

## **Electric Drives - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)**

Market Report | 2025-04-28 | 213 pages | Mordor Intelligence

### **AVAILABLE LICENSES:**

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

### **Report description:**

The Electric Drives Market size is estimated at USD 26.81 billion in 2025, and is expected to reach USD 34.38 billion by 2030, at a CAGR of 5.1% during the forecast period (2025-2030).

An electric drive is a device used to control the output of a motor. It offers several advantages over traditional mechanical drive systems like internal combustion engines or hydraulic systems. These devices are more efficient, produce less vibration and noise, and allow for precise control of motor performance, making electric drives ideal for applications where more energy efficiency, accuracy, and environmental considerations are essential factors.

### **Key Highlights**

- Rapid technological progress has led to the higher acceptability of drives in several industries. The advances focus on high reliability and reduced energy costs, potentially reducing the per-square-foot energy by 30-40% when equipped with motor-driven systems in commercial buildings. The advanced and modern drives also integrate networking and diagnostic capabilities into better performance and improved productivity. Intelligent motor control, reduction of peak-current drawn, and energy savings are significant reasons to choose an electric drive as the controller in every motor-driven system.
- The market is also witnessing an increased focus on process optimization. An electric drive reduces downtime in the oil and gas industry because the gas turbines require frequent maintenance, while electric drives and motors require very little maintenance. This enables more production, lower maintenance expense, and improved productivity. This has encouraged various oil and gas companies to incorporate electric drives.
- Energy efficiency has been of key focus for federal regulators and industry organizations. According to the International Energy Agency, electric motors consume 40% of the energy used in power industries. When these motors are deployed with electric drives in centrifugal load service, their efficiency increases. With the technological improvements in power electronics technology,

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scott's-international.com](mailto:support@scott's-international.com)

[www.scott's-international.com](http://www.scott's-international.com)

drives' performance is expected to improve, helping conserve energy.

- The addition of electric drives in existing motors gives rise to several technical problems, which have created a barrier to adoption among numerous players in various industries. After integrating the drive with an existing motor, the speed of the motor shaft reduces, which causes decreased cooling from the shaft-driven fan. The rotors in the electric drive motors are very sensitive and can get damaged by frequent spinning. This occurs because of aggressive dynamic braking. When the rotors are stopped this way, the thermal expansion of the rotor produces a force that pulls the rotor shaft away from the stator, leading to bearing failure. This usually occurs when the VSD is not adequately cooled.
- Growth in the market studied gradually increased during the COVID-19 pandemic because many governments worldwide pushed the semiconductor-based electronics and automation industry by providing funds to expand chips for various end-user industries, especially automobiles, consumer electronics, power, energy, and utilities. Moreover, governments helped semiconductor manufacturers shift their production facilities outside China to avoid supply chain disruption.

## Electric Drives Market Trends

### Power Generation to be the Major End-user Industry

- Electric drives are critical in saving energy, improving performance, simplifying a system, and cutting downtime in nuclear reactors. For instance, during operations, when the fast passage of liquid is required to cool down the reactor core, it is usual to have four big 6 kV recirculation pumps and more than 100 control valves operating simultaneously. This factor accounts for around 25% of the energy costs of running a nuclear power plant.
- This supports the significance of using electric drives in the nuclear power industry. A nuclear power plant in the Tennessee Valley increased its efficiency from 70% to 95% by switching from motor technology to electric drives. Electricity costs can be cut by 50% when drives are used while reducing CO2 emissions.
- Furthermore, by ensuring uninterrupted water circulation, drive technology applications help the plants protect the fuel rods and nuclear fuel, both vulnerable to turbulence. In this regard, the rules are very strict. It is best to increase the electricity supply gradually, which can be done by carefully controlling AC and DC drives. In nations like France and the United Kingdom, new opportunities are anticipated to result from this. Nuclear power plants produce more than two-thirds of the electricity in France.
- Also, it has been estimated that electric motors account for about 65% of the electricity consumed in industrial applications; hence, the energy-saving potential of low-voltage motors in industries is enormous. Energy consumption depends on the motor's kW rating, loading, and hours run. Therefore, high-efficiency low-voltage motors, as such, can play a significant role in reducing CO2 emissions.

Energy demand is rising steadily. At the same time, pressure to reduce energy consumption, lower carbon dioxide (CO2) emissions, and provide secure power supplies is becoming more reliable. According to Exxon Mobil, worldwide electricity demand will reach around 35.3 petawatt hours by 2040. It is expected to drive market growth over the forecast period.

### Asia Pacific Expected to be the Fastest Growing Region

- The Asia-Pacific region is significantly investing in the studied market's growth, primarily due to the rapidly growing end-user industries such as oil and gas, water and wastewater, chemical and petrochemical, food and beverage, power generation, HVAC, pulp and paper, discrete industries, and many others in the studied market.
- The growth of the industrial and manufacturing sectors, especially across countries such as China, India, and Taiwan, is expected to drive the demand for AC electric drives during the forecast period. For instance, according to IBEF, in India, outputs

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

increased for natural gas by 11.7%, petroleum refinery production by 3.7%, coal by 8.2%, steel by 2.8%, cement by 13.6%, and electricity by 0.5% in January 2022.

- With increased investments in the oil and gas upstream and midstream sectors, the AC drive market is expected to grow during the forecast period. Furthermore, oil and gas upstream companies are gradually investing in oil production activities, which will increase the replacement rate of AC electric motors, supporting market growth. In addition, in May 2022, the ONGC announced plans to invest USD 4 billion from FY22-25 to increase its exploration efforts in India.

