

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended September 30, 2017

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

(State or other jurisdiction of
incorporation or organization)

8000 W. Florissant Ave.

P.O. Box 4100

St. Louis, Missouri

(Address of principal executive offices)



EMERSON

43-0259330

(I.R.S. Employer
Identification No.)

63136

(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
Common Stock of \$0.50 par value per share

Name of each exchange on which registered
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 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

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 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 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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large accelerated filer Accelerated filer Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

Aggregate market value of the voting stock held by nonaffiliates of the registrant as of close of business on March 31, 2017: \$38.4 billion .

Common stock outstanding at October 31, 2017 : 641,819,838 shares.

Documents Incorporated by Reference

1. Portions of Emerson Electric Co. Notice of 2018 Annual Meeting of Shareholders and Proxy Statement incorporated by reference into Part III hereof.
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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.

In connection with the strategic portfolio repositioning actions undertaken to transform the Company into a more focused enterprise, its businesses and organization were realigned. In fiscal 2017, the Company began reporting three segments: **Automation Solutions**, and **Climate Technologies** and **Tools & Home Products** which together comprise the **Commercial & Residential Solutions** business. The Automation Solutions segment includes the former Process Management segment and the remaining businesses in the former Industrial Automation segment, except for the hermetic motors business, which is now included in the Climate Technologies segment. The new Tools & Home Products segment consists of the businesses previously reported in the Commercial & Residential Solutions segment in fiscal 2016. See Note 18. This reference and all other Note references in this document refer to 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. A summary of the Company’s businesses is described below.

- Automation Solutions - enables process, hybrid and discrete manufacturers to maximize production, protect personnel and the environment, and optimize their energy efficiency and operating costs through a broad offering of integrated solutions and products, including measurement and analytical instrumentation, industrial valves and equipment, and process control systems.
- Commercial & Residential Solutions - provides products and solutions that promote energy efficiency, enhance household and commercial comfort, and protect food quality and sustainability through heating, air conditioning and refrigeration technology, as well as a broad range of tools and appliance solutions.

Sales, earnings before interest and income taxes, and total assets attributable to each business segment for the three years ended September 30, 2017 are set forth in Note 18. Sales by business in 2017, as a percentage of the total Company, were: Automation Solutions, 62 percent and Commercial & Residential Solutions, 38 percent. Total Emerson sales by geographic destination in 2017 were: the United States and Canada, 52 percent; Asia, 21 percent; Europe, 16 percent; Latin America, 5 percent; and Middle East/Africa, 6 percent.

The Company’s strategic repositioning actions resulted in the sale of the network power systems business which closed in the first quarter of 2017, and the sale of the power generation, motors and drives business which closed in the second quarter of 2017. These businesses have been reported in discontinued operations for all periods presented. Additionally, on April 28, 2017, the Company completed the acquisition of Pentair’s valves & controls business, which is reported in the Automation Solutions segment and complements the Valves, Actuators and Regulators product offering. Information with respect to acquisition and divestiture activity, including the discontinued businesses, and restructuring costs is set forth in Notes 3, 4 and 6. See also Item 1A - “Risk Factors” and Item 7 - “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

AUTOMATION SOLUTIONS

The Automation Solutions segment offers customers products, software and technology, and engineering, project management, consulting services and integrated manufacturing solutions for precision measurement, control, monitoring, asset optimization, and safety and reliability of oil and gas reservoirs, manufacturing operations and plants that process or treat various items. The Company’s array of products and services enables customers to optimize their plant capabilities in the areas of plant safety and reliability, product quality, energy and emissions, and output efficiency. Significant end markets served include oil and gas, refining, chemicals and power generation, as well as pharmaceuticals, food and beverage, automotive, pulp and paper, metals and mining, and municipal water supplies. Sales by geographic destination in 2017 for Automation Solutions were: the United States and Canada, 44 percent; Asia, 23 percent; Europe, 20 percent; Latin America, 5 percent; and Middle East/Africa, 8 percent.

Measurement & 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 or other software applications. 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, wet gas 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 highly secure and reliable 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 & Regulators

The primary role of an industrial valve is to control, isolate, or regulate the flow of liquids or gases to achieve safe operation along with reliability and optimized performance.

Control, isolation and pressure relief valves respond to commands from a control system to continuously and precisely modulate the flow of process fluids. 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, gate, globe, check, sliding stem, rotary, high performance butterfly, triple offset, and severe services valves for critical applications. The Company also designs and manufactures sophisticated smart actuation and control technologies that continuously monitor valve health and remotely control valve positions to foster proactive and predictive maintenance as well as decrease the risk of unplanned shutdowns.

The Company provides pressure management products, including pressure relief, vacuum relief, and gauge valves designed to control fugitive emissions. The Company also supplies 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.

Industrial Solutions

Industrial Solutions include fluid power and control mechanisms, electrical distribution equipment, and materials joining and precision cleaning products which are used in a variety of manufacturing operations to provide integrated solutions to customers. Fluid power products control and power the flow of liquids and gases in manufacturing operations such as automobile assembly, food processing, textile manufacturing and petrochemical processing, and include products such as solenoid and pneumatic valves, valve position indicators, pneumatic cylinders, air preparation equipment, and pressure, vacuum and temperature switches. 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. Electrical distribution 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. Plastic and metal joining technologies and equipment are supplied to a diversified manufacturing customer base, including automotive, medical devices, business and consumer electronics, 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.

Process Control Systems & Solutions

Process control systems and software control plant processes by collecting and analyzing information from measurement devices in the plant, and then use 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 life sciences operations management, upstream oil and gas reservoir simulation and production optimization modeling, pipeline and terminal management, operations management simulation, and training systems. 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.

Plantweb Digital EcosystemTM

The Plantweb Digital Ecosystem combines the Company's intelligent field sensors, communication gateways and controllers, software, and complementary partner technologies to create a comprehensive Industrial Internet of Things (IIoT) architecture to improve customer operational performance. Newly developed sensors (usually wireless) monitor variables such as equipment health and energy consumption, providing data to software applications. Existing sensor information from control systems is also incorporated using secure communication designs. These applications contain analytic capabilities that provide insights into production performance, energy consumption, reliability of specific equipment or process units, and safety. Alerts are generated in areas such as impending equipment failure or excessive energy consumption. Complete solutions range from covering a few assets, such as pumps or steam traps with small applications, to complete facility monitoring using more sophisticated modeling.

Customers may also subscribe to IIoT "connected services" to improve the performance of their facilities. In this model, Company personnel who are experts in specific applications or asset classes monitor and analyze customer data that is supplied on a periodic basis and generate reports that provide specific information on actions to take to improve plant operational performance.

Industry Services

Automation Solutions provides a broad portfolio of services to improve automation project implementation time and costs, increase process availability and productivity, and reduce the total cost of ownership in industries such as oil and gas, chemicals, power generation, food and beverage, and life sciences. Consulting services help plant owners and operators improve plant safety, reliability, availability, cybersecurity, and operational performance through implementation of on-site and corporate-wide programs. Global industry centers offer engineering and project management services to help customers optimize cost and schedule on large capital projects. Lifecycle service centers provide maintenance, engineering, process, quality, and troubleshooting expertise to aid in process optimization for efficient and consistent operations, regulatory compliance, asset repair, asset replacement, shutdown/outage management and employee training. These offerings are available on demand or through long-term service agreements.

Distribution

The principal worldwide distribution channel for Automation Solutions 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 and distributors. 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 Automation Solutions include Emerson Automation Solutions, AMS, Anderson Greenwood, Appleton, ASCO, ASCO Numatics, Baumann, Bettis, Biffi, Branson, Bristol, Crosby, CSI, Damcos, Daniel, DeltaV, EIM, El-O-Matic, Fisher, Go Switch, Guardian, Keystone, KTM, Micro Motion, Net Safety,

Ovation, O-Z/Gedney, Plantweb, ROC, Rosemount, Roxar, Smart Process, SureService, TESCOM, TopWorx, Vanessa and Virgo.

COMMERCIAL & RESIDENTIAL SOLUTIONS

The Commercial & Residential Solutions business consists of the Climate Technologies and Tools & Home Products segments, and provides products and solutions that promote energy efficiency, enhance household and commercial comfort, and protect food quality and sustainability through heating, air conditioning and refrigeration technology, as well as a broad range of tools and appliance solutions. Sales by geographic destination in 2017 for Commercial & Residential Solutions were: the United States and Canada, 64 percent; Asia, 18 percent; Europe, 9 percent; Latin America, 5 percent; and Middle East/Africa, 4 percent.

CLIMATE TECHNOLOGIES

The Climate Technologies segment provides products and services for many 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, as well as cargo and transportation monitoring solutions. Sales by geographic destination in 2017 for Climate Technologies were: the United States and Canada, 55 percent; Asia, 24 percent; Europe, 10 percent; Latin America, 7 percent; and Middle East/Africa, 4 percent.

Residential and Commercial Heating and Air Conditioning

This business 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 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

Commercial and industrial refrigeration technologies are 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. Transport and cargo monitoring solutions are also offered, which extend throughout the cold chain to ensure quality and safety as food travels from growers to processing and distribution facilities and finally to retail points of sale.

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' 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 Educational Services, Emerson Climate Technologies Retail Services, Fusite, ProAct, Sensi, Therm-O-Disc, Vilter, and White-Rodgers.

TOOLS & HOME PRODUCTS

The Company's Tools & Home Products segment offers tools for professionals and homeowners and appliance solutions. Sales by geographic destination in 2017 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.

Appliance Solutions

This business 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 Tools & Home Products 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 outlets, as well as through online retailers.

Brands

Service/trademarks and trade names within the Tools & Home Products segment include Emerson, Grind2Energy, InSinkErator, Badger, ProTeam, RIDGID and WORKSHOP.

On October 2, 2017, the Company sold its residential storage solutions business. This business provides products for the home including shelving systems, cabinet and closet organizers, home office storage, and drawer systems and containers, available in wire, stainless steel and laminate. See Note 3.

DISCONTINUED OPERATIONS

The network power systems business and the power generation, motors and drives business were sold in 2017 and are reported as discontinued operations in the Consolidated Financial Statements for all years presented. See Note 4.

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. The power generation, motors and drives business supplies alternators, AC motor/generator sets, traction generators, wind power generators, wind turbine pitch control systems and solar photovoltaic converters, as well as a broad line of drives and electric motors for use in a wide variety of manufacturing operations and products.

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 \$4,894 million and \$3,925 million at September 30, 2017 and 2016, respectively. A large majority of the consolidated backlog as of September 30, 2017 is expected to be shipped within one year. Backlog by business at September 30, 2017 and 2016 follows (dollars in millions).

	2016	2017
Automation Solutions	\$ 3,464	4,414
Commercial & Residential Solutions	461	480
Total Backlog	\$ 3,925	4,894

The increase in Automation Solutions primarily reflects the acquisition of the valves & controls business.

COMPETITION

The Company's businesses operate in end markets that are highly competitive. The Company competes based on product performance, quality, branding, 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 \$340 million , \$320 million and \$336 million in 2017, 2016 and 2015, 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 76,500 employees during 2017. 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 \$7,991 million in 2017 , \$7,582 million in 2016 and \$8,641 million in 2015 , including U.S. exports of \$927 million , \$888 million and \$1,187 million in 2017 , 2016 and 2015 , 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 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 Proposed Acquisition of Rockwell Automation, Inc. May Not Be Completed or Completed On the Terms and Conditions Contemplated, or With the Expected Benefits

We are currently pursuing a potential acquisition of Rockwell Automation, Inc. Rockwell has not engaged with the Company on this or previous proposals. If the proposed transaction were to proceed, we can make no assurance as to the completion, terms, timing, costs or benefits anticipated from any such acquisition. The acquisition would involve increases in the Company's debt levels and outstanding shares. Unforeseen developments, including delays in obtaining various tax, regulatory and other approvals, could delay any acquisition, or cause it to occur on terms and conditions that are less favorable, or at a higher cost, than expected. In addition, the Company may encounter difficulties in integration and may not realize the degree or timing of the anticipated benefits of the acquisition.

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 2017 and in past years, we have made various acquisitions, including the valves & controls business, 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 mitigate 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 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 Both in the U.S. and Abroad Subject Us to Economic Risk as Our Results of Operations May Be Adversely Affected by Changes in Local Government Regulations and Policies and Foreign Currency Fluctuations

We sell, manufacture, engineer and purchase products globally, with significant sales in both mature and emerging markets. We expect sales in non-U.S. markets to continue to represent a significant portion of our total sales. Our U.S. and international 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. In addition, 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 mitigate 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, 2017, the Company had approximately 200 manufacturing locations worldwide, of which approximately 130 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 are: Automation Solutions, 150, and Commercial & Residential Solutions, 50, including 40 in the Climate Technologies segment and 10 in the Tools & Home Products segment. 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.

Information regarding legal proceedings is set forth in Note 13.

ITEM 4 - MINE SAFETY DISCLOSURES

Not applicable.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following sets forth certain information as of November 20, 2017 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 6, 2018:

<u>Name</u>	<u>Position</u>	<u>Age</u>	<u>Fiscal Year</u>
D. N. Farr	Chairman of the Board and Chief Executive Officer*	62	1985
F. J. Dellaquila	Senior Executive Vice President and Chief Financial Officer	60	1991
E. L. Monser	President	67	2002
E. M. Purvis	Executive Vice President and Chief Operating Officer	60	2003
S. J. Pelch	Executive Vice President - Organization Planning and Development	53	2005
R. T. Sharp	Executive President - Commercial & Residential Solutions	50	2012
M. H. Train	Executive President - Automation Solutions	55	1994
S. Y. Bosco	Senior Vice President, Secretary and General Counsel	59	2005
M. J. Bulanda	Senior Vice President - Acquisition Planning and Development	51	2002
K. Button Bell	Senior Vice President and Chief Marketing Officer	59	1999
R. J. Schlueter	Vice President, Controller and Chief Accounting Officer	63	1992

*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 Control Techniques 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.

On November 9, 2017, the Company announced that Mr. Purvis will retire as Executive Vice President and Chief Operating Officer on December 31, 2017, and that Mr. Pelch will be appointed as the Company's Chief Operating Officer and Executive Vice President Organizational Development as of that same date.

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 Note 20. There were approximately 19,066 stockholders of record at September 30, 2017 .

In November 2015, the Board of Directors authorized the purchase of up to 70 million shares, and 56.9 million shares remain available. No shares were purchased in the fourth quarter of 2017.

ITEM 6 - SELECTED FINANCIAL DATA

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

	2013 (a)	2014	2015 (b)	2016	2017
Net sales	\$ 17,935	17,733	16,249	14,522	15,264
Earnings from continuing operations – common stockholders	\$ 1,506	2,201	2,517	1,590	1,643
Basic earnings per common share from continuing operations	\$ 2.09	3.13	3.72	2.46	2.54
Diluted earnings per common share from continuing operations	\$ 2.08	3.11	3.71	2.45	2.54
Cash dividends per common share	\$ 1.64	1.72	1.88	1.90	1.92
Long-term debt	\$ 4,055	3,559	4,289	4,051	3,794
Total assets	\$ 24,711	24,177	22,088	21,732	19,589

(a) Includes goodwill impairment and income tax charges of \$566 million and \$0.78 per share.

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

See Notes 3 and 4 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. 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, impacts of 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) and free cash flow as a percent of net sales are indicators of the Company's cash generating capabilities, and dividends as a percent of free cash flow is an indicator of the Company's ability to support its dividend, 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, free cash flow as a percent of net sales and dividends as a percent of free cash flow are useful to both management and investors as measures of the Company's ability to generate cash and support its dividend (U.S. GAAP measure: *operating cash flow, operating cash flow as a percent of net sales, dividends as a percent of 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, 2017 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, 2017 .

The valves & controls business was acquired on April 28, 2017. Management has excluded this business from its assessment of internal control over financial reporting as of September 30, 2017. Valves & controls' total assets and revenues excluded from the assessment represented approximately 20 percent and 4 percent, respectively, of the Company's related consolidated financial statement amounts as of and for the year ended September 30, 2017.

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

David N. Farr

Chairman of the Board

and Chief Executive Officer

/s/ Frank J. Dellaquila

Frank J. Dellaquila

Senior Executive Vice President

and Chief Financial Officer

Results of Operations

Years ended September 30

(Dollars in millions, except per share amounts)

	2015	2016	2017	16 vs. 15	17 vs. 16
Net sales	\$ 16,249	14,522	15,264	(11)%	5 %
Gross profit	\$ 7,008	6,262	6,404	(11)%	2 %
<i>Percent of sales</i>	43.1%	43.1%	42.0%		
SG&A	\$ 3,735	3,464	3,618		
<i>Percent of sales</i>	23.0%	23.8%	23.7%		
Gains on divestitures of businesses	\$ 1,039	—	—		
Other deductions, net	\$ 330	294	286		
Interest expense, net	\$ 175	188	165		
Earnings from continuing operations before income taxes	\$ 3,807	2,316	2,335	(39)%	1 %
<i>Percent of sales</i>	23.4%	16.0%	15.3%		
Earnings from continuing operations common stockholders	\$ 2,517	1,590	1,643	(37)%	3 %
Net earnings common stockholders	\$ 2,710	1,635	1,518	(40)%	(7)%
<i>Percent of sales</i>	16.7%	11.3%	9.9%		
Diluted EPS – Earnings from continuing operations	\$ 3.71	2.45	2.54	(34)%	4 %
Diluted EPS – Net earnings	\$ 3.99	2.52	2.35	(37)%	(7)%
Return on common stockholders' equity	29.8%	20.9%	18.6%		
Return on total capital	22.8%	15.5%	15.3%		

OVERVIEW

In 2017, Emerson successfully completed the previously announced strategic actions to streamline its portfolio and drive growth in its core businesses. These actions resulted in the divestiture of the network power systems, and power generation, motors and drives businesses, which are reported in discontinued operations for all years presented. Additionally, on April 28, 2017, the Company completed the acquisition of Pentair's valves & controls business.

Sales from continuing operations for 2017 were \$15.3 billion, an increase of \$742 million, or 5 percent, supported by the acquisition of the valves & controls business, which added 4 percent. Underlying sales were up 1 percent compared with the prior year reflecting improving economic conditions and industrial end markets.

Earnings from continuing operations common stockholders were \$1,643 million in 2017, up 3 percent compared with prior year earnings of \$1,590 million. Diluted earnings per share from continuing operations were \$2.54, up 4 percent versus \$2.45 per share in 2016. Earnings per share from continuing operations were \$2.64, up 8 percent, excluding first year acquisition accounting charges of \$0.10 per share related to the valves & controls business which deducted 4 percentage points.

Discontinued operations in 2017 was a net loss of \$125 million, \$0.19 per share, reflecting the impact of completing the divestitures. Discontinued operations income in 2016 was \$45 million, \$0.07 per share. See Note 4 for further information.

Net earnings common stockholders, which includes the impact of discontinued operations, were \$1,518 million in 2017, down 7 percent compared with prior year earnings of \$1,635 million. Diluted earnings per share were \$2.35, down 7 percent versus \$2.52 per share in 2016.

Sales increased in both businesses. Automation Solutions sales increased 5 percent due to the acquisition of the valves & controls business, while underlying sales decreased slightly, reflecting weakness in energy-related markets which began to improve in the second half of the year. Commercial & Residential Solutions sales increased 5 percent reflecting favorable conditions in HVAC, refrigeration and construction related markets.

The Company generated operating cash flow from continuing operations of \$2.7 billion in 2017, an increase of \$191 million, or 8 percent. Total operating cash flow of \$1.9 billion was reduced by cash used for discontinued operations of \$778 million to execute the repositioning, primarily for income taxes on completion of the divestitures and repatriation of cash.

NET SALES

Net sales for 2017 were \$15.3 billion, an increase of \$742 million, or 5 percent compared with 2016. Underlying sales, which exclude foreign currency translation, acquisitions and divestitures, increased 1 percent (\$168 million) on higher volume and slightly lower price. Acquisitions added 4 percent (\$628 million) while foreign currency translation subtracted \$54 million. Underlying sales increased 2 percent in the U.S. and were flat internationally. Sales increased \$441 million in Automation Solutions and \$302 million in Commercial & Residential Solutions.

Net sales for 2016 were \$14.5 billion, a decrease of \$1,727 million, or 11 percent compared with 2015. Underlying sales decreased 7 percent (\$1,046 million) on 6 percent lower volume and 1 percent lower price. Foreign currency translation subtracted 2 percent (\$266 million) and divestitures, net of acquisitions subtracted 2 percent (\$415 million). Underlying sales decreased 5 percent in the U.S. and 8 percent internationally. Sales in Automation Solutions decreased \$1,176 million and Commercial & Residential solutions decreased \$76 million.

INTERNATIONAL SALES

Emerson is a global business with international sales representing 52 percent of total sales, including U.S. exports. Although economic conditions are currently soft worldwide, the Company generally expects faster economic growth in emerging markets in Asia, Latin America, Eastern Europe and Middle East/Africa in the future.

International destination sales, including U.S. exports, increased 5 percent, to \$8.0 billion in 2017, reflecting increases in both the Automation Solutions and Commercial & Residential Solutions businesses. U.S. exports of \$927 million were up 4 percent compared with 2016, reflecting increases in both Automation Solutions, which benefited from the valves & controls acquisition, and Commercial & Residential Solutions. Underlying international destination sales were flat, as foreign currency translation had a 1 percent unfavorable impact, while acquisitions had a 6 percent favorable impact on the comparison. Underlying sales were down 1 percent in Europe and up 6 percent in Asia (China up 15 percent). Underlying sales decreased 12 percent in Latin America, 3 percent in Canada and 6 percent in Middle East/Africa. Origin sales by international subsidiaries, including shipments to the U.S., totaled \$7.2 billion in 2017, up 6 percent compared with 2016, primarily reflecting the valves & controls acquisition.

International destination sales, including U.S. exports, decreased 12 percent, to \$7.6 billion in 2016, reflecting decreases in all segments, partially due to divestitures. U.S. exports of \$888 million were down 25 percent compared with 2015, reflecting reduced spending by global oil and gas customers, weakness in industrial spending and the stronger U.S. dollar. Underlying international destination sales declined 8 percent, as foreign currency translation and divestitures had a 3 percent and a 1 percent unfavorable impact, respectively, on the comparison. Underlying sales were up 2 percent in Europe and decreased 10 percent in both Asia and Latin America. Sales decreased 21 percent in Canada and 15 percent in Middle East/Africa. Weakness in energy-related and industrial end markets and global economic uncertainty challenged growth in these areas. Origin sales by international subsidiaries, including shipments to the U.S., totaled \$6.8 billion in 2016, down 10 percent compared with 2015, reflecting the weakness in industrial capital spending, unfavorable foreign currency translation and divestitures.

ACQUISITIONS AND DIVESTITURES

The Company is currently pursuing a potential acquisition of Rockwell Automation, Inc. On November 16, 2017, the Company announced that it proposed to acquire Rockwell for \$29 billion, or \$225 per share, consisting of \$135 per share in cash, financed primarily with newly issued debt, and \$90 per share in Emerson stock, which would result in Rockwell shareholders owning approximately 22 percent of the combined company. Rockwell has not engaged with the Company on this or previous proposals. Rockwell had fiscal 2017 sales of approximately \$6.3 billion. See Item 1A - "Risk Factors" for additional information.

See information under "Discontinued Operations" for a discussion of the Company's divestitures related to its portfolio repositioning actions.

On April 28, 2017, the Company completed the acquisition of Pentair's valves & controls business for \$2.960 billion, net of cash acquired of \$207 million, subject to certain post-closing adjustments. This business, with annualized sales of approximately \$1.4 billion, is a manufacturer of control, isolation and pressure relief valves and actuators, and complements the Valves, Actuators & Regulators product offering within Automation Solutions. The Company also acquired two smaller businesses in the Automation Solutions segment. Total cash paid for all businesses was \$3.0 billion, net of cash acquired. See Note 3.

On October 2, 2017, the Company sold its residential storage business for \$200 million in cash, subject to post-closing adjustments, and expects to recognize a loss of approximately \$40 million in 2018 due to income taxes resulting from nondeductible goodwill. The Company expects to realize approximately \$140 million in after-tax cash proceeds from the sale. This business, with sales of \$298 million and pretax earnings of \$15 million in 2017, is a leader in home organization and storage systems, and was reported within the Tools & Home Products segment.

The Company acquired six businesses in 2016, four in Automation Solutions and two in Climate Technologies. Total cash paid for these businesses was \$132 million, net of cash acquired. Annualized sales for these businesses were approximately \$51 million in 2016. The Company completed eight acquisitions in 2015, seven in Automation Solutions and one in Tools & Home Products, which had combined annualized sales of approximately \$115 million. Total cash paid for all businesses was \$324 million, net of cash acquired.

In January 2015, the Company completed the sale of its mechanical power transmission solutions business for \$1.4 billion, and recognized a pretax gain from the transaction of \$939 million (\$532 million after-tax, \$0.78 per share). Proceeds from the divestiture were used for share repurchase. This business was previously reported in the former Industrial Automation segment, and had partial year sales of \$189 million in 2015 and related pretax earnings of \$21 million. Power transmission solutions designs and manufactures market-leading couplings, bearings, conveying components and gearing and drive components, and provides supporting services and solutions.

On September 30, 2015, the Company sold its InterMetro commercial storage business for \$411 million in cash and recognized a pretax gain from the transaction of \$100 million (\$79 million after-tax, \$0.12 per share). This business was previously reported in the former Commercial & Residential Solutions segment, and had annual sales of \$288 million and pretax earnings of \$42 million in 2015. InterMetro is a leading manufacturer and supplier of storage and transport products in the food service, commercial products and health care industries.

COST OF SALES

Cost of sales for 2017 were \$8.9 billion, an increase of \$600 million compared with \$8.3 billion in 2016. The increase reflects the acquisition of the valves & controls business and higher volume, partially offset by cost reduction actions and the impact of foreign currency translation. Gross profit was \$6.4 billion in 2017 compared to \$6.3 billion in 2016. Gross margin of 42.0 percent reflected dilution of 1.2 percentage points due to the valves & controls operations and first year acquisition accounting charges of \$74 million related to inventory. Slightly lower price also contributed to the decline, while savings from cost reduction actions partially offset these decreases. Gross profit margin was 43.1 percent in 2016.

Cost of sales for 2016 were \$8.3 billion, a decrease of \$981 million compared with \$9.2 billion in 2015, primarily due to reduced sales volume, the impact of foreign currency translation (\$186 million) and prior year divestitures (\$273 million). Gross profit was \$6.3 billion in 2016 compared with \$7.0 billion in 2015. Gross margin of 43.1 percent was flat compared with 2015, as savings from cost reduction and containment actions were offset by deleverage on lower volume and unfavorable mix.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Selling, general and administrative (SG&A) expenses of \$3.6 billion in 2017 increased \$154 million compared with 2016, primarily due to the valves & controls acquisition. Savings from cost reduction actions and lower incentive stock compensation of \$35 million, reflecting the impact of changes in the stock price, were partially offset by higher other costs. SG&A as a percent of sales of 23.7 percent decreased 0.1 percentage points compared with 2016.

SG&A expenses of \$3.5 billion in 2016 decreased \$271 million compared with 2015. The decrease reflects savings from cost reduction actions, reduced costs from lower sales volume, and prior year divestitures (\$137 million), partially offset by higher incentive stock compensation of \$121 million. SG&A as a percent of sales of 23.8 percent increased 0.8 percent in 2016, reflecting deleverage on lower sales volume and higher incentive stock compensation, primarily due to changes in the stock price and overlap of awards, partially offset by savings from restructuring actions.

