#### EMERSON ELECTRIC CO

Form 10-K

November 16, 2016

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended September 30, 2016

OR

"TRANSITION REPORT PURSUANT TO SECTION 13	OR 15(d) OF THE SECURITIES EXCHANGE ACT OF
1934	
For the transition period from to	
Commission file number 1-278	

#### EMERSON ELECTRIC CO.

(Exact name of registrant as specified in its charter)
Missouri 43-0259330
(State or other jurisdiction of (I.R.S. Employer incorporation or organization)
Identification No.)

8000 W. Florissant Ave.

P.O. Box 4100

St. Louis, Missouri 63136 (Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (314) 553-2000

Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Name of each exchange on which registered

Common Stock of \$0.50 par value per share

New York Stock Exchange
Chicago Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ý No "

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes "No ý

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ý No "

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý No "

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K."

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. Large accelerated filer ý Accelerated filer "Non-accelerated filer" (Do not check if a smaller reporting company) Smaller reporting company "

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes "No ý

Aggregate market value of the voting stock held by nonaffiliates of the registrant as of close of business on March 31, 2016: \$34.8 billion.

Common stock outstanding at October 31, 2016: 642,776,971 shares.

Documents Incorporated by Reference

1. Portions of Emerson Electric Co. Notice of 2017 Annual Meeting of Stockholders and Proxy Statement incorporated by reference into Part III hereof.

#### PART I

### ITEM 1 - BUSINESS

Emerson ("the Company") was incorporated in Missouri in 1890, and has evolved through internal growth and strategic acquisitions and divestitures from a regional manufacturer of electric motors and fans into a diversified global leader that brings technology and engineering together to provide innovative solutions for customers in a wide range of industrial, commercial and consumer markets around the world.

As a result of the Company's strategic portfolio repositioning actions further described herein, the network power systems business, which comprised the former Network Power segment, and the power generation, motors and drives businesses, which were part of the Industrial Automation segment, are reported as discontinued operations in the Consolidated Financial Statements for all years presented. The Company's business segments described below are based on the nature of the products and services rendered:

Process Management - provides measurement, control and diagnostic capabilities for automated industrial processes producing items such as fuels, chemicals, foods, medicines and power.

Industrial Automation - brings integrated manufacturing solutions to diverse industries worldwide.

Climate Technologies - enhances household and commercial comfort, as well as food safety and energy efficiency, through heating, air conditioning and refrigeration technology.

Commercial & Residential Solutions - provides tools for professionals and homeowners, residential storage systems and appliance solutions.

In fiscal 2017, the Company expects to realign its business segments. The new Automation Solutions segment will include the current Process Management segment and the remaining businesses in the existing Industrial Automation segment, except for the hermetic motors business which will be included in the Climate Technologies segment. The Commercial & Residential Solutions business will include the Climate Technologies segment and the Tools & Home Products segment. Tools & Home Products will include the existing Commercial & Residential Solutions businesses. Sales, earnings before interest and income taxes, and total assets attributable to each business segment for the three years ended September 30, 2016, are set forth in Item 8 of this Annual Report on Form 10-K in Note 18 of Notes to Consolidated Financial Statements, which note is hereby incorporated by reference. Sales by segment in 2016, as a percentage of the total Company, were: Process Management, 49 percent; Industrial Automation, 14 percent; Climate Technologies, 26 percent; and Commercial & Residential Solutions, 11 percent. Total Emerson sales by geographic destination in 2016 were: the United States and Canada, 52 percent; Asia, 20 percent; Europe, 16 percent; Latin America, 6 percent; and Middle East/Africa, 6 percent. Information with respect to acquisition and divestiture activity, including the discontinued businesses, and restructuring costs is set forth in Item 8 of this Annual Report on Form 10-K in Notes 3, 4 and 6 of Notes to Consolidated Financial Statements, which notes are hereby incorporated by reference.

The Company entered into an agreement as of July 29, 2016 to sell its network power systems business, and on July 30, 2016, entered into an agreement to sell its power generation, motors and drives businesses. Additionally, on August 18, 2016, the Company entered into an agreement to acquire Pentair's Valves & Controls business for approximately \$3.15 billion, which will complement Process Management's final control business. These transactions are expected to close by the end of calendar year 2016 or shortly thereafter, subject to customary closing conditions and regulatory approvals. See Item 1A - "Risk Factors," Item 7 - "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Notes 3 and 4 of Notes to Consolidated Financial Statements set forth in Item 8 of this Annual Report on Form 10-K, which notes are hereby incorporated by reference.

#### PROCESS MANAGEMENT

The Process Management segment offers customers products and technology, and engineering, project management and consulting services for precision measurement, control, monitoring, asset optimization, and safety and reliability of oil and gas reservoirs and plants that process or treat various items. The Company's array of products and services helps customers optimize their plant capabilities in the areas of plant safety and reliability, product quality and output efficiency. Significant end markets served include oil and gas, refining, chemicals and power generation, as well as pharmaceuticals, food and beverages, pulp and paper, metals and mining, and municipal water supplies. Sales by geographic destination in 2016 for Process Management were: the United States and Canada, 42 percent; Asia, 23 percent; Europe, 19 percent; Latin America, 6 percent; and Middle East/Africa, 10 percent.

## Process Management Systems and Software

Process Management systems and software control plant processes by collecting and analyzing information from measurement devices in the plant, and then uses that information to adjust valves, pumps, motors, drives and other control hardware for maximum product quality and process efficiency and safety. Software capabilities also include upstream oil and gas reservoir simulation and modeling for production optimization. The Company's process control systems can be extended wirelessly to support a mobile workforce with handheld tools/communicators, provide site-wide location tracking of people and assets, and enable video monitoring and communication with wireless field devices, thereby increasing the information available to operators.

