

Europe Alternating Current (AC) Drive - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 100 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 Europe Alternating Current Drive Market is expected to register a CAGR of 7.1% during the forecast period.

Key Highlights

- AC drive is an electronic device that can adjust the rotation speed of an electric motor according to the application's needs, which can result in considerable energy savings. For example, the new ecodesign measures by Europe will now regulate the efficiency of these drives.
- According to Danfoss, the investment in an AC drive is higher than in an energy-efficient motor. In the industrial sector, where electric motors account for 30% of global final energy use, it requires significant investment to install AC drives or upgrade motor efficiency classes to optimize existing motors for energy efficiency.
- According to Invertek Drives, nearly 50 percent of the electricity produced in Europe is consumed by around eight billion electric motors. Forty percent of electricity is used to power the industry, with two-thirds of this used by electric motors globally, and yet less than 20 percent of electric motors are controlled by variable frequency drives (AC Drives). AC drives have a role on both the demand and supply sides of the equation. These drives primarily act to reduce electricity consumption drawn by motors under torque loading.
- Besides, increased usage of AC drives in relevant applications, such as a pump delivering a water flow that changes with time, can generate considerable savings at the application level. This is followed by the regulation requiring manufacturers of motors and drives to provide relevant energy efficiency data at different speed/torque points. However, the advantage is often considerably higher, so after the initial payback time, the AC drive is the most economical means to generate energy efficiency.
- The European Government has already identified motors and variable speed control of motors using AC drives as huge opportunities for energy-saving. Currently, 25% of the motors are equipped with these drives, and the additional potential to install other drives is 40-50% of the motors. The International Energy Agency (IEA) and the European Government have set

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

ambitious targets for energy savings and regard cutting back consumption as a vital first step in achieving the targets, following the principles of the Efficiency First concept.

- The COVID crisis directly impacts energy use and greenhouse gas (GHG) emissions at both global and regional levels. The Covid-19 Pandemic unveiled weaknesses, as the AC Drives market was initially unable to cope with shortages in supplies caused by closed borders and manufacturing sites. The crisis accentuated the strategic importance of value chains such as automation, motors, and drives in light of the accelerating digital transformation and growing demand for Alternating Current (AC) Drives.

Europe Alternating Current (AC) Drive Market Trends

Rapid Industrialization is Driving the Market Growth

- The power and voltage requirements vary with the application's demands, and in most cases, the AC (Alternating Current) drives have to be specially designed and manufactured. The need to manufacture AC drives (Alternating Current) that are scalable for different applications yet reliable has increased. Germany's regulations require Alternating Current (AC) drives to be installed with heating systems larger than 25 kW (heating capacity).
- For example, AC drives can be used to control the airflow of a fan for large heating and air conditioning systems or the flow of water and chemicals in industrial processes. AC drives can also be used in more complex situations like wastewater processing, paper mills, oil drilling platforms, or mining. When speed control is necessary, AC drives are the best solution because it allows controlling the motor speed to ramp up, down, or continuous.
- Smaller drives are easier to install. Panel builders can fit more drives into a standard cubicle, enabling panels to be smaller. This allows the use of smaller and less costly control rooms. Also, drives become easier for OEMs to fit into equipment. An example is cranes, an application with limited space for drives. Drives have become smaller, more capable, easier to use, and less costly.
- AC-drive users can reduce costs even more by employing application-specific drive solutions. These drives incorporate incremental functionality that supports specific applications such as fan and pump control, mixers, or crane controls. They can reduce the total cost of ownership through shorter startup times, lower integration costs, and improved machine productivity.

