Turntide Smart Motor System™

- More efficient
- More intelligent
- Ultra reliable
- Simple drop-in solution
- Standard NEMA dimensions
- No rare earth materials

Reduce HVAC energy usage by an average of

64%

with Turntide's Smart Motor System

Optimizing your HVAC efficiency is a high-impact energy conservation measure that delivers immediate and long-term savings

40% of energy used in commercial buildings is from HVAC equipment

30%+ of the energy that goes into powering HVAC is wasted in the average commercial building, according to the U.S Department of Energy

Source: U.S Department of Energy

What is the Smart Motor System?

Advanced device physics and intelligence come together in a Smart Motor System that optimizes your HVAC energy usage

Motor
Our patented high rotor pole switched reluctance motor with advanced device physics runs more efficiently and reliably.

Available for 1-15 HP

Motor Controller
The controller helps the variable-speed motor work at optimized efficiency across a broad range of speeds, control customized sequences of operation or application-specific functionality, and protect the system from damage or failure.

Turntide BOS
With Turntide BOS, your Turntide energy conservation measure can be managed from your fingertips. Turntide BOS makes your motor data visible to you in one secure dashboard view – no matter where you are, anytime.

Note: To access Turntide BOS you must install a Turntide Remote Monitoring Kit (RMK).
The Smart Motor System

The ultimate energy conservation measure
The Smart Motor System provides an HVAC setup that is more efficient, more intelligent, ultra reliable, and simple.

13%
Better performance than VFD retrofit
Source: NREL Study

The Smart Motor System Outperforms VFD

<table>
<thead>
<tr>
<th>Annual Fan Electricity Savings from Motor Retrofit</th>
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<tr>
<td>Fast-service Restaurant</td>
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<td>28%</td>
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Source: NREL Study

The Smart Motor System

More Efficient

Highly Efficient Design
Minimal energy loss due to optimal rotor/stator design and control strategies over conventional switched reluctance motors

Highly Versatile
Software ensures optimal efficiency across a range of loads and speeds

More Intelligent

24/7 Runtime Monitoring
Continuous monitoring of motor conditions, such as speed and torque, helps to identify potential fault conditions; as well as unlock insights to optimize the motor performance and aid in the efficiency of your HVAC system

Ultra Reliable

Reduced Failure Modes
Bobbin stator coil design with uniform windings reduce failures in comparison to induction motors by 10%

Optimized for Multispeed
With all Turntide components designed to work together, it works as reliably at higher and lower speeds

Simple

Hassle-Free Install
Retrofits and installations performed by experts from Turntide or our network of trusted partners

Proactive Insights
Built-in fault detection and alerts enable preventative maintenance

Fast-service Restaurant
Full-service Restaurant
Small Office
Stand-Alone Retail
Strip Mall
Warehouse

Source: NREL Study

View NREL study 🌐
Proven Results

- **Grocery store Sprouts**
  - Annual HVAC Energy Reduction: 75%
  - View case study

- **Retailer Wilko**
  - Total Energy Reduction: 60%
  - View case study

- **Auto manufacturing plant**
  - Annual HVAC Energy Reduction: 75%

Want to learn more?
Visit our website [turntide.com](http://turntide.com)  
Talk to our team [sales@turntide.com](mailto:sales@turntide.com)  
Read our Quick Reference Guide