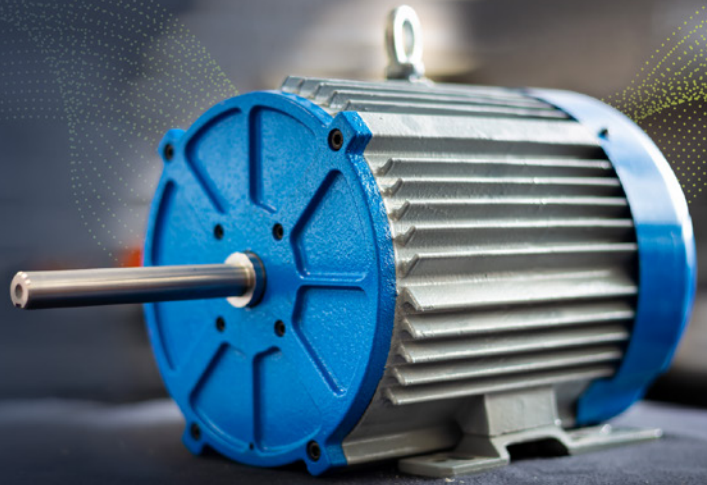




# Turntide Smart Motor System™



- + 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

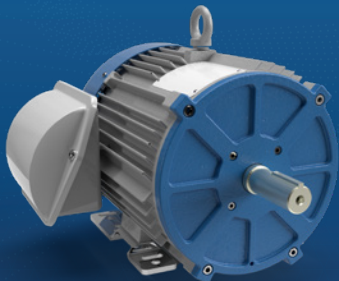
40% of energy used in commercial buildings is from HVAC equipment

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?

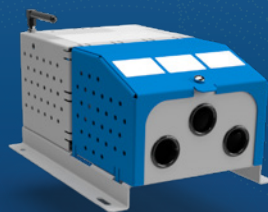
Advanced device physics and intelligence come together in a Smart Motor System that optimizes your HVAC energy usage



### Motor

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

Available for 1-10 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 App

Web and mobile apps make remote monitoring and management of your building systems and equipment easy, with notifications, troubleshooting tools, and the ability to make service requests anytime, anywhere.

# The Smart Motor System

# 13%

## The ultimate energy conservation measure

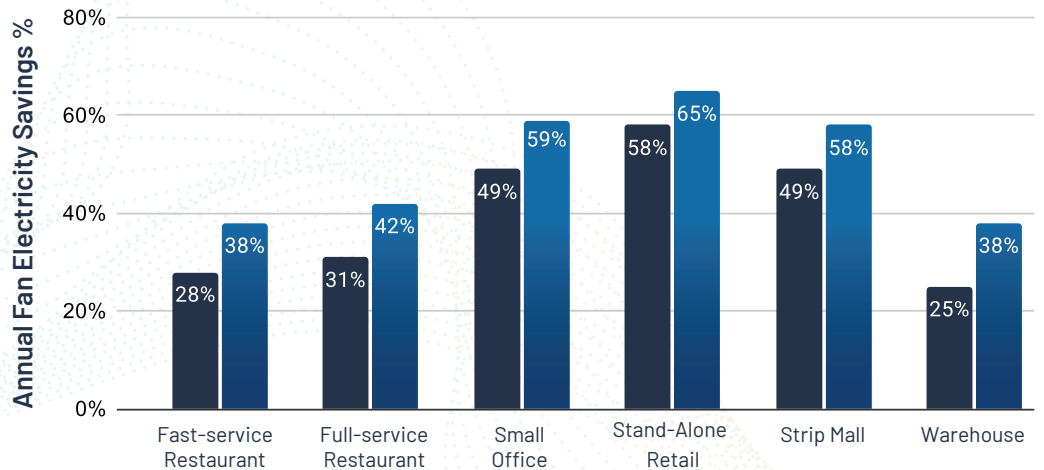
The Smart Motor System provides an HVAC setup that is more efficient, more intelligent, ultra reliable, and simple.

## Better performance than VFD retrofit

Source: NREL Study

## The Smart Motor System Outperforms VFD

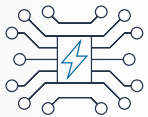
Annual Fan Electricity Savings from Motor Retrofit



■ NEMA Premium Induction Motor with VFD  
■ Turntide Smart Motor

[View NREL study](#) →

Source: NREL Study



### 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 provides motor agility over varying loads and speeds



### More Intelligent

#### 24/7 Runtime Monitoring

By monitoring speed and torque that helps identify equipment health and potential fault conditions, you have insights to remotely commission and optimize motor and HVAC to always run as efficiently as possible



### 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 FSP partners

#### Proactive Insights

Built-in fault detection and alerts enable preventative maintenance

# Proven Results



Grocery store Sprouts

75%

annual HVAC energy reduction

[View case study](#) →



Retailer Wilko

60%

total energy reduction

[View case study](#) →



Auto manufacturing plant

75%

annual HVAC energy reduction

## Intelligence, Automation, and Control

Turntide for Buildings brings together the Smart Motor System, Smart HVAC, and Smart Building Operations



### Smart HVAC

- Monitor and control HVAC and Smart Thermostats with BACnet integration
- Smart notifications via text and email for smart routing, prioritization, and escalation
- Troubleshooting tools like trends, charting, and playback features

### Smart Building Operations

- Building equipment management including metering, lighting control, monitoring indoor air quality (IAQ), and temperature monitoring in refrigeration and coolers
- Visibility and intelligence with customized reports you can create for compliance, executives, field teams, and more
- Remote management and service support with intelligence, smart notifications, and alerts to prevent downtime

## Want to learn more?

Visit our website [turntide.com](https://turntide.com)

| Talk to our team [sales@turntide.com](mailto:sales@turntide.com)

| Read our [Quick Reference Guide](#)

### TURNTIDE TECHNOLOGY FOR SUSTAINABLE OPERATIONS

Our breakthrough technologies accelerate electrification and sustainable operations for energy-intensive industries.

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