Power Generation Industry to Witness Significant Growth

- Europe is a large market for alternating current (AC) drives. Germany is the largest importer, followed by Italy and France. The demand for AC drives is driven primarily by a stable manufacturing economy in the European region that continues to grow over time. In the power generation industry, AC Drives would replace other drive systems, and the high power high voltage drives will replace inefficient damper and valve control systems. This will give reliability of operation coupled with energy-saving.
- For instance, AC drives capable of operating at 600 Hz or greater frequencies are generally referred to as high-frequency drives. The European region considers these drives to be dual-use devices commonly used in civilian applications. In Europe, AC drives are widely used in power generation industries to increase equipment efficiency. It controls the speed of electric motors according to the process needs and typically reduces energy consumption by 35-40%.
- AC drives control power plants' speed of fans, pumps, and mills. In European countries like Germany, Italy, and France, the need to boost energy efficiency Alternating Current drives (AC) along with massive infrastructure investments in these developing countries are among the factors expected to drive strong market growth for the AC drives. In addition to speed, control, and energy costs, AC drives offer greater reliability, soft-start, higher power, and improved efficiency.
- In Power Generation Industry, the low energy consumption of AC drives is one of the prime factors driving the market's growth. The medium and low-voltage AC drives play a major role in key power plant applications, such as primary fans, electric feed, and condensate pumps. These AC drives can save energy, maintenance, and downtime costs in the power generation industry.

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

Europe Alternating Current (AC) Drive Industry Overview

The Europe Alternating Current (AC) Drive Market is competitive and consists of several partakers like Danfoss, WEG, Siemens, Fuji Electric Co., Ltd., Schneider Electric, Emerson Electric Co., Rockwell Automation, Inc., ABB, Yaskawa Electric Corporation, and many more. The companies are increasing their market share by forming multiple partnerships, investing in projects, and launching new products in the market.

- October 2021 - Siemens acquired Wattsense, a hardware and software company that offers an innovative, plug-and-play Internet of things (IoT) management system for small and mid-size buildings to boost IoT systems for small and medium buildings. Wattsense to remain a separate, standalone unit within Siemens. The acquisition supports a wider range of facilities in reducing energy consumption through digitalization.
- June 2021 - Rockwell Automation acquired Plex Systems to expand the industrial cloud software offerings. Plex Systems, a leading subscription-based smart manufacturing platform with easy-to-deploy, cloud-native solutions, improves visibility into end-to-end production systems and accelerates customers' digital transformation with the answers. Across discrete, hybrid, and process industry segments, Plex provides applications in supply chain visibility, manufacturing execution, and quality management.

Additional Benefits:

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

Table of Contents:

- 1 INTRODUCTION
 - 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 Industry Attractiveness - Porter's Five Forces Analysis
 - 4.2.1 Bargaining Power of Suppliers
 - 4.2.2 Bargaining Power of Consumers
 - 4.2.3 Threat of New Entrants
 - 4.2.4 Threat of Substitutes
 - 4.2.5 Intensity of Competitive Rivalry
 - 4.3 Impact of COVID-19 on the Europe Alternating Current (AC) Drive Market
- 5 MARKET DYNAMICS
 - 5.1 Market Drivers

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

5.1.1 Regulation on Energy Efficiency

5.1.2 Emerging Demand for Sensorless Drives

5.2 Market Challenges

5.2.1 Increasing Prices of AC Drives

6 MARKET SEGMENTATION

6.1 By Voltage

6.1.1 Low

6.1.2 Medium

6.2 By End-User Industry

6.2.1 Oil & Gas

6.2.2 Chemical & Petrochemical

6.2.3 Food & Beverages

6.2.4 Water & Wastewater

6.2.5 Power Generation

6.2.6 Metal & Mining

6.2.7 Pulp & Paper

6.2.8 HVAC

6.2.9 Discrete Industries

6.3 By Country

6.3.1 United Kingdom

6.3.2 Germany

6.3.3 Italy

6.3.4 France

6.3.5 Russia

6.3.6 Rest of Europe

7 VENDOR MARKET SHARE ANALYSIS

8 COMPETITIVE LANDSCAPE

8.1 Company Profiles

8.1.1 ABB Ltd

8.1.2 Danfoss

8.1.3 Schneider Electric Corporation

8.1.4 Rockwell Automation, Inc.

8.1.5 YASKAWA ELECTRIC CORPORATION.

8.1.6 Mitsubishi Electric Corporation

8.1.7 Siemens

8.1.8 Fuji Electric Co., Ltd.

8.1.9 Emerson Electric Co.

8.1.10 WEG

9 INVESTMENT ANALYSIS

10 FUTURE OF THE MARKET

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

Europe Alternating Current (AC) Drive - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 100 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="2026-03-05"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

