

Volt/VAr Management Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, 2028Segmented By Application (Transmission, Generation and Distribution), By Component (Hardware and Software & Services), By End User (Electric Utility and Industrial), By Region, Competition, 2018-2028, By Region, Competition, 2018-2028

https://marketpublishers.com/r/V21DD1393B19EN.html

Date: November 2023 Pages: 181 Price: US\$ 4,900.00 (Single User License) ID: V21DD1393B19EN

Abstracts

In 2022, the Global Volt/VAr Management Market reached a valuation of USD 418.09 million, demonstrating a steady CAGR of 4.05% over the forecast period. The power industry employs Voltage/VAR management technologies to address electric line losses and enhance grid efficiency. The effective management and control of Voltage/VAR play a pivotal role in ensuring the optimal performance of electrical utilities. This includes maintaining power delivery within appropriate voltage limits for reliable operation of consumer equipment and minimizing losses.

The growth of the Volt/VAR systems market is driven by several key factors, including the increased integration of renewable energy sources, ongoing advancements in energy efficiency, enhancements in system voltages within the distribution network, and a concerted effort to reduce the environmental impact of energy distribution.

Key Market Drivers

Grid Modernization and Smart Grid Initiatives



Grid modernization and the proliferation of smart grid initiatives are significant drivers propelling the global Volt/VAr (Voltage and Reactive Power) Management Market. As the energy landscape evolves, power utilities and grid operators are seeking innovative solutions to enhance grid efficiency, reliability, and sustainability. The energy sector is undergoing a profound transformation characterized by the integration of renewable energy sources, the electrification of various sectors, and the growing demand for energy efficiency. Traditional power grids, designed for one-way electricity flow from centralized generation sources to consumers, are ill-equipped to handle these changes efficiently. This transformation has prompted power utilities and grid operators worldwide to embark on grid modernization efforts. Grid modernization involves the deployment of advanced technologies, digitalization, and automation to upgrade aging grid infrastructure. Its aim is to create a more adaptable, intelligent, and responsive grid system capable of meeting current and future energy challenges. One of the core components of grid modernization is Volt/VAr management. This technology optimizes voltage and reactive power levels throughout the grid, ensuring they remain within predefined limits. By doing so, Volt/VAr management enhances the overall efficiency of power distribution systems, reduces energy losses, and improves power quality. Furthermore, Volt/VAr management plays a vital role in accommodating the intermittent nature of renewable energy sources like wind and solar. These sources can cause voltage and power factor fluctuations, which, if not managed effectively, can disrupt grid stability. Volt/VAr management solutions mitigate these fluctuations, enabling the seamless integration of renewables into the grid.

Increasing Integration of Renewable Energy Sources

The increasing integration of renewable energy sources into power grids is a significant driver that fuels the global Volt/VAr (Voltage and Reactive Power) Management Market. As the world moves towards cleaner and more sustainable energy generation, the management of voltage and reactive power becomes paramount for ensuring grid stability. We are currently witnessing a revolution in renewable energy, characterized by the rapid growth of wind, solar, and other clean energy sources. Governments, corporations, and individuals are increasingly embracing renewable energy technologies to reduce carbon emissions, combat climate change, and transition towards a more sustainable energy future. However, the integration of renewable energy sources also presents unique challenges to power grids. Their inherent variability and intermittency, dependent on factors such as weather conditions and time of day, can lead to fluctuations in voltage and power factor. If left unmanaged, these fluctuations can destabilize the grid and compromise power quality. To address this issue, Volt/VAr management solutions actively regulate voltage levels, ensuring they



remain within specified bounds, thereby preventing overvoltage or undervoltage scenarios that could damage equipment or disrupt power supply. The adoption of renewable energy is a global phenomenon, with countries and regions worldwide setting ambitious renewable energy targets and investing in clean energy infrastructure. For instance, the European Union aims to achieve 32% renewable energy consumption by 2030, while China leads the world in solar and wind capacity installations. As renewable energy capacity continues to grow, the demand for effective Volt/VAr management solutions becomes increasingly critical. These solutions play a vital role in maintaining grid stability, minimizing energy losses, and facilitating a seamless transition to a cleaner energy mix.

