

# SAVE ON ENERGY IN YOUR CONDO BUILDING



## Variable Frequency Drives for Building Pumps

Pumps do a lot of work behind the scenes in your condo building, powering plumbing and heating systems. As pumps are sized to serve the maximum demand for water, most pumps operate inefficiently up to 90% of the time.

Many condo buildings have oversized booster pumps that cycle on and off frequently to maintain constant water pressure throughout the building. This frequent cycling wastes electricity and deteriorates the equipment over time. The same is true for most circulating pumps that operate hydronic heating and cooling systems.

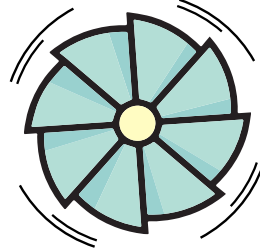
Variable frequency drives (VFDs) offer significant energy and cost savings for many condo building booster pumps and circulator pumps by matching the pump speed to the real-time water pressure and heating/cooling needs of the building.<sup>1</sup>

### Benefits of VFDs

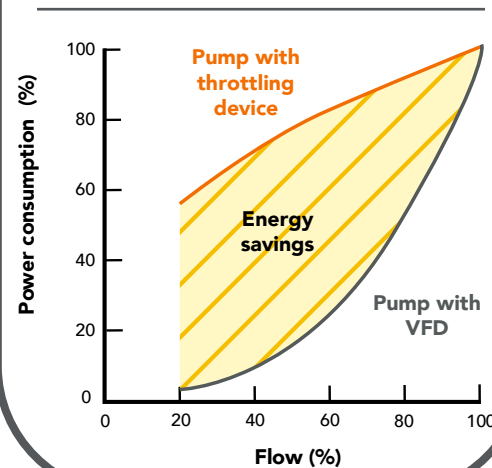
- ✓ Reduce maintenance costs and extend pump motor life
- ✓ Reduce energy waste and electricity costs
- ✓ Decrease noise from pump systems



### AT-A-GLANCE SYSTEM COMPARISON



VFDs adjust pump speed based on real-time building demand, reducing energy waste.<sup>2</sup>



## \$15,000 IN SAVINGS

A 49-storey, 612-unit building in the Greater Toronto Area added VFDs to three domestic water booster pumps. In their first year of operation, the VFDs enabled a savings of more than \$15,000 in electricity costs. These savings repaid the total project cost of \$38,000 in just 2.5 years and created a long-term cost savings stream for residents.<sup>3</sup>

### Sources

1. Energy Savings with VFDs, Efficiency Vermont: <https://www.youtube.com/watch?v=LYDSbOyUV4I>
2. Buying Guide: Variable Frequency Drives, SaveOnEnergy: <https://saveonenergy.ca/For-Business-and-Industry/Resources/VFDs-Buying-Guide>
3. Boost Your Water Savings – On Your Booster Pumps, Ontario Housing Service Corporation: <https://hscorp.ca/resources/boost-your-water-savings-on-your-booster-pumps/>

## INCENTIVES

The Save on Energy Retrofit program offers an incentive of up to \$13,000 per VFD, as well as \$300/hp for variable speed domestic cold water booster pump systems.

Visit the [Save on Energy Retrofit program web page](#) for details. You can also get in touch with a Save on Energy representative in your area by calling the Retrofit Support Line at 1-844-303-5542, or emailing [retrofit@ieso.ca](mailto:retrofit@ieso.ca).

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