### Measurement and Analytical Instrumentation

Measurement instrumentation measures the physical properties of liquids or gases in a process stream, such as pressure, temperature, level, rate and amount of flow, and communicates this information to a process control system. Measurement technologies provided by the Company include Coriolis direct mass flow, magnetic flow, vortex flow, ultrasonic flow, differential pressure, ultra-low flow fluid measurement, temperature sensors, radar-based tank gauging and magnetic level gauging. The Company's measurement products are also often used in custody transfer applications, such as the transfer of gasoline from a storage tank to a tanker truck, where precise metering of the amount of fluid transferred helps ensure accurate asset management. Complementary products include onshore and subsea multi-phase meters, wetgas meters, downhole gauges and corrosion/erosion measuring instruments.

Analytical instrumentation analyzes the chemical composition of process fluids and emissions to enhance quality and efficiency, as well as environmental compliance. The Company's analytical technologies include process gas chromatographs, in-situ oxygen analyzers, infrared gas and process fluid analyzers, combustion analyzers and systems, and analyzers that measure pH, conductivity and water quality. The Company provides sensors to detect combustible and toxic gases, and flames. These devices support the safety of both people and process plant assets.

Measurement and analytical instrumentation technologies are also available with wireless communication capability, allowing customers to monitor processes or equipment that were previously not measurable (remote, moving/rotating) or not economical to measure due to the high cost and difficulty of running wires in industrial process plants.

## Valves, Actuators and Regulators

Control valves respond to commands from a control system to continuously and precisely modulate the flow of process fluids to provide maximum process efficiency and product quality. Engineered on/off valves are typically used to achieve tight shutoff, even in high pressure and temperature processes. The Company designs, engineers and manufactures ball valves, sliding stem valves, rotary valves, high performance butterfly valves and severe service valves for critical applications, and related valve actuators and controllers. The Company provides a line of industrial and residential regulators, whose function is to reduce the pressure of fluids moving from high-pressure supply lines

into lower pressure systems, and also manufactures tank and terminal safety equipment, including hatches, vent pressure and vacuum relief valves, and flame arrestors for storage tanks in the oil and gas, petrochemical, refining and other process industries.

# ® PlantWeb Digital Plant Architecture

PlantWeb digital plant architecture combines the technologies described above with the advantages of "intelligent" plant devices (valves and measurement instruments with advanced diagnostic capabilities), open communication standards (nonproprietary wired and wireless digital protocols allowing plant devices and control systems to "talk" with one another) and integrated modular software, not only to better control the process but also to collect and analyze valuable information about the process and the plant assets. This capability gives the Company's customers the ability to detect or predict changes in equipment and process performance, and the associated impact on plant operations. PlantWeb architecture provides customers the insight to improve plant availability and safety, and also furnishes a platform to continually improve asset management and standards compliance, and to reduce startup, operating and maintenance costs.

#### **Industry Services and Solutions**

Process Management's array of process automation and asset optimization services improve automation project implementation time and costs, increase process availability and productivity, and reduce the total cost of ownership. Reliability consulting services help process plant owners and operators improve plant availability through implementation of on-site and corporate-wide reliability programs. Through proven project methodologies and deep knowledge of plant assets, the Company helps industrial plants to improve safety, increase plant uptime and reduce maintenance costs. The Company's Global Industry Centers offer engineering and project management services to help customers extract maximum performance and reliability from their process equipment and automation assets. These Centers serve industries such as oil and gas, pulp and paper, chemicals, power, food and beverage, and life sciences. They also assist customers in diagnosing equipment problems and plant inefficiencies.

#### Distribution

The principal worldwide distribution channel for Process Management is a direct sales force, although a network of independent sales representatives, and to a lesser extent independent distributors purchasing products for resale, are also utilized. Approximately half of the sales in the United States are made through a direct sales force with the remainder primarily through independent sales representatives. In Europe and Asia, sales are primarily made through a direct sales force with the remainder split evenly between independent sales representatives and distributors.

#### **Brands**

Service/trademarks and trade names within Process Management include Emerson Process Management, AMS Suite, Baumann, Bettis, Bristol, CSI, Damcos, Daniel, DeltaV, EIM, El-O-Matic, Fisher, Go Switch, Guardian, Micro Motion, Net Safety, Ovation, PlantWeb, ROC, Rosemount, Roxar, Smart Process, SureService, Tescom, TopWorx, Valvetop and Virgo.

## INDUSTRIAL AUTOMATION

The Industrial Automation segment provides integrated manufacturing solutions to its customers at the source of manufacturing their own products. Products include fluid controls, electrical distribution devices, materials joining equipment and hermetic motors. Through these offerings, the Company brings technology and enhanced quality to its customers' final products. Sales by geographic destination in 2016 for Industrial Automation were: the United States and Canada, 51 percent; Asia, 20 percent; Europe, 22 percent; Latin America, 4 percent; and Middle East/Africa, 3 percent.

#### Fluid Power and Control

These products control and power the flow of fluids (liquids and gases) in manufacturing operations such as automobile assembly, food processing, textile manufacturing and petrochemical processing. Products include solenoid and pneumatic valves, valve position indicators, pneumatic cylinders, air preparation equipment, and pressure, vacuum and temperature switches.

#### **Electrical Distribution**

Electrical distribution consists of a broad line of components for current- and noncurrent-carrying electrical distribution devices, including conduit and cable fittings, plugs and other receptacles, industrial lighting, enclosures and controls. Products are used in hazardous, industrial, commercial and construction environments, such as oil and gas drilling and production sites, pulp and paper mills and petrochemical plants.

#### Materials Joining and Precision Cleaning

The Company supplies plastic and metal joining technologies and equipment to a diversified manufacturing customer base, including automotive, medical devices and toys. The Company also provides precision cleaning and liquid processing solutions to industrial and commercial manufacturers. Products include ultrasonic joining and cleaning equipment; linear and orbital vibration welding equipment; systems for hot plate, spin and laser welding equipment; and aqueous, semi-aqueous and vapor cleaning systems.

