

=====

As Filed with the Securities and Exchange Commission on January 13, 1998
Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-8
REGISTRATION STATEMENT
Under
THE SECURITIES ACT OF 1933

EMERSON ELECTRIC CO.
(Exact name of Registrant as specified in its charter)

MISSOURI 43-0259330
(State or other jurisdiction of (I.R.S. Employer
incorporation or organization) Identification No.)

8000 West Florissant Avenue
St. Louis, Missouri 63136
(Address, including zip code, of Registrant's principal executive offices)

Computational Systems, Inc.
1987 Incentive Stock Option Plan

Computational Systems, Incorporated
1995 Employee Stock Incentive Plan

Computational Systems, Incorporated
1995 Amended and Restated
Non-Employee Directors' Stock
Option Plan
(Full Title of the Plans)

Harley M. Smith, Esq.
Assistant General Counsel and Assistant Secretary
Emerson Electric Co.
8000 West Florissant Avenue
St. Louis, Missouri 63043
(314) 553-2431
(Name, address, including zip code, and telephone number,
including area code, of agent for service)

<TABLE>

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered(1) -----	Amount to be Registered -----	Proposed Maximum Offering Price Per Share(2) -----	Proposed Maximum Aggregate Offering Price(2) -----	Amount of Registration Fee -----
<S>	<C>	<C>	<C>	<C>
Common Stock and Preferred Stock Purchase Rights.....	350,000	\$26.0843	\$9,129,505	\$2,694.00

1. Preferred Stock Purchase Rights are attached to and trade with the Common Stock, par value \$0.50, of the Registrant (the "Common Stock"). Value attributable to such Preferred Stock Purchase Rights, if any, is reflected in the market price of the Common Stock.

2. Computed pursuant to Rule 457(h) under the Securities Act of 1933 ("1933 Act") solely for the purpose of determining the registration fee. The proposed maximum aggregate offering price is computed upon the basis of the weighted average of the prices at which the options may be exercised.

</TABLE>

This Registration Statement also covers such additional shares of Common Stock as may be issuable pursuant to antidilution provisions.

=====

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by Emerson Electric Co. ("Emerson" or the "Registrant") pursuant to the Securities Exchange Act of 1934 (the "1934 Act") (file No. 001-00278) are incorporated by reference into this Registration Statement:

(a) Annual Report on Form 10-K for the year ended September 30, 1997.

(b) The description of Emerson's Common Stock as contained in Emerson's 1934 Act Registration Statement on Form 10 as amended under cover of Form 8 on January 19, 1981, and Emerson's Restated Articles of Incorporation filed as Exhibit 3(a) to Emerson's Form 10-Q for the quarter ended March 31, 1997.

(c) The description of Emerson's Preferred Stock Purchase Rights which is contained in Emerson's 1934 Act Registration Statement on Form 8-A dated November 3, 1988 and First Amendment to Rights Agreement filed on Emerson's Form 8-K dated October 17, 1997.

All documents subsequently filed by Emerson pursuant to Sections 13(a), 13(c), 14 and 15(d) of the 1934 Act, prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be a part hereof from the date of filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

Item 4. Description of Securities.

The securities to be offered are registered under Section 12(b) of the 1934 Act.

Item 5. Interest of Named Experts and Counsel.

H.M. Smith, whose opinion is contained in Exhibit 5.1, owns shares of the Registrant's Common Stock and holds options to purchase shares of such Common Stock.

Item 6. Indemnification of Directors and Officers.

The Registrant is a Missouri Corporation. Section 351.355(1) of the Revised Statutes of Missouri provides that a corporation may indemnify a director, officer, employee or agent of the corporation in any action, suit or proceeding other than an action by or in the right of the corporation, against expenses (including attorneys' fees), judgments, fines and settlement amounts actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action, had no reasonable cause to believe his conduct was unlawful. Section 351.355(2) provides that the corporation may indemnify any such person in any action or suit by or in the right of the corporation against expenses (including attorneys' fees) and settlement amounts actually and reasonably incurred by him in connection with the defense or settlement of the action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, except that he may not be indemnified in respect of any matter in which he has been adjudged liable for negligence or misconduct in the performance of his duty to the corporation, unless authorized by the court. Section 351.355(3) provides that a corporation shall indemnify any such person against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the action, suit or proceeding if he has been successful in defense of such action, suit or proceeding and if such action, suit or proceeding is one for which the corporation may indemnify