Regulatory Emphasis on Energy Efficiency and Grid Optimization

The global focus on energy efficiency and grid optimization, driven by regulatory initiatives and environmental concerns, serves as a significant catalyst propelling the Volt/VAr (Voltage and Reactive Power) Management Market. Governments and regulatory bodies are increasingly recognizing the paramount importance of reducing energy wastage, enhancing grid reliability, and minimizing greenhouse gas emissions. Energy efficiency stands as a pivotal global objective encompassing a wide range of initiatives aimed at curbing energy consumption while upholding or enhancing the quality and reliability of energy services. Enhanced energy efficiency offers numerous advantages, including cost savings, reduced environmental impact, and bolstered energy security. In the realm of power distribution, energy efficiency is closely intertwined with the objective of reducing energy losses during transmission and distribution. As electricity traverses power lines, some energy dissipates as heat due to factors such as resistance and grid inefficiencies. These energy losses signify wasted resources and contribute to heightened greenhouse gas emissions. Volt/VAr management also aids in improving power factor, which gauges the efficiency of electrical power conversion into useful work output. A high-power factor signifies optimal efficiency.

Key Market Challenges

Complex and Aging Grid Infrastructure

One of the primary challenges faced by the Global Volt/VAr (Voltage and Reactive Power) Management Market is the complex and aging grid infrastructure in many regions. Power distribution networks in various parts of the world have been operational for decades, if not longer. These legacy systems often lack the advanced control and



monitoring capabilities required for effective Volt/VAr management. Much of the grid infrastructure in developed countries dates back to the mid-20th century or earlier. These aging systems were designed without the digital technologies and automation capabilities that are now essential for Volt/VAr management. Consequently, retrofitting and upgrading these grids to accommodate modern Volt/VAr management solutions can be a complex and costly endeavor. Older grid systems often lack comprehensive data collection and monitoring capabilities, which makes it challenging to gather real-time data on voltage and reactive power levels - critical for effective Volt/VAr management. The absence of accurate data poses difficulties for utilities in optimizing their grids and maintaining power quality. Additionally, integrating new Volt/VAr management solutions with existing legacy infrastructure can pose compatibility issues, leading to interoperability problems between the old and new systems. These challenges hinder the seamless deployment of advanced Volt/VAr management technologies.

Regulatory Hurdles and Standards

The Global Volt/VAr Management Market encounters challenges associated with regulatory hurdles and the establishment of industry standards. Volt/VAr management plays a crucial role in grid optimization, and its effectiveness can be influenced by regulatory frameworks and the absence of standardized practices. Different regions and countries have diverse regulatory environments governing power distribution and grid operations, significantly impacting the deployment and operation of Volt/VAr management solutions. Utilities must navigate a complex landscape of regulatory requirements, approvals, and compliance measures. The absence of global standards for Volt/VAr management practices and technologies can impede interoperability and create market uncertainty. Without standardized approaches, vendors may develop proprietary solutions that are not easily compatible with systems from other manufacturers, hindering the widespread adoption of Volt/VAr management solutions. The regulatory landscape for energy and utilities is evolving rapidly, with new regulations aiming to promote energy efficiency, grid stability, and environmental sustainability. These regulations may require utilities to adopt Volt/VAr management solutions, posing challenges in keeping up with evolving regulations and ensuring compliance.