GAINS ON DIVESTITURES OF BUSINESSES

In 2015, the Company sold its power transmission solutions and commercial storage businesses and recorded pretax gains of \$939 million (\$532 million after-tax, \$0.78 per share) and \$100 million (\$79 million after-tax, \$0.12 per share), respectively. See Note 3.

OTHER DEDUCTIONS, NET

Other deductions, net were \$286 million in 2017 , a decrease of \$8 million compared with 2016. The decrease primarily reflects favorable foreign currency transactions comparisons of \$78 million (unfavorable in the prior year) and lower restructuring expense of \$18 million . These decreases were substantially offset by intangibles and backlog amortization related to the valves & controls acquisition of \$29 million and \$19 million, respectively, and higher acquisition/divestiture costs of \$24 million . Additionally, 2016 results included a \$21 million gain from payments received related to dumping duties. See Note 5.

Other deductions, net were \$294 million in 2016 , a \$36 million decrease from 2015 primarily due to lower restructuring costs of \$42 million , decreased litigation costs of \$30 million and a \$21 million gain on payments received related to dumping duties. The decrease in other deductions was partially offset by unfavorable foreign currency transactions of \$67 million.

INTEREST EXPENSE, NET

Interest expense, net was \$165 million , \$188 million and \$175 million in 2017 , 2016 and 2015 , respectively. The decrease of \$23 million in 2017 reflects the maturity of long-term debt with relatively higher interest rates and higher interest income.

INCOME TAXES

Income taxes were \$660 million , \$697 million and \$1,267 million for 2017 , 2016 and 2015 , respectively, resulting in effective tax rates of 28 percent , 30 percent and 33 percent in 2017 , 2016 and 2015 , respectively. The 2 percentage point decrease versus the prior year is largely due to tax benefits from restructuring a foreign subsidiary. The 3 percentage point higher rate in 2015 was due to taxes on the gains from the divestitures of the power transmission solutions and commercial storage businesses.

EARNINGS FROM CONTINUING OPERATIONS

Earnings from continuing operations attributable to common stockholders in 2017 were \$1,643 million , up 3 percent compared with 2016 , and diluted earnings per share were \$2.54 in 2017 , up 4 percent . Valves & controls reduced both comparisons by 6 percentage points, or \$97 million , \$0.15 per share, including restructuring expense, intangibles amortization, and first year pretax acquisition accounting charges related to inventory and backlog of \$93 million (\$65 million after-tax, \$0.10 per share) which are reported in Corporate and other. Earnings increased \$66 million in the Automation Solutions segment in 2017 and \$72 million in Commercial & Residential Solutions. See the Business discussion that follows and Note 18.

Earnings from continuing operations attributable to common stockholders in 2016 were \$1,590 million , down 37 percent compared with 2015 , and diluted earnings per share were \$2.45 , down 34 percent. Divestiture gains in the prior year negatively impacted earnings from continuing operations and earnings per share comparisons by 20 and 21 percentage points, respectively. In 2016 , earnings decreased \$390 million in the Automation Solutions segment and increased \$87 million in Commercial & Residential Solutions.

DISCONTINUED OPERATIONS

On November 30, 2016, the Company completed the sale of its network power systems business for \$4.0 billion in cash and retained a subordinated interest in distributions, contingent upon the equity holders first receiving a threshold return on their initial investment. This business comprised the former Network Power segment. Additionally, on January 31, 2017, the Company completed the sale of its power generation, motors and drives business for approximately \$1.2 billion, subject to post-closing adjustments. This business was previously reported in the former Industrial Automation segment. The results of operations for these businesses were reported in discontinued operations for all years presented, and the assets and liabilities were reflected as held-for-sale. See Note 4 and Item 1A - "Risk Factors."

Discontinued operations was a net loss of \$125 million in 2017, and income of \$45 million and \$193 million for 2016 and 2015, respectively. In 2017, the net loss of \$125 million, \$0.19 per share, included an after-tax gain on the divestiture of the network power systems business of \$125 million, a \$173 million after-tax loss on the divestiture of

the power generation, motors and drives business, income tax expense of \$109 million for repatriation of sales proceeds, and lower expense of \$32 million primarily due to ceasing depreciation and amortization for the discontinued businesses held-for-sale. Operating cash flow used by discontinued operations was \$778 million for 2017, which primarily included payments of approximately \$700 million for income taxes on completion of the divestitures and repatriation of cash, cash used by operations and other costs. Capital expenditures were \$ 20 million .

Discontinued operations income of \$45 million, \$0.07 per share, in 2016 included earnings from operations of \$344 million and costs to execute the portfolio repositioning of \$299 million. These costs are comprised of income tax expense of \$143 million for repatriation of cash from these businesses, reorganization of their legal structures prior to sale, and basis differences for book and tax, as well as costs for legal, consulting, investment banking and other expenses of \$77 million. In addition, net earnings for 2016 included a loss of \$103 million to write down the power generation, motors and drives business to the sales price less costs to sell, and lower expense of \$24 million due to ceasing depreciation and amortization for the discontinued businesses held-for-sale. Discontinued operations income of \$193 million, \$0.28 per share, in 2015 included earnings from operations of \$245 million and separation costs of \$52 million, comprised of income tax expense of \$42 million and fees of \$10 million. Operating cash flow from discontinued operations was \$382 million (net of payments of \$179 million for separation costs) and \$489 million for 2016 and 2015, respectively. Capital expenditures were \$76 million for 2016 and \$97 million for 2015.

NET EARNINGS AND EARNINGS PER SHARE; RETURNS ON EQUITY AND TOTAL CAPITAL

Net earnings attributable to common stockholders in 2017 were \$1,518 million , down 7 percent compared with 2016 , and diluted earnings per share were \$2.35 , down 7 percent . These results include the impact of discontinued operations discussed above which negatively impacted net earnings and earnings per share comparisons 10 and 11 percentage points, respectively.

Net earnings attributable to common stockholders in 2016 were \$1,635 million , down 40 percent compared with 2015 , and diluted earnings per share were \$2.52 , down 37 percent . Net earnings and earnings per share comparisons were negatively impacted approximately 24 percentage points due to divestiture gains of \$611 million (\$0.90 per share) in 2015 and discontinued operations in both years.

Return on common stockholders' equity (net earnings attributable to common stockholders divided by average common stockholders' equity) was 18.6 percent in 2017 compared with 20.9 percent in 2016 and 29.8 percent in 2015 . Return on total capital was 15.3 percent in 2017 compared with 15.5 percent in 2016 and 22.8 percent in 2015 (computed as net earnings attributable to common stockholders excluding after-tax net interest expense, divided by average common stockholders' equity plus short- and long-term debt less cash and short-term investments). Discontinued operations and the acquisition of the valves & controls business reduced the 2017 return on common stockholders' equity approximately 19 percentage points and return on total capital 11 percentage points. Discontinued operations reduced the 2016 return on common stockholders' equity approximately 23 percentage points and return on total capital 9 percentage points. For 2015, the combined impact of the divestiture gains and discontinued operations reduced the return on common stockholders' equity approximately 12 percentage points and return on total capital 3 percentage points.

Business Segments

Following is an analysis of segment results for 2017 compared with 2016 , and 2016 compared with 2015 . The Company defines segment earnings as earnings before interest and income taxes. In connection with the strategic portfolio repositioning actions completed in fiscal 2017, the Company began reporting three segments: Automation Solutions, and Climate Technologies and Tools & Home Products which together comprise the Commercial & Residential Solutions business. See Note 18.

AUTOMATION SOLUTIONS

(dollars in millions)

	2015	2016	2017	16 vs. 15	17 vs. 16
Sales	\$ 10,153	8,977	9,418	(12)%	5%
Earnings	\$ 1,846	1,456	1,522	(21)%	5%
Margin	18.2%	16.2%	16.2%		
Sales by Major Product Offering					
Measurement & Analytical Instrumentation	\$ 3,619	3,137	3,070	(13)%	(2)%
Valves, Actuators & Regulators	2,559	2,137	2,668	(16)%	25 %
Industrial Solutions	1,779	1,621	1,680	(9)%	4 %
Process Control Systems & Solutions	2,196	2,082	2,000	(5)%	(4)%
Total	\$ 10,153	8,977	9,418	(12)%	5 %

2017 vs. 2016 - Automation Solutions reported sales of \$9.4 billion in 2017, an increase of \$441 million, or 5 percent. Underlying sales decreased 1 percent (\$128 million) on lower volume and slightly lower price. The valves & controls acquisition added 7 percent (\$603 million), while foreign currency translation subtracted 1 percent (\$34 million). Sales for Measurement & Analytical Instrumentation decreased 2 percent and Process Control Systems & Solutions decreased 4 percent due to weakness in energy-related markets, but began to improve in the second half of the year as oil prices stabilized. Valves, Actuators & Regulators increased \$531 million, or 25 percent, due to the valves & controls acquisition. Industrial Solutions sales increased \$59 million, or 4 percent, on improving economic conditions and industrial end markets, especially automotive. Chemical, power and life sciences were favorable. Underlying sales increased 1 percent in the U.S., were down 2 percent in Europe and increased 1 percent in Asia (China up 9 percent). Latin America decreased 20 percent, Canada decreased 6 percent and Middle East/Africa was down 6 percent. Earnings of \$1.5 billion increased \$66 million from the prior year. Savings from cost reduction actions and favorable foreign currency transactions comparisons of \$64 million (unfavorable in the prior year) were partially offset by lower volume, and \$25 million of restructuring expense and \$29 million of intangibles amortization related to the valves & controls acquisition. Materials cost containment offset lower price. Margin was flat, primarily reflecting the benefit from cost reduction actions offset by dilution from the valves & controls acquisition of 1.5 percentage points. Strong order rates in the second half of the year were supported by broad-based momentum across end markets and regions. Going forward, strong demand for MRO and mid-sized projects together with increasing momentum in international markets supports the outlook for solid underlying growth in fiscal 2018.

2016 vs. 2015 - Automation Solutions reported sales of \$9.0 billion in 2016, a decrease of \$1.2 billion or 12 percent. Underlying sales decreased 10 percent (\$1,027 million) on 9 percent lower volume and 1 percent lower price as global oil and gas customers continued to curtail spending levels in a difficult environment. Foreign currency translation had a 2 percent (\$206 million) unfavorable impact, while acquisitions added \$57 million. Sales for Measurement & Analytical Instrumentation, Valves, Actuators & Regulators, and Process Control Systems & Solutions decreased 13 percent, 16 percent and 5 percent, respectively, compared with the prior year. These decreases reflect lower capital and operational spending by global oil and gas customers, particularly in upstream markets, while sales growth was positive in life sciences and power. Industrial Solutions sales decreased 9 percent on weakness in industrial spending and upstream oil and gas markets. Underlying sales decreased 10 percent in the U.S., were up 2 percent in Europe and decreased 13 percent in Asia (China down 16 percent). Latin America decreased 13 percent, Canada was down 26 percent and Middle East/Africa decreased 18 percent. Earnings of \$1.5 billion decreased \$390 million and margin was down 2.0 percentage points due to sharply lower volume, deleverage and unfavorable mix, partially offset by savings from cost reduction actions and lower restructuring costs of \$22 million. Materials cost containment offset lower pricing. Results also reflect unfavorable foreign currency transactions of \$65 million, partially offset by a favorable comparison from litigation costs of \$20 million in 2015.

COMMERCIAL & RESIDENTIAL SOLUTIONS

(dollars in millions)	2015	2016	2017	16 vs. 15	17 vs. 16
Sales:					
Climate Technologies	\$ 4,006	3,944	4,212	(2)%	7 %
Tools & Home Products	1,625	1,611	1,645	(1)%	2 %
Total	\$ 5,631	5,555	5,857	(1)%	5 %
Earnings:					
Climate Technologies	\$ 835	902	975	8 %	8 %
Tools & Home Products	364	384	383	5 %	— %
Total	\$ 1,199	1,286	1,358	7 %	6 %
Margin	21.3%	23.2%	23.2%		

2017 vs. 2016 - Commercial & Residential Solutions sales were \$5.9 billion in 2017, an increase of \$302 million, or 5 percent, reflecting favorable conditions in HVAC and refrigeration markets in the U.S., Asia and Europe, as well as U.S. and Asian construction markets. Underlying sales increased 5 percent (\$297 million) on 6 percent higher volume, partially offset by 1 percent lower price. Foreign currency translation deducted \$20 million and acquisitions added \$25 million. Climate Technologies sales were \$4.2 billion in 2017, an increase of \$268 million, or 7 percent. Global air conditioning sales were solid, led by strength in the U.S. and Asia and robust growth in China partially due to easier comparisons, while sales were up modestly in Europe and declined moderately in Middle East/Africa. Global refrigeration sales were strong, reflecting robust growth in China on increased adoption of energy-efficient solutions and slight growth in the U.S. Sensors and solutions had strong growth, while temperature controls was up modestly. Tools & Home Products sales were \$1.6 billion in 2017, up \$34 million compared to the prior year. Professional tools had strong growth on favorable demand from oil and gas customers and in other construction related markets. Wet/dry vacuums sales were up moderately as favorable conditions continued in U.S. construction markets. Food waste disposers increased slightly, while the storage business declined moderately. Overall, underlying sales increased 3 percent in the U.S., 4 percent in Europe and 17 percent in Asia (China up 27 percent). Sales increased 3 percent in Latin America and 4 percent in Canada, while sales decreased 5 percent in Middle East/Africa. Earnings were \$1.4 billion, an increase of \$72 million driven by Climate Technologies, while margin was flat. Increased volume and resulting leverage, savings from cost reduction actions, and lower customer accommodation costs of \$16 million were largely offset by higher materials costs, lower price and unfavorable product mix. In fiscal 2018, global demand is expected to remain favorable in air conditioning, refrigeration and construction markets, supporting the outlook for moderate underlying growth.

2016 vs. 2015 - Commercial & Residential Solutions sales were \$5.6 billion in 2016, a decrease of \$76 million, or 1 percent. Underlying sales decreased less than 1 percent (down \$21 million) on lower price, offset by slightly higher volume. Foreign currency translation deducted 1 percent (\$60 million), while acquisitions added \$5 million. Climate Technologies sales were \$3.9 billion in 2016, a decrease of \$62 million, or 2 percent. Global air conditioning sales were down while global refrigeration sales were up modestly, as the U.S. exhibited growth and Europe and China were down, with more significant declines in air conditioning. Sales of temperature controls, sensors and solutions decreased. Tools & Home Products sales were \$1.6 billion in 2016, down \$14 million compared to the prior year. Food waste disposers had solid sales growth and the wet/dry vacuums business was up modestly, while sales decreased moderately in the professional tools and storage businesses. Overall, underlying sales were up 1 percent in the U.S. and 3 percent in Europe, while Asia decreased 4 percent. Latin America decreased 3 percent, Canada was down 4 percent, and Middle East/Africa decreased 3 percent. Earnings of \$1.3 billion increased \$87 million and margin improved 1.9 percentage points, primarily due to savings from cost reduction actions, materials cost containment and lower restructuring costs of \$24 million, partially offset by lower price and higher customer accommodation costs.

Financial Position, Capital Resources and Liquidity

The Company continues to generate substantial cash from operations and has the resources available to reinvest for growth in existing businesses, pursue strategic acquisitions and manage its capital structure on a short- and long-term basis.

CASH FLOW FROM CONTINUING OPERATIONS

(dollars in millions)

	2015	2016	2017
Operating Cash Flow	\$ 2,040	2,499	2,690
<i>Percent of sales</i>	12.6%	17.2%	17.6%
Capital Expenditures	\$ 588	447	476
<i>Percent of sales</i>	3.6%	3.1%	3.1%
Free Cash Flow (Operating Cash Flow less Capital Expenditures)	\$ 1,452	2,052	2,214
<i>Percent of sales</i>	8.9%	14.1%	14.5%
Operating Working Capital	\$ 1,177	755	1,007
<i>Percent of sales</i>	7.2%	5.2%	6.6%

Operating cash flow from continuing operations for 2017 was \$2.7 billion , a \$191 million , or 8 percent increase compared with 2016 , reflecting higher earnings and favorable changes in working capital. Operating cash flow from continuing operations of \$2.5 billion in 2016 was a 23 percent increase compared to \$2.0 billion in 2015 , as comparisons benefited from income taxes of \$424 million paid on the gains from divestitures in 2015. At September 30, 2017 , operating working capital as a percent of sales increased to 6.6 percent due to higher levels of working capital in the acquired valves & controls business, compared with 5.2 percent and 7.2 percent in 2016 and 2015 , respectively. Operating cash flow from continuing operations funded capital expenditures of \$476 million , dividends of \$1,239 million , common stock purchases of \$400 million , and was also used to partially pay down debt in 2017. Proceeds of \$5.1 billion from the sales of the network power systems and power generation, motors and drives businesses funded acquisitions of \$2,990 million , cash used for discontinued operations of \$778 million and repayments of short-term borrowings and long-term debt of approximately \$1.3 billion. Contributions to pension plans were \$45 million in 2017 , \$66 million in 2016 and \$53 million in 2015 .

Capital expenditures related to continuing operations were \$476 million , \$447 million and \$588 million in 2017 , 2016 and 2015 , respectively. Free cash flow from continuing operations (operating cash flow less capital expenditures) was \$2.2 billion in 2017 , up 8 percent . Free cash flow was \$2.1 billion in 2016 , compared with \$1.5 billion in 2015 . The Company is targeting capital spending of approximately \$550 million in 2018 . Net cash paid in connection with acquisitions was \$2,990 million , \$132 million and \$324 million in 2017 , 2016 and 2015 , respectively. Proceeds from divestitures not classified as discontinued operations were \$39 million in 2017 and \$1,812 million in 2015 .

Dividends were \$1,239 million (\$1.92 per share) in 2017 , compared with \$1,227 million (\$1.90 per share) in 2016 and \$1,269 million (\$1.88 per share) in 2015 . In November 2017 , the Board of Directors voted to increase the quarterly cash dividend 1 percent, to an annualized rate of \$1.94 per share.

Purchases of Emerson common stock totaled \$400 million , \$601 million and \$2,487 million in 2017 , 2016 and 2015 , respectively, at average per share prices of \$60.51, \$48.11 and \$57.68.

The Board of Directors authorized the purchase of up to 70 million common shares in November 2015, and 56.9 million shares remain available for purchase under this authorization. The Company purchased 6.6 million shares in 2017 under the November 2015 authorization. In 2016, the Company purchased 12.5 million shares under a combination of the November 2015 authorization and the remainder of the May 2013 authorization. A total of 43.1 million shares were purchased in 2015 under the May 2013 authorization.

LEVERAGE/CAPITALIZATION

(dollars in millions)

	2015	2016	2017
Total Assets	\$ 22,088	21,732	19,589
Long-term Debt	\$ 4,289	4,051	3,794
Common Stockholders' Equity	\$ 8,081	7,568	8,718
Total Debt-to-Total Capital Ratio	45.8%	46.7%	34.8%
Net Debt-to-Net Capital Ratio	31.3%	31.3%	15.4%
Operating Cash Flow-to-Debt Ratio	29.8%	37.7%	57.8%
Interest Coverage Ratio	20.2X	11.8X	12.6X

Total debt, which includes long-term debt, current maturities of long-term debt, commercial paper and other short-term borrowings, was \$4.7 billion, \$6.6 billion and \$6.8 billion for 2017, 2016 and 2015, respectively. During the year, the Company repaid \$250 million of 5.125% notes that matured in December 2016. In 2015, the Company issued \$500 million of 2.625% notes due December 2021 and \$500 million of 3.150% notes due June 2025, and repaid \$250 million of 5.0% notes that matured in December 2014 and \$250 million of 4.125% notes that matured in April 2015.

The total debt-to-capital ratio and the net debt-to-net capital ratio (less cash and short-term investments) decreased in 2017 due to lower total debt outstanding and higher common stockholders' equity from changes in other comprehensive income. The total debt-to-capital ratio and the net debt-to-net capital ratio (less cash and short-term investments) increased in 2016 due to lower common stockholders' equity from share repurchases and changes in other comprehensive income. The operating cash flow from continuing operations-to-debt ratio increased in 2017 primarily due to lower debt in the current year. The operating cash flow from continuing operations-to-debt ratio increased in 2016 primarily due to taxes paid in 2015 on the divestiture gains and lower debt in 2016. The interest coverage ratio is computed as earnings from continuing operations before income taxes plus interest expense, divided by interest expense. The increase in interest coverage in 2017 reflects lower interest expense in the current year. The decrease in interest coverage in 2016 reflects lower pretax earnings, largely due to the divestiture gains of \$1,039 million in 2015, and slightly higher interest expense.

In April 2014, the Company entered into a \$3.5 billion five-year revolving backup credit facility with various banks, which replaced the December 2010 \$2.75 billion facility. The credit facility is maintained to support general corporate purposes, including commercial paper borrowing. The Company has not incurred any borrowings under this or previous facilities. The credit facility contains no financial covenants and is not subject to termination based on a change of credit rating or material adverse changes. The facility is unsecured and may be accessed under various interest rate and currency denomination alternatives at the Company's option. Fees to maintain the facility are immaterial. The Company also maintains a universal shelf registration statement on file with the SEC under which it can issue debt securities, preferred stock, common stock, warrants, share purchase contracts or share purchase units without a predetermined limit. Securities can be sold in one or more separate offerings with the size, price and terms to be determined at the time of sale.

Emerson's financial structure provides the flexibility necessary to achieve its strategic objectives. The Company has been successful in efficiently deploying cash where needed worldwide to fund operations, complete acquisitions and sustain long-term growth. At September 30, 2017, \$3.1 billion of the Company's cash was held outside the U.S. (primarily in Europe and Asia), \$1.4 billion of which income taxes have been provided for, and was generally available for repatriation to the U.S. Under current tax law, repatriated cash may be subject to U.S. federal income taxes, net of available foreign tax credits. The Company routinely repatriates a portion of its non-U.S. cash from earnings each year, or otherwise when it can be accomplished tax efficiently, and provides for U.S. income taxes as appropriate. The Company has been able to readily meet all its funding requirements and currently believes that sufficient funds will be available to meet the Company's needs in the foreseeable future through operating cash flow, existing resources, short- and long-term debt capacity or backup credit lines.

CONTRACTUAL OBLIGATIONS

At September 30, 2017, the Company's contractual obligations, including estimated payments, are as follows:

(dollars in millions)	Amounts Due By Period				
	Total	Less Than 1 Year	1 - 3 Years	3 - 5 Years	More Than 5 Years
Long-term Debt (including Interest)	\$ 5,342	428	1,434	966	2,514
Operating Leases	536	171	206	80	79
Purchase Obligations	746	655	71	14	6
Total	\$ 6,624	1,254	1,711	1,060	2,599

Purchase obligations consist primarily of inventory purchases made in the normal course of business to meet operational requirements. The table above does not include \$2.0 billion of other noncurrent liabilities recorded in the balance sheet and summarized in Note 19, which consist primarily of pension and postretirement plan liabilities, deferred income taxes and unrecognized tax benefits, because it is not certain when these amounts will become due. See Notes 11 and 12 for estimated future benefit payments and Note 14 for additional information on deferred income taxes.

FINANCIAL INSTRUMENTS

The Company is exposed to market risk related to changes in interest rates, foreign currency exchange rates and commodity prices, and selectively uses derivative financial instruments, including forwards, swaps and purchased options to manage these risks. The Company does not hold derivatives for trading or speculative purposes. The value of derivatives and other financial instruments is subject to change as a result of market movements in rates and prices. Sensitivity analysis is one technique used to forecast the impact of these movements. Based on a hypothetical 10 percent increase in interest rates, a 10 percent decrease in commodity prices or a 10 percent weakening in the U.S. dollar across all currencies, the potential losses in future earnings, fair value or cash flows are not material. Sensitivity analysis has limitations; for example, a weaker U.S. dollar would benefit future earnings through favorable translation of non-U.S. operating results, and lower commodity prices would benefit future earnings through lower cost of sales. See Notes 1, and 8 through 10.

Critical Accounting Policies

Preparation of the Company's financial statements requires management to make judgments, assumptions and estimates regarding uncertainties that could affect reported revenue, expenses, assets, liabilities and equity. Note 1 describes the significant accounting policies used in preparation of the consolidated financial statements. The most significant areas where management judgments and estimates impact the primary financial statements are described below. Actual results in these areas could differ materially from management's estimates under different assumptions or conditions.

REVENUE RECOGNITION

The Company recognizes a large majority of its revenue through the sale of manufactured products and records the sale when products are shipped or delivered, title and risk of loss pass to the customer, and collection is reasonably assured. In certain circumstances, revenue is recognized using the percentage-of-completion method, as performance occurs, or in accordance with ASC 985-605 related to software. Sales arrangements sometimes involve delivering multiple elements, which requires management judgment that affects the amount and timing of revenue recognized. In these instances, the revenue assigned to each element is based on vendor-specific objective evidence, third-party evidence or a management estimate of the relative selling price. Revenue is recognized for delivered elements if they have value to the customer on a stand-alone basis and performance related to the undelivered items is probable and substantially in the Company's control, or the undelivered elements are inconsequential or perfunctory and there are no unsatisfied contingencies related to payment. The vast majority of deliverables are tangible products, with a smaller portion attributable to installation, service or maintenance. Management believes that all relevant criteria and conditions are considered when recognizing revenue.

INVENTORIES

Inventories are stated at the lower of cost or market. The majority of inventory is valued based on standard costs, which approximate average costs, while the remainder is principally valued on a first-in, first-out basis. Cost standards are revised at the beginning of each year. The annual effect of resetting standards plus any operating

variances incurred during each period are allocated to inventories and recognized in cost of sales as product is sold. The Company's businesses review inventory for obsolescence, make appropriate provisions and dispose of obsolete inventory on a regular basis. Various factors are considered in these reviews, including sales history and recent trends, industry conditions and general economic conditions. If actual circumstances indicate a decline in any of these factors, particularly an abrupt change in economic conditions, the Company could incur higher levels of obsolescence expense.

LONG-LIVED ASSETS

Long-lived assets, which include property, plant and equipment, goodwill and identifiable intangible assets, are reviewed for impairment whenever events or changes in business circumstances indicate impairment may exist. If the Company determines that the carrying value of a long-lived asset may not be recoverable, a permanent impairment charge is recorded for the amount by which the carrying value of the long-lived asset exceeds its estimated fair value. Reporting units are also reviewed for possible goodwill impairment at least annually, in the fourth quarter. If an initial assessment indicates it is more likely than not an impairment may exist, it is evaluated by comparing the unit's estimated fair value to its carrying value. Fair value is generally estimated using an income approach that discounts estimated future cash flows using discount rates judged by management to be commensurate with the applicable risk. Estimates of future sales, operating results, cash flows and discount rates are subject to changes in the economic environment, including such factors as the general level of market interest rates, expected equity market returns and the volatility of markets served, particularly when recessionary economic circumstances continue for an extended period of time. Management believes the estimates of future cash flows and fair values are reasonable; however, changes in estimates due to variance from assumptions could materially affect the evaluations.