- Furthermore, the economic growth of the middle class has significantly impacted the demand for automobiles in India. For instance, according to the Federation of Automobile Dealers Association (FADA), about 2,11,20,441 passenger vehicles and tractors were sold in the country in 2022, reporting a growth of about 15.28% year-on-year. Furthermore, in recent years, local automobile manufacturers have enhanced their presence, with companies like Tata Motors, Mahindra, Suzuki, and Bajaj significantly expanding their sales figures. To compete with global players, these companies are investing significantly in automated production lines and expanding their manufacturing footprint, driving the demand for electric drives.

- South Korea is a highly urbanized country with a high per capita income. Due to a rising middle-class population and an increasing number of houses, commercial buildings, and other structures, the demand for HVAC systems has been increasing in the country. As these systems use electric drives for applications such as motor control, the growth of the sector will drive the demand for electric drives during the forecast period.

- Although the growth of the electric drives market in Southeast Asian countries has not been at par with other major countries in the Asia-Pacific region, in recent years, the area's economic development and various industries' development have created opportunities in the studied market. The industrial and manufacturing sector is also witnessing notable growth in Southeast Asian countries such as Thailand and Indonesia. For instance, Thailand and Indonesia are among the leading automobile manufacturers in the region. As motors and generators are widely used in automated production lines of the automotive industry, the demand for electric drives is expected to grow during the forecast period.

## Electric Drives Industry Overview

The electric drives market is highly fragmented, with major players like ABB Ltd, Siemens AG, Danfoss, Rockwell Automation Inc., and Schneider Electric SE. Players in the market are adopting strategies such as partnerships, innovations, and acquisitions to enhance their product offerings and gain sustainable competitive advantage.

In May 2023, Siemens launched the SINAMICS S200 servo drive system, designed for many common applications in electronics, batteries, and other sectors. Its accurate servo drive, strong servo motors, and simple-to-use wires provide high dynamic performance. The new servo drive system is especially useful for applications that need accuracy in speed and torque, such as winding and unwinding machines used in battery manufacture and cell assembly.

In March 2023, ABB launched a medium-voltage VFD (Variable-frequency Drive) with a rated capacity of 400 to 1,000kW and a voltage of up to 6.9kV, appropriate for a broad range of applications without a unique engineering design. The air-cooled ACS2000 VFD (Variable-frequency Drive) was especially used for fans, compressors, pumps, and other public applications in cement, mining and mining, metallurgy, pulp and paper, electric power, water, chemical, oil, and gas industries.

### Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

## Table of Contents:

### 1 INTRODUCTION

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

1.1 Study Assumptions and Market Definition

1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET INSIGHTS

4.1 Market Overview

4.2 An Assessment of the Impact of Key Macroeconomic Trends

5 MARKET DYNAMICS

5.1 Market Drivers

5.1.1 Rapid Industrialization and Increased use of Electric Drives Across Major Vertical Industries

5.1.2 Growing Demand for Energy Efficiency

5.2 Market Restraints

5.2.1 Technical Concerns of the Equipment

5.2.2 High Cost of the Equipment

6 MARKET SEGMENTATION

6.1 By Product

6.1.1 AC Drives

6.1.2 DC Drives

6.1.3 Servo Drives

6.2 By Voltage

6.2.1 Low-Voltage Drive (<372.8KW or <1KV)

6.2.1.1 Embedded

6.2.1.2 Standalone

6.2.2 Medium-Voltage Drive (>=372.8KW or >= 1KW)

6.3 By Power Rating Statistics

6.3.1 <250 KW

6.3.2 251 - 500 KW

6.3.3 >500 KW

6.4 By End-user Industry

6.4.1 Oil and Gas

6.4.2 Water and Wastewater

6.4.3 Chemical and Petrochemical

6.4.4 Food and Beverage

6.4.5 Power Generation

6.4.6 HVAC

6.4.7 Pulp and Paper

6.4.8 Discrete Industries

6.4.9 Other End-user Industries

6.5 By Geography\*\*\*

6.5.1 North America

6.5.1.1 United States

6.5.1.2 Canada

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 6.5.2 Europe
  - 6.5.2.1 Germany
  - 6.5.2.2 Italy
  - 6.5.2.3 United Kingdom
  - 6.5.2.4 France
  - 6.5.2.5 Rest of Europe
- 6.5.3 Asia-Pacific
  - 6.5.3.1 China
  - 6.5.3.2 Japan
  - 6.5.3.3 India
  - 6.5.3.4 South Korea
  - 6.5.3.5 Rest of Asia-Pacific
- 6.5.4 Latin America
  - 6.5.4.1 Brazil
  - 6.5.4.2 Mexico
  - 6.5.4.3 Rest of Latin America
- 6.5.5 Middle East and Africa
  - 6.5.5.1 United Arab Emirates
  - 6.5.5.2 Saudi Arabia
  - 6.5.5.3 Turkey
  - 6.5.5.4 Rest of Middle East and Africa

## 7 COMPETITIVE LANDSCAPE

- 7.1 Company Profiles
  - 7.1.1 ABB Ltd.
  - 7.1.2 Siemens AG
  - 7.1.3 Danfoss
  - 7.1.4 Rockwell Automation Inc.
  - 7.1.5 Schneider Electric SE
  - 7.1.6 Yaskawa Electric Corporation
  - 7.1.7 Mitsubishi Electric Corporation
  - 7.1.8 Nidec Corporation
  - 7.1.9 SEW-EURODRIVE GmbH & Co. KG
  - 7.1.10 TMEIC Corporation

## 8 VENDOR MARKET SHARE

## 9 MARKET OUTLOOK

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

**Electric Drives - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)**

Market Report | 2025-04-28 | 213 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

**ORDER FORM:**

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-03-01"/>
		Signature	

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