Key Market Trends

Integration of Artificial Intelligence (AI) and Machine Learning



The integration of artificial intelligence (AI) and machine learning is a transformative trend in the Global Volt/VAr (Voltage and Reactive Power) Management Market. Aldriven Volt/VAr management solutions are revolutionizing grid optimization by enhancing accuracy, facilitating real-time decision-making, and enabling predictive capabilities. Al and machine learning technologies are being deployed to augment the capabilities of Volt/VAr management systems. These advanced technologies can analyze vast amounts of data, including voltage and power factor measurements, historical grid performance data, and weather forecasts. By leveraging AI algorithms, utilities can identify patterns, anomalies, and trends in the data, empowering them to make proactive decisions to optimize grid operations. One of the key advantages of AI in Volt/VAr management is its predictive analytics capability. AI models can forecast voltage and reactive power fluctuations based on historical data and current conditions. This predictive capability empowers utilities to take preemptive actions to mitigate grid disturbances, reduce energy losses, and enhance power quality. Furthermore, Al-based Volt/VAr management systems enable real-time control of grid parameters, continuously analyzing incoming data to dynamically adjust voltage and reactive power settings. This ensures grid stability and optimizes energy distribution, particularly important as renewable energy sources introduce variability. With machine learning algorithms that adapt and learn from changing grid conditions, AI-powered Volt/VAr management systems can evolve and optimize grid performance as the energy landscape transforms, incorporating more renewable energy sources and distributed energy resources.

Increased Focus on Grid Resilience and Reliability

Grid resilience and reliability have become paramount concerns for utilities and grid operators, driving a significant trend in the Volt/VAr Management Market. The increasing frequency and severity of extreme weather events, cybersecurity threats, and the need to accommodate distributed energy resources (DERs) have elevated the importance of grid resilience. Climate change-related extreme weather events, such as hurricanes, wildfires, and heatwaves, pose substantial challenges to grid reliability. Volt/VAr management systems are being enhanced to better withstand and respond to these events. This includes implementing automated controls to mitigate voltage fluctuations during storms and establishing rapid response mechanisms to restore grid operations. The proliferation of DERs, including solar panels and battery storage, presents grid integration challenges. Volt/VAr management solutions are adapting to accommodate these distributed resources while ensuring grid stability. Dynamic control algorithms are being employed to manage voltage and power factor fluctuations introduced by DERs. As grids become more interconnected and reliant on digital technologies, cybersecurity threats are a growing concern. Volt/VAr management



systems are incorporating cybersecurity measures to protect against cyberattacks that could disrupt grid operations. Ensuring the security of these systems is critical for grid resilience. The emergence of microgrids, which can operate independently during grid outages, is influencing Volt/VAr management trends. These systems incorporate Volt/VAr management to maintain localized grid stability and reliability. The ability to island and restore power in the event of a broader grid failure enhances overall grid resilience.

Segmental Insights

Component Insights

Hardware segment is expected to dominate the market during the forecast period. Sensors and measurement devices form the foundation of Volt/VAr management hardware. They gather real-time data on voltage, current, power factor, and other grid parameters. These devices are strategically positioned throughout the grid to offer comprehensive visibility. Sensors and measurement devices continuously monitor grid conditions and supply data to Volt/VAr management systems. This data is crucial for making well-informed decisions regarding voltage and reactive power control. Communication infrastructure serves as a critical hardware component, enabling seamless data transfer between sensors, measurement devices, and control centers. It encompasses both wired and wireless communication networks. Control devices and equipment encompass various devices responsible for adjusting voltage and reactive power levels in the grid. This may include tap changers, voltage regulators, and capacitor banks. Data processing units, including servers and data concentrators, are responsible for collecting, storing, and processing data from sensors and measurement devices. These units analyze incoming data to identify grid anomalies, trends, and optimization opportunities. Additionally, they facilitate data storage and retrieval for historical analysis. User interfaces and displays provide operators and engineers with a means to interact with Volt/VAr management systems. These interfaces may include graphical user interfaces (GUIs) and dashboards. Edge computing devices are deployed at the edge of the grid to provide localized processing and decision-making capabilities, particularly for real-time grid control. In summary, the hardware segment of the Global Volt/VAr Management Market encompasses a wide range of components and technologies that play essential roles in monitoring, controlling, and optimizing grid voltage and reactive power. Advancements in sensor accuracy, communication infrastructure, control devices, data processing, user interfaces, cybersecurity, energy storage, and edge computing are driving the evolution of Volt/VAr management hardware, enhancing its capabilities, efficiency, and responsiveness to the changing



demands of modern power distribution networks.