RETIREMENT PLANS

The Company maintains a prudent long-term investment strategy consistent with the duration of pension obligations. The determination of defined benefit plan expense and liabilities is dependent on various assumptions, including the expected annual rate of return on plan assets, the discount rate and the rate of annual compensation increases. Management believes the assumptions used are appropriate; however, actual experience may differ. In accordance with U.S. generally accepted accounting principles, actual results that differ from the Company's assumptions are accumulated as deferred actuarial gains or losses and amortized to expense in future periods. The Company transitioned from defined benefit to defined contribution retirement plans in 2016. The principal U.S. defined benefit plan is closed to employees hired after January 1, 2016 while shorter-tenured current employees ceased accruing benefits effective October 1, 2016. Affected employees transitioned to an enhanced defined contribution plan. See Notes 11 and 12.

During 2017, the funded status of the Company's pension plans improved by \$667 million. As of September 30, 2017, the U.S. pension plans were underfunded by \$77 million in total, including unfunded plans totaling \$201 million. The non-U.S. plans were underfunded by \$253 million, including unfunded plans totaling \$215 million. The Company contributed a total of \$45 million to defined benefit plans in 2017 and expects to contribute approximately \$60 million in 2018. At year-end 2017, the discount rate for U.S. plans was 3.76 percent, and was 3.50 percent in 2016. The assumed investment return on plan assets was 7.25 percent in 2017 and 7.50 percent in 2016 and 2015, and is expected to be 7.0 percent for 2018. Deferred actuarial losses to be amortized to expense in future years were \$1,161 million (\$753 million after-tax) as of September 30, 2017.

INCOME TAXES

Income tax expense and tax assets and liabilities reflect management's assessment of taxes paid or expected to be paid (received) on items included in the financial statements. Deferred tax assets and liabilities arise from temporary differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases, and consideration of operating loss and tax credit carryforwards. Deferred income taxes are measured using enacted tax rates in effect for the year in which the temporary differences are expected to be recovered or settled. The impact on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. Valuation allowances are provided to reduce deferred tax assets to the amount that will more likely than not be realized. This requires management to make judgments and estimates regarding the amount and timing of the reversal of taxable temporary differences, expected future taxable income, and the impact of tax planning strategies.

Uncertainty exists regarding tax positions taken in previously filed tax returns which remain subject to examination, along with positions expected to be taken in future returns. The Company provides for unrecognized tax benefits, based on the technical merits, when it is more likely than not that an uncertain tax position will not be sustained

upon examination. Adjustments are made to the uncertain tax positions when facts and circumstances change, such as the closing of a tax audit; changes in applicable tax laws, including tax case rulings and legislative guidance; or expiration of the applicable statute of limitations.

The Company also pays U.S. federal income taxes, net of available foreign tax credits, on cash repatriated from non-U.S. locations. No provision is made for U.S. income taxes on the undistributed earnings of non-U.S. subsidiaries where these earnings are considered permanently invested or otherwise indefinitely retained for continuing international operations. Determination of the amount of taxes that might be paid on these undistributed earnings if eventually remitted is not practicable. See Notes 1 and 14.

Other Items

LEGAL MATTERS

At September 30, 2017, there were no known contingent liabilities (including guarantees, pending litigation, taxes and other claims) that management believes will be material in relation to the Company's financial statements, nor were there any material commitments outside the normal course of business.

NEW ACCOUNTING PRONOUNCEMENTS

In May 2014, the FASB amended ASC 606, *Revenue from Contracts with Customers*, to update and consolidate revenue recognition guidance from multiple sources into a single, comprehensive standard to be applied for all contracts with customers. The fundamental principle of the revised standard is to recognize revenue based on the transfer of goods and services to customers at an amount that the Company expects to be entitled to in exchange for those goods and services. Also required are additional disclosures regarding the nature, extent, timing and uncertainty of revenues and associated cash flows. The new standard is effective for the Company in the first quarter of fiscal 2019 and may be adopted on either a prospective or retrospective basis. The Company currently expects to adopt the new standard prospectively with the cumulative effect of adoption recognized in retained earnings. The Company continues to evaluate the impact of the revised standard and does not currently expect that the updates will materially impact its financial statements. The Company is also in the process of evaluating and implementing changes to its business processes, systems, controls and accounting policies to support recognition and disclosure under the new guidance.

In February 2016, the FASB amended ASC 842, *Leases*, to require recognition on the balance sheet of assets and liabilities related to the rights and obligations associated with all lease arrangements. Currently, obligations classified as operating leases are not recorded on the balance sheet but must be disclosed. The new standard is effective for the Company in the first quarter of fiscal 2020. The Company is in the process of evaluating the impact of the revised standard on its financial statements. The Company expects the revised standard to have a material impact on its balance sheet due to the recognition of right-of-use assets and lease liabilities related to operating leases. Contractual obligations related to operating leases totaled \$536 million at September 30, 2017. The Company does not expect the new standard will materially impact its results of operations.

In March 2017, the FASB issued updates to ASC 715, *Compensation - Retirement Benefits*, which only permit the service cost component of net periodic pension and postretirement expense to be reported with other compensation costs, while all other components are required to be reported separately in other deductions. These updates are effective in the first quarter of fiscal 2019, with early adoption permitted, and must be adopted on a retrospective basis. The updates change presentation only and will not impact the Company's results of operations.

In August 2017, the FASB issued updates to ASC 815, *Derivatives and Hedging*, which permit hedging contractually specified risk components. The updates also eliminate the requirement to separately measure and report hedge ineffectiveness and simplify hedge documentation and effectiveness assessment requirements. These updates are effective for the Company in the first quarter of fiscal 2020, with early adoption permitted, and must be adopted using a modified retrospective approach. The Company is in the process of evaluating the impact of the revised standard on its financial statements.

In January 2017, the FASB issued updates to ASC 350, *Intangibles - Goodwill and Other*, eliminating the requirement to measure impairment based on the implied fair value of goodwill compared to the carrying amount of a reporting unit's goodwill. Instead, goodwill impairment will be measured as the excess of a reporting unit's carrying amount over its estimated fair value. These updates are effective prospectively for impairment tests beginning in fiscal 2021, with early adoption permitted, and are not expected to materially impact the Company's results of operations.

FISCAL 2018 OUTLOOK

Market conditions began trending favorably in the second half of fiscal 2017 and are expected to continue into 2018. Oil and gas prices are expected to remain stable in a range favorable for energy-related markets, while growth in air conditioning, refrigeration and global construction markets is expected to continue. Automation Solutions net sales are expected to be up 14 to 16 percent, with underlying sales up 5 to 7 percent excluding an approximate 8 percent impact from acquisitions and 1 percent from currency translation. Commercial & Residential Solutions net sales are expected to be down 1 percent to up 1 percent, with underlying sales up 3 to 5 percent excluding an approximate 5 percent negative impact from divestitures and 1 percent from favorable currency translation. Consolidated net sales are expected to be up 8 to 10 percent, with underlying sales up 4 to 6 percent, excluding an approximate 3 percent impact from acquisitions and divestitures and 1 percent from currency translation. Reported earnings per share are expected to be \$2.66 to \$2.86. Earnings per share are expected to be \$2.75 to \$2.95, excluding a \$0.03 impact from valves & controls first year acquisition accounting charges related to inventory and backlog amortization, and a \$0.06 impact from a tax-related loss on the divestiture of the residential storage business.

ITEM 7A - QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The information from this Annual Report on Form 10-K set forth in Item 8 under "Financial Instruments" is hereby incorporated by reference.

ITEM 8 - FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See the Company's consolidated financial statements and accompanying notes and the report thereon of KPMG LLP that follow.

Consolidated Statements of Earnings
EMERSON ELECTRIC CO. & SUBSIDIARIES

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

	2015	2016	2017
Net sales	\$ 16,249	14,522	15,264
Costs and expenses:			
Cost of sales	9,241	8,260	8,860
Selling, general and administrative expenses	3,735	3,464	3,618
Gains on divestitures of businesses	1,039	—	—
Other deductions, net	330	294	286
Interest expense, net of interest income of: 2015, \$23; 2016, \$27; 2017, \$36	175	188	165
Earnings from continuing operations before income taxes	3,807	2,316	2,335
Income taxes	1,267	697	660
Earnings from continuing operations	2,540	1,619	1,675
Discontinued operations, net of tax: 2015, \$161; 2016, \$269; 2017, \$671	193	45	(125)
Net earnings	2,733	1,664	1,550
Less: Noncontrolling interests in earnings of subsidiaries	23	29	32
Net earnings common stockholders	\$ 2,710	1,635	1,518
Earnings common stockholders:			
Earnings from continuing operations	\$ 2,517	1,590	1,643
Discontinued operations, net of tax	193	45	(125)
Net earnings common stockholders	\$ 2,710	1,635	1,518
Basic earnings per share common stockholders:			
Earnings from continuing operations	\$ 3.72	2.46	2.54
Discontinued operations	0.29	0.07	(0.19)
Basic earnings per common share	\$ 4.01	2.53	2.35
Diluted earnings per share common stockholders:			
Earnings from continuing operations	\$ 3.71	2.45	2.54
Discontinued operations	0.28	0.07	(0.19)
Diluted earnings per common share	\$ 3.99	2.52	2.35

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statements of Comprehensive Income
EMERSON ELECTRIC CO. & SUBSIDIARIES

Years ended September 30
(Dollars in millions)

	2015	2016	2017
Net earnings	\$ 2,733	1,664	1,550
Other comprehensive income (loss), net of tax:			
Foreign currency translation	(794)	(188)	441
Pension and postretirement	(206)	(210)	500
Cash flow hedges	(43)	18	37
Total other comprehensive income (loss)	(1,043)	(380)	978
Comprehensive income	1,690	1,284	2,528
Less: Noncontrolling interests in comprehensive income of subsidiaries	22	31	30
Comprehensive income common stockholders	\$ 1,668	1,253	2,498

See accompanying Notes to Consolidated Financial Statements.

Consolidated Balance Sheets
EMERSON ELECTRIC CO. & SUBSIDIARIES

September 30 (Dollars in millions, except per share amounts)

	2016	2017
ASSETS		
Current assets		
Cash and equivalents	\$ 3,182	3,062
Receivables, less allowances of \$92 in 2016 and \$91 in 2017	2,701	3,072
Inventories	1,208	1,696
Other current assets	669	349
Current assets held-for-sale	2,200	73
Total current assets	9,960	8,252
Property, plant and equipment, net	2,931	3,321
Other assets		
Goodwill	3,909	5,316
Other intangible assets	902	1,890
Other	200	634
Noncurrent assets held-for-sale	3,830	176
Total other assets	8,841	8,016
Total assets	\$ 21,732	19,589
LIABILITIES AND EQUITY		
Current liabilities		
Short-term borrowings and current maturities of long-term debt	\$ 2,584	862
Accounts payable	1,517	1,776
Accrued expenses	2,126	2,286
Income taxes	180	65
Current liabilities held-for-sale	1,601	56
Total current liabilities	8,008	5,045
Long-term debt	4,051	3,794
Other liabilities	1,729	1,975
Noncurrent liabilities held-for-sale	326	5
Equity		
Common stock, \$0.50 par value; authorized, 1,200,000,000 shares; issued, 953,354,012 shares; outstanding, 642,796,490 shares in 2016; 641,691,971 shares in 2017	477	477
Additional paid-in-capital	205	297
Retained earnings	21,716	21,995
Accumulated other comprehensive income (loss)	(1,999)	(1,019)
	20,399	21,750
Less: Cost of common stock in treasury, 310,557,522 shares in 2016; 311,662,041 shares in 2017	12,831	13,032
Common stockholders' equity	7,568	8,718
Noncontrolling interests in subsidiaries	50	52
Total equity	7,618	8,770
Total liabilities and equity	\$ 21,732	19,589

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statements of Equity
EMERSON ELECTRIC CO. & SUBSIDIARIES

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

	2015	2016	2017
Common stock	\$ 477	477	477
Additional paid-in-capital			
Beginning balance	161	170	205
Stock plans	31	35	92
Purchase of noncontrolling interests	(22)	—	—
Ending balance	170	205	297
Retained earnings			
Beginning balance	19,867	21,308	21,716
Net earnings common stockholders	2,710	1,635	1,518
Dividends paid (per share: 2015, \$1.88; 2016, \$1.90; 2017, \$1.92)	(1,269)	(1,227)	(1,239)
Ending balance	21,308	21,716	21,995
Accumulated other comprehensive income (loss)			
Beginning balance	(575)	(1,617)	(1,999)
Foreign currency translation	(793)	(190)	443
Pension and postretirement	(206)	(210)	500
Cash flow hedges	(43)	18	37
Ending balance	(1,617)	(1,999)	(1,019)
Treasury stock			
Beginning balance	(9,811)	(12,257)	(12,831)
Purchases	(2,487)	(601)	(400)
Issued under stock plans	41	27	199
Ending balance	(12,257)	(12,831)	(13,032)
Common stockholders' equity	8,081	7,568	8,718
Noncontrolling interests in subsidiaries			
Beginning balance	48	47	50
Net earnings	23	29	32
Other comprehensive income (loss)	(1)	2	(2)
Dividends paid	(23)	(28)	(28)
Ending balance	47	50	52
Total equity	\$ 8,128	7,618	8,770

See accompanying Notes to Consolidated Financial Statements.

Consolidated Statements of Cash Flows
EMERSON ELECTRIC CO. & SUBSIDIARIES

Years ended September 30 (Dollars in millions)

	2015	2016	2017
Operating activities			
Net earnings	\$ 2,733	1,664	1,550
(Earnings) Loss from discontinued operations, net of tax	(193)	(45)	125
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation and amortization	573	568	636
Changes in operating working capital	(181)	93	160
Pension funding	(53)	(66)	(45)
Gains on divestitures of businesses, after tax	(611)	—	—
Income taxes paid on divestiture gains	(424)	—	—
Other, net	196	285	264
Cash from continuing operations	2,040	2,499	2,690
Cash from discontinued operations	489	382	(778)
Cash provided by operating activities	2,529	2,881	1,912
Investing activities			
Capital expenditures	(588)	(447)	(476)
Purchases of businesses, net of cash and equivalents acquired	(324)	(132)	(2,990)
Divestitures of businesses	1,812	—	39
Other, net	(221)	30	(106)
Cash from continuing operations	679	(549)	(3,533)
Cash from discontinued operations	(88)	(77)	5,047
Cash provided by (used in) investing activities	591	(626)	1,514
Financing activities			
Net increase (decrease) in short-term borrowings	1,116	(34)	(1,635)
Proceeds from short-term borrowings greater than three months	2,515	1,264	—
Payments of short-term borrowings greater than three months	(3,286)	(1,174)	(90)
Proceeds from long-term debt	1,000	—	—
Payments of long-term debt	(504)	(254)	(254)
Dividends paid	(1,269)	(1,227)	(1,239)
Purchases of common stock	(2,501)	(601)	(400)
Other, net	(19)	(19)	27
Cash used in financing activities	(2,948)	(2,045)	(3,591)
Effect of exchange rate changes on cash and equivalents	(267)	(82)	45
Increase (Decrease) in cash and equivalents	(95)	128	(120)
Beginning cash and equivalents	3,149	3,054	3,182
Ending cash and equivalents	\$ 3,054	3,182	3,062
Changes in operating working capital			
Receivables	\$ 241	162	(25)
Inventories	(11)	58	32
Other current assets	(140)	(4)	(12)
Accounts payable	(256)	(22)	135
Accrued expenses	(4)	(57)	74
Income taxes	(11)	(44)	(44)
Total changes in operating working capital	\$ (181)	93	160

See accompanying Notes to Consolidated Financial Statements.

Notes to Consolidated Financial Statements

EMERSON ELECTRIC CO. & SUBSIDIARIES

Years ended September 30
(Dollars in millions, except per share amounts or where noted)

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Financial Statement Presentation

The preparation of the financial statements in conformity with U.S. generally accepted accounting principles (U.S. GAAP) requires management to make estimates and assumptions that affect reported amounts and related disclosures. Actual results could differ from these estimates. Certain prior year amounts have been reclassified to conform with current year presentation.

In the first quarter of 2017, the Company adopted updates to ASC Subtopic 835-30, *Interest-Imputation of Interest*, which require presentation of debt issuance costs as a deduction from the related debt liability rather than within other assets. These updates were adopted on a retrospective basis and did not materially impact the Company's financial statements.

In the fourth quarter of 2017, the Company adopted updates to ASC 718, *Compensation - Stock Compensation*, which require all excess tax benefits and deficiencies related to share-based payments to be recognized in income tax expense rather than through additional paid-in-capital, and to be presented as operating cash flows instead of financing. These updates did not materially impact the Company's financial statements.

In the fourth quarter of 2017, the Company adopted updates to ASC 740, *Income Taxes*, which require noncurrent presentation of all deferred tax assets and liabilities on the balance sheet. These updates were adopted on a prospective basis and resulted in the reclassification of current deferred tax assets and liabilities to noncurrent presentation.

In the fourth quarter of 2017, the Company adopted updates to ASC 820, *Fair Value Measurement*, which require investments measured using the net asset value per share practical expedient to be removed from the fair value hierarchy and separately reported when making disclosures. These updates did not change the determination of fair value for any investments. Adoption affected disclosure presentation only; there was no impact on the Company's financial results.

In the first quarter of 2015, the Company adopted updates to ASC 205, *Presentation of Financial Statements*, and ASC 360, *Property, Plant and Equipment*, regarding the reporting of discontinued operations. These updates raised the threshold for reporting discontinued operations to a strategic business shift having a major effect on an entity's operations and financial results. The updates also added disclosures for disposals of business units qualifying for discontinued presentation, and for some dispositions that do not qualify as discontinued operations but are still considered individually significant components of the entity. In 2017, the Company completed the divestitures of its network power systems, and power generation, motors and drives businesses. The results of operations for these businesses were reported within discontinued operations for all years presented, and the assets and liabilities were reflected as held-for-sale. See Note 4.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its controlled affiliates. Intercompany transactions, profits and balances are eliminated in consolidation. Investments of 20 percent to 50 percent of the voting shares of other entities are accounted for by the equity method. Investments in publicly traded companies of less than 20 percent are carried at fair value, with changes in fair value reflected in accumulated other comprehensive income. Investments in nonpublicly traded companies of less than 20 percent are carried at cost.

Foreign Currency Translation

The functional currency for most of the Company's non-U.S. subsidiaries is the local currency. Adjustments resulting from translating local currency financial statements into U.S. dollars are reflected in accumulated other comprehensive income.

Cash Equivalents

Cash equivalents consist of highly liquid investments with original maturities of three months or less.

Inventories

Inventories are stated at the lower of cost or market. The majority of inventory is valued based on standard costs, which approximate average costs, while the remainder is principally valued on a first-in, first-out basis. Cost standards are revised at the beginning of each fiscal year. The annual effect of resetting standards plus any operating variances incurred during each period are allocated to inventories and recognized in cost of sales as product is sold. Following are the components of inventory as of September 30:

	2016	2017
Finished products	\$ 382	560
Raw materials and work in process	826	1,136
Total inventories	\$ 1,208	1,696

The increase is primarily due to the valves & controls acquisition. See Note 3.

Fair Value Measurement

ASC 820, *Fair Value Measurement*, establishes a formal hierarchy and framework for measuring certain financial statement items at fair value, and requires disclosures about fair value measurements and the reliability of valuation inputs. Under ASC 820, measurement assumes the transaction to sell an asset or transfer a liability occurs in the principal or at least the most advantageous market for that asset or liability. Within the hierarchy, Level 1 instruments use observable market prices for an identical item in active markets and have the most reliable valuations. Level 2 instruments are valued through broker/dealer quotation or other approaches using market-observable inputs for similar items in active markets, including forward and spot prices, interest rates and volatilities. Level 3 instruments are valued using inputs not observable in an active market, such as company-developed future cash flow estimates, and are considered the least reliable. Valuations for all of the Company's financial instruments fall within Level 2. The fair value of the Company's long-term debt is Level 2, estimated using current interest rates and pricing from financial institutions and other market sources for debt with similar maturities and characteristics.

Property, Plant And Equipment

The Company records investments in land, buildings, and machinery and equipment at cost. Depreciation is computed principally using the straight-line method over estimated service lives, which for principal assets are 30 to 40 years for buildings and 8 to 12 years for machinery and equipment. Long-lived tangible assets are reviewed for impairment whenever events or changes in business circumstances indicate the carrying value of the assets may not be recoverable. Impairment losses are recognized based on estimated fair values if the sum of estimated future undiscounted cash flows of the related assets is less than the carrying values. The components of property, plant and equipment as of September 30 follow:

	2016	2017
Land	\$ 210	295
Buildings	1,867	2,043
Machinery and equipment	4,932	5,175
Construction in progress	318	360
Property, plant and equipment, at cost	7,327	7,873
Less: Accumulated depreciation	4,396	4,552
Property, plant and equipment, net	\$ 2,931	3,321

The increase is primarily due to the valves & controls acquisition. See Note 3.

Goodwill and Other Intangible Assets

Assets and liabilities acquired in business combinations are accounted for using the acquisition method and recorded at their respective fair values. Substantially all goodwill is assigned to the reporting unit that acquires a business. A reporting unit is an operating segment as defined in ASC 280, *Segment Reporting*, or a business one level below an operating segment if discrete financial information for that business unit is prepared and regularly reviewed by the segment manager. The Company conducts annual impairment tests of goodwill in the fourth quarter. If an initial assessment indicates it is more likely than not goodwill might be impaired, it is evaluated by comparing the reporting unit's estimated fair value to its carrying value. Goodwill is also tested for impairment between annual tests if events or circumstances indicate the fair value of a unit may be less than its carrying value.

If the carrying amount exceeds the estimated fair value, impairment is recognized to the extent that recorded goodwill exceeds the implied fair value of that goodwill. Estimated fair values of reporting units are Level 3 measures and are developed generally under an income approach that discounts estimated future cash flows using risk-adjusted interest rates.

All of the Company's identifiable intangible assets are subject to amortization on a straight-line basis over their estimated useful lives. Identifiable intangibles consist of intellectual property such as patents and trademarks, customer relationships and capitalized software. Identifiable intangibles are also subject to evaluation for potential impairment if events or circumstances indicate the carrying amount may not be recoverable. See Note 7.

Product Warranty

Warranties vary by product line and are competitive for the markets in which the Company operates. Warranties generally extend for a period of one to two years from the date of sale or installation. Provisions for warranty are determined primarily based on historical warranty cost as a percentage of sales or a fixed amount per unit sold based on failure rates, adjusted for specific problems that may arise. Product warranty expense is less than one percent of sales.

Revenue Recognition

The Company recognizes a large majority of its revenues through the sale of manufactured products and records the sale when products are shipped or delivered, title and risk of loss pass to the customer, and collection is reasonably assured. Less than ten percent of the Company's revenues are recognized using the percentage-of-completion method as performance occurs, and revenue from software sales is recognized in accordance with ASC 985-605. Management believes that all relevant criteria and conditions are considered when recognizing revenue.

Sales arrangements sometimes involve delivering multiple elements. In these instances, the revenue assigned to each element is based on vendor-specific objective evidence, third-party evidence or a management estimate of the relative selling price. Revenue is recognized for delivered elements if they have value to the customer on a stand-alone basis and performance related to the undelivered items is probable and substantially in the Company's control, or the undelivered elements are inconsequential or perfunctory and there are no unsatisfied contingencies related to payment. Approximately five percent of the Company's revenues from continuing operations arise from qualifying sales arrangements that include the delivery of multiple elements, principally in the Automation Solutions segment. The vast majority of these deliverables are tangible products, with a smaller portion attributable to installation, service or maintenance. Generally, contract duration is short term, and cancellation, termination or refund provisions apply only in the event of contract breach and have historically not been invoked.

Derivatives and Hedging

In the normal course of business, the Company is exposed to changes in interest rates, foreign currency exchange rates and commodity prices due to its worldwide presence and diverse business profile. The Company's foreign currency exposures relate to transactions denominated in currencies that differ from the functional currencies of its business units, primarily in euros, Mexican pesos, Singapore dollars and Indian rupees. Primary commodity exposures are price fluctuations on forecasted purchases of copper and aluminum and related products. As part of the Company's risk management strategy, derivative instruments are selectively used in an effort to minimize the impact of these exposures. Foreign exchange forwards and options are utilized to hedge foreign currency exposures impacting sales or cost of sales transactions, firm commitments and the fair value of assets and liabilities, while swap and option contracts may be used to minimize the effect of commodity price fluctuations on the cost of sales. All derivatives are associated with specific underlying exposures and the Company does not hold derivatives for trading or speculative purposes. The duration of hedge positions is generally two years or less.

All derivatives are accounted for under ASC 815, *Derivatives and Hedging*, and recognized at fair value. For derivatives hedging variability in future cash flows, the effective portion of any gain or loss is deferred in stockholders' equity and recognized when the underlying hedged transaction impacts earnings. The majority of the Company's derivatives that are designated as hedges and qualify for deferral accounting are cash flow hedges. For derivatives hedging the fair value of existing assets or liabilities, both the gain or loss on the derivative and the offsetting loss or gain on the hedged item are recognized in earnings each period. Currency fluctuations on non-U.S. dollar obligations that have been designated as hedges of non-U.S. dollar net asset exposures are reported in equity. To the extent that any hedge is not fully effective at offsetting changes in the underlying hedged item, there could be a net earnings impact. The Company also uses derivatives to hedge economic exposures that do not receive deferral accounting under ASC 815. The underlying exposures for these hedges relate primarily to purchases of commodity-based components used in the Company's manufacturing processes, and the revaluation

of certain foreign-currency-denominated assets and liabilities. Gains or losses from the ineffective portion of any hedge, as well as any gains or losses on derivative instruments not designated as hedges, are recognized in the income statement immediately.

Counterparties to derivative arrangements are companies with high credit ratings, and the Company has bilateral collateral arrangements with them for which credit rating-based posting thresholds vary depending on the arrangement. If credit ratings on the Company's debt fall below preestablished levels, counterparties can require immediate full collateralization on all instruments in net liability positions. No collateral was posted with counterparties and none was held by the Company at year end. If contractual thresholds had been exceeded, the maximum collateral the Company could have been required to post was \$4 . The Company can also demand full collateralization of instruments in net asset positions should any of the Company's counterparties' credit ratings fall below certain thresholds. Risk from credit loss when derivatives are in asset positions is not considered material. The Company has master netting arrangements in place with its counterparties that allow the offsetting of certain derivative-related amounts receivable and payable when settlement occurs in the same period. Accordingly, counterparty balances are netted in the consolidated balance sheet and are reported in other current assets or accrued expenses as appropriate, depending on positions with counterparties as of the balance sheet date. See Note 8.

Income Taxes

The provision for income taxes is based on pretax income reported in the consolidated statements of earnings and tax rates currently enacted in each jurisdiction. Certain income and expense items are recognized in different time periods for financial reporting and income tax filing purposes, and deferred income taxes are provided for the effect of temporary differences. The Company also provides for U.S. federal income taxes, net of available foreign tax credits, on earnings intended to be repatriated from non-U.S. locations. No provision has been made for U.S. income taxes on approximately \$4.9 billion of undistributed earnings of non-U.S. subsidiaries as of September 30, 2017 , as these earnings are considered permanently invested or otherwise indefinitely retained for continuing international operations. Recognition of U.S. taxes on undistributed non-U.S. earnings would be triggered by a management decision to repatriate those earnings. Determination of the amount of taxes that might be paid on these undistributed earnings if eventually remitted is not practicable. See Note 14.