#### Hermetic Motors

The Company provides a broad range of hermetic motors that are used in a wide variety of commercial, industrial and residential HVAC products and applications.

#### Distribution

On a worldwide basis, the primary distribution channel for Industrial Automation is through direct sales forces, including to original equipment manufacturers. Independent distributors constitute the next significant sales channel, mostly to reach end users. To a lesser extent, independent sales representatives are utilized, particularly for electrical distribution products in the United States.

#### Brands

Service/trademarks and trade names within Industrial Automation include Emerson Industrial Automation, Appleton, ASCO, ASCO Joucomatic, ASCO Numatics, Branson Ultrasonics and O-Z/Gedney.

#### **CLIMATE TECHNOLOGIES**

The Climate Technologies segment provides products and services for all areas of the climate control industry, including residential heating and cooling, commercial air conditioning, and commercial and industrial refrigeration. The Company's technologies enable homeowners and businesses to better manage their heating, air conditioning and refrigeration systems for improved control and comfort, and lower energy costs. Climate Technologies also provides services that digitally control and remotely monitor refrigeration units in grocery stores and other food distribution outlets to enhance food freshness and safety. Sales by geographic destination in 2016 for Climate Technologies were: the United States and Canada, 56 percent; Asia, 22 percent; Europe, 10 percent; Latin America, 7 percent; and Middle East/Africa, 5 percent.

#### Residential and Commercial Heating and Air Conditioning

The Company provides a full range of heating and air conditioning products that help reduce operational and energy costs and create comfortable environments in all types of buildings. These products include reciprocating and scroll air conditioning compressors, including ultra-efficient residential scroll compressors with two stages of cooling capacity, as well as variable speed scroll compressors; system protector and flow control devices; standard, programmable and Wi-Fi thermostats; monitoring equipment and electronic controls for gas and electric heating

systems; gas valves for furnaces and water heaters; ignition systems for furnaces; sensors and thermistors for home appliances; and temperature sensors and controls.

## Commercial and Industrial Refrigeration

The Company's technology is incorporated into equipment to refrigerate food and beverages in supermarkets, convenience stores, food service operations, refrigerated trucks and refrigerated marine transport containers. Climate Technologies refrigeration products are also used in a wide variety of industrial applications, including medical applications, food processing and cold storage. Products include reciprocating, scroll and screw

compressors; precision flow controls; system diagnostics and controls that provide precise temperature management; and environmental control systems.

#### Services and Solutions

Services and solutions enable global customers to optimize the performance of facilities including large-scale retailers, supermarkets, convenience stores and food service operations. By providing expertise in air conditioning, refrigeration and lighting control, Climate Technologies performs as a complete facility manager for its customers. The Company's expertise allows customers to reduce energy and maintenance costs, thereby improving overall facility efficiency and uptime. In addition to industry-leading controls, services include facility design and product management, site commissioning, facility monitoring and energy modeling.

#### Distribution

Climate Technologies segment sales, primarily to original equipment manufacturers and end users, are made predominately through worldwide direct sales forces. Remaining sales are primarily through independent distributor networks throughout the world.

#### **Brands**

Service/trademarks and trade names within the Climate Technologies segment include Emerson Climate Technologies, Control Products, Computer Process Controls, Copeland, Design Services Network, Dixell, Emerson Climate Technologies Distribution Services, Emerson Climate Technologies Retail Services, Fusite, Therm-O-Disc, Vilter and White-Rodgers.

## COMMERCIAL & RESIDENTIAL SOLUTIONS

The Company's Commercial & Residential Solutions segment includes a broad range of tools, storage products and appliance solutions. Sales by geographic destination in 2016 for this segment were: the United States and Canada, 86 percent; Asia, 4 percent; Europe, 7 percent; Latin America, 2 percent; and Middle East/Africa, 1 percent.

#### Professional and Do-It-Yourself Tools

Pipe-working tools are used by plumbing and mechanical professionals to install and repair piping systems. Products include pipe wrenches, pipe cutters, pipe threading and roll grooving equipment, mechanical crimping tube joining systems, drain cleaners, tubing tools, and diagnostic systems, including closed-circuit television pipe inspection and locating equipment. Other professional tools include water jetters, wet-dry vacuums, commercial vacuums and bolt cutters. Do-it-yourself tools, available at retail home improvement outlets, include drain cleaning equipment, pipe and tube working tools, and wet-dry vacuums.

#### **Storage Solutions**

The Company provides a wide variety of freestanding, fixed and mobile storage products for residential applications. Products for the home include shelving systems, cabinet and closet organizers, home office storage, and drawer systems and containers, available in wire, stainless steel and laminate.

## **Appliance Solutions**

The Company provides a number of appliance solutions, including residential and commercial food waste disposers, ceiling fans, instant hot water dispensers and compact electric water heaters.

## Distribution

The principal worldwide distribution channels for Commercial & Residential Solutions are distributors and direct sales forces. Professional tools are sold worldwide almost exclusively through distributors. Independent sales representatives are utilized to a lesser extent. Appliance solutions are sold through direct sales force networks and distributors. Approximately one-third of this segment's sales are made to a small number of big box retailers.

#### **Brands**

Service/trademarks and trade names within the Commercial & Residential Solutions segment include Emerson, Emerson Appliance Solutions, Emerson Professional Tools, Emerson Storage Solutions, ClosetMaid, InSinkErator, ProTeam and RIDGID.

#### DISCONTINUED OPERATIONS

The network power systems business and the power generation, motors and drives businesses are reported as discontinued operations in the Consolidated Financial Statements for all years presented. See Note 4 of Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K.

#### **Network Power Systems**

The network power systems business supplies electric power conditioning, power reliability and environmental control products for telecommunications networks, data centers and other critical applications, and also provides comprehensive data center infrastructure management solutions.

