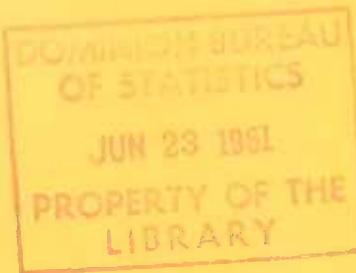


CATALOGUE No.

43-201

ANNUAL

c. 3



THE ELECTRICAL APPARATUS AND SUPPLIES INDUSTRY

1959

DOMINION BUREAU OF STATISTICS
Industry and Merchandising Division



DOMINION BUREAU OF STATISTICS

Industry and Merchandising Division

THE ELECTRICAL APPARATUS AND SUPPLIES INDUSTRY

1959

Published by Authority of
The Honourable George Hees, Minister of Trade and Commerce

June, 1961
6523-545

Price 75 cents

PUBLICATIONS

The results of the annual Census of Industry are published by the Dominion Bureau of Statistics in a series of industry reports which are released each year as the compilations are completed. Reports for industries in the **Electrical Apparatus and Supplies** Major Group are listed below, along with current and annual publications of related interest. Similar reports are issued for other industries. A complete catalogue of publications of the Bureau is available on request from the Information Services Division, Dominion Bureau of Statistics, Ottawa, or from the Queen's Printer, Ottawa.

A - Annual

M - Monthly

S.C. Special Compilation

Catalogue number	Title	Price
43-201	The Electrical Apparatus and Supplies Industry (A) .....	.75
43-001	Domestic Refrigerators and Freezers (M) per year	1.00
43-002	Domestic Washing Machines and Clothes Dryers (M)..... per year	1.00
43-003	Specified Domestic Electrical Appliances (M) per year	1.00
43-004	Radio and Television Receiving Sets (M) per year	1.00
43-005	Factory Sales of Electric Storage Batteries (M)..... per year	1.00
43-006	Air Conditioning and Refrigeration Equipment (M)..... per year	1.00
41-005	Stoves and Furnaces (M) per year	1.00
(S.C.)	Domestic Water Tank Heaters (M)..... per year	1.00
(S.C.)	Electric Lamps (M) per year	1.00
(S.C.)	Welding Electrodes (M)..... per year	1.00
(S.C.)	Fans, Unit Heaters and Ventilators (A).....	.25
57-001	Electric Power Statistics (M) per year	1.00
57-201	Electric and Gas Meter Registrations (A)	2.00
57-202	Electric Power Statistics (A) .....	.75
57-204	Electric Power Survey of Capability and Load (A) .....	.50
64-202	Household Facilities and Equipment (A).....	.50
31-201	General Review of Manufacturing Industries (A)	2.00
31-001	Inventories, Shipments and Orders in Manufacturing Industries (M) per year	4.00
65-004	Trade of Canada - Exports (M)..... per year	7.50
65-007	Trade of Canada - Imports (M)	7.50

*Remittances should be in the form of cheque or money order,
made payable to the Receiver General of Canada and forwarded to
the Information Services Division, Dominion Bureau of Statistics,
or to the Queen's Printer, Ottawa, Canada.*

EXPLANATORY NOTES

This report is one in a series of about 130 publications which present the results of the 1959 Census of Manufactures. Most reports in this series refer to specific industries, but there are summary reports for Canada and the provinces and for major industry groups. An annual Census of Manufactures has been carried out by the Dominion Bureau of Statistics since 1916.

Industry statistics given in these reports refer to number of establishments, employees, salaries and wages, cost of materials, supplies, fuel and electricity, gross value of shipments, inventories and value added by manufacturing. Details of materials used and products shipped are also given. Descriptions of the principal industry statistics, with special reference to 1959 are as follows:

Period Covered

Firms are asked to submit figures for the calendar year, if at all possible, and most reports are on this basis. Financial year reports for periods differing from the calendar year are accepted in instances where the firms find it impossible to supply calendar year data from accounting records. However the data on employees, salaries and wages are requested on a calendar year basis in all cases.

Establishment

Data for the annual census is collected on an establishment basis. A firm with more than one plant is required to file a report for each plant. In most cases an establishment is a complete factory. Sometimes, however, a plant is divided into two or more establishments when it carries out operations classifiable to different industries and when separate accounting records are available. Usually the statistics for an establishment relate only to the manufacturing activities. Other activities such as construction at the plant by its own employees, wholesale or retail activities carried on at the plant location, etc., are not included. Plants engaged solely in repair work (except in the case of furniture, shipbuilding, boat building, aircraft and railway rolling stock industries) are not included but plants occupied in assembling parts into complete units are included.

Employees

Administrative and office employees include all executives and supervisory officials such as presidents, vice-presidents, secretaries, treasurers, etc., together with managers, professional and technical employees, superintendents and factory supervisors above the working foremen level and clerical employees. Working owners and partners are also included in this category.

Production and related workers include all other factory workmen whether paid on a monthly, weekly, hourly or piece-work basis. Working foremen doing work similar to that of the employees they supervise are included, as are maintenance, warehousing and delivery staffs. Employees on new construction work, in retail or wholesale operations, on outside piece work etc., are not included.

Production workers are reported by months, an average for the year being obtained by summing the monthly figures and dividing by twelve. This procedure is followed even though the plant did not operate in all months. Figures on employment refer to calendar years whether or not some establishments reported other data on a financial year basis.

Salaries and Wages

Salaries and wages refer to gross earnings of the employees described above, including salaries, wages, commissions, bonuses, the value of room and board where provided, deductions for income tax and social services such as sickness and unemployment insurance, pensions, etc., as well as any other allowances forming part of the employees' wages. Payments for overtime are included.

Salaries refer to amounts paid to administrative and office employees. Withdrawals by working owners or partners for normal living expenses for self and family are included but not their withdrawals for income tax. Wages refer to the amounts paid to production and related workers as defined above. Data on earnings refer to the calendar year whether or not some establishments reported other data on a financial year basis.

Cost of Fuel and Electricity

Figures for fuel refer to amounts actually used, (including fuel used in cars and trucks), not to purchases unless the quantities are the same. Values refer to the laid-down cost at the works, including freight, duty, etc.

Materials and Supplies Used

Figures represent quantities and laid-down cost values, at the works, of materials and supplies actually used during the year whether purchased from others or received as transfers from other plants of the reporting company. Amounts paid to other manufacturers for work done on materials owned by the reporting company are included. Returnable containers or any other items charged to capital account are not included. Fuels are not included. Goods bought from others or received as transfers from other plants of reporting companies for resale without further processing are not included. Maintenance and repair supplies not chargeable to capital account are included.