End User Insights

Electric Utility segment is expected to dominate the market during the forecast period. Electric utilities are leading the way in adopting Volt/VAr management solutions, given their pivotal role in power distribution and grid management. These utilities bear the responsibility of delivering electricity to end-users, maintaining grid stability, and ensuring power quality. Volt/VAr management plays an integral part in achieving these objectives. Electric utilities utilize Volt/VAr management solutions to optimize electricity distribution. By adjusting voltage and reactive power levels, utilities can minimize energy losses, reduce voltage variations, and enhance overall grid efficiency. Maintaining stable voltage levels is crucial to ensuring reliable operation of electrical equipment and delivering high-quality power to customers. Electric utilities rely on Volt/VAr management systems to regulate voltage and keep it within acceptable limits. With the growing adoption of electric vehicles, electric utilities leverage Volt/VAr management solutions to optimize power delivery to EV charging stations, ensuring efficient charging without overloading the grid. Active involvement in grid modernization initiatives is a priority for electric utilities. Volt/VAr management serves as a critical component of smart grids, facilitating the deployment of advanced control and monitoring technologies. Electric utilities fully acknowledge the significance of cybersecurity in safeguarding grid assets. Hence, they deploy Volt/VAr management solutions with robust cybersecurity measures to protect grid control systems from potential cyber threats.

Regional Insights

North America is expected to dominate the market during the forecast period. North America plays a significant role in the global Volt/VAr management market due to its advanced power infrastructure, increasing integration of renewable energy, and a focus on grid modernization. This region has been at the forefront of adopting technologies for optimizing the grid and ensuring power quality. North America is witnessing a substantial growth in renewable energy sources such as wind and solar. Effectively managing the variability of these sources requires advanced Volt/VAr management to maintain grid stability. Ongoing grid modernization initiatives in North America are driven by the need to replace aging infrastructure and incorporate smart technologies. Volt/VAr management is a critical component of these efforts. The rise of microgrids in North America presents opportunities for Volt/VAr management solutions to enhance the stability and resilience of these distributed energy systems. The integration of



energy storage systems with Volt/VAr management can further improve grid stability and support the growing demand for energy storage solutions. In conclusion, North America is a key region in the global Volt/VAr management market due to its advanced power infrastructure, focus on grid modernization, and increasing adoption of renewable energy sources. The market is driven by the need for grid stability, energy efficiency, and compliance with regulations, presenting opportunities for both established players and newcomers in the energy management sector.

Key Market Players

ABB Limited Beckwith Electric Co., Inc. Eaton Corporation General Electric Company Landis+Gyr AG Open Systems International, Inc. Schneider Electric SE Siemens AG Utilidata, Inc.

Varentec, Inc.

Report Scope:

In this report, the Global Volt/VAr Management Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Global Volt/VAr Management Market, By Application:



Transmission

Generation

Distribution

Global Volt/VAr Management Market, By Component:

Hardware

Software & Services

Global Volt/VAr Management Market, By End User:

Electric Utility

Industrial

Global Volt/VAr Management Market, By Region:

North America

Europe

South America

Middle East & Africa

Asia Pacific

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Volt/VAr Management Market.

Available Customizations:

Global Volt/VAr Management Market report with the given market data, Tech Sci

Volt/VAr Management Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, 2028Segmented By...



Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).



Contents

1. PRODUCT OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
- 1.2.1. Markets Covered
- 1.2.2. Years Considered for Study
- 1.2.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

- 2.1. Baseline Methodology
- 2.2. Key Industry Partners
- 2.3. Major Association and Secondary Sources
- 2.4. Forecasting Methodology
- 2.5. Data Triangulation & Validation
- 2.6. Assumptions and Limitations

3. EXECUTIVE SUMMARY

4. IMPACT OF COVID-19 ON GLOBAL VOLT/VAR MANAGEMENT MARKET

5. VOICE OF CUSTOMER

6. GLOBAL VOLT/VAR MANAGEMENT MARKET OVERVIEW

7. GLOBAL VOLT/VAR MANAGEMENT MARKET OUTLOOK

7.1. Market Size & Forecast

7.1.1. By Value

- 7.2. Market Share & Forecast
 - 7.2.1. By Application (Transmission, Generation and Distribution)
 - 7.2.2. By Component (Hardware and Software & Services)
 - 7.2.3. By End User (Electric Utility and Industrial)

