can even be provided to automatically detect occupancy in a room and adjust the refrigerant and air flow accordingly—so you're only heating or cooling spaces in use.

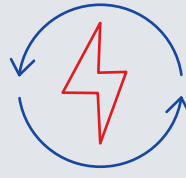
This means that VRF systems ultimately reduce power consumption, decrease carbon emissions and environmental impact, and increase energy savings.



Medium Static Ducted
MMDB-U



Rooftop Unit
40QQ-E



Energy Efficiency

VRF systems are highly efficient, calculating the precise amount of refrigerant needed and adjusting as needed. Toshiba Carrier heat

recovery options allow you to heat and cool individual zones simultaneously. And they reuse energy from one space (like a sunlit auditorium) to move air to other locations that need it (like a cold classroom). Plus, you can connect up to 74 indoor units while running at up to 200% capacity.

This excellent energy management delivers greater operational efficiency—lowering operating budgets and providing energy savings that contribute to LEED® (Leadership in Energy and Environmental Design™) and CHPS (Collaborative for High Performance Schools) certifications.



Easily Controlled Spaces

Toshiba Carrier VRF u-Series Systems offer flexible control. Connect up to 74 indoor units to a single system and configure specific zones across a variety of spaces.

You can control the entire system remotely, too—for easy adjustment of temperatures in classrooms, offices, gyms and more, all from a central controller.

How? With the BACNet® Interface that seamlessly integrates with any BAS. Schools using any BAS that is BACNet compatible can access all Toshiba Carrier equipment across zones for a real-time, consolidated view of usage and other operating conditions.



Wired Controller
RBC-AWSU52-UL



Touchscreen
Central Controller
BMS-CT2560U-UL



BACNet® (BN) Interface
BMS-IFBN1281U-UL

Cutting-Edge Tech for Greater Sustainability, Efficiency & Control

Fossil-fuel-based HVAC systems are estimated to produce 23.5 million tons of carbon dioxide in schools nationwide.¹ When you choose VRF technology for your K-12 school, you're making a positive impact. Not just on the comfort levels of your students and staff. But on your facility's energy use and environmental footprint, too.

Contact your local distributor today to learn more about Toshiba Carrier VRF u-Series Systems and get started.

carriervrf.com



¹ American School & University, (2023). Putting the Healthy in HVAC.
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