(2) WEIGHTED-AVERAGE COMMON SHARES

Basic earnings per common share consider only the weighted-average of common shares outstanding while diluted earnings per common share also consider the dilutive effects of stock options and incentive shares. Options to purchase approximately 4.5 million , 13.3 million and 5.9 million shares of common stock were excluded from the computation of diluted earnings per share in 2017 , 2016 and 2015 , respectively, as the effect would have been antidilutive. Earnings allocated to participating securities were inconsequential for all years presented. Reconciliations of weighted-average shares for basic and diluted earnings per common share follow (shares in millions):

	2015	2016	2017
Basic shares outstanding	673.3	644.0	642.1
Dilutive shares	3.2	2.8	1.3
Diluted shares outstanding	676.5	646.8	643.4

(3) ACQUISITIONS AND DIVESTITURES

On April 28, 2017, the Company completed the acquisition of Pentair's valves & controls business for \$2.960 billion , net of cash acquired of \$207 , subject to certain post-closing adjustments. This business, with annualized sales of approximately \$1.4 billion , is a manufacturer of control, isolation and pressure relief valves and actuators, and complements the Valves, Actuators & Regulators product offering within Automation Solutions. The Company recognized goodwill of \$1,472 (none of which is expected to be tax deductible), and other identifiable intangible assets of \$1,045 , primarily customer relationships and intellectual property with a weighted-average life of approximately fifteen years. The Company also acquired two smaller businesses in the Automation Solutions segment. Total cash paid for all businesses was \$3.0 billion , net of cash acquired.

The purchase price of the valves & controls business was preliminarily allocated to assets and liabilities as follows. Valuations of acquired assets and liabilities are in-process and subject to refinement.

Accounts receivable	\$ 350
Inventory	525
Property, plant & equipment	355
Goodwill	1,472
Intangibles	1,045
Other assets	289
Total assets	<u>4,036</u>
Accounts payable	119
Other current liabilities	300
Deferred taxes and other liabilities	657
Cash paid, net of cash acquired	<u>\$ 2,960</u>

Results of operations for 2017 included sales of \$600 and a net loss of \$97 , \$ 0.15 per share, including restructuring expense of \$25 and intangibles amortization of \$29 . These results also included first year pretax acquisition accounting charges related to inventory of \$74 and backlog of \$19 , or a total of \$93 (\$65 after-tax, \$ 0.10 per share), which are reported in Corporate and other. See Note 18.

Pro Forma Financial Information

The following pro forma consolidated condensed financial results of operations are presented as if the acquisition of the valves & controls business occurred on October 1, 2015. The pro forma information is presented for informational purposes only and is not indicative of the results of operations that would have been achieved had the acquisition occurred as of that time.

	<u>2016</u>	<u>2017</u>
Net sales	\$ 16,201	16,112
Net earnings from continuing operations common stockholders	\$ 1,482	1,692
Diluted earnings per share from continuing operations	\$ 2.28	2.62

The pro forma results for 2016 were adjusted to include first year acquisition accounting charges related to inventory and backlog of \$ 122 in 2017. The pro forma 2016 results also include acquisition costs of \$ 52 , while the 2017 pro forma results were adjusted to exclude these charges.

On October 2, 2017, the Company sold its residential storage business for \$200 in cash, subject to post-closing adjustments, and expects to recognize a loss of approximately \$40 in 2018 due to income taxes resulting from nondeductible goodwill. The Company expects to realize approximately \$140 in after-tax cash proceeds from the sale. This business, with sales of \$298 and pretax earnings of \$15 in 2017, is a leader in home organization and storage systems, and was reported within the Tools & Home Products segment. Assets and liabilities were classified as held-for-sale as of September 30, 2017.

The Company acquired six businesses in 2016, four in Automation Solutions and two in Climate Technologies. Total cash paid for these businesses was \$132 , net of cash acquired. Annualized sales for these businesses were approximately \$51 in 2016. The Company recognized goodwill of \$83 (\$27 of which is expected to be tax deductible) and other identifiable intangible assets of \$50 , primarily customer relationships and intellectual property with a weighted-average life of approximately nine years.

The Company completed eight acquisitions in 2015, seven in Automation Solutions and one in Tools & Home Products, which had combined annualized sales of approximately \$115 . Total cash paid for all businesses was \$324 , net of cash acquired. The Company recognized goodwill of \$178 (\$42 of which is expected to be tax deductible) and other intangible assets of \$128 , primarily customer relationships and intellectual property with a weighted-average life of approximately ten years.

In January 2015, the Company completed the sale of its mechanical power transmission solutions business for \$1.4 billion , and recognized a pretax gain from the transaction of \$939 (\$532 after-tax, \$0.78 per share). Assets and liabilities sold were as follows: current assets, \$182 (accounts receivable, inventories, other current assets); other

assets, \$374 (property, plant and equipment, goodwill, other noncurrent assets); accrued expenses, \$56 (accounts payable, other current liabilities); and other liabilities, \$41 . Proceeds from the divestiture were used for share repurchase. This business was previously reported in the former Industrial Automation segment, and had partial year sales in 2015 of \$189 and related pretax earnings of \$21 . Power transmission solutions designs and manufactures market-leading couplings, bearings, conveying components and gearing and drive components, and provides supporting services and solutions.

On September 30, 2015, the Company sold its InterMetro commercial storage business for \$411 in cash and recognized a pretax gain from the transaction of \$100 (\$79 after-tax, \$0.12 per share). This business had annual sales of \$288 and pretax earnings of \$42 in 2015 and was reported in the former Commercial & Residential Solutions segment. Assets and liabilities sold were as follows: current assets, \$62 (accounts receivable, inventories, other current assets); other assets, \$292 (property, plant and equipment, goodwill, other noncurrent assets); current liabilities, \$34 (accounts payable, other current liabilities); and other liabilities, \$9 . InterMetro is a leading manufacturer and supplier of storage and transport products in the food service, commercial products and health care industries.

The results of operations of the acquired businesses discussed above have been included in the Company's consolidated results of operations since the respective dates of acquisition.

(4) DISCONTINUED OPERATIONS

In 2017, the Company completed the previously announced strategic actions to streamline its portfolio and drive growth in its core businesses. On November 30, 2016, the Company completed the sale of its network power systems business for \$4.0 billion in cash and retained a subordinated interest in distributions, contingent upon the equity holders first receiving a threshold return on their initial investment. This business comprised the former Network Power segment. Additionally, on January 31, 2017, the Company completed the sale of its power generation, motors and drives business for approximately \$1.2 billion , subject to post-closing adjustments. This business was previously reported in the former Industrial Automation segment. The results of operations for these businesses were reported within discontinued operations for all years presented, and the assets and liabilities were reflected as held-for-sale.

The financial results of the network power systems business and power generation, motors and drives business reported as discontinued operations for the years ending September 30, 2017 , 2016 and 2015 , were as follows:

	Network Power Systems			Power Generation, Motors and Drives			Total		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Net sales	\$ 4,426	4,378	630	1,668	1,368	407	6,094	5,746	1,037
Cost of sales	2,810	2,708	394	1,244	1,033	307	4,054	3,741	701
SG&A	1,143	1,101	180	306	269	83	1,449	1,370	263
Other deductions, net	222	172	(515)	15	149	42	237	321	(473)
Earnings (Loss) before income taxes	251	397	571	103	(83)	(25)	354	314	546
Income taxes	134	218	577	27	51	94	161	269	671
Earnings (Loss), net of tax	\$ 117	179	(6)	76	(134)	(119)	193	45	(125)

In 2017, the net loss from discontinued operations of \$125 , \$0.19 per share, included an after-tax gain on the divestiture of the network power systems business of \$125 (\$519 pretax), a \$173 after-tax loss (\$36 pretax loss) on the divestiture of the power generation, motors and drives business, income tax expense of \$109 for repatriation of sales proceeds, and lower expense of \$32 primarily due to ceasing depreciation and amortization for the discontinued businesses held-for-sale.

Discontinued operations income of \$45 , \$0.07 per share, in 2016 included earnings from operations of \$344 and costs to execute the portfolio repositioning of \$299 . These costs are comprised of income tax expense of \$143 for repatriation of cash from these businesses, reorganization of their legal structures prior to sale, and basis differences for book and tax, as well as costs for legal, consulting, investment banking and other expenses of \$77 . In addition, net earnings for 2016 included a loss of \$103 to write down the power generation, motors and drives

business to the sales price less costs to sell, and lower expense of \$24 due to ceasing depreciation and amortization for the discontinued businesses held-for-sale. Discontinued operations income of \$193, \$0.28 per share, in 2015 included earnings from operations of \$245 and separation costs of \$52, comprised of income tax expense of \$42 and fees of \$10.

The aggregate carrying amounts of the major classes of assets and liabilities classified as held-for-sale as of September 30, 2016 are summarized as follows:

	Network Power Systems		Power Generation, Motors and Drives		Total	
	2016		2016		2016	
Assets						
Receivables, less allowances	\$	1,202		290		1,492
Inventories		381		197		578
Property, plant & equipment, net		352		259		611
Goodwill		2,111		580		2,691
Other assets		581		77		658
Total assets held-for-sale	\$	4,627		1,403		6,030
Liabilities						
Accounts payable	\$	664		176		840
Other current liabilities		620		141		761
Deferred taxes and other noncurrent liabilities		227		99		326
Total liabilities held-for-sale	\$	1,511		416		1,927

The net cash from operating activities and from investing activities for the network power systems business and the power generation, motors and drives business for the years ending September 30, 2017, 2016 and 2015, were as follows:

	Network Power Systems			Power Generation, Motors and Drives			Total		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Cash from operating activities	\$ 378	343	(615)	111	39	(163)	489	382	(778)
Cash from investing activities	\$ (48)	(33)	3,952	(40)	(44)	1,095	(88)	(77)	5,047

Operating cash flow used by discontinued operations was \$778 for 2017, which primarily included payments of approximately \$700 for income taxes on completion of the divestitures and repatriation of cash, cash used by operations and other costs. Operating cash flow from discontinued operations in 2016 was net of payments of \$179 for separation costs.

(5) OTHER DEDUCTIONS, NET

Other deductions, net are summarized as follows:

	2015	2016	2017
Amortization of intangibles (intellectual property and customer relationships)	\$ 94	84	136
Restructuring costs	138	96	78
Other	98	114	72
Total	\$ 330	294	286

Other is composed of several items, including foreign currency transaction gains and losses, bad debt expense, equity investment income and losses, litigation and other items. The decrease in other for 2017 is due to favorable foreign currency transactions comparisons of \$78 (unfavorable in the prior year), partially offset by higher acquisition/divestiture costs of \$24 and the comparative impact of a \$21 gain from payments received related to

dumping duties in 2016. The increase in 2016 is primarily due to an unfavorable foreign currency transactions impact of \$67 , partially offset by lower litigation costs of \$30 and the dumping duties gain.

(6) RESTRUCTURING COSTS

Each year the Company incurs costs to size its businesses to levels appropriate for current economic conditions and to continually improve its cost structure and operational efficiency, deploy assets globally, and remain competitive on a worldwide basis. Costs result from numerous individual actions implemented across the Company's various operating units on an ongoing basis and can include costs for moving facilities to best-cost locations, restarting plants after relocation or geographic expansion to better serve local markets, reducing forcecount or the number of facilities, exiting certain product lines, and other costs resulting from asset deployment decisions. By category, shutdown costs include severance and benefits, stay bonuses, lease and other contract termination costs and asset write-downs. Vacant facility costs include security, maintenance, utilities and other costs. Start-up and moving costs include the costs of relocating fixed assets and employee training and relocation.

Restructuring expenses were \$78 , \$96 and \$138 , respectively, for 2017 , 2016 and 2015 . The 2017 restructuring expense included \$25 related to the acquired valves & controls business. Restructuring activity in 2015 and 2016 was initiated in connection with the slowdown in global capital spending and the Company's strategic portfolio repositioning activities. The Company currently expects 2018 restructuring expense to be approximately \$80 , including costs to complete actions initiated before the end of 2017 and for actions anticipated to be approved and initiated during 2018 .

Restructuring costs by business segment follows:

	2015	2016	2017
Automation Solutions	\$ 102	80	63
Climate Technologies	20	5	10
Tools & Home Products	11	2	2
Commercial & Residential Solutions	31	7	12
Corporate	5	9	3
Total	\$ 138	96	78

Costs incurred in 2017 primarily related to the deployment of resources to better serve local markets and higher growth areas, and the integration of the valves & controls business. In 2016 and 2015 costs primarily related to the reduction and selective repositioning of the Company's cost structure to address global economic weakness and in connection with the portfolio repositioning through facilities and forcecount rationalization in Europe and North America, primarily in Automation Solutions. In 2017 , restructuring activities included actions to exit 10 production or office facilities worldwide and eliminate approximately 1,200 positions. Expenses incurred in 2016 and 2015 included actions to exit 19 and 12 facilities, and eliminate approximately 1,900 and 3,100 positions, respectively.

The change in the liability for restructuring costs during the years ended September 30 follows:

	2016	Expense	Utilized/Paid	2017
Severance and benefits	\$ 44	49	33	60
Lease and other contract terminations	5	4	5	4
Asset write-downs	—	7	7	—
Vacant facility and other shutdown costs	3	5	7	1
Start-up and moving costs	2	13	15	—
Total	\$ 54	78	67	65

	2015	Expense	Utilized/Paid	2016
Severance and benefits	\$ 64	66	86	44
Lease and other contract terminations	1	9	5	5
Asset write-downs	—	4	4	—
Vacant facility and other shutdown costs	3	7	7	3
Start-up and moving costs	2	10	10	2
Total	\$ 70	96	112	54

(7) GOODWILL AND OTHER INTANGIBLES

Purchases of businesses are accounted for under the acquisition method, with substantially all goodwill assigned to the reporting unit that acquires the business. Under an impairment test performed annually, if the carrying amount of a reporting unit exceeds its estimated fair value, impairment is recognized to the extent that the carrying amount of the unit's goodwill exceeds the implied fair value of the goodwill. Fair values of reporting units are Level 3 measures which are estimated generally using an income approach that discounts future cash flows using risk-adjusted interest rates, as well as earnings multiples or other techniques as warranted. Fair values are subject to changes in underlying economic conditions.

The change in the carrying value of goodwill by business segment follows:

	Automation Solutions	Climate Technologies	Tools & Home Products	Commercial & Residential Solutions	Total
Balance, September 30, 2015	\$ 3,138	513	196	709	3,847
Acquisitions	39	44		44	83
Foreign currency translation and other	(17)	(4)		(4)	(21)
Balance, September 30, 2016	3,160	553	196	749	3,909
Acquisitions	1,486				1,486
Divestitures			(142)	(142)	(142)
Foreign currency translation and other	58	2	3	5	63
Balance, September 30, 2017	\$ 4,704	555	57	612	5,316

The gross carrying amount and accumulated amortization of identifiable intangible assets by major class follow:

	Customer Relationships		Intellectual Property		Capitalized Software		Total	
	2016	2017	2016	2017	2016	2017	2016	2017
Gross carrying amount	\$ 580	1,392	730	1,012	1,071	1,137	2,381	3,541
Less: Accumulated amortization	286	361	393	435	800	855	1,479	1,651
Net carrying amount	\$ 294	1,031	337	577	271	282	902	1,890

Intangible asset amortization expense for 2017, 2016 and 2015 was \$222, \$177 and \$174, respectively. Based on intangible asset balances as of September 30, 2017, amortization expense is expected to approximate \$261 in 2018, \$226 in 2019, \$201 in 2020, \$168 in 2021 and \$148 in 2022.

The increase in goodwill and intangibles is primarily due to the valves & controls acquisition. See Note 3.

(8) FINANCIAL INSTRUMENTS

Hedging Activities

As of September 30, 2017, the notional amount of foreign currency hedge positions was approximately \$1.8 billion, while commodity hedge contracts totaled approximately \$115 (primarily 49 million pounds of copper and aluminum). All derivatives receiving deferral accounting are cash flow hedges. The majority of hedging gains and losses deferred as of September 30, 2017 are expected to be recognized over the next 12 months as the underlying forecasted transactions occur. Gains and losses on foreign currency derivatives reported in other deductions, net reflect hedges of balance sheet exposures that do not receive deferral accounting.

Amounts included in earnings and other comprehensive income follow:

		Gain (Loss) to Earnings			Gain (Loss) to OCI		
		2015	2016	2017	2015	2016	2017
	<u>Location</u>						
Commodity	Cost of sales	\$ (24)	(35)	10	(43)	(9)	25
Foreign currency	Sales, cost of sales	(12)	(41)	(15)	(61)	(38)	30
Foreign currency	Other deductions, net	14	(27)	(39)			
Total		\$ (22)	(103)	(44)	(104)	(47)	55

Regardless of whether derivatives receive deferral accounting, the Company expects hedging gains or losses to be essentially offset by losses or gains on the related underlying exposures. The amounts ultimately recognized will differ from those presented above for open positions, which remain subject to ongoing market price fluctuations until settlement. Derivatives receiving deferral accounting are highly effective and no amounts were excluded from the assessment of hedge effectiveness. Hedge ineffectiveness was immaterial in all years shown.

Fair Value Measurement

The estimated fair value of long-term debt was \$4,385 and \$4,806, respectively, as of September 30, 2017 and 2016, which exceeded the carrying value by \$321 and \$488, respectively. As of September 30, 2017, the fair value of commodity contracts and foreign currency contracts was reported in other current assets and accrued expenses. Valuations of derivative contract positions as of September 30 follow:

	2016		2017	
	Assets	Liabilities	Assets	Liabilities
Foreign currency	\$ 7	49	26	18
Commodity	\$ 2	4	12	—

(9) SHORT-TERM BORROWINGS AND LINES OF CREDIT

Short-term borrowings and current maturities of long-term debt are as follows:

	2016	2017
Current maturities of long-term debt	\$ 267	270
Commercial paper	2,317	592
Total	\$ 2,584	862
Interest rate for weighted-average short-term borrowings at year end	0.5%	1.1%

The Company routinely issues commercial paper as a source of short-term financing. In April 2014, the Company entered into a \$3.5 billion five-year revolving backup credit facility with various banks, which replaced a December 2010 \$2.75 billion facility. The credit facility is maintained to support general corporate purposes, including commercial paper borrowing. The Company has not incurred any borrowings under this or previous facilities. The credit facility contains no financial covenants and is not subject to termination based on a change of credit rating or material adverse changes. The facility is unsecured and may be accessed under various interest rate and currency denomination alternatives at the Company's option. Fees to maintain the facility are immaterial.

(10) LONG-TERM DEBT

The details of long-term debt follow:

	2016	2017
5.125% notes due December 2016	\$ 250	—
5.375% notes due October 2017	250	250
5.25% notes due October 2018	400	400
5.0% notes due April 2019	250	250
4.875% notes due October 2019	500	500
4.25% notes due November 2020	300	300
2.625% notes due December 2021	500	500
2.625% notes due February 2023	500	500
3.15% notes due June 2025	500	500
6.0% notes due August 2032	250	250
6.125% notes due April 2039	250	250
5.25% notes due November 2039	300	300
Other	68	64
Long-term debt	4,318	4,064
Less: Current maturities	267	270
Total, net	\$ 4,051	3,794

Long-term debt maturing during each of the four years after 2018 is \$683, \$516, \$299 and \$500, respectively. Total interest paid on all debt was approximately \$192, \$209 and \$196 in 2017, 2016 and 2015, respectively. During the year, the Company repaid \$250 of 5.125% notes that matured in December 2016. In 2016, the Company repaid \$250 of 4.75% notes that matured in October 2015.

The Company maintains a universal shelf registration statement on file with the SEC under which it can issue debt securities, preferred stock, common stock, warrants, share purchase contracts or share purchase units without a predetermined limit. Securities can be sold in one or more separate offerings with the size, price and terms to be determined at the time of sale.

(11) RETIREMENT PLANS

Retirement plans expense includes the following components:

	U.S. Plans			Non-U.S. Plans		
	2015	2016	2017	2015	2016	2017
Defined benefit plans:						
Service cost (benefits earned during the period)	\$ 69	59	60	37	26	19
Interest cost	182	148	134	46	39	30
Expected return on plan assets	(303)	(296)	(290)	(58)	(52)	(56)
Net amortization and other	174	166	211	20	17	22
Net periodic pension expense	122	77	115	45	30	15
Defined contribution plans	111	104	96	61	56	47
Total retirement plans expense	\$ 233	181	211	106	86	62

The increase in net periodic pension expense in 2017 is attributable to higher amortization compared to the prior year. Beginning in 2016, the Company refined the method used to determine the service and interest cost components of pension expense for its U.S. retirement plans. The specific spot rates along the yield curve, rather than the single weighted-average rate previously used, are applied to the projected cash flows to provide more

precise measurement of these costs. This is a change in estimate which has been accounted for prospectively beginning with the 2016 financial statements. The change reduced the 2016 service and interest cost by a total of \$38 compared with the cost measured using the weighted-average approach. Net periodic pension expense includes \$3, \$12 and \$14 and defined contribution expense includes \$6, \$34 and \$33, for 2017, 2016 and 2015, respectively, related to discontinued operations. For defined contribution plans, the Company makes cash contributions based on plan requirements, which are expensed as incurred.

The Company transitioned from defined benefit to defined contribution retirement plans in 2016. The principal U.S. defined benefit pension plan is closed to employees hired after January 1, 2016, and current employees not meeting combined age and years of service criteria ceased accruing benefits effective October 1, 2016. Affected employees were enrolled in an enhanced defined contribution plan. The impact of these actions had an inconsequential impact on the Company's financial statements for all years presented. Over time, defined benefit plan expense will decline while defined contribution plan expense will increase, with an expectation of reduced earnings volatility.

All of the following tables include defined benefit plans related to continuing and discontinued operations.

Details of the changes in the actuarial present value of the projected benefit obligation and the fair value of plan assets for defined benefit pension plans follow:

	U.S. Plans		Non-U.S. Plans	
	2016	2017	2016	2017
Projected benefit obligation, beginning	\$ 4,263	4,696	1,248	1,320
Service cost	59	60	26	19
Interest cost	148	134	39	30
Actuarial (gain) loss	565	(144)	275	(83)
Benefits paid	(191)	(201)	(31)	(29)
Settlements	(151)	(125)	(82)	(25)
Acquisitions (Divestitures), net	—	(55)	(6)	163
Foreign currency translation and other	3	4	(149)	94
Projected benefit obligation, ending	\$ 4,696	4,369	1,320	1,489
Fair value of plan assets, beginning	\$ 3,928	4,110	935	909
Actual return on plan assets	491	516	155	61
Employer contributions	31	20	35	25
Benefits paid	(191)	(201)	(31)	(29)
Settlements	(151)	(125)	(82)	(25)
Acquisitions (Divestitures), net	—	(30)	—	232
Foreign currency translation and other	2	2	(103)	63
Fair value of plan assets, ending	\$ 4,110	4,292	909	1,236
Net amount recognized in the balance sheet	\$ (586)	(77)	(411)	(253)
Location of net amount recognized in the balance sheet:				
Noncurrent asset	\$ —	154	1	43
Current liability	(11)	(11)	(7)	(11)
Noncurrent liability	(565)	(220)	(279)	(285)
Net liability held-for-sale	(10)	—	(126)	—
Net amount recognized in the balance sheet	(586)	(77)	(411)	(253)
Pretax accumulated other comprehensive loss	\$ (1,527)	(923)	(389)	(238)

Approximately \$142 of the \$1,161 of pretax losses deferred in accumulated other comprehensive income (loss) at September 30, 2017 will be amortized to expense in 2018 . As of September 30, 2017 , U.S. pension plans were underfunded by \$77 in total, including unfunded plans totaling \$201 . The non-U.S. plans were underfunded by \$253 , including unfunded plans totaling \$215 .

As of the September 30, 2017 and 2016 measurement dates, the plans' total accumulated benefit obligation was \$5,607 and \$5,729 , respectively. Also as of the measurement dates, the total projected benefit obligation, accumulated benefit obligation and fair value of plan assets for individual plans with accumulated benefit obligations in excess of plan assets were \$1,182 , \$1,088 and \$663 , respectively, for 2017 , and \$5,951 , \$5,678 and \$4,958 , respectively, for 2016 .

Future benefit payments by U.S. plans are estimated to be \$212 in 2018 , \$220 in 2019 , \$228 in 2020 , \$235 in 2021 , \$241 in 2022 and \$1,272 in total over the five years 2023 through 2027. Based on foreign currency exchange rates as of September 30, 2017 , future benefit payments by non-U.S. plans are estimated to be \$56 in 2018, \$57 in 2019, \$59 in 2020, \$63 in 2021, \$68 in 2022 and \$390 in total over the five years 2023 through 2027. The Company expects to contribute approximately \$60 to its retirement plans in 2018 .

The weighted-average assumptions used in the valuation of pension benefits follow:

	U.S. Plans			Non-U.S. Plans		
	2015	2016	2017	2015	2016	2017
<u>Net pension expense</u>						
Discount rate used to determine service cost	4.25%	4.60%	3.75%	3.6%	3.3%	2.3%
Discount rate used to determine interest cost	4.25%	3.50%	2.90%	3.6%	3.3%	2.3%
Expected return on plan assets	7.50%	7.50%	7.25%	6.6%	6.4%	6.2%
Rate of compensation increase	3.25%	3.25%	3.25%	3.4%	3.4%	3.2%
<u>Benefit obligations</u>						
Discount rate	4.35%	3.50%	3.76%	3.3%	2.3%	2.6%
Rate of compensation increase	3.25%	3.25%	3.25%	3.4%	3.2%	3.4%

The discount rate for the U.S. retirement plans was 3.76 percent as of September 30, 2017 . An actuarially developed, company-specific yield curve is used to determine the discount rate. The expected return on plan assets assumption is determined by reviewing the investment returns of the plans for the past 10 years plus longer-term historical returns of an asset mix approximating the Company's asset allocation targets, and periodically comparing these returns to expectations of investment advisors and actuaries to determine whether long-term future returns are expected to differ significantly from the past.

The Company's asset allocations at September 30, 2017 and 2016 , and weighted-average target allocations follow:

	U.S. Plans			Non-U.S. Plans		
	2016	2017	Target	2016	2017	Target
Equity securities	66%	67%	60-70%	51%	52%	50-60%
Debt securities	29	28	25-35	36	38	25-35
Other	5	5	3-10	13	10	10-20
Total	100%	100%	100%	100%	100%	100%

The primary objective for the investment of pension assets is to secure participant retirement benefits by earning a reasonable rate of return. Plan assets are invested consistent with the provisions of the prudence and diversification rules of ERISA and with a long-term investment horizon. The Company continuously monitors the value of assets by class and routinely rebalances to remain within target allocations. The equity strategy is to minimize concentrations of risk by investing primarily in a mix of companies that are diversified across geographies, market capitalization, style, sectors and industries worldwide. The approach for bonds emphasizes investment-grade corporate and government debt with maturities matching a portion of the longer duration pension liabilities. The bonds strategy also includes a high-yield element which is generally shorter in duration. For diversification, a small

portion of U.S. plan assets is allocated to private equity partnerships and real asset fund investments, providing opportunities for above market returns. Leveraging techniques are not used and the use of derivatives in any fund is limited and inconsequential.

The fair values of defined benefit pension assets as of September 30, organized by asset class and by the fair value hierarchy of ASC 820, *Fair Value Measurement*, follow. Investments valued based on the net asset value (NAV) of fund units held, as derived from the fair value of the underlying assets, are excluded from the fair value hierarchy.