Critical power system products, including automatic transfer switches, load banks, surge protection, paralleling and synchronizing gear, and related control systems, automatically transfer critical application loads from a utility to emergency backup generators in the event of a blackout or brownout. Uninterruptible AC and DC power systems provide reliable, conditioned power to telecommunication networks, data centers and other critical equipment to protect customers' equipment. Products range from stand-alone desktop solutions to complete systems incorporating rectifiers, inverters, power distribution units, surge protection, batteries and system supervision.

Thermal management equipment provides efficient, reliable and cost-effective management of heat in mission- critical facilities ranging from small network closets and computer rooms to hyperscale-sized data center and communication network sites. Thermal management products include chilled water, direct expansion and evaporative equipment, software and controls.

Data center management solutions are provided through server access technologies that enable access, monitoring and control of the information technology infrastructure and provide linkage with data center operations. Customer Resolution Centers are staffed globally and provide services to assist customers in managing their critical infrastructure, including on-site operations management, energy consumption monitoring, preventive maintenance, electrical testing, remote monitoring and management, and 24-hour service capability.

#### Power Generation, Motors and Drives

Power generation products include low, medium and high voltage alternators for use in diesel and gas powered generator sets, as well as high frequency alternators, AC motor/generator sets, traction generators, wind power generators, wind turbine pitch control systems and solar photovoltaic converters. A broad line of drives and electric motors are supplied for use in a wide variety of manufacturing operations and products, including production assembly lines, escalators in shopping malls and supermarket checkout stations. Products include alternating current (AC) and direct current (DC) electrical variable speed drives, servo motors, pump motors, drive control systems, integral horsepower motors (1 HP and above), fractional horsepower motors (less than 1 HP) and gear drives.

#### **PRODUCTION**

The Company utilizes various production operations and methods. The principal production operations are electronics assembly, metal stamping, forming, casting, machining, welding, plating, heat treating, painting and assembly. In

addition, the Company uses specialized production operations, including automatic and semiautomatic testing, automated material handling and storage, ferrous and nonferrous machining, and special furnaces for heat treating and foundry applications. Management believes the equipment, machinery and tooling used in these processes are of modern design and well maintained.

#### **RAW MATERIALS**

The Company's major requirements for basic raw materials include steel, copper, cast iron, electronics, rare earth metals, aluminum and brass; and to a lesser extent, plastics and petroleum-based chemicals. The Company seeks to have many sources of supply for each of its major requirements in order to avoid significant dependence on any one or a few suppliers. However, the supply of materials or other items could be disrupted by natural disasters or other events. Despite market price volatility for certain requirements and materials pricing pressures at some of our businesses, the raw materials and various purchased components needed for the Company's products have generally been available in sufficient quantities.

#### PATENTS, TRADEMARKS AND LICENSES

The Company maintains an intellectual property portfolio it has developed or acquired over a number of years, including patents, trademarks and licenses. The Company also continues to develop or acquire new intellectual property on an ongoing basis. New patent applications are continuously filed to protect the Company's ongoing research and development activities. The Company's trademark registrations may be renewed and their duration is dependent upon national laws and trademark use. While this proprietary intellectual property portfolio is important to the Company in the aggregate, management does not regard any of its segments as being dependent on any single patent, trademark registration or license.

#### **BACKLOG**

The Company's estimated consolidated order backlog was \$3,925 million and \$4,368 million at September 30, 2016 and 2015, respectively. The vast majority of the consolidated backlog as of September 30, 2016 is expected to be shipped within one year. Estimated backlog by business segment at September 30, 2016 and 2015 follows (dollars in millions).

	2015	2016
Process Management	\$3,725	3,291
Industrial Automation	205	173
Climate Technologies	370	406
Commercial & Residential Solutions	68	55
Total Backlog	\$4,368	3,925

Backlog of businesses reported in discontinued operations was \$1,705 million and \$1,618 million at September 30, 2016 and 2015, respectively.

#### **COMPETITION**

The Company's businesses operate in end markets that are highly competitive. The Company competes based on product performance, quality, service and/or price across the industries and markets served. A significant element of the Company's competitive strategy is to deliver solutions to our customers by manufacturing high-quality products at the best relevant global cost. Although no single company competes directly with Emerson in all of the Company's product lines, various companies compete in one or more product lines with the number of competitors varying by product line. Some competitors have substantially greater sales, assets and financial resources than Emerson and the Company also competes with many smaller companies. Management believes Emerson has a market leadership position in many of its product lines.

## RESEARCH AND DEVELOPMENT

Costs associated with Company-sponsored research and development activities for continuing operations were \$320 million, \$336 million and \$356 million in 2016, 2015 and 2014, respectively.

## **ENVIRONMENT**

The Company's manufacturing locations generate waste, of which treatment, storage, transportation and disposal are subject to federal, state, foreign and/or local laws and regulations relating to protection of the environment.

Compliance with laws regulating the discharge of materials into the environment or otherwise relating to protection of the environment has not had a material effect on the Company's capital expenditures, earnings or competitive position. The Company does not anticipate having material capital expenditures for environmental control facilities during the next fiscal year.

### **EMPLOYEES**

The Company and its subsidiaries had an average of approximately 103,500 employees during 2016, of which 29,000 related to discontinued businesses. Management believes that the Company's employee relations are favorable. Some of the Company's employees are represented under collective bargaining agreements, but none of these agreements are considered significant.

#### DOMESTIC AND FOREIGN OPERATIONS

International sales from continuing operations were \$7,582 million in 2016, \$8,641 million in 2015 and \$9,804 million in 2014, including U.S. exports of \$888 million, \$1,187 million and \$1,288 million in 2016, 2015 and 2014, respectively. There are additional risks attendant to foreign operations, such as possible nationalization of facilities, currency fluctuations and potential restrictions on the movement of funds. See Note 18 of Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K, which note is hereby incorporated by reference, for further information with respect to foreign operations.

#### INTERNET ACCESS

Emerson's reports on Forms 10-K, 10-Q, 8-K and all amendments to those reports are available without charge through the Company's website on the internet as soon as reasonably practicable after they are electronically filed with, or furnished to, the U.S. Securities and Exchange Commission (SEC). They may be accessed as follows: www.Emerson.com, Investors, SEC Filings. Information on the Company's website does not constitute part of this Form 10-K.