7.2.4. By Region (North America, Europe, South America, Middle East & Africa, Asia Pacific)

7.3. By Company (2022)

7.4. Market Map



8. NORTH AMERICA VOLT/VAR MANAGEMENT MARKET OUTLOOK

- 8.1. Market Size & Forecast
- 8.1.1. By Value
- 8.2. Market Share & Forecast
 - 8.2.1. By Application
 - 8.2.2. By Component
 - 8.2.3. By End User
 - 8.2.4. By Country
 - 8.2.4.1. United States Volt/VAr Management Market Outlook
 - 8.2.4.1.1. Market Size & Forecast
 - 8.2.4.1.1.1. By Value
 - 8.2.4.1.2. Market Share & Forecast
 - 8.2.4.1.2.1. By Application
 - 8.2.4.1.2.2. By Component
 - 8.2.4.1.2.3. By End User
 - 8.2.4.2. Canada Volt/VAr Management Market Outlook
 - 8.2.4.2.1. Market Size & Forecast
 - 8.2.4.2.1.1. By Value
 - 8.2.4.2.2. Market Share & Forecast
 - 8.2.4.2.2.1. By Application
 - 8.2.4.2.2.2. By Component
 - 8.2.4.2.2.3. By End User
 - 8.2.4.3. Mexico Volt/VAr Management Market Outlook
 - 8.2.4.3.1. Market Size & Forecast
 - 8.2.4.3.1.1. By Value
 - 8.2.4.3.2. Market Share & Forecast
 - 8.2.4.3.2.1. By Application
 - 8.2.4.3.2.2. By Component
 - 8.2.4.3.2.3. By End User

9. EUROPE VOLT/VAR MANAGEMENT MARKET OUTLOOK

- 9.1. Market Size & Forecast
- 9.1.1. By Value
- 9.2. Market Share & Forecast
 - 9.2.1. By Application
 - 9.2.2. By Component



- 9.2.3. By End User
- 9.2.4. By Country
- 9.2.4.1. Germany Volt/VAr Management Market Outlook
 - 9.2.4.1.1. Market Size & Forecast
 - 9.2.4.1.1.1. By Value
 - 9.2.4.1.2. Market Share & Forecast
 - 9.2.4.1.2.1. By Application
 - 9.2.4.1.2.2. By Component
 - 9.2.4.1.2.3. By End User
- 9.2.4.2. France Volt/VAr Management Market Outlook
 - 9.2.4.2.1. Market Size & Forecast
 - 9.2.4.2.1.1. By Value
 - 9.2.4.2.2. Market Share & Forecast
 - 9.2.4.2.2.1. By Application
 - 9.2.4.2.2.2. By Component
 - 9.2.4.2.2.3. By End User
- 9.2.4.3. United Kingdom Volt/VAr Management Market Outlook
 - 9.2.4.3.1. Market Size & Forecast
 - 9.2.4.3.1.1. By Value
 - 9.2.4.3.2. Market Share & Forecast
 - 9.2.4.3.2.1. By Application
 - 9.2.4.3.2.2. By Component
 - 9.2.4.3.2.3. By End User
- 9.2.4.4. Italy Volt/VAr Management Market Outlook
- 9.2.4.4.1. Market Size & Forecast
 - 9.2.4.4.1.1. By Value
- 9.2.4.4.2. Market Share & Forecast
- 9.2.4.4.2.1. By Application
- 9.2.4.4.2.2. By Component
- 9.2.4.4.2.3. By End User
- 9.2.4.5. Spain Volt/VAr Management Market Outlook
- 9.2.4.5.1. Market Size & Forecast
 - 9.2.4.5.1.1. By Value
- 9.2.4.5.2. Market Share & Forecast
- 9.2.4.5.2.1. By Application
- 9.2.4.5.2.2. By Component
- 9.2.4.5.2.3. By End User