him under Section 351.355(1) or (2). Section 351.355(7) provides that a corporation shall have the power to give any further indemnity to any such person, in addition to the indemnity otherwise authorized under Section 351.355, provided such further indemnity is either (i) authorized, directed or provided for in the articles of incorporation of the corporation or any duly adopted amendment thereof or (ii) is authorized, directed or provided for in any bylaw or agreement of the corporation which has been adopted by a vote of the shareholders of the corporation, provided that no such indemnity shall indemnify any person from or on account of such person's conduct which was finally adjudged to have been knowingly fraudulent, deliberately dishonest or willful misconduct.

At the Annual Meeting of Shareholders held on February 10, 1987, the shareholders adopted indemnification agreements with the directors of the Registrant and amendments to the By-laws of the Registrant which incorporate indemnity provisions permitted by Section 351.355(7) described above. The amended By-Laws provide that the Registrant will indemnify its directors and officers against all expenses (including attorneys' fees), judgments, fines and settlement amounts, paid or incurred in any action or proceeding, including any action by or on behalf of the Registrant, on account of their service as a director or officer of the Registrant, any subsidiary of the Registrant or any other company or enterprise when they are serving in such capacities at the request of the Registrant, excepting only cases where (i) the conduct of such person is adjudged to be knowingly fraudulent, deliberately dishonest or willful misconduct, (ii) a final court adjudication shall determine that such indemnification is not lawful, (iii) judgment is rendered against such person for an accounting of profits made from a purchase or sale of securities of the Registrant in violation of Section 16(b) of the Securities Exchange Act of 1934 or of any similar statutory law, or (iv) any remuneration paid to such person is adjudicated to have been paid in violation of law. Such person shall be indemnified only to the extent that the aggregate of losses to be indemnified exceeds the amount of such losses for which the director or officer is insured pursuant to any directors' or officers' liability insurance policy maintained by the Registrant.

The Registrant maintains directors' and officers' liability insurance.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Reference is made to the Exhibit Index.

Item 9. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

EXPERTS

The historical financial information incorporated in this Registration Statement by reference to the Annual Report on Form 10-K for Emerson for the year ended September 30, 1997 have been so incorporated in reliance on the report of KPMG Peat Marwick LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Forms S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the County of St. Louis, State of Missouri, on December 31, 1997.

EMERSON ELECTRIC CO.

By: /s/ W.J. GALVIN

W.J. Galvin
Senior Vice President-Finance and
Chief Financial Officer

Each person whose signature appears below hereby severally constitutes and appoints W.J. Galvin, W.W. Withers and H.M. Smith, Esq., and each of them singly, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Commission, granting unto

said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<TABLE>

Signature -----	Title -----	Date -----
<S>	<C>	<C>
/s/ C.F. KNIGHT ----- C.F. Knight	Chairman of the Board, Chief Executive Officer and Director	December 31, 1997
/s/ W.J. GALVIN ----- W.J. Galvin	Senior Vice President-Finance and Chief Financial Officer	December 31, 1997
/s/ J.G. BERGES ----- J.G. Berges	Director	December 31, 1997
/s/ L.L. BROWNING, JR. ----- L.L. Browning, Jr.	Director	December 31, 1997
/s/ A.A. BUSCH, III ----- A.A. Busch, III	Director	December 31, 1997
/s/ D.C. FARRELL ----- D.C. Farrell	Director	December 31, 1997
/s/ J.A. FRATES ----- J.A. Frates	Director	December 31, 1997
/s/ R.B. HORTON ----- R.B. Horton	Director	December 31, 1997
/s/ G.A. LODGE ----- G.A. Lodge	Director	December 31, 1997
/s/ V.R. LOUCKS, JR. ----- V.R. Loucks, Jr.	Director	December 31, 1997
/s/ R.B. LOYND ----- R.B. Loynd	Director	December 31, 1997
/s/ R.L. RIDGWAY ----- R.L. Ridgway	Director	December 31, 1997
/s/ R.W. STALEY ----- R.W. Staley	Director	December 31, 1997
/s/ A.E. SUTER ----- A.E. Suter	Director	December 31, 1997
/s/ G.W. TAMKE ----- G.W. Tamke	Director, President	December 31, 1997
/s/ W.M. VAN CLEVE ----- W.M. Van Cleve	Director	December 31, 1997
/s/ E.E. WHITACRE, JR. ----- E.E. Whitacre, Jr.	Director	December 31, 1997
/s/ E.F. WILLIAMS, JR.	Director	December 31, 1997

E.F. Williams, Jr.