Factory Shipments

Factory shipments refer to shipments of goods made from own materials either in the reporting plant or by other manufacturers on the basis of a charge to the reporting plant for work done. All products and by-products shipped from the establishment are included whether for domestic use, export, or for government departments. Transfer shipments to sales outlets, distributing warehouses or to other manufacturing units of the reporting firm are included. Goods bought or received as transfers and resold without further processing are not included. Values are computed on f.o.b. plant or

plant warehouse basis, and do not include sales tax or excise duties. Values of containers not returnable are included. Amounts received in payment for work done on materials owned by others are included.

In a few industries such as shipbuilding, aircraft, etc., where work on principal products extend over a relatively long period, the value of production is recorded rather than the value of shipments. For those industries production is computed from the value of deliveries of complete units during the year plus the value of work done during the year on unfinished units less the value of work done in previous years on finished units delivered in the year under review.

Inventories

Values represent the book values of manufacturing inventories owned and held at the reporting plant. Figures include inventories held in warehouses or selling outlets which have been included with plant operations for purposes of reporting shipments.

Value Added by Manufacturing

Figures are computed from value of shipments plus or minus changes in inventories of finished goods and goods in process less cost of materials, fuel and electricity. This figure is sometimes referred to as net production.¹

Standard Industrial Classification

The Standard Industrial Classification Manual, prepared by the Dominion Bureau of Statistics, provides for 135 three-digit industries in the manufacturing sector, arranged in 17 major groups. Reporting establishments are classified or allotted to specific industries on the basis of the value of principal products made or shipped.

Short Forms

Between 1949 and 1957, in an effort to ease the reporting burden for smaller firms, a short form was used asking for the total value of shipments only or, in a few cases where losses of detail were significant, for quantities and values of principal products. For purposes of publication, missing data were estimated on the basis of appropriate ratios. In general the cut-off point for these short forms was set at \$50,000 value of shipments. About 40% of the total number of establishments reported on the short form and accounted for less than 3 per cent of the total value of shipments.

In 1958, in order to establish a new base year, the small firms were asked to report all items of principal statistics together with some detail on materials and products.

¹ To arrive at the National Accounts concept of "gross domestic product at factor cost", it would be necessary to subtract also the cost of office supplies used, advertising, insurance and other goods and services obtained from other businesses. Data on these inputs are not collected on the annual Census of Manufactures. Value added figures for "The primary industries and construction" are published in D.B.S. publication 61-202, *Survey of Production*.

For the 1959 Census, the short form was used again, but further steps were taken to ease the respondents' burden. First, the general limit for short forms was raised to \$100,000 value of shipments. In addition, a new intermediate form was developed. This form is a shortened version of the long form in that most of the general questions were pared down and the detailed lists of materials and products were limited to the more important items. The general limits for firms in this category were set at between \$100,000 - \$500,000 value of shipments, but in the case of both the short and intermediate forms there were lower cut-offs for a number of industries in which the smaller firms accounted for a larger share of total shipments. On the other hand, limits were raised where this could be done without a significant loss of coverage. On most of the short forms for 1959, in addition to total value of shipments, data on principal products were requested. In a few industries, where loss of employment and earnings data were considered too large because of higher cut-offs, a question on total payroll was placed on the short form.

The intermediate and long forms provide complete data for the compilation of all elements of principal industry statistics and the details of materials and products. The one-page short form, although containing data on principal products and total value of shipments, does not request information on other elements of principal statistics such as value of inventories, materials, fuel and electricity and, in most cases, employment and salaries and wages, nor does it contain detailed data on volume and value of materials used. For purposes of compiling aggregates of principal statistics by industry and by geographic location, the missing data for each establishment were estimated for 1959 by using, in general, ratios based on the change in the value of shipments between 1958 and 1959. The proportion of the estimated data was generally less than 5 per cent of the total in each category of principal statistics.

The general request for the principal items of products on the short form for 1959 permitted a fairly complete compilation of the detailed quantities and values of commodity shipments. In the case of the detailed quantities and values of materials, fuel and electricity, however, and the monthly distribution of production workers, only the totals of data actually reported on the intermediate and long forms are contained in published reports and no attempt was made as in past years to estimate the generally small proportion of individual totals represented by detailed items omitted from the short forms.

The new approach has relieved an additional 12,000 establishments from filling out the regular long form. Establishments now receiving the short form number in excess of 20,000 and account for more than 54 per cent of the total number of establishments and a little more than 3 per cent of the total value of shipments.

TABLE OF CONTENTS

	Table
Principal statistics	1 and 3
Electrical products in other industries	2
Inventories	4
Products made	5
Materials used	6
Production workers, by months	39
Employees and earnings	40
Capital expenditures	41
Imports and exports	42
Fuel and Electricity Used	43
Commodity figures:	
Batteries—Dry cell	13
Storage	14
Capacitors	38
Conduit	10
Control equipment	25
Converter equipment	32
Cutouts and fuses	29
Generators	7
Heaters, domestic water-tank	26
Irons	18
Ironing machines, domestic	35
Lamps (bulbs)—Incandescent	20
Fluorescent	21
Lighting fixtures	30
Miscellaneous appliances (heating pads, electric clothes-dryers, floor polishers, coffee makers, kettles, fry-pans, fans)	36
Motors	8
Pole line hardware	33
Radio receiving sets	15
Radio receiving tubes and television picture tubes	17
Refrigeration equipment	27 - 28
Stoves	23
Switch gear and protective equipment	11
Television sets	16
Toasters	19
Transformers	9
Vacuum cleaners	12
Washing machines	34
Watthour meters	37
Welding apparatus	24
Wires and cables	22
Wiring devices	31
Directory of firms	Page 37

SYMBOLS

The interpretation of the symbols used in the tables throughout this publication is as follows:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.
- P preliminary figures.
- R revised figures.

THE ELECTRICAL APPARATUS AND SUPPLIES INDUSTRY

1959

Factory shipments reported by firms in the Electrical Apparatus and Supplies Industry in 1959 were valued at \$1,047,462,278 an increase of 3.2 per cent over the \$1,015,416,736 reported in 1958. The 496 firms which reported in this group in 1959 were distributed across Canada as follows: 1 in Newfoundland; 1 in Nova Scotia; 1 in New Brunswick; 105 in Quebec; 317 in Ontario; 20 in Manitoba; 3 in Saskatchewan; 10 in Alberta and 38 in British Columbia. These plants gave employment to a total of 73,883 workers who were paid \$316,857,086 in salaries and wages. Expenditures for materials amounted to \$501,799,678 and an additional \$10,177,155 was spent for fuel and electricity.