10. SOUTH AMERICA VOLT/VAR MANAGEMENT MARKET OUTLOOK



- 10.1. Market Size & Forecast
- 10.1.1. By Value
- 10.2. Market Share & Forecast
 - 10.2.1. By Application
 - 10.2.2. By Component
 - 10.2.3. By End User
 - 10.2.4. By Country
 - 10.2.4.1. Brazil Volt/VAr Management Market Outlook
 - 10.2.4.1.1. Market Size & Forecast
 - 10.2.4.1.1.1. By Value
 - 10.2.4.1.2. Market Share & Forecast
 - 10.2.4.1.2.1. By Application
 - 10.2.4.1.2.2. By Component
 - 10.2.4.1.2.3. By End User
 - 10.2.4.2. Colombia Volt/VAr Management Market Outlook
 - 10.2.4.2.1. Market Size & Forecast
 - 10.2.4.2.1.1. By Value
 - 10.2.4.2.2. Market Share & Forecast
 - 10.2.4.2.2.1. By Application
 - 10.2.4.2.2.2. By Component
 - 10.2.4.2.2.3. By End User
 - 10.2.4.3. Argentina Volt/VAr Management Market Outlook
 - 10.2.4.3.1. Market Size & Forecast
 - 10.2.4.3.1.1. By Value
 - 10.2.4.3.2. Market Share & Forecast
 - 10.2.4.3.2.1. By Application
 - 10.2.4.3.2.2. By Component
 - 10.2.4.3.2.3. By End User

11. MIDDLE EAST & AFRICA VOLT/VAR MANAGEMENT MARKET OUTLOOK

- 11.1. Market Size & Forecast
- 11.1.1. By Value
- 11.2. Market Share & Forecast
- 11.2.1. By Application
- 11.2.2. By Component
- 11.2.3. By End User
- 11.2.4. By Country



- 11.2.4.1. Saudi Arabia Volt/VAr Management Market Outlook
 - 11.2.4.1.1. Market Size & Forecast
 - 11.2.4.1.1.1. By Value
 - 11.2.4.1.2. Market Share & Forecast
 - 11.2.4.1.2.1. By Application
 - 11.2.4.1.2.2. By Component
 - 11.2.4.1.2.3. By End User
- 11.2.4.2. UAE Volt/VAr Management Market Outlook
 - 11.2.4.2.1. Market Size & Forecast
 - 11.2.4.2.1.1. By Value
 - 11.2.4.2.2. Market Share & Forecast
 - 11.2.4.2.2.1. By Application
 - 11.2.4.2.2.2. By Component
 - 11.2.4.2.2.3. By End User
- 11.2.4.3. South Africa Volt/VAr Management Market Outlook
- 11.2.4.3.1. Market Size & Forecast
- 11.2.4.3.1.1. By Value
- 11.2.4.3.2. Market Share & Forecast
- 11.2.4.3.2.1. By Application
- 11.2.4.3.2.2. By Component
- 11.2.4.3.2.3. By End User

12. ASIA PACIFIC VOLT/VAR MANAGEMENT MARKET OUTLOOK

- 12.1. Market Size & Forecast
- 12.1.1. By Value
- 12.2. Market Share & Forecast
 - 12.2.1. By Application
 - 12.2.2. By Component
 - 12.2.3. By End User
 - 12.2.4. By Country
 - 12.2.4.1. China Volt/VAr Management Market Outlook
 - 12.2.4.1.1. Market Size & Forecast
 - 12.2.4.1.1.1. By Value
 - 12.2.4.1.2. Market Share & Forecast
 - 12.2.4.1.2.1. By Application
 - 12.2.4.1.2.2. By Component
 - 12.2.4.1.2.3. By End User
 - 12.2.4.2. India Volt/VAr Management Market Outlook



