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# 1.65 HP High-Efficiency Motor for Industrial Applications SM1650 Series

#### **Key Features**

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Compact and lightweight, allowing for more space and easier installation and operation.

## 6BA

Quiet performance, providing better value for end users.



Motor and drive can be operated at full power (1.65 hp, 3,450 RPM) up to 40°C (104°F)



Energy friendly.



Future communication features: Wi-Fi, Bluetooth, etc.

### **The Murky Waters**

According to the U.S. Environmental Protection Agency (EPA), more than half of the electricity used in manufacturing powers various motors. If we focus on the industrial energy-related carbon dioxide emissions, they reach over 1,300 million tonnes per year in the U.S. alone. Industry in the country is responsible for almost a quarter of its greenhouse gas emissions. Working with the best available technology would help solve some of the environmental challenges while also addressing the most common problems of:

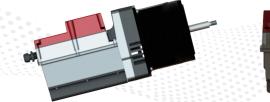
- Materials used
- Power demands
- Flow demands

Experts estimate that if high-efficiency motor systems were adopted globally, it would cut electricity consumption by up to 10%. This is why variable speed pumps are the best choice. They are greener and their efficiency means both more sustainable products and operations that save money on energy bills.

### Efficiency is the Way Forward

Energy-efficient electric pump motors have much less impact on the environment. They save money, and they are powerful enough for applications ranging from industrial, commercial, and residential, all the way to pool and spa. What's more, variable speed motors can simplify inventory since they can cover a broader range of applications.

At ePropelled, we design and build better motor systems. Our goal is to use our innovative technology and expertise to deliver significant improvements in motor efficiency. As a result, what we have done for eMobility and air transport can be applied to building motors suited for a variety of applications.





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2

## SM1650 1.65 HP Motor for Industrial Applications

Although our integrated drive for water pumps was designed specifically for spa and pool pump applications, which is an advantage over induction and other VSD motors, it is easily scalable and adaptable to any industry or market. Our high-efficiency 1.65 hp variable speed motor that is about 90% efficient, while current induction motor technology is about 80% efficient. Additionally, our variable speed motors reduce energy costs and enable manufacturers to add new features and functions. They are compatible with all types of pumps used in various application including:

- Large-volume fluid management
- Pressurizing water/fluid
- Water movement
- Chemical processing
- And many more

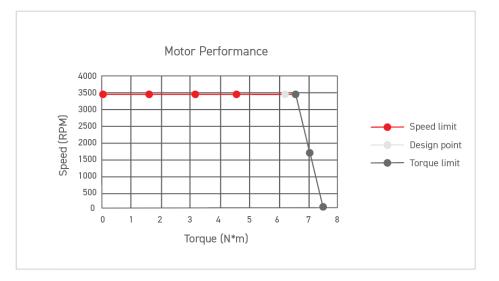
### SM1650 1.65 HP MOTOR (INDUSTRIAL) SPECIFICATIONS

Parameter	Measurement
Rated speed	3,450 RPM
Rated power	1.65 hp (1.23 kW)
Input voltage	230 VAC± 10%, 1PH, 50/60 Hz
Input current	6.1 Arms
Drive efficiency	98%
Motor efficiency	91%
Winding temperature sensor	NTC thermistor
Communication	RS-485 (isolated)
Weight	24 lbs (10.8 kg)
Ambient temperature	Consult factory for operations above 40°C
Weatherproof	IPX5
NEMA frame	56

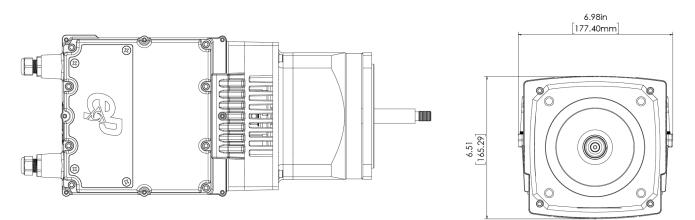


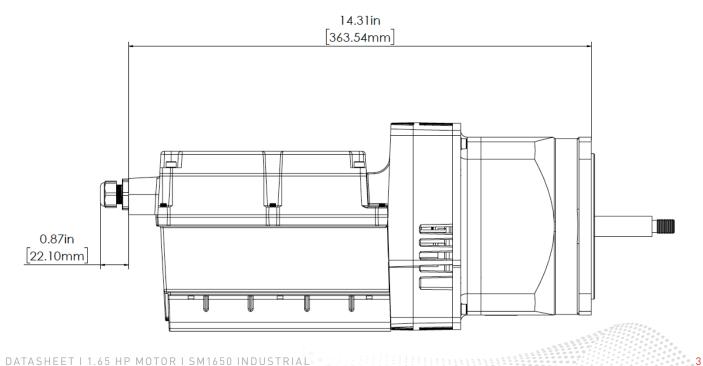


#### Performance SM1650, 230 VAC INPUT



#### **SM1650 HP MOTOR DIMENSIONS**





## **Designed in USA**

Errors and omissions excepted. All specifications subject to change without notice. For more information, including ordering product, please contact us at **info@ePropelled.com**.

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ePropelled © 2023. ePropelled designs state of the art motors, generators, and power management systems. Our technology helps reduce energy consumption and improve system efficiency at a lower cost in the aerospace, manned and unmanned aerial vehicles, electric vehicles, and pump motor markets. We are a leader in magnetics engineering, and our patented technology innovations are used in the air, land, and water, defining the future of electric propulsion.

ePropelled has offices in the United States, Europe, and India and works with manufacturers of various types and sizes around the world.

For more information, visit **epropelled.com**