This industrial group includes most of the concerns in Canada which manufacture equipment for use in the generation, transmission and utilization of electricity. However, it is not possible to include all such producers in this group under the Standard Industrial Classification which is used for the annual Census of Industry. According to this system which combines the concept of "purpose" with that of "chief component material" some important producers must be allotted to other industries. For example, since clay is the chief material used in making porcelain insulators, the producers of these goods have been classified to the Clay Products Industry under the main group which embraces all manufacturers of non-metallic minerals; similarly, the makers of electric washing machines have been included in the Machinery Industry of the iron and steel group. Again, some electrical supplies were made as minor products of plants which were primarily engaged in other lines of business and, therefore, were included in other industries. The output of electrical apparatus in these other industries, including electrical accessories for automobiles and household use, but excluding office and industrial machinery, amounted in value to about \$152,000,000 in 1959 — see Table 2.

Statistics given in Tables 1, 3 to 6, 39 to 41, and 43 of this report cover only the concerns in the Electrical Apparatus and Supplies Industry. Tables 7 to 38 give the total Canadian output (regardless of the industry in which produced) of generators, motors, transformers, conduit, switch gear, vacuum cleaners, dry cell batteries, storage batteries, radios, television sets, radio tubes, flat irons, toasters, lamps, wire and cable, stoves, welding apparatus, control equipment, water-tank heaters, refrigeration equipment, cutouts and fuses, lighting fixtures, wiring devices, converter equipment, pole line hardware, washing machines, ironers and miscellaneous electrical appliances. Table 42 is a

special compilation covering imports and exports of certain specified electrical products.

The Standard Industrial Classification, which has been used by the Dominion Bureau of Statistics in its compilations since 1949, provides for a breakdown of the Electrical Apparatus and Supplies group into five divisions, and individual firms were classified to each of these divisions according to the nature of their principal product. For example, a firm primarily concerned with the production of radios (that is, 50% or more of its output by value being accounted for by radios) was classified to the Radio and Radio Parts group. It follows, of course, that by using this principle not all producers of radios are coded in this class. For instance, a firm chiefly engaged in, say the production of refrigerators, might also make radios as a secondary product. In this case it would properly be classified to the Refrigerators, Vacuum Cleaners and Appliances group. Principal statistics for the five groups are detailed in Table 3.

Note: Figures for "Value added by manufacture", shown in Table 1, prior to 1952 were obtained by subtracting the cost of materials used, including fuel and electricity, from the value of production. In 1952 the gross value of production was replaced by value of factory shipments, f.o.b. plant. As no information on inventory change is available for 1952 and 1953, value added figures for these years were obtained by subtracting from the value of shipments the cost of materials, fuel and electricity. In 1954 and 1955 the "Value added" adjustment incorporated the increase or decrease to shipments values resulting from changes in the value of inventories over the period. For these two years, the adjustments that were made used only the change in finished product inventory owned by manufacturers. Beginning with 1956 the calculation of the "Value added" figure was further adjusted to take into account the "Goods in process" as well as the finished goods held at plant or plant warehouse. The "Goods in process" adjustment is not based on the values for this item as shown in Table 4 which represents goods in process owned by reporting manufacturers only; but rather, is based on goods in process held by manufacturers (i.e. goods in process inventory owned plus inventory held under progress payments arrangements). An inventory change of \$29,253,000 for these progress payments was therefore added in 1956 to the goods in process figures in order to arrive at an actual "Value added" figure. In 1957 the adjustment involved subtracting \$653,000 from the goods in process figures, in 1958 the adjustment was a minus \$5,255,000 and in 1959 a total of \$4,253,000 was added.

**TABLE 1. Principal Statistics of the Electrical Apparatus and Supplies Industry, Significant Years
1929-59, and by Provinces, 1958 and 1959**

Year and province	Establishments	Employees	Salaries and wages	Cost of fuel and electricity at works	Cost at works of materials used	Value added by manufacture ¹	Gross selling value of products ¹
		number					
1929	139	20,871	26,725,215	1,098,506	49,623,322	63,074,174	113,796,002
1933	174	11,767	12,428,430	,851,575	14,504,269	22,508,240	37,012,509
1937	191	21,706	26,291,436	1,331,249	41,695,446	55,815,297	98,841,992
1939	190	20,261	25,711,092	1,266,471	39,331,766	48,462,341	89,060,578
1944	234	48,834	82,304,460	2,488,432	120,413,034	160,169,974	283,071,440
1946	266	43,998	74,510,479	2,667,477	101,939,272	129,965,904	234,572,653
1949	365	55,916	137,278,521	4,483,959	212,460,413	269,410,983	486,355,355
1955	468	76,244	264,031,474	7,876,225	477,655,753	469,918,651	962,615,012
1956	473	83,296	310,522,800	9,164,267	558,249,520	577,411,595	1,090,194,175
1957	486	81,432	320,416,647	9,525,064	498,242,643	569,240,265	1,078,212,912
1958							
Newfoundland	1						
Nova Scotia	1						
New Brunswick	1						
Quebec	98						
Ontario	320	49,991	212,223,335	6,200,475	330,873,705	365,895,233	708,050,236
Manitoba	20	1,005	3,886,203	134,926	6,198,446	7,308,133	13,900,617
Saskatchewan	3						
Alberta	9						
British Columbia	39	919	4,104,720	188,069	8,387,916	8,026,807	16,135,868
Canada	492	74,944	316,357,773	9,191,597	473,902,660	523,826,941	1,015,416,736
1959							
Newfoundland	1						
Nova Scotia	1						
New Brunswick	1						
Quebec	105						
Ontario	317	48,334	206,473,628	6,937,333	337,484,331	396,013,551	716,025,214
Manitoba	20	893	3,168,593	153,373	7,428,067	6,873,643	14,349,622
Saskatchewan	3						
Alberta	10						
British Columbia	38	1,024	4,523,870	203,807	9,250,431	8,166,054	17,770,960
Canada	496	73,883	316,857,086	10,177,155	501,799,678	566,293,281	1,047,462,278

¹ See note to text.

TABLE 2. Production of Certain Electrical Apparatus by Firms classified to Industries other than the Electrical Apparatus and Supplies Industry, 1958

Note: Data given in this table represent the output of electrical appliances or equipment reported as minor products by concerns which have been classified to industries other than the Electrical Apparatus and Supplies Industry. These figures may be added to those given in Table 5 to arrive at the total Canadian output for this equipment. See also Tables 7 to 38. Details along the lines presented below are not available for 1959 but it is estimated that the total for 1959 will be about \$152,000,000.