	Level 1	Level 2	Level 3	Measured at NAV	Total	%
2017						
U.S. equities	\$ 1,059	5	338	357	1,759	32%
International equities	724	6		739	1,469	27%
Emerging market equities				276	276	5%
Corporate bonds		514		283	797	14%
Government bonds	3	369		399	771	14%
High-yield bonds				132	132	2%
Other	132	6	113	73	324	6%
Total	\$ 1,918	900	451	2,259	5,528	100%
2016						
U.S. equities	\$ 1,081	4	292	301	1,678	33%
International equities	627	8		599	1,234	25%
Emerging market equities				257	257	5%
Corporate bonds		476		172	648	13%
Government bonds	3	392		357	752	15%
High-yield bonds				122	122	2%
Other	144	2	113	69	328	7%
Total	\$ 1,855	882	405	1,877	5,019	100%

Asset Classes

U.S. equities reflect companies domiciled in the U.S., including multinational companies. International equities are comprised of companies domiciled in developed nations outside the U.S. Emerging market equities are comprised of companies domiciled in portions of Asia, Eastern Europe and Latin America. Corporate bonds represent investment-grade debt of issuers primarily from the U.S. Government bonds include investment-grade instruments issued by federal, state and local governments, primarily in the U.S. High-yield bonds include noninvestment-grade debt from a diverse group of developed market issuers. Other includes cash, interests in mixed asset funds investing in commodities, natural resources, agriculture, real estate and infrastructure funds, life insurance contracts (U.S.), and shares in certain general investment funds of financial institutions or insurance arrangements (non-U.S.) that typically ensure no market losses or provide for a small minimum return guarantee.

Fair Value Hierarchy Categories

Valuations of Level 1 assets for all classes are based on quoted closing market prices from the principal exchanges where the individual securities are traded. Cash is valued at cost, which approximates fair value. Debt securities categorized as Level 2 assets are generally valued based on independent broker/dealer bids or by comparison to other debt securities having similar durations, yields and credit ratings. U.S. equity securities classified as Level 3 are fund investments in private companies. Valuation techniques and inputs for these assets include discounted cash flow analysis, earnings multiple approaches, recent transactions, transfer restrictions, prevailing discount rates, volatilities, credit ratings and other factors. In the Other class, interests in mixed asset funds are Level 2, and U.S. life insurance contracts and non-U.S. general fund investments and insurance arrangements are Level 3. Investments measured at net asset value are primarily nonexchange-traded commingled or collective funds where the underlying securities have observable prices available from active markets.

Details of the changes in value for Level 3 assets follow:

	2016	2017
Level 3, beginning	\$ 371	405
Gains (Losses) on assets held	18	49
Gains (Losses) on assets sold	(20)	(28)
Purchases, sales and settlements, net	36	25
Level 3, ending	<u>\$ 405</u>	<u>451</u>

(12) POSTRETIREMENT PLANS

The Company sponsors unfunded postretirement benefit plans (primarily health care) for certain U.S. retirees and their dependents. The components of net postretirement benefits expense for the years ended September 30 follow:

	2015	2016	2017
Service cost	\$ 1	1	1
Interest cost	9	8	6
Net amortization	(22)	(21)	(19)
Net postretirement expense	<u>\$ (12)</u>	<u>(12)</u>	<u>(12)</u>

Details of the changes in actuarial present value of accumulated postretirement benefit obligations follow:

	2016	2017
Benefit obligation, beginning	\$ 213	206
Service cost	1	1
Interest cost	8	6
Actuarial (gain) loss	—	(24)
Benefits paid	(16)	(13)
Divestitures	—	(2)
Benefit obligation, ending (recognized in balance sheet)	<u>\$ 206</u>	<u>174</u>

As of September 30, 2017 there were \$141 of deferred actuarial gains in accumulated other comprehensive income, of which approximately \$19 will be amortized into earnings in 2018. The discount rates used to measure the benefit obligation as of September 30, 2017, 2016 and 2015 were 3.45 percent, 3.10 percent and 3.80 percent, respectively. The health care cost trend rate used for both 2018 and 2017 is assumed to be 7.5 percent initially, and declining to 5.0 percent over the subsequent eleven years. A one percentage point increase or decrease in the health care cost trend rate assumption for either year would have an inconsequential impact on postretirement benefits expense and the benefit obligation. The Company estimates that future health care benefit payments will be approximately \$14 per year for 2018 through 2022, and \$60 in total over the five years 2023 through 2027.

(13) CONTINGENT LIABILITIES AND COMMITMENTS

The Company is a party to a number of pending legal proceedings and claims, including those involving general and product liability (including asbestos) and other matters, several of which claim substantial amounts of damages. The Company accrues for such liabilities when it is probable that future costs (including legal fees and expenses) will be incurred and such costs can be reasonably estimated. Accruals are based on developments to date; management's estimates of the outcomes of these matters; the Company's experience in contesting, litigating and settling similar matters; and any related insurance coverage. Although it is not possible to predict the ultimate outcome of these matters, the Company historically has been largely successful in defending itself against claims and suits that have been brought against it, and will continue to defend itself vigorously in all such matters. While the Company believes a material adverse impact is unlikely, given the inherent uncertainty of litigation, a remote possibility exists that a future development could have a material adverse impact on the Company. The Company enters into certain indemnification agreements in the ordinary course of business in which the indemnified party is

held harmless and is reimbursed for losses incurred from claims by third parties, usually up to a prespecified limit. In connection with divestitures of certain assets or businesses, the Company often provides indemnities to the buyer with respect to certain matters including, for example, environmental or unidentified tax liabilities related to periods prior to the disposition. Because of the uncertain nature of the indemnities, the maximum liability cannot be quantified. As such, contingent liabilities are recorded when they are both probable and reasonably estimable. Historically, payments under indemnity arrangements have been inconsequential.

At September 30, 2017, there were no known contingent liabilities (including guarantees, pending litigation, taxes and other claims) that management believes will be material in relation to the Company's financial statements, nor were there any material commitments outside the normal course of business.

(14) INCOME TAXES

Pretax earnings from continuing operations consist of the following:

	2015	2016	2017
United States	\$ 2,688	1,312	1,350
Non-U.S.	1,119	1,004	985
Total pretax earnings	\$ 3,807	2,316	2,335

The principal components of income tax expense follow:

	2015	2016	2017
Current:			
Federal	\$ 831	394	351
State and local	86	11	40
Non-U.S.	398	305	311
Deferred:			
Federal	12	2	7
State and local	(1)	4	4
Non-U.S.	(59)	(19)	(53)
Income tax expense	\$ 1,267	697	660

Reconciliations of the U.S. federal statutory income tax rate to the Company's effective tax rate follow:

	2015	2016	2017
Federal statutory rate	35.0 %	35.0 %	35.0 %
State and local taxes, net of federal tax benefit	0.7	0.5	1.2
Non-U.S. rate differential	(2.4)	(2.9)	(3.6)
Non-U.S. tax holidays	(0.9)	(1.1)	(1.0)
U.S. manufacturing deduction	(1.2)	(1.8)	(1.7)
Gains on divestitures	1.8	—	—
Non-U.S. subsidiary restructuring	—	—	(1.8)
Other	0.3	0.4	0.2
Effective income tax rate	33.3 %	30.1 %	28.3 %

Non-U.S. tax holidays reduce tax rates in certain foreign jurisdictions and are expected to expire over the next five years.

Following are changes in unrecognized tax benefits before considering recoverability of any cross-jurisdictional tax credits (federal, state and non-U.S.) and temporary differences. The amount of unrecognized tax benefits is not expected to change significantly within the next 12 months.

	2016	2017
Unrecognized tax benefits, beginning	\$ 84	86
Additions for current year tax positions	12	54
Additions for prior year tax positions	16	4
Reductions for prior year tax positions	(13)	(6)
Acquisitions and divestitures	—	9
Reductions for settlements with tax authorities	(4)	(4)
Reductions for expiration of statutes of limitations	(9)	(11)
Unrecognized tax benefits, ending	<u>\$ 86</u>	<u>132</u>

If none of the unrecognized tax benefits shown is ultimately paid, the tax provision and the calculation of the effective tax rate would be favorably impacted by \$100, which is net of cross-jurisdictional tax credits and temporary differences. The Company accrues interest and penalties related to income taxes in income tax expense. Total interest and penalties recognized were \$(1), \$2 and \$(4) in 2017, 2016 and 2015, respectively. As of September 30, 2017 and 2016, total accrued interest and penalties were \$16 and \$21, respectively.

The U.S. is the major jurisdiction for which the Company files income tax returns. U.S. federal tax returns are closed through 2013. The status of state and non-U.S. tax examinations varies due to the numerous legal entities and jurisdictions in which the Company operates.

The principal items that gave rise to deferred income tax assets and liabilities follow:

	2016	2017
Deferred tax assets:		
Net operating losses and tax credits	\$ 164	444
Accrued liabilities	277	319
Postretirement and postemployment benefits	82	70
Employee compensation and benefits	206	173
Pensions	271	72
Other	158	196
Total	<u>\$ 1,158</u>	<u>1,274</u>
Valuation allowances	<u>\$ (132)</u>	<u>(309)</u>
Deferred tax liabilities:		
Intangibles	\$ (510)	(753)
Property, plant and equipment	(239)	(265)
Undistributed non-U.S. earnings	(9)	(249)
Other	(42)	(37)
Total	<u>\$ (800)</u>	<u>(1,304)</u>
Net deferred income tax asset (liability)	<u>\$ 226</u>	<u>(339)</u>

As of September 30, 2017, all deferred tax assets and liabilities were presented as noncurrent. As of September 30, 2016, current deferred tax assets, net were \$400 and noncurrent deferred tax liabilities, net were \$174. Total income taxes paid were approximately \$1,420, \$950 and \$1,590 in 2017, 2016 and 2015, respectively. Approximately one-third of the \$444 of net operating losses and tax credits can be carried forward indefinitely, one-third expire in ten years, and the remainder expire over varying periods.

(15) STOCK-BASED COMPENSATION

The Company's stock-based compensation plans include stock options, performance shares, restricted stock and restricted stock units. Although the Company has discretion, shares distributed under these plans are issued from treasury stock.

Stock Options

The Company's stock option plans permit key officers and employees to purchase common stock at specified prices, which are equal to 100 percent of the closing market price of the Company's stock on the date of grant. Options generally vest one-third in each of the three years subsequent to grant and expire 10 years from the date of grant. Compensation expense is recognized ratably over the vesting period based on the number of options expected to vest. As of September 30, 2017, 11.5 million options were available for grant under the plans.

Changes in shares subject to options during the year ended September 30, 2017 follow (shares in thousands):

	Weighted- Average Exercise Price Per Share	Shares	Total Intrinsic Value of Shares	Average Remaining Life (Years)
Beginning of year	\$ 54.87	15,276		
Options granted	\$ 53.71	386		
Options exercised	\$ 51.09	(3,812)		
Options canceled	\$ 61.48	(1,091)		
End of year	\$ 55.49	10,759	\$ 87	5.8
Exercisable at end of year	\$ 56.73	8,222	\$ 58	5.1

The weighted-average grant date fair value per option was \$8.36, \$9.02 and \$12.48 in 2017, 2016 and 2015, respectively. Cash received for option exercises was \$148 in 2017, \$31 in 2016 and \$36 in 2015. The total intrinsic value of options exercised in 2017, 2016 and 2015 was \$36, \$9 and \$16, respectively, while the tax benefit realized by the Company from tax deductions related to option exercises was \$2, \$2 and \$10, respectively.

The grant date fair value of options is estimated using the Black-Scholes option-pricing model. The weighted-average assumptions used in valuations for 2017, 2016 and 2015 are, respectively: risk-free interest rate, based on U.S. Treasury yields, 1.7 percent, 1.9 percent and 1.9 percent; dividend yield, 3.6 percent, 3.8 percent and 3.1 percent; and expected volatility, based on historical volatility, 24 percent, 27 percent and 28 percent. The expected life of each option awarded is seven years based on historical experience and expected future exercise patterns.

Performance Shares, Restricted Stock and Restricted Stock Units

The Company's incentive shares plans include performance shares awards which distribute the value of common stock to key management employees subject to certain operating performance conditions and other restrictions. The form of distribution is primarily shares of common stock, with a portion in cash. Compensation expense for performance shares is recognized over the service period based on the number of shares ultimately expected to be earned. Performance shares awards are accounted for as liabilities in accordance with ASC 718, *Compensation - Stock Compensation*, with compensation expense adjusted at the end of each reporting period to reflect the change in fair value of the awards.

As of September 30, 2016, 4,944,575 performance shares awarded primarily in 2013 were outstanding, contingent on the Company achieving its performance objectives through 2016 and the provision of additional service by employees. The objectives for these shares were met at the 86 percent level at the end of 2016, or 4,252,335 shares. Of these, 2,549,083 shares were distributed in early 2017 as follows: 1,393,715 issued as shares, 944,002 withheld for income taxes, and the value of 211,366 paid in cash. An additional 1,691,986 shares were distributed at the end of 2017 to employees who provided one additional year of service as follows: 1,070,264 issued as shares, 616,734 withheld for income taxes, and the value of 4,988 paid in cash. There were 11,266 shares canceled and not distributed. Additionally, the rights to receive a maximum of 2,388,125 and 2,178,388 common shares awarded in 2017 and 2016, under the new performance shares program, are outstanding and contingent upon the Company achieving its performance objectives through 2019 and 2018, respectively.

Incentive shares plans also include restricted stock awards which involve distribution of common stock to key management employees subject to cliff vesting at the end of service periods ranging from three to ten years. The fair value of restricted stock awards is determined based on the average of the high and low market prices of the Company's common stock on the date of grant, with compensation expense recognized ratably over the applicable service period. In 2017 , 130,641 shares of restricted stock vested as a result of participants fulfilling the applicable service requirements. Consequently, 84,398 shares were issued while 46,243 shares were withheld for income taxes in accordance with minimum withholding requirements. As of September 30, 2017 , there were 1,194,500 shares of unvested restricted stock outstanding.

The total fair value of shares vested under incentive shares plans was \$245 , \$11 and \$9 , respectively, in 2017 , 2016 and 2015 , of which \$101 , \$4 and \$5 was paid in cash, primarily for tax withholding. As of September 30, 2017 , 12.9 million shares remained available for award under incentive shares plans.

Changes in shares outstanding but not yet earned under incentive shares plans during the year ended September 30, 2017 follow (shares in thousands):

	Shares	Average Grant Date Fair Value Per Share
Beginning of year	<u>7,328</u>	<u>\$ 49.17</u>
Granted	2,134	\$ 51.91
Earned/vested	(4,372)	\$ 49.14
Canceled	<u>(91)</u>	<u>\$ 51.18</u>
End of year	<u>4,999</u>	<u>\$ 50.33</u>

Total compensation expense for stock options and incentive shares was \$115 , \$159 and \$30 for 2017 , 2016 and 2015 , respectively, of which \$5 , \$14 and \$6 was included in discontinued operations. The decrease in expense for 2017 reflects the impact of changes in the stock price. The increase in expense for 2016 reflects an increasing stock price in the current year compared with a decreasing price in 2015, and overlap of awards. Income tax benefits recognized in the income statement for these compensation arrangements during 2017 , 2016 and 2015 were \$33 , \$45 and \$2 , respectively. As of September 30, 2017 , total unrecognized compensation expense related to unvested shares awarded under these plans was \$149 , which is expected to be recognized over a weighted-average period of 1.5 years.

In addition to the employee stock option and incentive shares plans, in 2017 the Company awarded 17,984 shares of restricted stock and 2,248 restricted stock units under the restricted stock plan for non-management directors. As of September 30, 2017 , 174,335 shares were available for issuance under this plan.

(16) COMMON AND PREFERRED STOCK

At September 30, 2017 , 40.0 million shares of common stock were reserved for issuance under the Company's stock-based compensation plans. During 2017 , 6.6 million common shares were purchased and 5.5 million treasury shares were reissued. In 2016 , 12.5 million common shares were purchased and 0.7 million treasury shares were reissued.

At September 30, 2017 and 2016 , the Company had 5.4 million shares of \$2.50 par value preferred stock authorized, with none issued.

(17) ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Activity in accumulated other comprehensive income (loss) attributable to common stockholders is shown below:

	2015	2016	2017
<u>Foreign currency translation</u>			
Beginning balance	\$ 171	(622)	(812)
Other comprehensive income (loss)	(793)	(190)	58
Reclassified to gain/loss on sale of businesses	—	—	385
Ending balance	(622)	(812)	(369)
<u>Pension and postretirement</u>			
Beginning balance	(746)	(952)	(1,162)
Actuarial gains (losses) deferred during the period	(315)	(310)	315
Amortization of deferred actuarial losses into earnings	109	100	135
Reclassified to gain/loss on sale of businesses	—	—	50
Ending balance	(952)	(1,162)	(662)
<u>Cash flow hedges</u>			
Beginning balance	—	(43)	(25)
Gains (Losses) deferred during the period	(66)	(30)	34
Reclassifications of realized (gains) losses to sales and cost of sales	23	48	3
Ending balance	(43)	(25)	12
Accumulated other comprehensive income (loss)	\$ (1,617)	(1,999)	(1,019)

Activity above is shown net of income taxes for 2017, 2016 and 2015, respectively, as follows: deferral of pension and postretirement actuarial gains (losses): \$(170), \$159 and \$192; amortization of pension and postretirement deferred actuarial losses: \$(75), \$(59) and \$(59); deferral of cash flow hedging gains (losses): \$(21), \$17 and \$38; reclassification of realized cash flow hedging (gains) losses: \$(2), \$(28) and \$(13).

(18) BUSINESS SEGMENTS INFORMATION

The Company designs and manufactures products and delivers services that bring technology and engineering together to provide innovative solutions for customers in a wide range of industrial, commercial and consumer markets around the world.

In connection with the strategic portfolio repositioning actions undertaken to transform the Company into a more focused enterprise, its businesses and organization were realigned. In fiscal 2017, the Company began reporting three segments: **Automation Solutions**, and **Climate Technologies** and **Tools & Home Products** which together comprise the **Commercial & Residential Solutions** business. Prior year information has been reclassified to conform with the current year presentation. The Automation Solutions segment includes the former Process Management segment and the remaining businesses in the former Industrial Automation segment, except for the hermetic motors business, which is now included in the Climate Technologies segment. The new Tools & Home Products segment consists of the businesses previously reported in the Commercial & Residential Solutions segment in fiscal 2016 and 2015.

The **Automation Solutions** segment enables process, hybrid and discrete manufacturers to maximize production, protect personnel and the environment, and optimize their energy efficiency and operating costs through a broad offering of integrated solutions and products, including measurement and analytical instrumentation, industrial valves and equipment, and process control systems. Significant end markets serviced include oil and gas, refining, chemicals and power generation, as well as pharmaceuticals, food and beverage, automotive, pulp and paper, metals and mining, and municipal water supplies. The segment's major product offerings are described below.

- **Measurement & Analytical Instrumentation** products measure the physical properties of liquids or gases in a process stream and communicate this information to a process control system or other software applications, and analyze the chemical composition of process fluids and emissions to enhance quality and efficiency, as well as environmental compliance.

- **Valves, Actuators & Regulators** consists of control, isolation and pressure relief valves which respond to commands from a control system to continuously and precisely modulate the flow of process fluids, smart actuation and control technologies, pressure management products, and industrial and residential regulators that reduce the pressure of fluids moving from high-pressure supply lines into lower pressure systems.
- **Industrial Solutions** provides fluid power and control mechanisms, electrical distribution equipment, and materials joining and precision cleaning products which are used in a variety of manufacturing operations to provide integrated solutions to customers.
- **Process Control Systems & Solutions** provides a digital ecosystem that controls plant processes by communicating with and adjusting the "intelligent" plant devices described above to provide precision measurement, control, monitoring, asset optimization, and plant safety and reliability for plants that produce power, or process fluids or other items.

The **Commercial & Residential Solutions** business consists of the Climate Technologies and Tools & Home Products segments. This business provides products and solutions that promote energy efficiency, enhance household and commercial comfort, and protect food quality and sustainability through heating, air conditioning and refrigeration technology, as well as a broad range of tools and appliance solutions.

The **Climate Technologies** segment provides products, services and solutions for all areas of the climate control industry, including residential heating and cooling, commercial air conditioning, commercial and industrial refrigeration, and cold chain management. Products include compressors, temperature sensors and controls, thermostats, flow controls, and stationary and mobile remote monitoring technologies and services that enable homeowners and businesses to better manage their heating, air conditioning and refrigeration systems for improved control and comfort, and lower energy costs.

The **Tools & Home Products** segment offers tools for professionals and homeowners and appliance solutions. Products include professional pipe-working tools, residential and commercial food waste disposers, and wet-dry vacuums.

The principal distribution method for each segment is direct sales forces, although the Company also uses independent sales representatives and distributors. Due to its global presence, certain of the Company's international operations are subject to risks including the stability of governments and business conditions in foreign countries which could result in adverse changes in exchange rates, changes in regulation or disruption of operations.

The primary income measure used for assessing segment performance and making operating decisions is earnings before interest and income taxes. Intersegment selling prices approximate market prices. Accounting method differences between segment reporting and the consolidated financial statements are primarily management fees allocated to segments based on a percentage of sales and the accounting for pension and other retirement plans. Corporate and other includes corporate operations, stock compensation expense, acquisition related costs and other items. Corporate assets are primarily comprised of cash and equivalents, investments and certain fixed assets. Summarized below is information about the Company's operations by business segment and by geography.

Business Segments

	Sales			Earnings			Total Assets		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Automation Solutions	\$ 10,153	8,977	9,418	\$ 1,846	1,456	1,522	\$ 8,817	8,759	12,581
Climate Technologies	4,006	3,944	4,212	835	902	975	2,455	2,489	2,547
Tools & Home Products	1,625	1,611	1,645	364	384	383	817	809	830
Commercial & Residential Solutions	5,631	5,555	5,857	1,199	1,286	1,358	3,272	3,298	3,377
Divested businesses (a)	477			58					
Differences in accounting methods				174	189	148			
Corporate and other (b)				705	(427)	(528)	9,999	9,675	3,631
Eliminations/Interest	(12)	(10)	(11)	(175)	(188)	(165)			
Total	\$ 16,249	14,522	15,264	\$ 3,807	2,316	2,335	\$ 22,088	21,732	19,589

(a) Divested businesses includes sales and earnings related to the power transmission solutions and commercial storage businesses, which were reported in the former Industrial Automation and Commercial & Residential Solutions segments, respectively.

(b) Corporate and other in 2017 includes first year pretax acquisition accounting charges related to inventory and backlog of \$93 (\$65 after-tax, \$0.10 per share), and in 2015 includes pretax gains on divestitures of \$1,039 (\$611 after-tax, \$0.90 per share) related to the power transmission solutions and commercial storage businesses. See Note 3. Assets held-for-sale of \$6,030 and \$6,222 are included in Corporate and other for 2016 and 2015, respectively. See Note 4.

Automation Solutions sales by major product offering are summarized below:

	2015	2016	2017
Measurement & Analytical Instrumentation	\$ 3,619	3,137	3,070
Valves, Actuators & Regulators	2,559	2,137	2,668
Industrial Solutions	1,779	1,621	1,680
Process Control Systems & Solutions	2,196	2,082	2,000
Total	\$ 10,153	8,977	9,418

	Depreciation and Amortization			Capital Expenditures		
	2015	2016	2017	2015	2016	2017
Automation Solutions	\$ 311	330	400	\$ 298	246	234
Climate Technologies	149	150	156	154	133	182
Tools & Home Products	42	44	45	46	44	45
Commercial & Residential Solutions	191	194	201	200	177	227
Corporate and other	71	44	35	90	24	15
Total	\$ 573	568	636	\$ 588	447	476

Geographic Information

	Sales by Destination			Property, Plant and Equipment		
	2015	2016	2017	2015	2016	2017
United States and Canada	\$ 8,370	7,505	7,854	\$ 1,756	1,780	1,852
Asia	3,363	2,926	3,253	481	459	525
Europe	2,381	2,300	2,434	426	435	626
Latin America	981	834	767	216	203	203
Middle East/Africa	1,154	957	956	50	54	115
Total	\$ 16,249	14,522	15,264	\$ 2,929	2,931	3,321

Sales in the U.S. were \$7,273 , \$6,940 and \$7,608 for 2017, 2016 and 2015, respectively, while Asia includes sales in China of \$1,540 , \$1,320 and \$1,575 in those years. Assets located in the U.S. were \$1,840 in 2017, \$1,772 in 2016 and \$1,746 in 2015.

(19) OTHER FINANCIAL DATA

Items reported in earnings from continuing operations during the years ended September 30 included the following:

	2015	2016	2017
Research and development expense	\$ 336	320	340
Depreciation expense	\$ 399	391	414
Rent expense	\$ 287	273	289

The Company leases certain facilities, transportation and office equipment, and various other items under operating lease agreements. Minimum annual rentals under noncancelable long-term leases, exclusive of maintenance, taxes, insurance and other operating costs, will approximate \$171 in 2018 , \$125 in 2019 , \$81 in 2020 , \$49 in 2021 and \$31 in 2022 .

Items reported in accrued expenses included the following:

	2016	2017
Employee compensation	\$ 431	531
Customer advanced payments	\$ 433	505
Product warranty	\$ 106	120

Other liabilities are summarized as follows:

	2016	2017
Pension and postretirement liabilities	\$ 1,037	664
Deferred income taxes	210	425
Asbestos litigation	52	340
Other	430	546
Total	\$ 1,729	1,975

The increase in asbestos litigation primarily reflects the valves & controls acquisition, which added approximately \$240 of asbestos liabilities. In addition, other long-term assets include \$133 of related insurance receivables, \$95 of which were acquired with valves & controls.

Other operating cash flow is comprised of the following:

	2015	2016	2017
Pension expense	\$ 153	95	127
Stock compensation expense	24	145	110
Deferred income taxes and other	19	45	27
Total	\$ 196	285	264

(20) QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter		Full Year	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Net sales	\$ 3,337	3,216	3,579	3,574	3,674	4,039	3,932	4,435	14,522	15,264
Gross profit	\$ 1,414	1,365	1,542	1,557	1,593	1,678	1,713	1,804	6,262	6,404
Earnings from continuing operations common stockholders	\$ 303	364	367	376	441	407	479	496	1,590	1,643
Net earnings common stockholders	\$ 349	309	369	292	479	413	438	504	1,635	1,518
Earnings per common share from continuing operations:										
Basic	\$ 0.47	0.56	0.57	0.58	0.68	0.63	0.74	0.77	2.46	2.54
Diluted	\$ 0.46	0.56	0.57	0.58	0.68	0.63	0.74	0.77	2.45	2.54
Net earnings per common share:										
Basic	\$ 0.54	0.48	0.57	0.45	0.74	0.64	0.68	0.78	2.53	2.35
Diluted	\$ 0.53	0.48	0.57	0.45	0.74	0.64	0.68	0.78	2.52	2.35
Dividends per common share	\$ 0.475	0.48	0.475	0.48	0.475	0.48	0.475	0.48	1.90	1.92
Common stock prices:										
High	\$ 51.47	58.28	55.54	64.36	56.82	61.63	56.72	64.18	56.82	64.36
Low	\$ 42.21	49.22	41.25	55.40	48.45	56.77	50.41	57.81	41.25	49.22

Earnings per share are computed independently each period; as a result, the quarterly amounts may not sum to the calculated annual figure.