The information set forth under Item 1A - "Risk Factors" is hereby incorporated by reference.

#### ITEM 1A - RISK FACTORS

Investing in our securities involves risks. We may amend or supplement the risk factors described below from time to time by other reports we file with the SEC.

Our Strategic Portfolio Transactions, Including the Planned Sales of Our Network Power Systems Business and Our Power Generation, Motors and Drives Businesses, as Well as the Planned Acquisition of Pentair's Valves & Controls Business, May Not Be Completed Within the Currently Contemplated Time Frame, With the Expected Terms or Costs, and May Not Achieve the Intended Benefits

We make no assurance regarding the terms, timing, costs or benefits anticipated from the strategic portfolio transactions. Unforeseen developments, including possible delays in obtaining various tax, regulatory and other approvals, could delay the proposed transactions, or cause them to occur on terms and conditions that are less favorable, or at a higher cost, than expected.

Further, we may not realize some or all of the anticipated strategic, financial or other benefits of the strategic portfolio transactions. Moreover, after the transactions are completed, the Company will be smaller and less diversified, with a narrower business focus and may be more vulnerable to changing market conditions, which could adversely affect our business.

We Operate in Businesses That Are Subject to Competitive Pressures That Could Affect Prices or Demand for Our Products

Our businesses operate in markets that are highly competitive and potentially volatile, and we compete on the basis of product performance, quality, service and/or price across the industries and markets served. Our businesses are largely dependent on the current and future business environment, including capital and consumer spending. A significant element of our competitive strategy is to deliver solutions to our customers by manufacturing high-quality products at the best relevant global cost. Various companies compete with us in one or more product lines and the

number of competitors varies by product line. Some of our competitors have substantially greater sales, assets and financial resources than our Company and we also compete with many smaller companies. Competitive pressures could adversely affect prices or customer demand for our products, impacting our sales or profit margins, and/or resulting in a loss of market share.

Our Operating Results Depend in Part on Continued Successful Research, Development and Marketing of New and/or Improved Products and Services, and There Can Be No Assurance That We Will Continue to Successfully Introduce New Products and Services

The success of new and improved products and services depends on their initial and continued acceptance by our customers. Our businesses are affected by varying degrees of technological change and corresponding shifts in customer demand, which result in unpredictable product transitions, shortened life cycles and increased importance of being first to market with new products and services. We may experience difficulties or delays in the research, development, production and/or marketing of new products and services which may negatively impact our operating results and prevent us from recouping or realizing a return on the investments required to continue to bring new products and services to market.

If We Are Unable to Defend or Protect Our Intellectual Property Rights the Company's Competitive Position Could Be Adversely Affected

The Company's intellectual property rights are important to its business and include numerous patents, trademarks, copyrights, trade secrets and other confidential information. This intellectual property may be subject to challenge, infringement, invalidation or circumvention by third parties. Despite extensive security measures, our intellectual property may be subject to misappropriation through unauthorized access of our information technology systems, employee theft, or other acts of industrial espionage. Should the Company be unable to adequately defend or protect its intellectual property, it may suffer competitive harm.

We Engage in Acquisitions and Divestitures, Which Are Subject to Domestic and Foreign Regulatory Requirements, and May Encounter Difficulties in Integrating and Separating These Businesses and Therefore We May Not Realize the Anticipated Benefits

We regularly seek growth through strategic acquisitions as well as evaluate our portfolio for potential divestitures. These activities require favorable environments to execute these transactions, and we may encounter difficulties in obtaining the necessary regulatory approvals in both domestic and foreign jurisdictions. In 2016 and in past years, we have made various acquisitions and entered into joint venture arrangements intended to complement or expand our business, and may continue to do so in the future. The success of these transactions will depend on our ability to integrate assets and personnel acquired in these transactions and to cooperate with our strategic partners. We may encounter difficulties in integrating acquisitions with our operations as well as separating divested businesses, and in managing strategic investments. Furthermore, we may not realize the degree, or timing, of benefits we anticipate when we first enter into a transaction. Any of the foregoing could adversely affect our business and results of operations.

We Use a Variety of Raw Materials and Components in Our Businesses, and Significant Shortages or Price Increases Could Increase Our Operating Costs and Adversely Impact the Competitive Positions of Our Products

Our major requirements for raw materials include steel, copper, cast iron, electronics, rare earth metals, aluminum, brass and, to a lesser extent, plastics and petroleum-based chemicals. The Company seeks multiple sources of supply for each of its major requirements in order to avoid significant dependence on any one or a few suppliers. However, the supply of materials or other items could be disrupted by natural disasters or other events. Significant shortages or price increases could impact the prices our affected businesses charge, their operating costs and the competitive position of their products and services, which could adversely affect our results of operations. While we monitor

market prices of the commodities we require and attempt to reduce price exposure through hedging activities, this risk could adversely affect our operating results.

Our Operations Depend on Production Facilities Throughout the World, a Majority of Which Are Located Outside the United States and Subject to Increased Risks of Disrupted Production Causing Delays in Shipments and Loss of Customers and Revenue

We manage businesses with manufacturing facilities worldwide, a majority of which are located outside the United States, and also source certain materials internationally. Emerging market sales now represent over one-third of total sales and serving a global customer base requires that we place more materials sourcing and production in emerging markets to capitalize on market opportunities and maintain our best-cost position. Our and our suppliers' international production facilities and operations could be disrupted by a natural disaster, labor strife, war, political unrest, terrorist activity or public health concerns, particularly in emerging countries that are not well-equipped to handle such occurrences.

Our manufacturing facilities abroad are dependent on the stability of governments and business conditions and may be more susceptible to changes in laws, policies and regulation in host countries, as well as economic and political upheaval, than our domestic facilities. These facilities face increased risks of nationalization as well as operational disruptions which could cause delays in shipments of products and the loss of sales and customers, and insurance proceeds may not adequately compensate us.