Item	Value of factory shipments
	\$
Washing machines, electric type	23,569,000
Pole line hardware	3,754,000
Water heaters, including immersion, circulating and storage tank types	4,451,000
Electrical equipment, automotive:	
Spark plugs	9,257,000
Distributors, battery cables, ignition coils, and wire assemblies	5,123,000
Headlights	2,853,000
Other electrical equipment, automotive type including generators, starters and voltage regulators	7,853,000
Refrigeration and air conditioning equipment:	
Mechanical refrigerators	5,458,000
Other refrigeration and air conditioning equipment	15,342,000
Electric ranges (excluding oil and gas combinations) rangettes and grills	19,337,000
Motor driving equipment n.e.s., including vacuum cleaners, fans, electric clocks, floor polishers, clothes dryers, shavers, hair clippers and electric irons	9,330,000
Heating and cooking apparatus and appliances, n.e.s., including electric kettles, irons, heating pads, air heaters, commercial cooking ranges, electric furnaces, electropails, etc.	2,314,000
Apparatus including motors, switchgear, welders, welding rod, transformers, etc.	5,729,000
Electrical porcelains	6,245,000
Lighting fixtures	424,000
All other electrical apparatus including wire and cable, carbon and graphite electrodes, plastic products, (electrical), conduit and fittings, electronic equipment, control equipment, etc.	19,077,000
Total	140,116,000

TABLE 3. Principal Statistics, by Sub-groups,¹ 1958 and 1959

Group	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost at works of materials used	Value added by manufacture ²	Value of factory shipments ²
1958							
	number				dollars		
Batteries	31	2,183	8,494,204	511,447	22,184,794	15,387,640	39,604,763
Heavy electrical machinery	80	20,074	97,573,375	2,151,912	97,534,523	139,709,541	244,743,678
Telecommunication equipment ³	127	19,100	75,497,784	1,189,333	119,506,470	122,008,393	237,994,688
Refrigerators and appliances	75	8,471	33,631,510	1,877,276	70,624,131	70,893,553	145,236,530
Miscellaneous electrical products:							
Wires and cables ⁴	27	6,809	30,213,533	1,481,203	85,702,096	53,506,507	141,099,882
Other miscellaneous electrical products	152	18,307	70,947,367	1,980,426	78,350,646	122,321,307	206,737,195
Totals	492	74,944	316,357,773	9,191,597	473,902,660	523,826,941	1,015,416,736
1959							
	number				dollars		
Batteries	29	2,223	9,133,750	556,318	23,477,934	19,225,772	42,106,864
Heavy electrical machinery	86	17,357	81,372,760	2,563,069	92,568,152	143,156,069	233,675,890
Telecommunication equipment ³	123	18,931	77,930,395	1,271,687	117,599,255	117,788,500	225,070,764
Refrigerators and appliances	77	9,246	37,923,171	1,939,680	81,433,814	82,339,474	161,393,328
Miscellaneous electrical products:							
Wires and cables ⁴	27	7,011	32,704,731	1,741,794	99,238,822	64,801,175	161,372,698
Other miscellaneous electrical products	154	19,115	77,792,279	2,104,607	87,481,701	138,982,291	223,842,734
Totals	496	73,883	316,857,086	10,177,155	501,799,678	566,293,281	1,047,462,278

¹ Sub-division made on basis of principal products.

² See note to text.

³ For statistical purposes this industry includes in addition to firms manufacturing radios and radio parts firms engaged in manufacturing record players, television equipment (including complete sets), radar and other electronic and telecommunications equipment (except telephone equipment). At the present time manufacturers of telephone equipment are classified to the "Other miscellaneous electrical products" industry.

⁴ "Wires and cables" as a sub-division of the miscellaneous electrical products industry available for the first time in 1955.

TABLE 4. Inventories,¹ 1959

	Raw materials and supplies	Goods in process ²	Finished goods of own manufacture	Total
dollars				
(a) By sub-groups				
Opening:				
Batteries	3,133,934	2,712,324	1,909,353	7,755,611
Heavy electrical machinery and equipment	22,955,315	17,986,769	15,299,141	56,241,225
Telecommunication equipment ³	13,077,556	16,683,629	28,674,301	58,435,486
Refrigerators, vacuum cleaners and appliances ...	12,068,540	8,669,400	15,488,401	36,226,341
Miscellaneous electrical products:				
Wires and cables	10,967,324	7,394,772	8,793,424	27,155,520
Other miscellaneous electrical products	15,117,544	25,600,283	17,561,654	58,279,481
Canada	77,320,213	79,047,177	87,726,274	244,093,664
Closing:				
Batteries	3,185,680	2,918,165	2,856,672	8,960,517
Heavy electrical machinery and equipment	24,525,277	25,453,069	16,678,241	66,656,587
Telecommunication equipment ³	13,581,786	17,922,886	30,311,722	61,816,394
Refrigerators, vacuum cleaners and appliances ...	14,249,682	9,431,605	19,045,836	42,727,123
Miscellaneous electrical products:				
Wires and cables	10,018,942	8,463,116	12,134,173	30,616,231
Other miscellaneous electrical products	17,711,009	27,633,539	20,479,263	65,823,811
Canada	83,272,376	91,822,380	101,505,907	276,600,663
(b) By provinces				
Opening:				
Newfoundland, Nova Scotia, New Brunswick and Quebec.....	17,501,529	32,476,672	28,764,941	78,743,142
Ontario.....	55,055,540	44,013,187	56,930,803	155,999,530
Manitoba	1,411,813	785,889	809,436	3,007,138
Saskatchewan and Alberta	597,090	387,383	316,063	1,300,536
British Columbia	2,754,241	1,384,046	905,031	5,043,318
Canada	77,320,213	79,047,177	87,726,274	244,093,664
Closing:				
Newfoundland, Nova Scotia, New Brunswick and Quebec.....	19,119,515	33,915,582	33,362,181	86,397,278
Ontario.....	59,327,330	55,387,935	65,713,056	180,428,321
Manitoba	1,346,503	712,673	988,113	3,047,289
Saskatchewan and Alberta	820,398	486,938	623,400	1,930,736
British Columbia	2,658,630	1,319,252	819,157	4,797,039
Canada	83,272,376	91,822,380	101,505,907	276,600,663

¹ (a) Book value of all manufacturing inventories owned and held at plant and plant warehouses.

(b) Beginning with 1954, information on the value of year-end inventory holdings at plant and plant warehouses is being collected as part of the annual Census of Industry. These data were formerly collected by a separate survey. The summarized results for the Electrical Apparatus and Supplies Industry for the year under review are shown in the above table.

(c) The opening inventory for 1959 does not necessarily agree with the closing inventory for 1958 because of revisions such as the addition of new plants, the transfer of plants to other industries and plants going out of business, etc. However, the value added figures for the previous year have not been recalculated to allow for the revisions mentioned above.

² See note to text.

³ See footnote to Table 3.