Emerson Electric Co. common stock (symbol EMR) is listed on the New York Stock Exchange and the Chicago Stock Exchange.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Emerson Electric Co.:

We have audited the accompanying consolidated balance sheets of Emerson Electric Co. and subsidiaries as of September 30, 2017 and 2016 , and the related consolidated statements of earnings, comprehensive income, equity, and cash flows for each of the years in the three-year period ended September 30, 2017 . We also have audited Emerson Electric Co.'s internal control over financial reporting as of September 30, 2017 , based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Emerson Electric Co.'s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Report on Internal Control over Financial Reporting* . Our responsibility is to express an opinion on these consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the consolidated financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As described in Management's Report on Internal Control Over Financial Reporting, the valves & controls business was acquired on April 28, 2017 and management has excluded this business from its assessment of internal control over financial reporting as of September 30, 2017. Valves & controls' total assets and revenues excluded from the assessment represented approximately 20 percent and 4 percent, respectively, of the Company's related consolidated financial statement amounts as of and for the year ended September 30, 2017. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of the acquired business.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Emerson Electric Co. and subsidiaries as of September 30, 2017 and 2016 , and the results of its operations and its cash flows for each of the years in the three-year period ended September 30, 2017 , in conformity with U.S. generally accepted accounting principles. Also in our opinion, Emerson Electric Co. maintained, in all material respects, effective internal control over financial reporting as of September 30, 2017 ,

based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

/s/ KPMG LLP
St. Louis, Missouri
November 20, 2017

ITEM 9 - CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A - CONTROLS AND PROCEDURES

The Company maintains a system of disclosure controls and procedures which is designed to ensure that information required to be disclosed by the Company in the reports filed or submitted under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and is accumulated and communicated to management, including the Company's certifying officers, as appropriate to allow timely decisions regarding required disclosure. Based on an evaluation performed, the Company's certifying officers have concluded that the disclosure controls and procedures were effective as of September 30, 2017 to provide reasonable assurance of achieving these objectives.

Notwithstanding the foregoing, there can be no assurance that the Company's disclosure controls and procedures will detect or uncover all failures of persons within the Company and its consolidated subsidiaries to report material information otherwise required to be set forth in the Company's reports. There was no change in the Company's internal control over financial reporting during the quarter ended September 30, 2017, that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. Management's report on internal control over financial reporting, and the related report of the Company's auditor, KPMG LLP, an independent registered public accounting firm, set forth in Item 7 and Item 8, respectively, of this Annual Report on Form 10-K, are hereby incorporated by reference.

ITEM 9B - OTHER INFORMATION

None.

PART III

ITEM 10 - DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding nominees and directors appearing under "Proxy Item No. 1: Election of Directors" in the Emerson Electric Co. Notice of Annual Meeting of Shareholders and Proxy Statement for the February 2018 annual shareholders' meeting (the "2018 Proxy Statement") is hereby incorporated by reference. Information regarding executive officers is set forth in Part I of this report. Information appearing under "Section 16(a) Beneficial Ownership Reporting Compliance" in the 2018 Proxy Statement is hereby incorporated by reference. Information regarding the Audit Committee and Audit Committee Financial Expert appearing under "Board and Committee Operations - Board and Corporate Governance - Committees of Our Board of Directors," "Board and Committee Operations - Corporate Governance and Nominating Committee - Nomination Process" and "- Proxy Access" in the 2018 Proxy Statement is hereby incorporated by reference.

The Company has adopted a Code of Ethics that applies to the Company's Chief Executive Officer, Chief Financial Officer and Chief Accounting Officer; has posted such Code of Ethics on its website; and intends to satisfy the disclosure requirement under Item 5.05 of Form 8-K by posting such information on its website. The Company has adopted Charters for its Audit Committee, Compensation Committee, and Corporate Governance and Nominating Committee and a Code of Business Ethics for directors, officers and employees, which are available on its website and in print to any stockholder who requests them. The Company has also adopted Corporate Governance Principles and Practices, which are available on its website and in print to any stockholder who requests them. The Corporate Governance section of the Company's website may be accessed as follows: www.Emerson.com, Investors, Corporate Governance.

ITEM 11 - EXECUTIVE COMPENSATION

Information appearing under "Executive Compensation" (including the information set forth under "Compensation Discussion and Analysis"), "Compensation Tables," "Board and Committee Operations—Corporate Governance and Nominating Committee—Director Compensation," "Board and Committee Operations—Compensation Committee" (including, but not limited to, the information set forth under "Role of Executive Officers and the Compensation Consultant" and "Compensation Committee Report") and "Compensation Committee Interlocks and Insider Participation" in the 2018 Proxy Statement is hereby incorporated by reference.

The information contained in "Compensation Committee Report" shall not be deemed to be filed with the SEC or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act"), except to the extent that the Company specifically incorporates such information into future filings under the Securities Act of 1933 or the Exchange Act.

ITEM 12 - SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information regarding beneficial ownership of shares by nominees and continuing directors, named executive officers, five percent beneficial owners, and by all directors and executive officers as a group appearing under "Ownership of Emerson Equity Securities" in the 2018 Proxy Statement is hereby incorporated by reference.

The following table sets forth aggregate information regarding the Company's equity compensation plans as of September 30, 2017 :

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders (1)	15,428,415	\$55.49	24,580,373
Equity compensation plans not approved by security holders	—	—	—
Total	<u>15,428,415</u>	<u>\$55.49</u>	<u>24,580,373</u>

(1) Includes the Stock Option and Incentive Shares Plans previously approved by the Company's security holders. Included in column (a) are: (i) 10,759,141 shares reserved for outstanding stock option awards, (ii) 2,388,125 shares reserved for performance share awards granted in 2017, (iii) 2,178,388 shares reserved for performance share awards granted in 2016 and (iv) 102,761 reserved for outstanding restricted stock unit awards. As provided by the Company's Incentive Shares Plans, performance shares awards represent a commitment to issue such shares without cash payment by the employee, contingent upon achievement of the performance objectives and continued service by the employee.

The price in column (b) represents the weighted-average exercise price for outstanding options. Included in column (c) are shares remaining available for award under previously approved plans as follows: (i) 11,483,140 under the 2011 Stock Option Plan, (ii) 10,481,900 under the 2015 Incentive Shares Plan, (iii) 2,440,978 under the 2006 Incentive Shares Plan, and (iv) 174,355 under the Restricted Stock Plan for Non-Management Directors.

Information regarding stock option plans and incentive shares plans is set forth in Note 15.

ITEM 13 - CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information appearing under "Board and Committee Operations—Board and Corporate Governance—Review, Approval or Ratification of Transactions with Related Persons," "Certain Business Relationships and Related

Party Transactions" and "—Director Independence" in the 2018 Proxy Statement is hereby incorporated by reference.

ITEM 14 - PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information appearing under "Board and Committee Operations—Audit Committee—Fees Paid to KPMG LLP" in the 2018 Proxy Statement is hereby incorporated by reference.

PART IV

ITEM 15 - EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

A) Documents filed as a part of this report:

1. The consolidated financial statements and accompanying notes of the Company and subsidiaries and the report thereon of KPMG LLP set forth in Item 8 of this Annual Report on Form 10-K.
2. Financial Statement Schedules - All schedules are omitted because they are not required, not applicable or the required information is provided in the financial statements or notes thereto contained in this Annual Report on Form 10-K.
3. Exhibits (Listed by numbers corresponding to the Exhibit Table of Item 601 in Regulation S-K).
 - 3(a) [Restated Articles of Incorporation of Emerson Electric Co.](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended March 31, 2001, File No. 1-278, Exhibit 3(a); [Termination of Designated Shares of Stock and Certificate of Designation, Preferences and Rights of Series B Junior Participating Preferred Stock](#), incorporated by reference to Emerson Electric Co. 1998 Form 10-K, File No. 1-278, Exhibit 3(a).
 - 3(b) [Bylaws of Emerson Electric Co.](#), as amended through August 1, 2017, incorporated by reference to Emerson Electric Co. Form 8-K filed August 2, 2017, Exhibit 3.1.
 - 4(a) [Indenture dated as of December 10, 1998, between Emerson Electric Co. and The Bank of New York, Trustee](#), incorporated by reference to Emerson Electric Co. 1998 Form 10-K, File No. 1-278, Exhibit 4(b).

No other long-term debt instruments are filed since the total amount of securities authorized under any such instrument does not exceed 10 percent of the total assets of Emerson Electric Co. and its subsidiaries on a consolidated basis. Emerson Electric Co. agrees to furnish a copy of such instruments to the SEC upon request.
 - 10(a)* [Third Amendment to the Emerson Electric Co. 1993 Incentive Shares Plan, as restated](#), incorporated by reference to Emerson Electric Co. 1996 Form 10-K, File No. 1-278, Exhibit 10(g), and [Fourth Amendment thereto](#), incorporated by reference to Emerson Electric Co. 2001 Form 10-K, File No. 1-278, Exhibit 10(d).
 - 10(b)* [Amended and Restated Emerson Electric Co. Continuing Compensation Plan for Non-Management Directors](#), incorporated by reference to Emerson Electric Co. 2007 Form 10-K, File No. 1-278, Exhibit 10(c).
 - 10(c)* [Amended and Restated Deferred Compensation Plan for Non-Employee Directors and Forms of Payment Election Form, Initial Notice of Election and Notice of Election Change](#), incorporated by reference to Emerson Electric Co. 2007 Form 10-K, File No. 1-278, Exhibit 10(d).
 - 10(d)* [First Amendment to the Emerson Electric Co. Supplemental Executive Retirement Plan](#), incorporated by reference to Emerson Electric Co. 1999 Form 10-K, File No. 1-278, Exhibit 10(h), and [Form of Change of Control Election](#), incorporated by reference to Emerson Electric Co. Form 8-K dated October 1, 2004, Exhibit 10.9 (applicable only with respect to benefits vested as of December 31, 2004).

- 10(e)* [Amended and Restated Emerson Electric Co. Pension Restoration Plan dated October 6, 2015](#), incorporated by reference to Emerson Electric Co. 2015 Form 10-K, File No. 1-278, Exhibit 10(e); [Forms of Participation Award Letter, Acceptance of Award and Benefit Election Forms \(applicable only with respect to benefits after January 1, 2005\)](#), incorporated by reference to Emerson Electric Co. 2007 Form 10-K, File No. 1-278, Exhibit 10(f); and Lump Sum Distribution Election Forms.
- 10(f)* [Fifth Amendment to the Supplemental Executive Savings Investment Plan](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended March 31, 1999, File No. 1-278, Exhibit 10(j), and [Form of Participation Agreement and Form of Annual Election](#), incorporated by reference to Emerson Electric Co. Form 8-K filed October 1, 2004, Exhibit 10.8 (applicable only with respect to benefits vested as of December 31, 2004).
- 10(g)* [Amended and Restated Emerson Electric Co. Savings Investment Restoration Plan and Forms of Participation Agreement, Annual Election Form and Payment Election Form \(applicable only with respect to benefits after January 1, 2005\)](#), incorporated by reference to Emerson Electric Co. 2007 Form 10-K, File No. 1-278, Exhibit 10(h), and [First Amendment to Emerson Electric Co. Savings Investment Restoration Plan](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended March 31, 2008, File No. 1-278, Exhibit 10.1.
- 10(h)* [Amended and Restated Emerson Electric Co. Annual Incentive Plan and Form of Acceptance of Award](#), incorporated by reference to Emerson Electric Co. 2007 Form 10-K, File No. 1-278, Exhibit 10(i).
- 10(i)* [1997 Incentive Shares Plan](#), incorporated by reference to Emerson Electric Co. 1997 Proxy Statement dated December 6, 1996, File No. 1-278, Exhibit A, and [First Amendment thereto](#), incorporated by reference to Emerson Electric Co. 2001 Form 10-K, File No. 1-278, Exhibit 10(j), [Amendment for 409A Compliance](#), incorporated by reference to Emerson Electric Co. 2007 Form 10-K, File No. 1-278, Exhibit 10(j), [Form of Performance Share Award Certificate, Forms of Acceptance of Award and Change of Control Election](#), incorporated by reference to Emerson Electric Co. Form 8-K filed October 1, 2004, Exhibit 10.5, and [Form of Restricted Shares Award Agreement](#), incorporated by reference to Emerson Electric Co. Form 8-K filed October 1, 2004, Exhibit 10.6.
- 10(j)* [1998 Stock Option Plan](#), incorporated by reference to Emerson Electric Co. 1998 Proxy Statement dated December 12, 1997, File No. 1-278, Appendix A, and [Amendment No. 1 thereto](#), incorporated by reference to Emerson Electric Co. 2000 Form 10-K, File No. 1-278, Exhibit 10(l), [Form of Notice of Grant of Stock Options and Option Agreement and Form of Incentive Stock Option Agreement](#), incorporated by reference to Emerson Electric Co. Form 8-K filed October 1, 2004, Exhibit 10.1, and [Form of Notice of Grant of Stock Options and Option Agreement and Form of Nonqualified Stock Option Agreement](#), incorporated by reference to Emerson Electric Co. Form 8-K filed October 1, 2004, Exhibit 10.2.
- 10(k)* [2001 Stock Option Plan](#), incorporated by reference to Emerson Electric Co. 2002 Proxy Statement dated December 12, 2001, File No. 1-278, Appendix A, [Form of Notice of Grant of Stock Options and Option Agreement and Form of Incentive Stock Option Agreement](#), incorporated by reference to Emerson Electric Co. Form 8-K filed October 1, 2004, Exhibit 10.3 (used on or prior to September 30, 2011), [Forms of Notice of Grant of Stock Options, Option Agreement and Incentive Stock Option Agreement](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended December 31, 2011, File No. 1-278, Exhibit 10.1 (used after September 30, 2011), [Form of Notice of Grant of Stock Options and Option Agreement and Form of Nonqualified Stock Option Agreement](#), incorporated by reference to Emerson Electric Co. Form 8-K filed October 1, 2004, Exhibit 10.4 (used on or prior to September 30, 2011), [Forms of Notice of Grant of Stock Options, Option Agreement and Nonqualified Stock Option Agreement](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended December 31, 2011, File No. 1-278, Exhibit 10.2 (used after September 30, 2011).
- 10(l)* [Emerson Electric Co. Description of Split Dollar Life Insurance Program Transition](#), incorporated by reference to Emerson Electric Co. Form 8-K filed September 2, 2005, Exhibit 10.1.

- 10(m)* [Amended and Restated Restricted Stock Plan for Non-Management Directors](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended December 31, 2009, File No. 1-278, Exhibit 10.1, [Form of Restricted Stock Award Letter under the Emerson Electric Co. Restricted Stock Plan for Non-Management Directors](#), incorporated by reference to Emerson Electric Co. Form 8-K filed February 1, 2005, Exhibit 10.2, and [Form of Restricted Stock Unit Award Letter under the Emerson Electric Co. Restricted Stock Plan for Non-Management Directors](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended December 31, 2009, File No. 1-278, Exhibit 10.1.
- 10(n)* [Description of Non-Management Director Compensation, filed herewith](#).
- 10(o)* [Description of Named Executive Officer Compensation, filed herewith](#).
- 10(p)* [Emerson Electric Co. 2006 Incentive Shares Plan](#), incorporated by reference to Emerson Electric Co. 2006 Proxy Statement dated December 16, 2005, Appendix C, [Amendment for 409A Compliance](#), incorporated by reference to Emerson Electric Co. 2007 Form 10-K, File No. 1-278, Exhibit 10(q), [Forms of Performance Shares Award Certificate and Acceptance of Award \(used on or prior to September 30, 2009\) and Restricted Shares Award Agreement \(used on or prior to September 30, 2011\)](#), incorporated by reference to Emerson Electric Co. 2007 Form 10-K, File No. 1-278, Exhibit 10(q), [Amendment to Emerson Electric Co. 2006 Incentive Shares Plan](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended June 30, 2008, File No. 1-278, Exhibit 10.1, [Forms of Performance Shares Award Certificate, Acceptance of Award and 2010 Performance Shares Program Award Summary](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended December 31, 2009 (used after September 30, 2009 and on or prior to September 30, 2011), File No. 1-278, Exhibit 10.2, [Forms of Performance Shares Award Certificate and Acceptance of Award](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended December 31, 2011, File No. 1-278, Exhibit 10.3 (used after September 30, 2011), and [Form of Restricted Shares Award Agreement](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended December 31, 2011, File No. 1-278, Exhibit 10.4 (used after September 30, 2011).
- 10(q) [Credit Agreement dated as of April 30, 2014](#), incorporated by reference to Emerson Electric Co. Form 8-K filed May 2, 2014, Exhibit 10.1.
- 10(r)* [2011 Stock Option Plan](#), incorporated by reference to Emerson Electric Co. 2011 Proxy Statement dated December 10, 2010, File No. 1-278, Appendix B, 2011 [Stock Option Plan as Amended and Restated effective October 1, 2012](#), incorporated by reference to Emerson Electric Co. 2012 Form 10-K, File No. 1-278, Exhibit 10(r), [Forms of Notice of Grant of Stock Options, Option Agreement and Incentive Stock Option Agreement under the 2011 Stock Option Plan](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended March 31, 2012, File No. 1-278, Exhibit 10.1 and [Forms of Notice of Grant of Stock Options, Option Agreement and Nonqualified Stock Option Agreement under the 2011 Stock Option Plan](#), incorporated by reference to Emerson Electric Co. Form 10-Q for the quarter ended March 31, 2012, File No. 1-278, Exhibit 10.2.
- 10(s)* [Emerson Electric Co. 2015 Incentive Shares Plan](#), incorporated by reference to Emerson Electric Co. 2015 Proxy Statement dated December 12, 2014, Appendix B, [Forms of Performance Shares Award Certificate and Acceptance of Award, Performance Shares Program Award Summary and Form of Restricted Shares Award Agreement](#), incorporated by reference to Emerson Electric Co. 2015 Form 10-K, File No. 1-278, Exhibit 10(u).
- 10(t)* [Letter Agreement effective as of January 15, 2014 between Emerson Electric Co. and Edgar M. Purvis](#), incorporated by reference to Emerson Electric Co. 2015 Form 10-K, File No. 1-278, Exhibit 10(v).
- 10(u)* [Letter Agreement dated December 7, 2015 by and between Emerson Electric Co. and Charles A. Peters](#), incorporated by reference to Emerson Electric Co. form 10-Q for the quarter ended December 31, 2015, Exhibit 10.1.

- 10(v)* [Letter Agreement effective as of January 15, 2014 between Emerson Electric Co. and Steven J. Pelch](#) , incorporated by reference to Emerson Electric Co. 2016 Form 10-K, File No. 1-278, Exhibit 10(v).
- 10(w) [Transaction Agreement dated as of July 29, 2016 among Emerson Electric Co., Cortes NP Holdings, LLC, Cortes NP Acquisition Corporation, ASCO Power Grp, LLC and Cortes NP JV Holdings, LLC](#) , incorporated by reference to Emerson Electric Co. 2016 Form 10-K, File No. 1-278, Exhibit 10(w).
- 10(x) [Share Purchase Agreement by and between Emerson Electric Co. and Pentair plc dated August 18, 2016](#) , incorporated by reference to Emerson Electric Co. 2016 Form 10-K, File No. 1-278, Exhibit 10(x).
- 12 [Ratio of Earnings to Fixed Charges](#)
- 21 [Subsidiaries of Emerson Electric Co.](#)
- 23 [Consent of Independent Registered Public Accounting Firm](#)
- 24 [Power of Attorney](#)
- 31 [Certifications pursuant to Exchange Act Rule 13a-14\(a\)](#)
- 32 [Certifications pursuant to Exchange Act Rule 13a-14\(b\) and 18 U.S.C. Section 1350](#)
- 99.1 [Description of Capital Stock](#)
- 101 Attached as Exhibit 101 to this report are the following documents formatted in XBRL (Extensible Business Reporting Language): (i) Consolidated Statements of Earnings for the years ended September 30, 2015 , 2016 and 2017 , (ii) Consolidated Statements of Comprehensive Income for the years ended September 30, 2015 , 2016 , and 2017 (iii) Consolidated Balance Sheets at September 30, 2016 and 2017 , (iv) Consolidated Statements of Equity for the years ended September 30, 2015 , 2016 and 2017 , (v) Consolidated Statements of Cash Flows for the years ended September 30, 2015 , 2016 and 2017 , and (vi) Notes to Consolidated Financial Statements for the year ended September 30, 2017 .

* Management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

EMERSON ELECTRIC CO.

By /s/ F. J. Dellaquila

F. J. Dellaquila
Senior Executive Vice President and
Chief Financial Officer
November 20, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on November 20, 2017, by the following persons on behalf of the registrant and in the capacities indicated.

<u>Signature</u>	<u>Title</u>
<u>/s/ D. N. Farr</u> D. N. Farr	Chairman of the Board and Chief Executive Officer
<u>/s/ F. J. Dellaquila</u> F. J. Dellaquila	Senior Executive Vice President and Chief Financial Officer
<u>/s/ R. J. Schlueter</u> R. J. Schlueter	Vice President, Controller and Chief Accounting Officer
<u>*</u> C. A. H. Boersig	Director
<u>*</u> J. B. Bolten	Director
<u>*</u> G. A. Flach	Director
<u>*</u> A. F. Golden	Director
<u>*</u> C. Kendle	Director
<u>*</u> M. S. Levatich	Director

*

Director

J. W. Prueher

*

Director

R. L. Stephenson

*

Director

J. S. Turley

* By /s/ F. J. Dellaquila
F. J. Dellaquila
Attorney-in-Fact

Summary of Compensation Arrangements with Non-Management Directors

Each non-management Director is paid an annual retainer in cash and/or restricted stock or restricted stock units (RSUs), as determined by the Board, as well as a meeting fee for each Board or Committee meeting attended and reimbursement of expenses. The Lead Independent Director and each of the Committee Chairs receive an additional cash retainer. The amounts are set forth in the Company's proxy statement each year. Management Directors do not receive any additional compensation for service on the Board. Directors may defer all or a part of their cash compensation under the Company's Deferred Compensation Plan for Non-Employee Directors. Directors may also defer payment of the dividend equivalents on RSUs.

The Company's Continuing Compensation Plan for Non-Management Directors was terminated on June 4, 2002. Directors who were serving on the Board as of that date are eligible to continue participation in the plan. These Directors will, after the later of termination of service or age 72, receive \$30,000 annually for life, which was the annual cash retainer in effect on that date. If service terminates because of death, the benefit will be paid to the surviving spouse for five years.

As part of the Company's charitable contributions practice, the Company may, in the Board's discretion, make a charitable contribution in the names of Emerson and a Director (including management Directors) upon retirement from the Board (as determined by the Board), taking into account the Director's Board tenure, accomplishments, and other relevant factors.

Compensation of Named Executive Officers

The executive officers named in the summary compensation and other tables in the proxy statement for Emerson Electric Co. have their base salaries and annual bonuses determined yearly by the Compensation Committee of the Board of Directors. This ordinarily takes place at a meeting of the Committee in November of each fiscal year, but the base salary determination is typically retroactively effective as of October 1, the first day of the fiscal year. The named executive officers are all "at will" employees, and do not have written or oral employment agreements. The Company, upon the approval of the Committee, retains the right to unilaterally decrease or increase such officers' base salaries at any time during the fiscal year.

The named executive officers are eligible to participate in the Company's incentive compensation plans as provided in the terms of such plans. Such plans, and any forms of awards thereunder providing for material terms, are filed as exhibits to reports filed by the Company under the Securities Exchange Act of 1934 and are described in detail each year in the Company's proxy statement for its annual meeting of shareholders.