Our Substantial Sales Abroad Subject Us to Economic Risk as Our Results of Operations May Be Adversely Affected by Foreign Currency Fluctuations and Changes in Local Government Regulations and Policies

We sell, manufacture, engineer and purchase products in overseas markets and a significant portion of our sales occur in mature and emerging markets outside the United States. We expect sales from non-U.S. markets to continue to represent a significant portion of our total sales. International sales and operations are subject to changes in local government regulations and policies, including those related to tariffs and trade barriers, investments, taxation, exchange controls and repatriation of earnings, which could adversely affect our results. Changes in the relative values of currencies occur from time to time and have affected our operating results and could do so in the future. While we monitor our exchange rate exposures and attempt to reduce this exposure through hedging activities, this risk could adversely affect our operating results.

Recessions, Adverse Market Conditions or Downturns in End Markets We Serve May Negatively Affect Our Operations

In the past, our operations have been exposed to significant volatility due to changes in general economic conditions, recessions or adverse conditions in the end markets we serve. In the future, similar changes could adversely impact overall sales, operating results and cash flows. Moreover, during economic downturns we may undertake more extensive restructuring actions and incur higher costs. If our restructuring actions are not sufficiently effective, we may not be able to achieve our anticipated operating results. In addition, these factors could lead to impairment charges for goodwill or other long-lived assets.

Access to Funding Through the Capital Markets Is Essential to the Execution of Our Business Plan and if We Are Unable to Maintain Such Access We Could Experience a Material Adverse Effect on Our Business and Financial Results

Our ability to invest in our businesses, make strategic acquisitions and refinance maturing debt obligations requires access to the capital markets and sufficient bank credit lines to support short-term borrowings. Volatility in the capital markets may increase costs associated with issuing commercial paper or other debt instruments, or affect the Company's ability to access those markets. If we are unable to continue to access the capital markets, we could experience a material adverse effect on our business and financial results. Additionally, if our customers, suppliers or financial institutions are unable to access the capital markets to meet their commitments to the Company, our business

could be adversely impacted.

Our Business Success Depends on the Ability to Attract, Develop and Retain Key Personnel

Our success depends in part on the efforts and abilities of our management and key employees. Their skills, experience and industry knowledge significantly benefit our operations and performance. The failure to attract, develop and retain highly qualified personnel could adversely affect our business and operating results.

Security Breaches or Disruptions of Our Information Technology Systems Could Adversely Affect Our Business

The Company utilizes a variety of information technology systems to manage and operate its businesses. Despite the implementation of extensive security measures (including access controls, data encryption, vulnerability assessments, continuous monitoring, and maintenance of backup and protective systems), the Company's information technology systems are potentially vulnerable to unauthorized access, computer viruses, cyberattack and other events, ranging from individual attempts to advanced persistent threats. Although considered unlikely, it is possible a security breach could result in theft of trade secrets or other intellectual property or disclosure of confidential customer, supplier or employee information. Should the Company be unable to prevent security breaches, disruptions could have an adverse effect on our operations, as well as expose the Company to litigation, increased cybersecurity protection costs and reputational damage.

We Are Subject to Litigation and Environmental Regulations That Could Adversely Impact Our Operating Results

We are, and may in the future be, a party to a number of legal proceedings and claims, including those involving intellectual property, product liability and environmental matters, several of which claim, or may in the future claim, significant damages. Given the inherent uncertainty of litigation, we can offer no assurance that existing litigation or a future adverse development will not have a material adverse impact. We also are subject to various laws and regulations relating to environmental protection and the discharge of materials into the environment, and we could incur substantial costs as a result of the noncompliance with or liability for cleanup or other costs or damages under environmental laws.

#### ITEM 1B - UNRESOLVED STAFF COMMENTS

None.

#### **ITEM 2 - PROPERTIES**

At September 30, 2016, the Company had approximately 205 manufacturing locations worldwide, of which approximately 135 were located outside the United States, primarily in Europe and Asia, and to a lesser extent in Canada and Latin America. Manufacturing locations by business segment are: Process Management, 76; Industrial Automation, 32; Climate Technologies, 33; and Commercial & Residential Solutions, 14. There were approximately 50 manufacturing facilities related to businesses included in discontinued operations at September 30, 2016. The majority of the locations are owned, with the remainder occupied under lease. The Company considers its facilities suitable and adequate for the purposes for which they are used.

#### **ITEM 3 - LEGAL PROCEEDINGS**

The Company and its subsidiaries are party to various legal proceedings, some of which claim substantial amounts of damages. It is not possible to predict the outcome of these matters, but historically the Company has been largely successful in both prosecuting and defending claims and lawsuits.

The Company believes a material adverse impact of any pending litigation is unlikely. Nevertheless, given the uncertainties of litigation, a remote possibility exists that litigation could have a material adverse impact on the Company.

The information regarding legal proceedings set forth in Item 8 of this Annual Report on Form 10-K in Note 13 of Notes to Consolidated Financial Statements is hereby incorporated by reference.

#### ITEM 4 - MINE SAFETY DISCLOSURES

Not applicable.

### EXECUTIVE OFFICERS OF THE REGISTRANT

The following sets forth certain information as of November 16, 2016 with respect to the Company's executive officers. The Fiscal Year column indicates the first year the executive served as an officer of the Company. These officers have been elected or appointed to terms which expire February 7, 2017:

Name	Position	Age	eFiscal Year
D. N. Farr	Chairman of the Board and Chief Executive Officer*	61	1985
F. J. Dellaquila	a Senior Executive Vice President and Chief Financial Officer	59	1991
E. L. Monser	President	66	2002
E. M. Purvis	Executive Vice President and Chief Operating Officer	59	2003
S. J. Pelch	Executive Vice President - Organization Planning and Development	52	2005
R. T. Sharp	Executive President - Commercial & Residential Solutions	49	2012
M. H. Train	Executive President - Automation Solutions	54	1994
S. Y. Bosco	Senior Vice President, Secretary and General Counsel	58	2005
M. J. Bulanda	Senior Vice President - Acquisition Planning and Development	50	2002
K. Button Bell	Senior Vice President and Chief Marketing Officer	58	1999
R. J. Schlueter	Vice President, Controller and Chief Accounting Officer	62	1992

<sup>\*</sup>Also chairman of the Executive Committee of the Board of Directors.