TABLE 5. Products Made in the Electrical Apparatus and Supplies Industry, 1958 and 1959

Product	1958		1959	
	Quantity	Value of factory shipments	Quantity	Value of factory shipments
No.	\$	No.	\$	
Apparatus:				
Converter equipment (see Table 32) .....	..	3,949,709	..	2,869,724
Industrial control (see Table 25) .....	..	24,304,858	..	23,911,277
Generators and parts (see Table 7) .....	..	27,662,418	..	20,273,278
Motors and parts (see Table 8) .....	..	42,019,642	..	41,705,932
Switchgear and protective equipment (see Table 11) .....	..	62,170,484	..	56,822,711
Transformers and parts (see Table 9) .....	..	64,246,037	..	66,968,129
Welding apparatus (see Table 24) .....	..	8,142,616	..	10,169,446
Capacitors (see Table 38) .....	..	5,383,203	..	5,259,253
Appliances:				
Cooking and heating equipment:				
Stoves, rangettes, cooking plates (see Table 23) .....	..	17,217,898	..	17,679,079
Heating elements for stoves, etc. ....	..	5,021,563	..	5,337,727
Air heaters, electric, portable type - With fan	55,103	562,802	64,218	841,158
Without fan	35,589	617,853	42,605	736,098
Heating pads, electric (see Table 36)	132,148	456,274	164,535	522,369
Water heaters, electric (see Table 26) .....	..	2,056,936	..	2,910,954
Flat irons, electric (see Table 18) .....	..	3,877,433	..	3,967,211
Toasters, electric (see Table 19) .....	..	2,909,912	..	3,003,863
All other cooking and heating apparatus .....	..	8,947,614	..	8,573,328
Motor-driven equipment:				
Vacuum cleaners and parts (see Table 12) .....	..	9,903,247	..	10,156,619
Fans, A.C. and D.C.:				
Portable type	107,632	945,795	73,133	701,582
All other types	18,484	436,357	27,189	527,844
All other motor-driven appliances, including washing machines, air-conditioners, etc. ....	..	29,445,535	..	32,906,815
Refrigeration equipment (see Tables 27 and 28) .....	..	47,754,886	..	55,435,243
Batteries:				
Storage batteries (see Table 14) .....	..	26,409,769	..	28,019,953
Dry cell batteries (see Table 13) .....	..	8,212,591	..	8,898,544
Parts and supplies for batteries, and wet cell type batteries .....	..	777,103	..	1,076,864
Conduit and fittings (see Table 10) .....	..	15,801,274	..	19,334,988
Cutouts and fuses (see Table 29) .....	..	4,150,319	..	4,001,368
Electro-therapeutic apparatus (X-ray machines, therapeutic lamps, etc.) .....	..	79,813	..	53,315
Electrical industrial heating equipment:				
Furnaces:				
Resistance type				
Other types .....	..	1,360,736	..	1,988,092
Industrial ovens .....	..		
Other industrial heating equipment				
Instruments and meters:				
Electrical indicating instruments .....	..	892,444	..	887,694
Other electrical instruments and meters, including watt hour meters and demand meters (see Table 37) .....	..	9,373,766	..	9,187,887
Parts for instruments and meters .....	..	827,177	..	931,851
Lamps (bulbs):				
Incandescent (except therapeutic) (see Table 20) .....	..	22,141,670	..	24,960,851
Fluorescent (see Table 21)	7,098,152	5,684,156	7,482,566	6,686,809
Lighting fixtures (see Table 30) .....	..	35,621,801	..	41,087,894

See note at end of table.

**TABLE 5. Products Made in the Electrical Apparatus and Supplies Industry,
1958 and 1959 — Concluded**

Product	1958		1959	
	Quantity	Value of factory shipments	Quantity	Value of factory shipments
	No.	\$	No.	\$
Line material, including pole line hardware (see Table 33) .....	...	8,681,608	...	8,624,560
Radio apparatus and supplies:				
Radio receiving sets for civilian use (see Table 15)	645,038	22,273,118	625,437	21,638,055
Record players — With amplifier	245,454	7,612,787	208,352	6,773,635
Without amplifier	3,916	63,921	5,592	93,145
Radio transmission equipment for civilian use .....	..	11,181,782	..	7,831,395
Radio communication equipment for military purposes (except radar) .....	..	10,004,775	..	9,048,598
Radar equipment — commercial and defence .....	..	21,980,616	..	12,471,140
Navigational equipment, aeronautical and marine .....	..	750,495	..	1,055,328
Carrier current equipment .....	..	11,541,463	..	7,593,779
Studio television equipment, including cameras, etc. ....	..	2,321,942	..	2,039,103
Radio transmitters for broadcast and television	432,318	67,669,153	402,348	64,524,130
Television equipment — Complete sets (see Table 16)				
Industrial electronic control (relays, photo-electric timing, capacitance, etc. and electronic control panels for industrial applications) .....	..	757,091	..	1,910,908
Spare parts (less tubes) for maintenance of electronic telecommunication equipment and other electronic equipment — commercial and defence .....	..	2,315,643	..	1,567,116
Contract maintenance of electronic telecommunication equipment — Commercial and defence .....	..	5,017,245	..	7,952,773
All other radio and electronic equipment, except tubes and transformers .....	..	30,408,495	..	37,820,813
Signal systems:				
Traffic .....	..	394,562	..	491,446
Fire alarm .....	..	926,580	..	1,386,726
Interior signal and clock systems, excluding telephone .....	..	1,790,518	..	1,996,789
Vacuum tubes (see Table 17) .....	..	25,156,053	..	25,358,085
Wiring devices (see Table 31) .....	..	11,713,159	..	13,239,084
Wires and cables (see Table 22) .....	..	136,812,123	..	150,573,693
Miscellaneous:				
Fencers, electric	3,659	47,927	4,575	50,997
Rectifiers, except power type .....	..	899,749	..	933,090
Telephone materials, including exchange switchboards, telephones, transmitters, etc. ....	..	73,498,743	..	77,177,998
All other products, not separately specified .....	..	55,940,197	..	61,003,643
Amount received for repair work .....	..	6,291,300	..	5,910,499
Total all products .....	..	1,015,416,736	..	1,047,462,278

Note: In the Census of Industry the reporting firms are classified to certain industries in accordance with the nature of the main products which they manufacture. Data in this table represent only the output of concerns classified to the Electrical Apparatus and Supplies Industry. The figures for the individual items do not necessarily represent the total output in Canada as these articles may have been produced as minor products by companies which have been classified to other industrial groups. For the total Canadian output of certain major items, see Tables 7 to 38 as well as Table 2.