</TABLE>

EMERSON ELECTRIC CO.

EXHIBIT INDEX

<TABLE>
<CAPTION>

Exhibit Number -----	Description -----
<S>	<C>
4.1	Restated Articles of Incorporation of Emerson (incorporated by reference to Emerson's Form 10-Q for the quarter ended March 31, 1997, Exhibit 3(a)).
4.2	Bylaws of Emerson, incorporated by reference to Emerson's 1933 Act Registration Statement (Reg. No. 333-40871, Exhibit 3(b)).
4.3	Rights Agreement dated as of November 1, 1988 (incorporated by reference to Emerson's Form 8-K, dated November 1, 1988, Exhibits 1 and 2), as amended by the First Amendment to Rights Agreement (incorporated by reference to Emerson's Form 8-K, filed October 17, 1997, Exhibit 4).
5.1	Opinion of Counsel to Emerson Electric Co.
23.1	Consent of KPMG Peat Marwick LLP.
23.2	Consent of Counsel to Emerson Electric Co. (included in Exhibit 5.1).
24.1	Power of Attorney (included in Signature Page).

</TABLE>

* Incorporated by reference.

EXHIBIT 5.1

EMERSON ELECTRIC CO.
8000 W. FLORISSANT
P.O. BOX 4100
ST. LOUIS, MO 63136

HARLEY M. SMITH
ASSISTANT GENERAL COUNSEL
AND ASSISTANT SECRETARY
(314) 553-2431

January 13, 1998

Emerson Electric Co.
8000 West Florissant Avenue
St. Louis, MO 63136

Gentlemen:

I am Assistant General Counsel and Assistant Secretary of Emerson Electric Co. (the "Company"), and in such capacity I am familiar with the Registration Statement on Form S-8 to which this opinion is filed as an exhibit (the "Registration Statement") which registers under the Securities Act of 1933, as amended, 350,000 shares of Common Stock of the Company (the "Shares") which may be purchased pursuant to the Computational Systems, Inc. 1987 Incentive Stock Option Plan, the Computational Systems, Incorporated 1995 Employee Stock Incentive Plan and the Computational Systems, Inc. 1995 Amended and Restated Non-Employee Directors' Stock Option Plan (collectively, the "Plans"), including 350,000 Preferred Share Purchase Rights.

I have examined originals or copies, certified or otherwise identified to my satisfaction, of such documents, corporate records, certificates of public officials and other instruments as I deemed necessary for the purposes of the opinion expressed herein.

On the basis of the foregoing, I am of the opinion that the Shares (including the Preferred Share Purchase Rights) to which the Registration Statement relates, when sold in accordance with the provisions of the applicable Plan, will be legally issued, fully paid and non-assessable.

I consent to the filing of this opinion as an exhibit to the Registration Statement. I also consent to your filing copies of this opinion as an exhibit to the Registration Statement and with such agencies of such states as you deem necessary in the course of complying with the laws of such states regarding the offering and sale of the Shares. In giving this consent, I do not admit that I am in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Securities and Exchange Commission.

Yours truly,

/s/ HARLEY M. SMITH

Harley M. Smith

INDEPENDENT AUDITORS' CONSENT

The Board of Directors
Emerson Electric Co.:

We consent to the use of our report incorporated herein by reference. Our report on the consolidated financial statements of Emerson Electric Co. as of September 30, 1997 and 1996 and for each of the years in the three-year period ended September 30, 1997 refers to a change in accounting for postemployment benefits.

/s/ KPMG Peat Marwick LLP

St. Louis, Missouri
January 7, 1998