There are no family relationships among any of the executive officers and directors.

David N. Farr has been Chief Executive Officer since October 2000, was appointed Chairman of the Board in September 2004, and also served as President from November 2005 to October 2010.

Frank J. Dellaquila was appointed Senior Executive Vice President in November 2016, Executive Vice President in November 2012 and Senior Vice President and Chief Financial Officer in February 2010.

Edward L. Monser was appointed President in October 2010 and was Chief Operating Officer from November 2001 to January 2015.

Edgar M. Purvis was appointed Chief Operating Officer in January 2015. Prior to his current position, Mr. Purvis was Executive Vice President responsible for the Climate Technologies business segment from 2008 to January 2015.

Steven J. Pelch was appointed Executive Vice President in November 2016, Senior Vice President in November 2015 and Vice President - Organization Planning and Development in November 2014. Prior to that, Mr. Pelch was Vice President - Organization Planning from October 2012 to November 2014 and Vice President - Planning from October 2005 to October 2012.

Robert T. Sharp was appointed Executive President - Commercial & Residential Solutions in October 2016. Prior to his current position, Mr. Sharp was Executive Vice President - Commercial & Residential Solutions from February 2016 through October 2016, Executive Vice President - Climate Technologies from February 2015 through February 2016, Vice President - Profit Planning from 2013 through January 2015 and President - Emerson Process Management Europe from 2009 through 2013.

Michael H. Train was appointed Executive President - Automation Solutions in October 2016. Prior to his current position, Mr. Train was Executive Vice President - Automation Solutions from May 2016 through October 2016 and President of Global Sales for Emerson Process Management from 2010 through May 2016.

Sara Y. Bosco was appointed to the position of Senior Vice President, Secretary and General Counsel in May 2016. Prior to her current position, Ms. Bosco was President, Emerson Asia-Pacific from 2008 through May 2016.

Mark J. Bulanda was appointed Senior Vice President in November 2016 and Vice President - Acquisition Planning and Development in May 2016. Prior to his current position, Mr. Bulanda was Executive Vice President - Emerson Industrial Automation from 2012 through May 2016 and President of Emerson's Control Techniques business from 2010 through 2012.

Katherine Button Bell was appointed Senior Vice President in November 2016 and Vice President and Chief Marketing Officer in 1999.

Richard J. Schlueter was appointed Controller in October 2011. He has been Vice President Accounting since 1999 and was appointed Chief Accounting Officer in February 2003.

### PART II

# ITEM 5 - MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Information regarding the market for the Company's common stock, quarterly market price ranges and dividend payments is set forth in Item 8 of this Annual Report on Form 10-K in Note 20 of Notes to Consolidated Financial Statements, which note is hereby incorporated by reference. There were approximately 19,724 stockholders of record at September 30, 2016.

Period	Total Number of Share	Average Price	Shares Purchased	Maximum Number of Shares that May Yet Be Purchased Under			
	Purchased Paid per Share	Announced Plans	the Plans or				
	(000s)		or Programs (000s)	Programs (000s)			
July 2016	_		_	64,416			
August 2016	875	\$52.94	875	63,541			
September 2016	_		_	63,541			
Total	875	\$52.94	875	63,541			

The 63.5 million shares available for purchase represent the remaining authorized shares under a 70 million share purchase program approved by the Board of Directors in November 2015.

#### ITEM 6 - SELECTED FINANCIAL DATA

Years ended September 30 (dollars in millions, except per share amounts)

	2012 (a)	2013 (a)	2014	2015 (b)	2016
Net sales	\$17,349	17,935	17,733	16,249	14,522
Earnings from continuing operations – common stockholders	\$1,444	1,506	2,201	2,517	1,590
Basic earnings per common share from continuing operations	\$1.97	2.09	3.13	3.72	2.46
Diluted earnings per common share from continuing operations	\$1.96	2.08	3.11	3.71	2.45
Cash dividends per common share	\$1.60	1.64	1.72	1.88	1.90
Long-term debt	\$3,787	4,055	3,559	4,289	4,062
Total assets	\$23,818	24,711	24,177	22,088	21,743

<sup>(</sup>a) Includes goodwill impairment and income tax charges as follows: 2013, \$566 million and \$0.78 per share; 2012, \$425 million and \$0.58 per share.

(b) Includes gains from divestitures of businesses of \$611 million and \$0.90 per share.

See Notes 3 and 4 of Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K, which notes are hereby incorporated by reference, for information regarding the Company's acquisition and divestiture activities for the last three years.

# ITEM 7 - MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

#### Safe Harbor Statement

This Annual Report on Form 10-K contains various forward-looking statements and includes assumptions concerning Emerson's operations, future results and prospects, including the planned separation of the network power systems business and the power generation, motors and drives businesses and other strategic repositioning actions. These forward-looking statements are based on current expectations and are subject to risks and uncertainties. Emerson undertakes no obligation to update any such statements to reflect later developments. In connection with the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, Emerson provides the cautionary statements set forth under Item 1A - "Risk Factors," which are hereby incorporated by reference and identify important economic, political and technological factors, among others, changes in which could cause the actual results or events to differ materially from those set forth in or implied by the forward-looking statements and related assumptions.