TABLE 6. Materials Used in the Electrical Apparatus and Supplies Industry, 1958 and 1959

Material		1958		1959	
		Quantity	Cost at works	Quantity	Cost at works
		\$		\$	
Aluminum:					
Castings	lb.	3,709,768	2,546,662	5,103,677	3,391,235
Rods	"	52,614,349	15,054,640	45,028,457	12,447,764
Sheets and strip	"	9,176,425	4,309,764	9,501,867	4,651,840
Other		...	2,508,938	...	1,879,954
Brass and bronze:					
Castings	lb.	2,360,135	1,621,913	2,200,711	1,448,102
Rods	"	2,467,696	1,102,085	1,812,225	893,348
Sheets and strip	"	2,792,449	1,371,631	3,211,749	1,705,009
Other		...	1,320,836	...	1,612,450
Carbon plates, blanks, etc.		..	324,444	..	270,422
Carbon brushes		..	118,648	..	167,398
Chalk or whiting	lb.	1,101,478	28,768	2,604,402	58,399
China-clay (kaolin)	ton	2,033	88,009	2,003	85,401
Copper:					
Rods	lb.	132,503,514	38,207,176	151,108,727	48,847,737
Sheets and strip	"	3,274,664	1,667,867	3,378,331	1,984,425
Tubing and pipe	"	2,541,705	1,500,294	2,688,517	1,627,304
Wire, enamelled	"	9,088,012	6,125,230	10,522,250	7,209,811
Wire, other insulated		..	7,283,055	..	6,057,829
Other		..	5,285,999	..	5,288,301
Cotton and linen sheets, tapes, etc.		..	3,733,018	..	2,446,522
Glass bulbs, tubing and cane		..	4,972,052	..	4,896,052
Insulating varnishes and japans		..	1,122,052	..	1,147,769
Insulators, porcelain		..	2,635,418	..	2,625,352
Iron and steel (except alloy):					
Pig iron	net ton	1,838	112,494	1,859	118,952
Steel bars and rods	"	20,854	4,563,262	18,805	4,341,657
Steel sheets and strip	"	117,257	17,501,587	117,785	21,042,451
Steel wire	"	22,470	4,947,741	20,006	4,388,089
Structural steel	"	14,574	2,368,734	4,598	821,811
Scrap iron and steel	"	346	14,100	382	15,342
Other iron and steel		..	13,571,388	..	9,010,093
Alloy steel:					
Stainless		..	1,349,697	..	1,711,958
Silicon sheets and strips	net ton	28,158	10,386,458	26,428	10,589,093
Other alloy steel		..	1,203,107	..	1,265,784
Lead:					
Pig (pure)	lb.	27,097,220	3,615,341	34,000,111	3,651,551
Antimonial	"	31,502,604	3,841,829	31,998,118	3,792,830
Other		..	646,017	..	314,466
Lead oxide (litharge and red lead)	lb.	6,428,110	886,890	7,443,019	954,680
Mica	"	355,928	529,221	361,710	480,031
Paints, stains, lacquers, etc.		..	2,694,115	..	3,430,065
Resistance wire		..	800,366	..	600,518
Sulphuric acid, 100%	lb.	17,083,718	327,378	12,164,694	254,395
Talc	"	407,180	6,934	235,854	3,607
Tungsten wire		..	817,443	..	1,019,150
Electric motors, purchased—Under 1 h.p.		275,413	2,686,818	178,725	1,930,008
1 h.p. and over, a.c. or d.c.		2,440	489,679	3,183	451,550
All other materials ¹		..	287,098,882	..	308,399,550
Containers and packing material		..	10,514,680	..	11,825,223
Total materials		..	473,902,660	..	501,799,678

¹ Commodity detail was requested only from larger firms and the estimated value of materials used by the smaller firms is included in 'all other materials.'

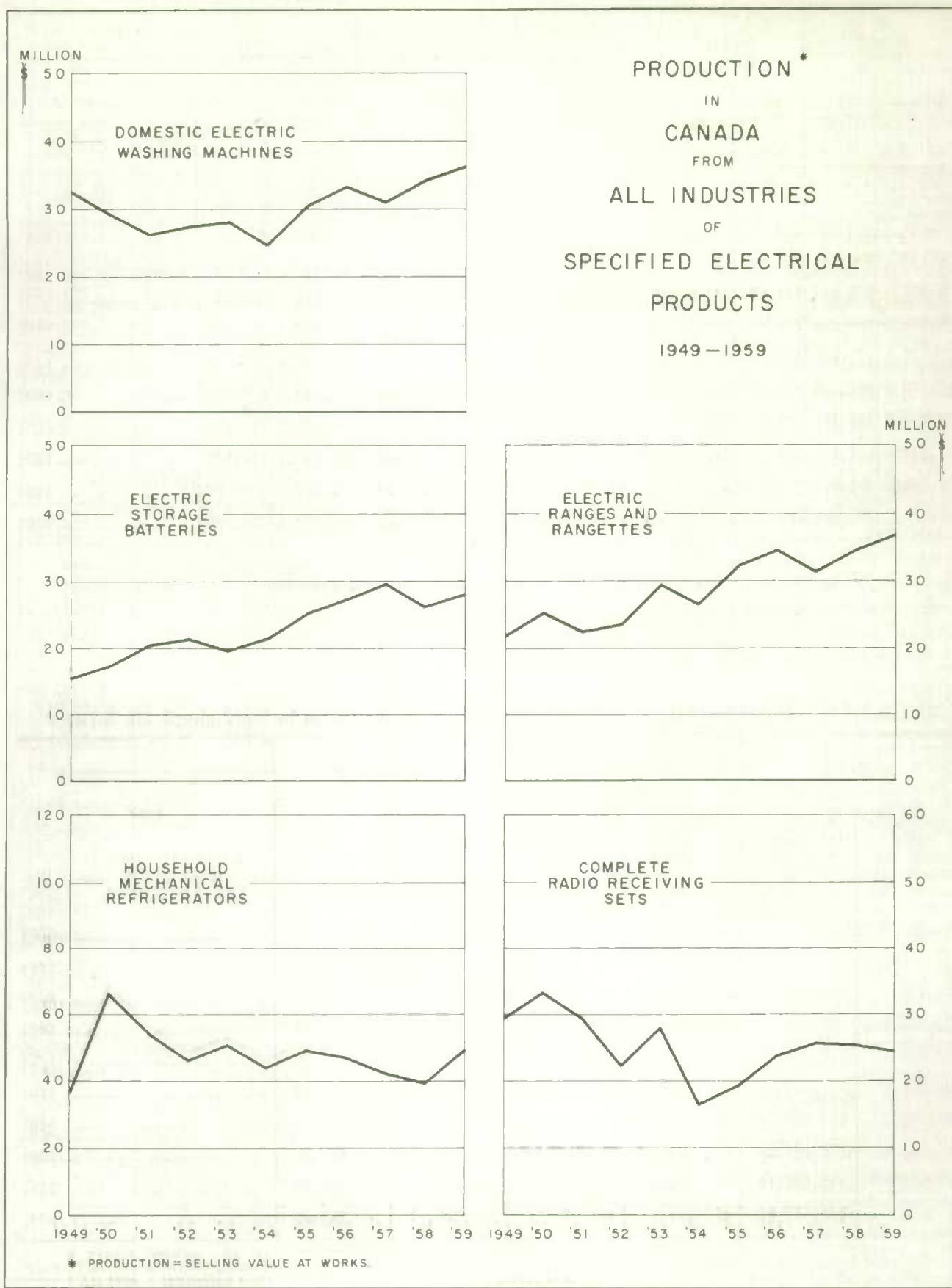


TABLE 7. Factory Shipments¹ of Electric Generators and Parts, 1958 and 1959 (from All Industries)