EMERSON ELECTRIC CO. AND SUBSIDIARIES
COMPUTATION OF THE RATIO OF EARNINGS TO FIXED CHARGES
(Dollars in Millions)

	Year Ended September 30,				
	2013	2014	2015	2016	2017
Earnings:					
Earnings from continuing operations before income taxes	\$ 2,491	3,191	3,807	2,316	2,335
Fixed charges	373	355	331	337	304
Earnings, as defined	<u>\$ 2,864</u>	<u>3,546</u>	<u>4,138</u>	<u>2,653</u>	<u>2,639</u>
Fixed Charges:					
Interest expense	\$ 234	218	200	215	201
One-third of all rents	139	137	131	122	103
Total fixed charges	<u>\$ 373</u>	<u>355</u>	<u>331</u>	<u>337</u>	<u>304</u>
Ratio of Earnings to Fixed Charges	<u>7.7X</u>	<u>10.0X</u>	<u>12.5X</u>	<u>7.9X</u>	<u>8.7X</u>

**Subsidiaries and Affiliates of Emerson Electric Co.
September 30, 2017**

<u>LEGAL NAME</u>	<u>JURISDICTION OF INCORPORATION</u>
Appleton Holding Corp.	Delaware
EGS Electrical Group Canada Ltd.	Ontario
Easy Heat Ltd.	Ontario
Branson Ultrasonic S.A.	Switzerland
Bristol, Inc.	Delaware
Energy Solutions International SAS	Colombia
Energy Solutions International Sub, LLC	Delaware
Energy Solutions International GP, LLC	Pennsylvania
Energy Solutions International Ltd.	New Brunswick
Energy Solutions International Ltd.	United Kingdom
Energy Solutions International (India) Private Limited	India
California Emerson LLC	Delaware
ClosetMaid Corporation	Florida
Clairson, Inc.	Delaware
Computational Systems, Incorporated	Tennessee
Control Products, Inc.	Minnesota
Control Techniques Iberia S.A.	Spain
Daniel Industries, Inc.	Delaware
Daniel Automation Company	Delaware
Daniel Industrial, Inc.	Delaware
Daniel International Limited	United Kingdom
Daniel Europe Limited	United Kingdom
Daniel Industries Limited	United Kingdom
Spectra-Tek Holdings Limited	United Kingdom
Spectra-Tek UK Limited	United Kingdom
Daniel Measurement Solutions Private Limited	India
Spectra-Tek International Limited	United Kingdom
Greenfield (UK) Limited	United Kingdom
Daniel Measurement and Control, Inc.	Delaware
Daniel Industries Canada Inc.	Canada
Metco Services Venezuela, C.A.	Venezuela
Danmasa S.A. de C.V.	Mexico
Emerson Process Management Valve Automation, Inc.	Delaware
Bettis Canada Ltd.	Canada
Bettis Holdings Limited	United Kingdom
Bettis UK Limited	United Kingdom
Hytork Controls, Inc.	Delaware
RPP, LLC	Massachusetts
Hytork International Ltd.	United Kingdom
Hytork LLC	Delaware
Hytork Services Limited	United Kingdom
Hytork Controls Limited	United Kingdom
EECO, Inc.	Delaware
Apple JV Holding Corp.	Delaware
Appleton Grp LLC	Delaware
Appleton Electric LLC	Delaware

EGS Comercializadora Mexico, S. de R.L. de C.V.	Mexico
Nutsteel DHC B.V.	Netherlands
Nutsteel Indústria Metalúrgica Ltda	Brazil
Appleton Holding Sarl	France
ATX SAS	France
Easy Heat Europe SAS	France
Easy Heat, Inc.	Delaware
EGS Electrical Group Romania S.R.L.	Romania
EGS Mexico S. de R.L. de C.V.	Mexico
EGS Private Ltd.	Singapore
Emerson Hazardous Electrical Equipment (Shanghai) Co., Ltd.	China
Emersub CV, Inc.	Delaware
Flow Control US Holding Corporation	Delaware
FC QSF, LLC	Delaware
Keystone Asia Pacific Pty Limited	Australia
Keystone Germany Holdings Corp.	Delaware
Chemat GmbH Armaturen fur Industrie-und Nukkeranlage	Germany
Pentair Valves & Controls de Mexico, S.A. de C.V.	Mexico
Pentair Sales Holding, LLC	Delaware
Pentair Sales US, LLC	Delaware
Pentair Valves & Controls France S.C.A.	France
Vulsub II, LLC	Texas
Keystone Canada Co.	Canada
The J.R. Clarkson Company LLC	Nevada
Crosby Valve, LLC	Nevada
Vulsub Corp.	Texas
Pentair Valves & Controls US LP	Delaware
TV&C GP Holding, LLC	Nevada
Vulsub Chile Holding, LLC	Delaware
Pentair Valves & Controls Chile SpA	Chile
Vulsub Holdings A, LLC	Delaware
Emerson Automation Solutions Final Control (Taiwan) Ltd.	Taiwan
Pentair Valves & Controls (Thailand) Ltd.	Thailand
Pentair Valvulas & Controles VZ, C.A.	Venezuela
Vulsub Holdings B, LLC	Delaware
Emerson Automation Solutions Final Control Hong Kong Limited	Hong Kong
Emerson Automation Solutions Final Control (Beijing) Co., Ltd.	China
Keystone Valve (Korea) LLC	Korea
Vulsub Holdings D, LLC	Delaware
Vulsub, LLC	Delaware
Vulsub Property Holding, LLC	Delaware
Westlock Controls Holdings, Inc.	Nevada
GSEG LLC	Delaware
Emerson Climate Technologies, Inc.	Delaware
Copeland Access +, Inc.	Delaware
Copeland Corporation LLC	Delaware
Copeland de Mexico, S.A. de C.V.	Mexico
Emerson Climate Technologies (India) Private Limited	India
Copeland Redevelopment Corporation	Missouri
CR Compressors LLC	Delaware
Emerson Climate Technologies Retail Solutions, Inc.	Delaware
Emerson Climate Services, LLC	Delaware
Scroll Compressors LLC	Delaware

Scroll Mexico LLC
Emerson Electric (U.S.) Holding Corporation
Automatic Switch Company
ASC Investments, Inc.
Asco AB

Delaware
Delaware
Delaware
Delaware
Sweden

Asco Controls AG	Switzerland
Asco Controls B.V.	Netherlands
ASCO/JOUCOMATIC s.r.o.	Czech Republic
Asco Joucomatic ZA B.V.	Netherlands
Asco Magnesszelep Kft.	Hungary
Asco Numatics Sp. z o.o.	Poland
ASCO Controls, L.P.	Delaware
ASCO Japan Co., Ltd.	Japan
Ascomatica S.A. de C.V.	Mexico
Ascomation Pty. Ltd.	Australia
Ascomation (NZ) Ltd.	New Zealand
ASCO Numatics (India) Private Limited	India
ASCO Switch Enterprises LLC	Delaware
Ascotech, S.A. de C.V.	Mexico
Ascoval Industria e Comercio Ltda	Brazil
ASCO Valve Enterprises LLC	Delaware
ASCO Valve, Inc.	Delaware
ASCO Valve Manufacturing, LLC	Delaware
Branson Ultrasonics Corporation	Delaware
Branson Korea Co., Ltd.	Korea
Branson Ultrasonidos S.A.E.	Spain
Branson Ultrasons SAS	France
Emerson Climate Technologies GmbH	Germany
Emerson Climate Technologies Limited	United Kingdom
Emerson Climate Technologies Refrigeration S.A.	Belgium
Emerson Climate Technologies S.A.	Spain
Emerson Climate Technologies Sarl	France
Emerson Climate Technologies S.R.L.	Italy
Emerson Dietzenbach GmbH	Germany
Emerson Electric Overseas Finance Corp.	Delaware
Emerson Process Management GmbH	Germany
Emerson Process Management GmbH & Co. OHG	Germany
epro GmbH	Germany
Flow Control Holding GmbH & Co. KG	Germany
Flow Control Holding Verwaltungs GmbH	Germany
RPP Europe GmbH	Germany
Sempell GmbH	Germany
Emerson Automation Solutions Final Control Germany GmbH	Germany
Mecafrance (Deutschland) GmbH	Germany
SABO-Armaturen Service GmbH	Germany
Emerson Retail Services Europe GmbH	Germany
Emerson Technologies Verwaltungs GmbH	Germany
Emerson Technologies GmbH & Co. OHG	Germany
Emersub LXXXIV, Inc.	Delaware
Emersub LXXXVI, Inc.	Delaware
EMR Holdings (France) SAS	France
ASCO SAS	France
Asco Numatics GmbH	Germany
Asco Numatics, S.A.	Spain
Joucomatic S.A.	Belgium
Flow Control Technologies S.A.	France
Francel SAS	France
Generale de Robinetterie Industrielle et de Sytemes de Surete	France

Conception et Representation de Technologia de Controle SAS

Ridgid France SAS

Ridge Tool GmbH

Ridge Tool GmbH & Co. OHG

Rosemount Inc.

France

France

Germany

Germany

Minnesota

Dieterich Standard, Inc.	Delaware
Emerson Industrial Automation USA Inc.	Delaware
Fincor Holding, LLC	Delaware
Emerson Process Management AB	Sweden
Emerson Process Management A/S (Denmark)	Denmark
Emerson Process Management AS	Norway
Emerson Process Management Holding AG	Switzerland
Emerson Process Management AG	Switzerland
Emerson LLC	Azerbaijan
Emerson LLP	Kazakhstan
Emerson Process Management del Peru, S.A.C.	Peru
Emerson Process Management Kft.	Hungary
Emerson Process Management Romania S.R.L.	Romania
Emerson Process Management Sp. z o.o.	Poland
Emerson Process Management UAB	Lithuania
Emerson Process Management Ticaret Limited Sirket	Turkey
Emerson Process Management, s.r.o.	Czech Republic
Emerson Process Management, s.r.o.	Slovakia
Emerson TOV	Ukraine
Emerson Process Management Asia Pacific Pte. Ltd.	Singapore
Emerson Automation Solutions Final Control Singapore Pte. Ltd.	Singapore
Emerson Automation Solutions Final Control (Sichuan) Co., Ltd.	China
Emerson Automation Solutions Final Control (Shanghai) Co., Ltd.	China
PT Pentair Indonesia	Indonesia
Safety Systems UK Pte. Ltd.	Singapore
Pentair Valves and Controls India Private Limited	India
Sakhi-Raimondi Valve (India) Limited	India
Emerson Process Management Chennai Private Limited	India
Emerson Process Management Manufacturing (M) Sdn Bhd	Malaysia
Emerson Process Management Valve Automation (M) Sdn Bhd	Malaysia
Spectronix Ltd.	Israel
E. Business Development, E.B.D.Com Ltd.	Israel
Eurotronics Sistemas de Seguridad S.A.	Spain
Fire & Safety Group.Com Ltd.	Israel
Novel Environmental Technologies Ltd.	Israel
Novel Extinguishing Agent Technology Ltd.	Israel
Greenex Ltd.	Israel
S.F.T. Group Ltd.	Israel
Spectrex, Inc.	Connecticut
Fire & Safety Group.Com, Inc.	New Jersey
Emerson Process Management Korea Ltd.	Korea
Emerson Process Management Oy	Finland
Emerson Process Management, S.A. de C.V.	Mexico
Emerson Process Management, S.L.	Spain
Micro Motion, Inc.	Colorado
P I Components Corp.	Texas
Rosemount Analytical Inc.	Delaware
Rosemount China Inc.	Minnesota
Rosemount Nuclear Instruments, Inc.	Delaware
Rosemount Specialty Products LLC	Delaware
Emersub 15 LLC	Delaware
Ridge Tool Company	Ohio
Ridge Tool (Australia) Pty. Ltd.	Australia

Ridge Tool Manufacturing Company
Ridge Tool Pattern Company
RIDGID, Inc.
Ridgid Italia S.R.L.
Ridgid Online, Inc.

Delaware
Delaware
Delaware
Italy
Ohio

Ridgid Werkzeuge AG	Switzerland
Therm-O-Disc, Incorporated	Ohio
Componentes Avanzados de Mexico S.A. de C.V.	Mexico
Controles de Temperatura S.A. de C.V.	Mexico
E.G.P. Corporation	Delaware
Emerson Arabia, Inc.	Delaware
Emerson Climate Technologies Arabia Limited Co.	Saudi Arabia
Emerson Process Management Arabia LLC	Saudi Arabia
Emersub 4 LLC	Delaware
Emerson Climate Technologies Mexico, S.A. de C.V.	Mexico
Emerson Electric (Asia) Limited	Hong Kong
Branson Ultrasonics (Asia Pacific) Co. Ltd.	Hong Kong
Emerson Electric (South Asia) Pte. Ltd.	Singapore
Emerson (Philippines) Corporation	Philippines
Emerson Electric II, C.A.	Venezuela
Soluciones 0925, C.A.	Venezuela
Emerson Electric International, Inc.	Delaware
Emerson Electric Ireland Limited	Bermuda
Emersub Treasury Ireland Unlimited Company	Ireland
Emerson Electric (Mauritius) Ltd.	Mauritius
Emerson Electric Company (India) Private Limited	India
Westinghouse Electric Pvt. Limited	Mauritius
Emerson Process Management Power & Water Solutions India Private Limited	India
Emerson Finance LLC	Delaware
Emerson International Holding Company Limited	United Kingdom
Emerson Electric Nederland B.V.	Netherlands
Aegir Norge Holding AS	Norway
Roxar AS	Norway
Emerson Process Management Nigeria Limited	Nigeria
PolyOil Limited	United Kingdom
Roxar do Brasil Ltda	Brazil
Roxar Flow Measurement AS	Norway
Roxar Maximum Reservoir Performance W.L.L.	Bahrain
Roxar de Venezuela C.A.	Venezuela
Roxar Saudi Co.	Saudi Arabia
Roxar Services AS	Norway
Roxar Services OOO	Russia
Roxar Technologies AS	Norway
Roxar Software Solutions AS	Norway
Roxar Vietnam Company Ltd.	Vietnam
A.P.M. Automation Solutions Ltd.	Israel
Branson Ultrasonics B.V.	Netherlands
Beckman Industrial B.V.	Netherlands
Damcos Holding A/S	Denmark
Damcos A/S	Denmark
Emerson Process Management Marine Solutions Korea Co., Ltd.	Korea
Emerson Process Management Marine Systems (Shanghai) Co., Ltd.	China
EI-O-Matic B.V.	Netherlands
EI-O-Matic Valve Actuators (F.E.) Pte. Ltd.	Singapore
Emerson Process Management (South Africa) (Proprietary) Ltd.	South Africa
Electrische Apparatenfabriek Capax B.V.	Netherlands
Emerson Automation Solutions Final Control Netherlands B.V.	Netherlands
Pentair Flow Control Italia S.r.l.	Italy

Biffi Italia S.r.l.
Emerson Automation Solutions Final Control Italia S.r.l.
Emerson Electric Company Lanka (Private) Limited
Emerson LLC
Emerson Network Power DHC B.V.

Italy
Italy
Sri Lanka
Russia
Netherlands

Emerson S.R.L.	Romania
EMERSON CLIMATE TECHNOLOGIES, s.r.o.	Czech Republic
Emerson Process Management B.V.	Netherlands
Emerson Process Management (Vietnam) Co., Ltd.	Vietnam
EMRSN HLDG B.V.	Netherlands
Emerson Process Management Flow B.V.	Netherlands
Fusite B.V.	Netherlands
System Plast International B.V.	Netherlands
Therm-O-Disc Europe B.V.	Netherlands
Emerson Sice S.R.L.	Italy
Asco Numatics Sirai S.R.L.	Italy
Branson Ultrasuoni S.R.L.	Italy
Dixell S.R.L.	Italy
Emerson Climate Technologies Retail Solutions Europe S.R.L.	Italy
Emerson Process Management S.R.L.	Italy
Emerson Process Management Virgo Valves S.R.L.	Italy
Emerson Middle East, Inc.	Delaware
Emerson Process Management SAS	France
Emerson Process Management, Lda	Portugal
Emerson Telecommunication Products, LLC	Delaware
JTP Industries, Inc.	Delaware
Emerson Ventures Inc.	Delaware
Emerson Vulcan Holding LLC	Delaware
Emersub 3 LLC	Delaware
Emersub 14 LLC	Delaware
Vilter Manufacturing LLC	Wisconsin
Emersub 16 LLC	Delaware
Emersub 17 LLC	Delaware
Emersub CII, Inc.	Delaware
Emersub CIV, Inc.	Delaware
Emersub XLVI, Inc.	Nevada
Copesub, Inc.	Delaware
Alliance Compressors LLC	Delaware
Emersub Italia S.R.L.	Italy
International Gas Distribution SA	Luxembourg
OMT Officina Meccanica Tartarini S.R.L.	Italy
EMR Foundation, Inc.	Missouri
EMR Holdings, Inc.	Delaware
Branson de Mexico, S.A. de C.V.	Mexico
Chloride Koexa S.A.	Argentina
Comercializadora ClosetMaid, S. de R.L. de C.V.	Mexico
Copeland Compresores Hermeticos, S.A. de C.V.	Mexico
Dar Ibtikar Al Iraq for General Services and General Trade LLC	Iraq
Emerson Argentina S.A.	Argentina
Emerson Automation Solutions GmbH	Switzerland
Emerson Automation Solutions Isolation Valves, Inc.	Delaware
Emerson Climate Technologies Australia Pty. Ltd.	Australia
Emerson Dominicana, Srl	Dominican Republic
Emerson Electric (U.S.) Holding Corporation (Chile) Limitada	Chile
Emerson Electric C.R. Srl	Costa Rica
Emerson Electric de Mexico S.A. de C.V.	Mexico
Emerson Electric Holdings (Switzerland) GmbH	Switzerland
ALCO CONTROLS, spol. s.r.o.	Czech Republic

Emerson Process Management Co., Ltd.

EMR Emerson Holdings (Switzerland) GmbH

Emerson Climate Technologies - Transportation Solutions ApS

Emerson Process Management Qatar W.L.L.

EMR (Asia) Limited

China

Switzerland

Denmark

Qatar

Hong Kong

Emerson Electric (China) Holdings Co., Ltd.	China
ASCO Valve (Shanghai) Co., Ltd.	China
Beijing Rosemount Far East Instrument Co., Ltd.	China
Branson Ultrasonics (Shanghai) Co., Ltd.	China
ClosetMaid (Jiangmen) Storage Limited	China
Emerson Beijing Instrument Co. Ltd.	China
Emerson Climate Technologies (Shanghai) Co., Ltd.	China
Emerson Climate Technologies (Shenyang) Refrigeration Co., Ltd.	China
Emerson Climate Technologies - Solutions (Suzhou) Co., Ltd.	China
Emerson Climate Technologies (Suzhou) Co., Ltd.	China
Emerson Climate Technologies (Suzhou) Trading Co., Ltd.	China
Emerson Electric (Tongling) Co., Ltd.	China
Emerson Electric (Zhuhai) Co., Ltd.	China
Emerson Fusite Electric (Shenzhen) Co. Ltd.	China
Emerson InSinkErator Appliance (Nanjing) Co., Ltd.	China
Emerson Junkang Enterprise (Shanghai) Co., Ltd.	China
Emerson Machinery Equipment (Shenzhen) Co., Ltd.	China
Emerson Process Management Flow Technologies Co., Ltd.	China
Emerson Process Management Power & Water Solutions (Shanghai) Co., Ltd.	China
Emerson Process Management (Tianjin) Valves Co., Ltd.	China
Emerson Process Management Valve Automation (Tianjin) Co., Ltd.	China
Emerson Professional Tools (Shanghai) Co., Ltd.	China
Emerson Trading (Shanghai) Co., Ltd.	China
Emerson Xi'an Engineering Center	China
Fisher Jeon Gas Equipment (Chengdu) Co., Ltd.	China
Fisher Regulators (Shanghai) Co., Ltd.	China
Parex Industries Limited	New Zealand
Rosemount Tank Radar AB	Sweden
Emerson Process Management Marine Solutions Singapore Pte. Ltd.	Singapore
Rosemount Tank Gauging India Pvt. Ltd.	India
Rosemount Tank Gauging Middle East SPC	Bahrain
Hytork Controls, Inc.	Florida
Virgo Valves & Controls (ME) FZE	UAE
Virgo Valves and Controls Sdn Bhd	Malaysia
Emerson Electric Korea Ltd.	Korea
Emerson Electric (M) Sdn Bhd	Malaysia
Emerson Electric Poland Sp. z o.o.	Poland
Emerson Process Management Europe GmbH	Switzerland
Emerson Process Management Magyarorszag Kft.	Hungary
Emerson Automation Solutions Final Control Hungary Kft	Hungary
Emerson Process Management NV	Belgium
Emerson Puerto Rico, Inc.	Puerto Rico
Emerson (Thailand) Limited	Thailand
Emersub 5 LLC	Delaware
Emersub Mexico, Inc.	Nevada
ClosetMaid Reynosa S. de R.L. de C.V.	Mexico
Copeland Scroll Compresores de Mexico S.A. de C.V.	Mexico
Daniel Measurement and Control, S. de R.L. de C.V.	Mexico
Emerson Mexico Corporate Services S de R.L. de C.V.	Mexico
Emerson Tool and Appliance Company, S. de R.L. de C.V.	Mexico
Emerson Tool Company de Mexico, S. de R.L. de C.V.	Mexico
Emersub 1 LLC	Delaware
Emersub XXXVI, Inc.	Delaware

Digital Appliance Controls (UK) Limited

Emerson Holding Company Limited

Asco Joucomatic Ltd.

Asco Power Technologies Limited

Bristol Babcock Limited

United Kingdom

United Kingdom

United Kingdom

United Kingdom

United Kingdom

Copeland Limited	United Kingdom
CSA Consulting Engineers Ltd.	United Kingdom
El-O-Matic Limited	United Kingdom
Emerson Climate Technologies Retail Solutions UK Limited	United Kingdom
Emerson Electric U.K. Limited	United Kingdom
Artesyn Hungary Elektronikai Kft.	Hungary
Bray Lectroheat Limited	United Kingdom
Buehler Europe Limited	United Kingdom
Bannerscientific Limited	United Kingdom
Buehler UK Limited	United Kingdom
Metaserv Limited	United Kingdom
Metallurgical Services Laboratories Limited	United Kingdom
Emerson Egypt LLC	Egypt
Emerson FZE	UAE
Emerson Climate Technologies FZE	UAE
Emerson Gabon SARL	Gabon
Emerson Process Management Angola Lda	Angola
EMRSN Process Management Morocco Sarl	Morocco
ENPDOR2012A Limited	United Kingdom
Liebert Swindon Limited	United Kingdom
Emerson Energy Systems (UK) Limited	United Kingdom
Emerson Process Management Limited	United Kingdom
Emerson Process Management Distribution Limited	United Kingdom
Emerson Process Management Shared Services Limited	United Kingdom
EMR Barnstaple Limited	United Kingdom
Fisher-Rosemount Properties Limited	United Kingdom
Groveley Detection Limited	United Kingdom
K Controls Limited	United Kingdom
METCO Services Limited	United Kingdom
Permasense Limited	United Kingdom
Permasense Americas, Inc.	Texas
Permasense Asia Pacific Sdn Bhd	Malaysia
Roxar Limited	United Kingdom
Energy Scitech Ltd.	United Kingdom
Roxar Flow Measurement Limited	United Kingdom
TopWorx UK Limited	United Kingdom
Emerson UK Trustees Limited	United Kingdom
Fisher Controls Limited	United Kingdom
Farris Engineering Limited	United Kingdom
Fisher Governor Company Limited	United Kingdom
MDC Technology Limited	United Kingdom
MDC Technology Trustees Limited	United Kingdom
Mobrey Group Limited	United Kingdom
Rosemount Measurement Limited	United Kingdom
Cascade Technologies Holdings Limited	Scotland
Cascade Technologies Limited	Scotland
Pactrol Controls Limited	United Kingdom
EMR Worldwide B.V.	Netherlands
Emerson DHC B.V.	Netherlands
Emerson Electric do Brasil Ltda	Brazil
System Plast Ltda	Brazil
Emerson Electric (Thailand) Limited	Thailand
Emerson Process Management Ltda	Brazil

Emerson Scroll Machining (Thailand) Limited
Emersub 7 LLC
Emersub 8 LLC
Emersub 9 LLC
Emersub 10 LLC

Thailand
Delaware
Delaware
Delaware
Delaware

Emersub 11 LLC	Delaware
Emersub 12 LLC	Delaware
EMR (Mauritius) Ltd.	Mauritius
Emerson Electric Canada Limited	Canada
Emerson Holding Sweden AB	Sweden
Emerson Sweden AB	Sweden
Emerson USD Finance Company Limited	United Kingdom
Emerson Final Control Canada, Inc.	Canada
Net Safety Monitoring Inc.	Canada
Rutherford Acquisitions Limited	United Kingdom
Branson Ultrasonics a.s.	Slovakia
Emerson Automation Solutions Final Control Czech s.r.o.	Czech Republic
Emerson Automation Solutions Final Control Polska Sp. z o.o.	Poland
Emerson Climate Technologies (South Africa) (Pty) Ltd	South Africa
Emerson Comres de Mexico, S. de R.L. de C.V.	Mexico
Emerson Electric Ireland Limited	Ireland
Emerson Process Management de Colombia SAS	Colombia
Emerson Process Management d.o.o.	Croatia
Emerson Process Management (India) Pvt. Ltd.	India
Virgo Valves & Controls Private Limited	India
Shanghai Virgo Valves Technology Consulting Co., Ltd.	China
Virgo Valves & Controls Korea Ltd.	Korea
Emerson Process Management S.A.	Greece
Pentair Flow Control Holdings Limited	Isle of Man
Emerson Automation Solutions SSC UK Limited	United Kingdom
Emerson Automation Solutions Final Control UK II Ltd	United Kingdom
Emerson Automation Solutions Final Control UK Ltd	United Kingdom
Emerson Sales UK Limited	United Kingdom
Keystone Valve (U.K.) Limited	United Kingdom
Vulsub 1 Limited	United Kingdom
Vulsub Property Limited	United Kingdom
Hindle Cockburns Limited	United Kingdom
Spensall Engineering Limited	United Kingdom
Steel Support Systems Limited	United Kingdom
Westlock Controls Limited	United Kingdom
Pentair Valves & Controls Africa (Pty) Ltd	South Africa
Pentair Waterworks (Pty) Ltd	South Africa
Pentair Valves & Controls Argentina S.A.	Argentina
Pentair Valves & Controls Japan Co., Ltd.	Japan
Pentair Valves & Controls South Africa (Pty) Ltd	South Africa
Taiwan Valve Co., Ltd.	Taiwan
Vulsub Brazil Holding S.a.r.l.	Luxembourg
Vulsub Brasil Ltda.	Brazil
Westlock Equipamentos de Controle Ltda.	Brazil
Hiter Industria e Comercia de Controles Termo-Hidraulicos Ltda.	Brazil
Vulsub Holding III (Denmark) ApS	Denmark
Emerson Automation Solutions Final Control Denmark A/S	Denmark
Vulsub Holdings C, LLC	Delaware
Emerson Automation Solutions Final Control Malaysia Sdn. Bhd.	Malaysia
Vulsub Middle East Holdings, LLC	Delaware
Pentair Flow Control Middle East FZE	United Arab Emirates
Pentair Gulf Holding Limited	United Arab Emirates
Emirates Techno Casting FZE	United Arab Emirates

ETC International Holdings, Ltd.

Emirates Techno Casting Holding Limited

Emirates Techno Casting LLC

Gulf Valve FZE

JCF Fluid Flow India Private Limited

British Virgin Islands

United Arab Emirates

United Arab Emirates

United Arab Emirates

India

Vulsub Peru S.A.C.	Peru
F-R Tecnologias de Flujo, S.A. de C.V.	Mexico
NetworkPower Ecuador S.A.	Ecuador
PT. Emerson Indonesia	Indonesia
RAC Technologies (Israel) Ltd.	Israel
Rey-Lam, S. de R.L. de C.V.	Mexico
Termotec de Chihuahua, S.A. de C.V.	Mexico
Tranmet Holdings Limited	United Kingdom
Tranmet Holdings B.V.	Netherlands
Industrial Group Metran JSC	Russia
Metran-Export CJSC	Russia
EPMCO Holdings, Inc.	Delaware
Emerson Process Management Regulator Technologies, Inc.	Delaware
Fromex, S.A. de C.V.	Mexico
Fisher Controls International LLC	Delaware
Emerson Process Management Australia Pty Limited	Australia
Emerson Automation Solutions Final Control Australia Pty Limited	Australia
Emerson Automation Solutions Final Control Sales Australia Pty Limited	Australia
Emerson Electric Australia Co. Pty. Ltd.	Australia
Emerson Process Management New Zealand Limited	New Zealand
Vulsub SSC Australia Pty Limited	Australia
Fisher Controles de Mexico, S.A. de C.V.	Mexico
Instrument & Valve Services Company	Delaware
Nippon Fisher Co., Ltd.	Japan
Fisher-Rosemount Systems, Inc.	Delaware
Emerson Process Management Holding LLC	Delaware
Emerson Process Management LLLP	Delaware
Emerson Process Management Power & Water Solutions, Inc.	Delaware
ENPESNA, Inc.	Delaware
EPM Tulsa Holdings Corp.	Delaware
Emerson Process Management Regulator Technologies Tulsa, LLC	Oklahoma
Fiberconn Assemblies Morocco Sarl	Morocco
Fusite Corporation	Ohio
Emerson Japan, Ltd.	Japan
Fusite Land Company	Delaware
Fusite LLC	Delaware
General Equipment and Manufacturing Company, Inc.	Kentucky
Great River Canada Holding Limited	United Kingdom
Hiross India Private Limited	India
Humboldt Hermetic Motor Corp.	Delaware
Woodstock Land Company LLC	Missouri
Intrinsic Safety Equipment of Texas, Inc.	Texas
Locus Solutions, LLC	Wisconsin
Locus Traxx Worldwide Europe BVBA	Belgium
Management Resources Group, Inc.	Connecticut
Motores Hermeticos del Sur, S.A. de C.V.	Mexico
Numatics, Incorporated	Michigan
Emerson (Taiwan) Limited	Taiwan
PakSense, Inc.	Delaware
PakSense South America SpA	Chile
Artesyn Embedded Technologies, Inc.	Florida
Artesyn Embedded Computing, Inc.	Wisconsin
Artesyn North America LLC	Delaware
AIH LLC	Delaware

Artesyn Embedded Technologies GmbH
Artesyn Embedded Technologies (Hong Kong) Limited
Astec International Limited
Astec Agencies Limited

Germany
Hong Kong
Hong Kong
Hong Kong

Astec Custom Power (Philippines) Inc.	Philippines
Astec Custom Power (Singapore) Pte. Ltd.	Singapore
Astec Electronics Company Limited	China
Astec Electronics (Luoding) Company Ltd.	China
Astec Power Supply (Shenzhen) Company Limited	China
Astec Power Inc.	BVI
Astec Power Philippines, Inc.	Philippines
Embedded Computing & Power (India) Private Limited	India
Embedded Computing & Power Japan KK	Japan
Artesyn Cayman Ltd.	Cayman Islands
Artesyn Cayman LP	Cayman Islands
Artesyn Technologies Asia-Pacific Ltd.	Hong Kong
Artesyn Netherlands B.V.	Netherlands
Artesyn Embedded Technologies Sarl	France
Artesyn Holding GmbH	Austria
Artesyn Austria GmbH	Austria
Artesyn Austria GmbH & Co. KG	Austria
Astec America LLC	Delaware
Stourbridge Holdings (U.K.) Limited	United Kingdom
Mirroware Manufacturing Limited	United Kingdom
Astec Europe Limited	United Kingdom
Embedded Computing & Power Sweden AB	Sweden
ProTeam, Inc.	Idaho
ProTeam (China) Limited	Hong Kong
Ridge Tool Europe NV	Belgium
Ridgid Scandinavia A/S	Denmark
Von Arx AG	Switzerland
Von Arx GmbH	Germany
Rosemount Tank Gauging North America Inc.	Texas
System Plast USA de Mexico, S. de R.L. de C.V.	Mexico
Termocontroles de Juarez, S.A. de C.V.	Mexico
Tescom Corporation	Minnesota
Tescom Europe Management GmbH	Germany
Tescom Europe GmbH & Co. KG	Germany
Thunderline Z, Inc.	Delaware

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors
Emerson Electric Co.:

We consent to the incorporation by reference in Registration Statement Nos. 333-206096, 333-173933, 333-154362, 333-154361, 333-152917, 333-152916, 333-90240 and 333-46919 on Form S-8 and Registration Statement Nos. 333-200373, 333-110546, 333-52658, 333-84673 and 333-66865 on Form S-3 of Emerson Electric Co. of our report dated November 20, 2017, with respect to the consolidated balance sheets of Emerson Electric Co. as of September 30, 2017 and 2016, and the related consolidated statements of earnings, comprehensive income, equity, and cash flows for each of the years in the three-year period ended September 30, 2017, and the effectiveness of internal control over financial reporting as of September 30, 2017, which report is incorporated by reference in the September 30, 2017 annual report on Form 10-K of Emerson Electric Co.