#### Non-GAAP Financial Measures

To supplement the Company's financial information presented in accordance with U.S. generally accepted accounting principles (U.S. GAAP), management periodically uses certain "non-GAAP financial measures," as such term is defined in Regulation G under SEC rules, to clarify and enhance understanding of past performance and prospects for the future. Generally, a non-GAAP financial measure is a numerical measure of a company's operating performance, financial position or cash flows that excludes or includes amounts that are included in or excluded from the most directly comparable measure calculated and presented in accordance with U.S. GAAP. For example, non-GAAP measures may exclude the impact of certain items such as our strategic repositioning actions, other acquisitions or divestitures, changes in reporting segments, gains, losses and impairments, or items outside of management's control, such as foreign currency exchange rate fluctuations. Management believes that the following non-GAAP financial measures provide investors and analysts useful insight into the Company's financial position and operating performance. Any non-GAAP measure provided should be viewed in addition to, and not as an alternative to, the most directly comparable measure determined in accordance with U.S. GAAP, as identified in italics below. Further, the calculation of these non-GAAP financial measures may differ from the calculation of similarly titled financial measures presented by other companies and therefore may not be comparable among companies.

Underlying sales, which exclude the impact of acquisitions, divestitures and fluctuations in foreign currency exchange rates during the periods presented, are provided to facilitate relevant period-to-period comparisons of sales growth by excluding those items that impact overall comparability (U.S. GAAP measure: net sales).

Operating profit (defined as net sales less cost of sales and selling, general and administrative expenses) and operating profit margin (defined as operating profit divided by net sales) are indicative of short-term operational performance and ongoing profitability. Management closely monitors operating profit and operating profit margin of each business to evaluate past performance and actions required to improve profitability. EBIT (defined as earnings before deductions for interest expense, net and income taxes) and total segment EBIT, and EBIT margin (defined as EBIT divided by net sales) and total segment EBIT margin, are commonly used financial measures that exclude the impact of financing on the capital structure and income taxes. All these measures are utilized by management to evaluate performance (U.S. GAAP measures: pretax earnings or pretax profit margin).

Earnings, earnings per share, return on common stockholders' equity and return on total capital excluding certain gains and losses, impairments, costs associated with the strategic portfolio repositioning actions, or other items provide additional insight into the underlying, ongoing operating performance of the Company and facilitate period-to-period comparisons by excluding the earnings impact of these items. Management believes that presenting earnings, earnings

per share, return on common stockholders' equity and return on total capital excluding these items is more representative of the Company's operational performance and may be more useful for investors (U.S. GAAP measures: earnings, earnings per share, return on common stockholders' equity, return on total capital).

Free cash flow (operating cash flow less capital expenditures) is an indicator of the Company's cash generating capabilities after considering investments in capital assets which are necessary to maintain and enhance existing operations. The determination of operating cash flow adds back noncash depreciation expense to earnings and thereby does not reflect a charge for necessary capital expenditures. Management believes that free cash flow is

useful to both management and investors as a measure of the Company's ability to generate cash (U.S. GAAP measure: operating cash flow).

#### FINANCIAL REVIEW

Report of Management

The Company's management is responsible for the integrity and accuracy of the financial statements. Management believes that the financial statements for the three years ended September 30, 2016 have been prepared in conformity with U.S. generally accepted accounting principles appropriate in the circumstances. In preparing the financial statements, management makes informed judgments and estimates where necessary to reflect the expected effects of events and transactions that have not been completed. The Company's disclosure controls and procedures ensure that material information required to be disclosed is recorded, processed, summarized and communicated to management and reported within the required time periods.

In meeting its responsibility for the reliability of the financial statements, management relies on a system of internal accounting control. This system is designed to provide reasonable assurance that assets are safeguarded and transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of financial statements in accordance with U.S. generally accepted accounting principles. The design of this system recognizes that errors or irregularities may occur and that estimates and judgments are required to assess the relative cost and expected benefits of the controls. Management believes that the Company's internal accounting controls provide reasonable assurance that errors or irregularities that could be material to the financial statements are prevented or would be detected within a timely period.

The Audit Committee of the Board of Directors, which is composed solely of independent directors, is responsible for overseeing the Company's financial reporting process. The Audit Committee meets with management and the Company's internal auditors periodically to review the work of each and to monitor the discharge by each of its responsibilities. The Audit Committee also meets periodically with the independent auditors, who have free access to the Audit Committee and the Board of Directors, to discuss the quality and acceptability of the Company's financial reporting and internal controls, as well as nonaudit-related services.

The independent auditors are engaged to express an opinion on the Company's consolidated financial statements and on the Company's internal control over financial reporting. Their opinions are based on procedures that they believe to be sufficient to provide reasonable assurance that the financial statements contain no material errors and that the Company's internal controls are effective.

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. With the participation of the Chief Executive Officer and the Chief Financial Officer, management conducted an evaluation of the effectiveness of internal control over financial reporting based on the framework and the criteria established in Internal Control - Integrated Framework (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management has concluded that internal control over financial reporting was effective as of September 30, 2016.

The Company's auditor, KPMG LLP, an independent registered public accounting firm, has issued an audit report on the effectiveness of the Company's internal control over financial reporting.

/s/ David N. Farr /s/ Frank J. Dellaquila David N. Farr Frank J. Dellaquila

Chairman of the Board Senior Executive Vice President and Chief Executive Officer and Chief Financial Officer

# Results of Operations

Years ended September 30

(Dollars in millions, except per share amounts)

	2014		2015		2016		14 v 15	s.	15 vs. 16
Net sales Gross profit Percent of sales	\$17,733 \$7,762 43.8		16,249 7,008 43.1		14,522 6,262 43.1	? %			(11)% (11)%
SG&A Percent of sales Gains on divestitures of businesses Other deductions, net Interest expense, net	\$4,164 23.5 \$— \$211 \$196	%	3,735 23.0 1,039 330 175	%	3,464 23.8 — 294 188	%			
Earnings from continuing operations before income taxes Percent of sales Earnings from continuing operations	\$3,191 18.0	%	3,807 23.4	%	2,316 16.0	%	19	%	(39)%