	Number	Total rating	Selling value at works
1958 ²			
A.c. generators (except for vehicle and marine use):			\$
A.c. 200 kva. and under, generators, any speed	4	203	16,060
A.c. 201 kva. to 1000 kva. generators, any speed	21	9,284	282,167
A.c. 1001 kva. and above generators, any speed	69	2,885,861	26,603,062
Accessories and parts for a.c. generators	—	—	761,129 ³
Total	—	—	27,762,418
1959 ²			
A.c. generators (except for vehicle and marine use):			
A.c. 200 kva. and under, generators, any speed	12	1,565	55,407
A.c. 201 kva. to 1000 kva. generators, any speed	35	27,653	544,030
A.c. 1001 kva. and above generators, any speed	37	2,023,750	19,003,717
Accessories and parts for a.c. generators	—	—	670,124 ³
Total	—	—	20,273,278

¹ Exclusive of automobile generators, engine-driven generator sets and motor-generator sets.² See also table 8 B.³ Includes a.c. generators for steam or gas turbo-generators.TABLE 8 A. Factory Shipments of Electric Motors¹ and Parts, 1958 (from All Industries)

	Number	Total rating	Selling value at works
		h.p.	\$
A.c. motors (except for railway and vehicle use):			
Single phase induction:			
$\frac{1}{2}$ h.p. and under (except shaded pole or universal motors)	991,328	..	13,284,764
$\frac{1}{2}$ h.p. and $\frac{3}{4}$ h.p.	73,789	..	2,219,808
1 h.p. to 5 h.p. inclusive-open type	10,825	19,708	1,130,679
1 h.p. to 5 h.p. inclusive-enclosed type	1,193	2,351	143,818
Polyphase induction:			
$\frac{1}{2}$ h.p. and under	3,745	1,247	123,820
$\frac{1}{2}$ h.p. and $\frac{3}{4}$ h.p.	8,552	5,166	384,402
1 h.p. to 5 h.p. inclusive-open type	16,142	42,027	1,331,849
1 h.p. to 5 h.p. inclusive-enclosed type	7,255	19,698	759,323
6 h.p. to 25 h.p. inclusive-open type	4,179	50,975	912,265
6 h.p. to 25 h.p. inclusive-enclosed type	4,429	60,198	1,213,200
26 h.p. to 100 h.p. inclusive-open type	1,536	75,396	1,206,329
26 h.p. to 100 h.p. inclusive-enclosed type	1,256	61,385	1,181,240
101 h.p. to 200 h.p. inclusive-open type	324	48,660	940,902
101 h.p. to 200 h.p. inclusive-enclosed type	139	25,115	519,503
201 h.p. to 1000 h.p. inclusive	360	170,450	3,085,980
1001 h.p. and over			
Synchronous motors and condensers:			
Up to and including 200 h.p. or kva.	14	1,728	52,267
201 h.p. or kva. to 1000 h.p. or kva.	44	26,250	610,342
1001 h.p. or kva. and over	14	29,450	377,618
Accessories and parts for a.c. motors	—	—	580,747
Railway and vehicle motors, a.c. and d.c.	—	—	—
Shaded pole type motors, all ratings	187,283	..	1,029,257
Universal type motors, all ratings	—	—	—
D.c. motors and generators, including excitors, (except for railway and vehicle use):			
D.c. Motors - $\frac{1}{2}$ kw. and under	377,290	117,869	1,265,780
$\frac{1}{2}$ kw. and $\frac{3}{4}$ kw.	222	135	43,157
D.c. motors or generators:			
1 h.p. or kw. to 5 h.p. or kw.	363	697	125,688
6 h.p. or kw. to 25 h.p. or kw.	344	5,340	559,781
26 h.p. or kw. to 100 h.p. or kw.	428	25,457	1,383,668
101 h.p. or kw. to 200 h.p. or kw.	45	6,960	464,193
201 h.p. or kw. to 1000 h.p. or kw.	80	39,555	1,873,540
1001 h.p. or kw. and over	—	—	—
Accessories and parts for d.c. motors and generators	—	—	502,616
All other motors or generators	—	—	7,491,873 ³
Total	—	—	44,798,409

See footnotes at end of Table 8 B.

**TABLE 8 B. Factory Shipments of Electric Motors¹ and Parts, 1959
(from All Industries)**

	Number	Total rating	Selling value at works	
			h.p.	
A.c. motors (except for railway and vehicle use):				
Single phase induction:				
1/3 h.p. and under (except shaded pole or universal motors)	1,056,932	265,515	14,169,150	
1/2 h.p. and 3/4 h.p.	73,122	42,957	1,949,663	
1 h.p. to 5 h.p. inclusive-open type	8,866	13,916	904,948	
1 h.p. to 5 h.p. inclusive-enclosed type	1,199	2,317	157,825	
Polyphase induction:				
1/3 h.p. and under	4,781	1,389	126,040	
1/2 h.p. and 3/4 h.p.	8,210	4,792	333,106	
1 h.p. to 5 h.p. inclusive-open type	16,167	42,503	1,302,060	
1 h.p. to 5 h.p. inclusive-enclosed type	8,408	22,486	868,738	
6 h.p. to 25 h.p. inclusive-open type	4,593	56,631	989,313	
6 h.p. to 25 h.p. inclusive-enclosed type	4,894	59,151	1,309,269	
26 h.p. to 100 h.p. inclusive-open type	1,724	83,550	1,330,331	
26 h.p. to 100 h.p. inclusive-enclosed type	1,204	58,526	1,207,830	
101 h.p. to 200 h.p. inclusive-open type	377	55,384	999,208	
101 h.p. to 200 h.p. inclusive-enclosed type	125	20,850	462,372	
201 h.p. to 1000 h.p. inclusive	212	80,298	1,399,850	
1001 h.p. and over				
Synchronous motors and condensers:				
Up to and including 200 h.p. or kva.	18	2,710	71,161	
201 h.p. or kva. to 1000 h.p. or kva.	53	21,800	499,788	
1001 h.p. or kva. and over	—	—	—	
Accessories and parts for a.c. motors	—	—	597,245	
Railway and vehicle motors, ac. and d.c.	—	—	—	
Shaded pole type motors, all ratings	134,063	..	808,214	
Universal type motors, all ratings	109,280	..	432,422	
D.c. motors and generators, including excitors, (except for railway and vehicle use):				
D.c. motors — 1/3 kw. and under	454,411	151,806	1,473,626	
1/2 kw. and 3/4 kw.	48	29	4,770	
D.c. motors or generators:				
1 h.p. or kw. to 5 h.p. or kw.	372	935	267,478	
6 h.p. or kw. to 25 h.p. or kw.	230	3,766	463,919	
26 h.p. or kw. to 100 h.p. or kw.	312	17,584	1,066,303	
101 h.p. or kw. to 200 h.p. or kw.	29	4,775	237,108	
201 h.p. or kw. to 1000 h.p. or kw.	59	27,080	984,283	
1001 h.p. or kw. and over	—	—	—	
Accessories and parts for d.c. motors and generators	—	—	641,619	
All other motors or generators	—	—	9,196,230	
Total	—	—	44,253,869	

¹ Electric motors and/or generators as indicated.