12.2.4.2.1. Market Size & Forecast 12.2.4.2.1.1. By Value 12.2.4.2.2. Market Share & Forecast 12.2.4.2.2.1. By Application 12.2.4.2.2.2. By Component 12.2.4.2.2.3. By End User 12.2.4.3. Japan Volt/VAr Management Market Outlook 12.2.4.3.1. Market Size & Forecast 12.2.4.3.1.1. By Value 12.2.4.3.2. Market Share & Forecast 12.2.4.3.2.1. By Application 12.2.4.3.2.2. By Component 12.2.4.3.2.3. By End User 12.2.4.4. South Korea Volt/VAr Management Market Outlook 12.2.4.4.1. Market Size & Forecast 12.2.4.4.1.1. By Value 12.2.4.4.2. Market Share & Forecast 12.2.4.4.2.1. By Application 12.2.4.4.2.2. By Component 12.2.4.4.2.3. By End User 12.2.4.5. Australia Volt/VAr Management Market Outlook 12.2.4.5.1. Market Size & Forecast 12.2.4.5.1.1. By Value 12.2.4.5.2. Market Share & Forecast 12.2.4.5.2.1. By Application 12.2.4.5.2.2. By Component 12.2.4.5.2.3. By End User **13. MARKET DYNAMICS**

- 13.1. Drivers
- 13.2. Challenges

14. MARKET TRENDS AND DEVELOPMENTS

15. COMPANY PROFILES

- 15.1. ABB Limited
 - 15.1.1. Business Overview



- 15.1.2. Key Revenue and Financials
- 15.1.3. Recent Developments
- 15.1.4. Key Personnel
- 15.1.5. Key Product/Services Offered
- 15.2. Beckwith Electric Co., Inc.
 - 15.2.1. Business Overview
 - 15.2.2. Key Revenue and Financials
 - 15.2.3. Recent Developments
- 15.2.4. Key Personnel
- 15.2.5. Key Product/Services Offered
- 15.3. Eaton Corporation
- 15.3.1. Business Overview
- 15.3.2. Key Revenue and Financials
- 15.3.3. Recent Developments
- 15.3.4. Key Personnel
- 15.3.5. Key Product/Services Offered
- 15.4. General Electric Company
- 15.4.1. Key Revenue and Financials
- 15.4.2. Recent Developments
- 15.4.3. Key Personnel
- 15.4.4. Key Product/Services Offered
- 15.5. Landis+Gyr AG
- 15.5.1. Business Overview
- 15.5.2. Key Revenue and Financials
- 15.5.3. Recent Developments
- 15.5.4. Key Personnel
- 15.5.5. Key Product/Services Offered
- 15.6. Open Systems International, Inc.
- 15.6.1. Business Overview
- 15.6.2. Key Revenue and Financials
- 15.6.3. Recent Developments
- 15.6.4. Key Personnel
- 15.6.5. Key Product/Services Offered
- 15.7. Schneider Electric SE
 - 15.7.1. Business Overview
- 15.7.2. Key Revenue and Financials
- 15.7.3. Recent Developments
- 15.7.4. Key Personnel
- 15.7.5. Key Product/Services Offered



- 15.8. Siemens AG
 - 15.8.1. Business Overview
- 15.8.2. Key Revenue and Financials
- 15.8.3. Recent Developments
- 15.8.4. Key Personnel
- 15.8.5. Key Product/Services Offered

15.9. Utilidata, Inc.

- 15.9.1. Business Overview
- 15.9.2. Key Revenue and Financials
- 15.9.3. Recent Developments
- 15.9.4. Key Personnel
- 15.9.5. Key Product/Services Offered
- 15.10. Varentec, Inc.
 - 15.10.1. Business Overview
 - 15.10.2. Key Revenue and Financials
 - 15.10.3. Recent Developments
 - 15.10.4. Key Personnel
 - 15.10.5. Key Product/Services Offered

16. STRATEGIC RECOMMENDATIONS

17. ABOUT US & DISCLAIMER



I would like to order

Product name: Volt/VAr Management Market – Global Industry Size, Share, Trends, Opportunity, and Forecast, 2028Segmented By Application (Transmission, Generation and Distribution), By Component (Hardware and Software & Services), By End User (Electric Utility and Industrial), By Region, Competition, 2018-2028, By Region, Competition, 2018-2028

Product link: https://marketpublishers.com/r/V21DD1393B19EN.html

Price: US\$ 4,900.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/V21DD1393B19EN.html</u>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

**All fields are required

Custumer signature ____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>



To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970