Our report dated November 20, 2017, on the effectiveness of internal control over financial reporting as of September 30, 2017, contains an explanatory paragraph that states “the valves & controls business was acquired on April 28, 2017 and management has excluded this business from its assessment of internal control over financial reporting as of September 30, 2017. Valves & controls’ total assets and revenues excluded from the assessment represented approximately 20 percent and 4 percent, respectively, of the Company’s related consolidated financial statement amounts as of and for the year ended September 30, 2017.” KPMG LLP’s audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of the acquired business.

/s/ KPMG LLP

St. Louis, Missouri
November 20, 2017

POWER OF ATTORNEY

The undersigned members of the Board of Directors and Executive Officers of Emerson Electric Co., a Missouri corporation with principal offices at 8000 West Florissant Avenue, St. Louis, Missouri 63136, hereby appoint F. J. Dellaquila, S. Y. Bosco, R. J. Schlueter and J. G. Shively as their Attorneys-in-Fact for the purpose of signing Emerson Electric Co.'s Securities and Exchange Commission Form 10-K (and any and all Amendments thereto) for the fiscal year ended September 30, 2017 .

Dated: October 3, 2017

<u>Signature</u>	<u>Title</u>
<u>/s/ D. N. Farr</u> D. N. Farr	Chairman of the Board and Chief Executive Officer
<u>/s/ R. J. Schlueter</u> R. J. Schlueter	Vice President, Controller and Chief Accounting Officer
<u>/s/ C. A. H. Boersig</u> C. A. H. Boersig	Director
<u>/s/ J. B. Bolten</u> J. B. Bolten	Director
<u>/s/ G. A. Flach</u> G. A. Flach	Director
<u>/s/ A. F. Golden</u> A. F. Golden	Director
<u>/s/ C. Kendle</u> C. Kendle	Director
<u>/s/ M. S. Levatich</u> M. S. Levatich	Director
<u>/s/ J. W. Prueher</u> J. W. Prueher	Director
<u>/s/ R. L. Stephenson</u> R. L. Stephenson	Director
<u>/s/ J. S. Turley</u> J. S. Turley	Director

Certification

I, D. N. Farr, certify that:

1. I have reviewed this annual report on Form 10-K of Emerson Electric Co.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 20, 2017

/s/ D. N. Farr

D. N. Farr
Chairman of the Board and
Chief Executive Officer
Emerson Electric Co.

Certification

I, F. J. Dellaquila, certify that:

1. I have reviewed this annual report on Form 10-K of Emerson Electric Co.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 20, 2017

/s/ F. J. Dellaquila

F. J. Dellaquila
Senior Executive Vice President and
Chief Financial Officer
Emerson Electric Co.

**CERTIFICATION PURSUANT TO
EXCHANGE ACT RULE 13a-14(b) AND
18 U.S.C. SECTION 1350**

In connection with the Annual Report of Emerson Electric Co. (the "Company") on Form 10-K for the period ended September 30, 2017 , as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, D. N. Farr, certify, to the best of my knowledge, pursuant to Exchange Act Rule 13a-14(b) and 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ D. N. Farr

D. N. Farr
Chairman of the Board and
Chief Executive Officer
Emerson Electric Co.
November 20, 2017

**CERTIFICATION PURSUANT TO
EXCHANGE ACT RULE 13a-14(b) AND
18 U.S.C. SECTION 1350**

In connection with the Annual Report of Emerson Electric Co. (the "Company") on Form 10-K for the period ended September 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, F. J. Dellaquila, certify, to the best of my knowledge, pursuant to Exchange Act Rule 13a-14(b) and 18 U.S.C. Section 1350, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ F. J. Dellaquila

F. J. Dellaquila
Senior Executive Vice President and
Chief Financial Officer
Emerson Electric Co.
November 20, 2017

DESCRIPTION OF CAPITAL STOCK

The following is a summary of the general terms of the capital stock of Emerson Electric Co. (the “Company” or “Emerson”). This description is a summary, and it does not describe every aspect of our capital stock. This summary is subject to and qualified in its entirety by reference to our Restated Articles of Incorporation, our Bylaws, as amended, and the provisions of the Missouri General and Business Corporation Law, which we refer to as Missouri law, and which may be amended from time to time.

As used herein, unless otherwise specified or the context requires otherwise, we use the terms “we,” “us” and “our” to refer to the Company.

General

Our authorized capital stock consists of 1,200,000,000 shares of common stock, par value \$0.50 per share, and 5,400,000 shares of preferred stock, par value \$2.50 per share. There are no shares of preferred stock outstanding.

Common Stock

All of our outstanding shares of common stock are fully paid and non-assessable. Subject to the prior rights of the holders of any shares of preferred stock which later may be issued and outstanding, holders of common stock are entitled to receive dividends as and when declared by us out of legally available funds. In the event of any such declaration or payment, the holders of common stock will be entitled, to the exclusion of the holders of the preferred stock, to share therein. If we liquidate, dissolve, or wind up, after distribution and payment in full is made to holders of preferred stock, if any, the remainder of assets, if any, will be distributed pro rata among the holders of common stock of the company. Each holder of common stock is entitled to one vote for each share held of record on all matters presented to a vote of shareholders, including the election of directors. Holders of common stock have no cumulative voting rights or preemptive rights to purchase or subscribe for any stock or other securities and there are no conversion rights or redemption or sinking fund provisions for the common stock. We may issue additional shares of authorized common stock without shareholder approval, subject to applicable rules of the New York Stock Exchange and the Chicago Stock Exchange.

Computershare, Inc. is the registrar and transfer agent for our common stock. Our common stock is listed on the New York Stock Exchange and on the Chicago Stock Exchange under the symbol “EMR.”

Preferred Stock

Our Restated Articles of Incorporation vest our board of directors with authority to issue up to 5,400,000 shares of preferred stock from time to time in one or more series and by resolution or resolutions:

- To fix the distinctive serial designation of the shares of any such series;
 - To fix the rate or amount per annum at which the holders of the shares of any series shall be entitled to receive dividends, the dates on which such dividends shall be payable, and the date or dates from which such dividends shall be cumulative;
 - To fix the price or prices at which, the times during which, and the other terms upon which the shares of any such series may be redeemed;
 - To fix the amounts payable on the shares of any series in the event of dissolution or liquidation of the Company;
 - From time to time to include additional shares of preferred stock which the Company is authorized to issue in any such series;
-

- To determine whether or not the shares of any such series shall be made convertible into or exchangeable for shares of the common stock of the Company, shares of any other series of the preferred stock of the Company, now or hereafter authorized, or any new class of preferred stock of the Company hereafter authorized, or debt securities, the conversion price or prices, or the rate or rates of exchange at which such conversion or exchange may be made, and the terms and conditions upon which any such conversion right shall be exercised;
- To fix such other preferences and rights, privileges and restrictions applicable to any such series as may be permitted by law;
- To determine if a sinking fund shall be provided for the purchase or redemption of shares of any series and, if so, to fix the terms and amount or amounts of such sinking fund; and
- To set the consideration for which the shares of the series are to be issued.

The shares of different series may differ, including as to ranking. We may from time to time amend our Restated Articles of Incorporation to increase or decrease the number of authorized shares of preferred stock. The material terms of any series of preferred stock being offered by us will be described in a certificate of amendment to our Restated Articles of Incorporation or board resolution which will be filed with the Secretary of State of the State of Missouri and with the SEC, as required. Such terms may differ from those that are set forth below.

Dividend Rights . The preferred stock will be preferred as to payment of dividends over our common stock or any other stock ranking junior to the preferred stock as to dividends. No dividend may be declared or paid and no distribution may be made on our common stock or stock of junior rank, other than dividends or distributions payable in common stock, until the full cumulative dividends on the preferred stock of all series up to the end of the then quarterly dividend period shall have been declared and paid (or appropriated and set aside) by the board of directors. We will pay those dividends either in cash, shares of common stock or preferred stock or otherwise, at the rate and on the date or dates determined by our board of directors. With respect to each series of preferred stock, the dividends on each share of that series will be cumulative from the date of issue of the share unless some other date is determined by our board of directors. Accruals of dividends will not bear interest. If the amount determined by our board of directors to be declared and payable as dividends on the preferred stock is insufficient to pay the full dividend, including accumulations, on all outstanding series, such amount shall be paid on all outstanding shares of all series on pro rata basis generally based on the amount of the full dividend for that series.

Rights upon Liquidation . The preferred stock will be preferred over common stock, or any other stock ranking junior to the preferred stock with respect to distribution earnings and assets, so that the holders of each series of preferred stock will be entitled to be paid, upon voluntary or involuntary liquidation, dissolution or winding up and before any distribution is made to the holders of common stock or stock of junior rank, the amount as determined by our board of directors. However, in this case the holders of preferred stock will not be entitled to any other or further payment. In addition, the rights of the preferred stock in the event of a dissolution, liquidation or winding up shall not restrict or prevent the Company from paying dividends on common stock if the payment of such dividends is not restricted by any other terms of the preferred stock. If upon any liquidation, dissolution or winding up amounts available for payment are insufficient to permit the payment in full of the respective amounts to which the holders of all outstanding preferred stock are entitled, the amount available will be distributed among the holders of each series of preferred stock in an amount proportional to the full amounts to which the holders of each series are entitled.

Redemption . All shares of any series of preferred stock may be redeemable to the extent determined by our board of directors.

Conversion or Exchange . Shares of any series of preferred stock will be convertible into or exchangeable for shares of common stock or preferred stock or debt securities to the extent determined by our board of directors.

Preemptive Rights . No holder of shares of any series of preferred stock will have any preemptive or preferential rights to subscribe to or purchase shares of any class or series of stock, now or hereafter authorized, or any securities convertible into, or warrants or other evidences of optional rights to purchase or subscribe to, shares of any series, now or hereafter authorized.

Voting Rights . Except as determined by our board of directors, the holders of preferred stock will be entitled to one vote for each share of preferred stock held by them on all matters properly presented to shareholders. The

holders of common stock and the holders of all series of preferred stock will vote together as one class, except as otherwise provided by law and except as set forth below.

The preferences, priorities, special rights and powers given to the preferred stock under our Restated Articles of Incorporation, or to any series thereof by any authorizing action of our board, may be altered or terminated, as provided by law, upon the affirmative vote of the holders of two-thirds (2/3) of each series of preferred stock issued and outstanding whose rights will be affected by such proposed alteration or termination. No additional shares of the preferred stock except the shares provided for in our Restated Articles of Incorporation shall be authorized, and no additional shares of any other class of preferred stock having a priority over, or entitled to participate on a parity with, the preferred stock shall be authorized, except upon the affirmative vote of the holders of a majority of each series of the preferred stock issued and outstanding; provided, however, that the authorizing resolution for any series of preferred stock may provide for the vote of a greater percentage of the shares.

Currently under Missouri law, even if shares of a particular class or series of stock are not otherwise entitled to a vote on any matter submitted to the shareholders, amendments to the Restated Articles of Incorporation which adversely affect those shares require a vote of the class or series of which such shares are a part, including amendments which would:

- increase or decrease the aggregate number or par value of authorized shares of the class or series;
- create a new class of shares having rights and preferences prior or superior to the shares of the class or series;
- increase the rights and preferences, or the number of authorized shares, of any class having rights and preferences prior to or superior to the rights of the class or series; or
- alter or change the powers, preferences or special rights of the shares of such class or series so as to affect such shares adversely.

Board Representation . Our Restated Articles of Incorporation provide that in addition to the voting rights set forth above, if, and whenever, six (6) or more quarterly dividends, whether or not consecutive, on the preferred stock shall be in arrears, in whole or in part, the holders of the preferred stock, including all series thereof, voting as a single class, shall have the right to elect a number of the members of the board of directors equal to the whole number obtained by dividing seven (7), into the number of directors of the Company authorized at such time by the Restated Articles of Incorporation of the Company, but not less than two (2) directors. In such event, the remainder of the directors shall be elected by the holders of the common stock and preferred stock, voting as a single class. Whenever all dividends in arrears and current dividends on the preferred stock then outstanding have been paid or declared and a sum sufficient for the payment thereof set aside, then the right of the holders of the preferred stock to elect such number of directors shall cease. During the time when the preferred stock is vested with the power of board representation, the secretary of the Company may (and shall upon the written request of the holders of record of ten percent (10%) or more in number of shares of the preferred stock outstanding) call a special meeting of the holders of the preferred stock for the election of the directors to be elected by them subject to the provisions of our Restated Articles of Incorporation. In the case of additional authorized shares of preferred stock or a different class of preferred stock shall be created and issued, nothing herein contained shall prevent any such additional shares or class of the preferred stock from having the same voting rights on a pari passu basis with the shares of preferred stock entitled to vote on any matters.

Many of our operations are conducted through our subsidiaries, and thus our ability to pay dividends on our common stock or any series of preferred stock is dependent on their financial condition, results of operations, cash requirements and other related factors.

Depending upon the rights of holders of the preferred stock, an issuance of preferred stock could adversely affect holders of common stock by delaying or preventing a change of control of Emerson, making removal of the management of Emerson difficult, or restricting the payment of dividends and other distributions to the holders of common stock.

Certain Effects of Authorized but Unissued Stock

We may issue additional shares of common stock or preferred stock without shareholder approval, subject to applicable rules of the New York Stock Exchange and the Chicago Stock Exchange, for a variety of corporate

purposes, including raising additional capital, corporate acquisitions and employee benefit plans. The existence of unissued and unreserved common and preferred stock may enable us to issue shares to persons who are friendly to current management, which could discourage an attempt to obtain control of Emerson through a merger, tender offer, proxy contest, or otherwise, and protect the continuity of management and possibly deprive you of opportunities to sell your shares at prices higher than the prevailing market prices. We could also use additional shares to dilute the stock ownership of persons seeking to obtain control of Emerson. See also "Certain Charter and Bylaw Provisions" below.

Series B Junior Participating Preferred Stock

Our board previously authorized the issuance of 1,200,000 shares of preferred stock as Series B junior participating preferred stock in connection with our adoption of a shareholder rights plan as of November 1, 1998, which expired by its terms on November 1, 2008. We do not have any current plans to utilize such preferred stock. At the time of its authorization, our board designated the dividend, liquidation, voting and redemption features and the rights in the event of a merger of the Series B junior participating preferred stock so that the value of one one-thousandth (1/1,000th) of a share of Series B junior participating preferred stock approximated the value of one share of common stock. Each of these shares, if issued, would generally be non-redeemable and junior to all other series of preferred stock, have a variable preferential cumulative quarterly dividend, entitle its holder to receive a variable preferred liquidation payment and have one vote.

Certain Charter and Bylaw Provisions

Our Restated Articles of Incorporation and Bylaws:

- provide for a classified board of directors;
- limit the right of shareholders to remove directors or change the size of the board of directors;
- limit the right of shareholders to fill vacancies on the board of directors;
- limit the right of shareholders to call a special meeting of shareholders or propose other actions;
- require a higher percentage of shareholders than would otherwise be required to amend, alter, change, or repeal certain provisions of our Restated Articles of Incorporation; and
- provide that the Bylaws may be amended only by the majority vote of the board of directors.

Shareholders will not be able to amend the Bylaws without first amending the Restated Articles of Incorporation. These provisions may discourage certain types of transactions that involve an actual or threatened change of control of Emerson.

Size of Board

Our Restated Articles of Incorporation provide that the number of directors will be fixed by our Bylaws; provided that the Bylaws must provide for three or more directors. Our Bylaws provide for a board of directors of at least three directors and permit the board of directors to set the number of directors from time to time. In accordance with our Bylaws, our board of directors has fixed the number of directors at ten. Our Restated Articles of Incorporation and Bylaws further provide that our Bylaws may be amended only by majority vote of our entire board of directors.

Election of Directors

Our Bylaws provide certain detailed timing and information requirements for the nomination of directors by shareholders. Descriptions of these requirements are contained in our Proxy Statement. Our Bylaws do not permit cumulative voting in the election of directors. Accordingly, the holders of a majority of the then outstanding shares of common stock can elect all the directors of the class then being elected at that meeting of shareholders.

Classified Board

Our Restated Articles of Incorporation and Bylaws provide that our board will be divided into three classes, with the classes to be as nearly equal in number as possible, and that one class shall be elected each year and serve for a three-year term.

Removal of Directors

Missouri law provides that, unless a corporation's articles of incorporation provide otherwise, the holders of a majority of the corporation's voting stock may remove any director from office. Our Restated Articles of Incorporation provide that shareholders may remove a director with or without "cause" and with the approval of the holders of 85% of Emerson's voting stock. Our board of directors may remove a director, with or without cause, only in the event the director fails to meet the qualifications stated in the Bylaws for election as a director or in the event the director is in breach of any agreement between such director and Emerson relating to such director's service as a director or employee of Emerson.

Filling Vacancies

Missouri law further provides that, unless a corporation's articles of incorporation or bylaws provide otherwise, all vacancies on a corporation's board of directors, including any vacancies resulting from an increase in the number of directors, may be filled by the vote of a majority of the remaining directors even if that number is less than a quorum, or by a sole remaining director, until the next election of directors by the shareholders of the corporation. Our Bylaws provide that, subject to the rights, if any, of the holders of any class of preferred stock then outstanding and except as described below, only the vote of a majority of the remaining directors may fill vacancies.

Limitations on Shareholder Action by Written Consent

Missouri law provides that any action by written consent of shareholders in lieu of a meeting must be unanimous.

Limitations on Calling Shareholder Meetings

Under our Restated Articles of Incorporation and Bylaws, special meetings of shareholders may be called only by a majority of our board of directors, our chairman of the board, or the holders of not less than 85% of our voting stock.

Limitations on Introducing Other Items of Business

Our Bylaws provide certain detailed timing and information requirements for the introduction of business by shareholders at meetings. Descriptions of these requirements are contained in our Proxy Statement.

Amendment of Restated Articles of Incorporation

Our Restated Articles of Incorporation may be amended by the affirmative vote of the holders of shares representing a majority of the votes entitled to be cast on the amendment; provided that certain provisions contained in our Restated Articles of Incorporation respecting business combinations, the board of directors, removal of directors, amendment of Bylaws and special meetings of shareholders may be amended only by the affirmative vote of the holders of 85% of the total voting power of all outstanding shares of Emerson, voting as a single class. However, the provisions respecting business combinations may be amended upon the affirmative vote of the holders of a majority of the total voting power of all outstanding shares of Emerson if such amendment shall first have been approved and recommended by a majority of those directors who meet certain criteria of independence from parties seeking a business combination.

Business Combination Provisions in Restated Articles of Incorporation

Our Restated Articles of Incorporation provide that certain business combinations involving Emerson and certain 10% shareholders, each as defined in our Restated Articles of Incorporation, require the affirmative vote of the holders of 85% of the outstanding shares of Emerson common stock unless (i) a majority of the continuing directors (as defined in our Restated Articles of Incorporation) have approved the proposed business combination, or (ii) various conditions intended to ensure the adequacy of the consideration offered by the party seeking the combination are satisfied. Under Missouri law, for certain other mergers, the shareholder approval requirement

may be two-thirds of the outstanding shares entitled to vote. However, additional requirements may apply as described in “Missouri Statutory Provisions” herein.

Limitation on Directors’ Liability

Our Restated Articles of Incorporation limit the liability of our directors to us or any of our shareholders for monetary damages for breach of fiduciary duty as a director to the fullest extent permitted under the Missouri General and Business Corporation Law.

Anti-Takeover Effects of Provisions

The classification of directors, the inability to vote shares cumulatively, the advance notice requirements for nominations, and the provisions in our Restated Articles of Incorporation and/or Bylaws that limit the ability of shareholders to increase the size of our board or to remove directors and that permit the remaining directors to fill any vacancies on our board make it more difficult for shareholders to change the composition of our board. As a result, at least two annual meetings of shareholders may be required for the shareholders to change a majority of the directors, whether or not a change in our board would benefit Emerson and its shareholders and whether or not a majority of our shareholders believes that the change would be desirable.

The provision of Missouri law which requires unanimity for shareholder action by written consent gives all our shareholders entitled to vote on a proposed action the opportunity to participate in the action and prevents the holders of a majority of the voting power of Emerson from using the written consent procedure to take shareholder action. The Bylaw provision requiring advance notice of other items of business may make it more difficult for shareholders to take action opposed by the board of directors. Moreover, a shareholder cannot force a shareholder consideration of an item of business over the opposition of our board of directors by calling a special meeting of shareholders.

These provisions make it more difficult and time-consuming to obtain majority control of our board of directors or otherwise bring a matter before shareholders without our board’s consent, and thus reduce the vulnerability of Emerson to an unsolicited takeover proposal. These provisions enable Emerson to develop its business in a manner which will foster its long-term growth, by reducing to the extent practicable the threat of a takeover not in the best interests of Emerson and its shareholders and the potential disruption entailed by the threat. On the other hand, these provisions may adversely affect the ability of shareholders to influence the governance of Emerson and the possibility that shareholders would receive a premium above market price for their securities from a potential acquirer who is unfriendly to management. The provisions requiring an 85% vote of shareholders for amendments to certain provisions of our Restated Articles of Incorporation and for certain business combinations have the effect of limiting the ability of shareholders and others to change the terms of Emerson’s Restated Articles of Incorporation and to change control of Emerson.

Exclusive Forum Provision

Our Bylaws provide for the designation of the United States District Court for the Eastern District of Missouri, the Circuit Court located in the County of St. Louis, Missouri or other courts in the State of Missouri, as the exclusive forum for certain shareholder litigation such as derivative claims, breach of fiduciary duty claims, claims pursuant to the General and Business Corporation Law of Missouri, our Restated Articles of Incorporation or our Bylaws, claims governed by the internal affairs doctrine and actions to interpret, enforce or determine the validity of our Restated Articles of Incorporation or our Bylaws, unless we otherwise consent to another jurisdiction.

Missouri Statutory Provisions

Missouri law also contains certain provisions which may have an anti-takeover effect and otherwise discourage third parties from effecting transactions with us, including control share acquisition and business combination statutes. These provisions are referenced or summarized below. You should not rely on these references or summaries, but rely instead on the actual text of the applicable Missouri law provisions, any applicable Missouri regulations, as well as any case law interpreting such provisions or regulations.

Business Combination Statute

Missouri law contains a “business combination statute” which restricts certain “business combinations” between us and an “interested shareholder,” or affiliates of the interested shareholder, for a period of five years after the date of the transaction in which the person becomes an interested shareholder, unless either such transaction or the

interested shareholder's acquisition of stock is approved by our board on or before the date the interested shareholder obtains such status.

The statute also prohibits business combinations after the five-year period following the transaction in which the person becomes an interested shareholder unless the business combination or purchase of stock prior to becoming an interested shareholder is approved by our board prior to the date the interested shareholder obtains such status. The statute provides that, after the expiration of such five-year period, business combinations are prohibited unless:

- the holders of a majority of the outstanding voting stock, other than the stock owned by the interested shareholder, approve the business combination; or
- the business combination satisfies certain detailed fairness and procedural requirements.

A "business combination" for this purpose includes a merger or consolidation, some sales, leases, exchanges, pledges and similar dispositions of corporate assets or stock and any reclassifications or recapitalizations that increase the proportionate voting power of the interested shareholder. An "interested shareholder" for this purpose generally means any person who, together with his or her affiliates and associates, owns or controls 20% or more of the outstanding shares of the corporation's voting stock.

A Missouri corporation may opt out of coverage by the business combination statute by including a provision to that effect in its governing corporate documents. We have not done so.

The business combination statute may make it more difficult for a 20% beneficial owner to effect other transactions with us and may encourage persons that seek to acquire us to negotiate with our board prior to acquiring a 20% interest. It is possible that such a provision could make it more difficult to accomplish a transaction which shareholders may otherwise deem to be in their best interest.

Control Share Acquisition Statute

Missouri also has a "control share acquisition statute." This statute may limit the rights of a shareholder to vote some or all of his shares. A shareholder whose acquisition of shares results in that shareholder having voting power, when added to the shares previously held by him, to exercise or direct the exercise of more than a specified percentage of our outstanding stock (beginning at 20%), will lose the right to vote some or all of his shares in excess of such percentage unless the shareholders approve the acquisition of such shares.

In order for the shareholders to grant approval, the acquiring shareholder must meet certain disclosure requirements specified in the statute. In addition, a majority of the outstanding voting shares, as determined before the acquisition, must approve the acquisition. Furthermore, a majority of the outstanding voting shares, as determined after the acquisition, but excluding shares held by (i) the acquiring shareholder, (ii) employee directors or (iii) officers appointed by the board of directors, must approve the acquisition. If the acquisition is approved, the statute grants certain rights to dissenting shareholders.

Not all acquisitions of shares constitute control share acquisitions. A variety of ordinary acquisitions of shares and certain other specified acquisitions generally do not constitute control share acquisitions under Missouri law.

A Missouri corporation may opt out of coverage by the control share acquisition statute by including a provision to that effect in its governing corporate documents. We have not opted out of the control share acquisition statute.

Take-Over Bid Disclosure Statute

Missouri's "take-over bid disclosure statute" requires that, under some circumstances, including inapplicability of disclosure required by the Exchange Act, before making a tender offer that would result in the offeror acquiring control of us, the offeror must file certain disclosure materials with the Commissioner of the Missouri Department of Securities.