² Included with "All other motors or generators".

³ Includes rotors and stators.

**TABLE 9. Factory Shipments of Transformers, by Types, 1958 and 1959
(from All Industries)**

Type	1958		
	Number	Total rating	Selling value at works
		kva.	\$
Distribution transformers—Dry type up to and including 200 kva., 1 phase or up to and including 225 kva., 3 phase—15,000 volts and below, except dry type transformers 2 kva. and below	6,815	172,176	2,394,621
Distribution transformers—Liquid filled type, up to and including 200 kva., 1 phase, or up to and including 225 kva. 3 phase; 15 kv. and below	57,322	1,162,685	12,457,344
Power transformers 7,500 kva. and less, up to and including 138 kv. class	1,409	2,016,519	11,010,366
Power transformers above 7,500 kva. at all voltages, also all kva. ratings in voltages above 138 kv. class	167	6,671,957	15,857,430
Feeder regulators—Single phase step voltage regulators			
Three phase step voltage regulators with 750 kva. of regulation or less	248	50,773	1,104,539
Induction voltage regulators			
Current transformers—Up to and including 15 kv.	42,652	..	1,746,550
Above 15 kv.			
Potential transformers—Up to and including 15 kv.	6,367	..	886,911
Above 15 kv.			
Metering outfits (combination of current and potential transformers in one enclosure)—Up to and including 15 kv.	560	..	695,023
Above 15 kv.			
Constant current transformers (street lighting)	1	—	1
Series lamp transformers	1	—	1
Luminous tube transformers	43,358	..	553,832
Ignition transformers (oil and gas).....	148,155	..	996,998
Radio and TV transformers—Air core	587,685	..	238,781
Powdered iron and therite core	4,198,230	..	1,714,744
Laminated core	2,241,581	..	2,307,152
Transformers for electronic equipment (other than radio and TV)	125,004	..	1,091,368
Variable radio transformers	—	..	1
Fluorescent transformers and ballasts	—	..	1
Mercury lamp transformers	26,659	..	861,882
Bell ringing and chime transformers	—	—	1
Control and signalling transformers	39,215	—	318,651
General purpose dry type transformers, up to and including 2 kva.	—	—	1
All other transformers	—	—	8,379,377
Parts and supplies for transformers	—	—	1,630,468
Total.....	—	—	64,246,037
1959			
Distribution transformers—Dry type up to and including 200 kva. 1 phase, 15 kv. and below; except dry type transformers 2 kva. and below	5,758	149,724	1,919,325
Distribution transformers—Dry type, up to and including 225 kva. 3 phase, 15 kv. and below; except dry type transformers 2 kva. and below	642	44,916	532,505
Distribution transformers—Liquid filled type, up to and including 200 kva., 1 phase, 15 kv. and below	58,039	1,107,859	12,830,540
Distribution transformers—Liquid filled type, up to and including 225 kva. 3 phase; 15 kv. and below	2,302	159,101	975,296

¹ Included in "All other transformers".

**TABLE 9. Factory Shipments of Transformers, by Types, 1958 and 1959
(from All Industries) — Concluded**

Type	1959		
	Number	Total rating	Selling value at works
Power transformers 7,500 kva. and less, up to and including 138 kv. class	1,277	kva.	\$
		2,163,317	11,033,291
Power transformers above 7,500 kva. at all voltages, also all kva. ratings in voltages above 138 kv. class	200	6,898,982	14,590,703
Feeder regulators — Single phase step voltage regulators			
Three phase step voltage regulators with 750 kva. of regulation or less	192	29,589	997,675
Induction voltage regulators			
Current transformers — Up to and including 15 kv.	26,266	..	2,064,784
Above 15 kv.			
Potential transformers — Up to and including 15 kv.	5,636	..	832,568
Above 15 kv.			
Metering outfits (combination of current and potential transformers in one enclosure) — Up to and including 15 kv.	494	..	362,924
Above 15 kv.			
Constant current transformers (street lighting)	—	—	—
Series lamp transformers	—	—	—
Luminous tube transformers	245,021	..	1,893,015
Ignition transformers (oil and gas)			
Radio and TV transformers — Air core	1,230,235	..	289,208
Powdered iron and therite core	4,653,120	..	1,520,411
Laminated core	2,147,373	..	2,283,841
Transformers for electronic equipment (other than radio and TV)	182,080	..	1,299,623
Variable ratio transformers	—	—	—
Fluorescent transformers and ballasts	1,808,464	..	6,832,068
Mercury lamp transformers	35,265	..	1,267,551
Bell ringing and chime transformers	1	..	1
Control and signalling transformers	63,089	..	426,778
General purpose dry type transformers, up to and including 2 kva.	1	..	1
All other transformers .....	..	..	3,508,116
Parts and supplies for transformers .....	..	..	1,507,907
Total .....	..	..	66,968,129

¹ Included in "All other transformers".

**TABLE 10. Factory Shipments of Conduit for Electrical Wiring, 1958 and 1959
(from All Industries)**

Item	1958		1959	
	Quantity	Selling value at works	Quantity	Selling value at works
Rigid conduit:		\$		\$
Steel and non-ferrous	lb. 42,593,510	7,241,192	49,057,382	9,203,993
Electrical metallic tubing, steel and non-ferrous	" 8,944,757	1,862,904	12,094,138	2,524,074
Flexible conduit (steel and non-metallic)	ft. ..	213,744	..	428,557
Totals	—	9,317,840	—	12,156,624

**TABLE 11. Factory Shipments of Electrical Switch Gear and Protective Equipment
(except Telephone Switchboards), 1958 and 1959 (from All Industries)**

Item	Selling value at works	
	1958	1959
dollars		
Switchgear assemblies:		
Metalclad switchgear, 5 kv. and 15 kv. with drawout oil circuit breakers	3,765,481	2,299,594
Metalclad switchgear, 5 kv. and 15 kv. with drawout oilless circuit breakers (includes air and airblast breakers)	6,635,082	5,614,243
600 volt metal-enclosed switchgear (drawout or fixed breakers, but not including moulded case breakers)	2,843,681	3,044,301
Control desks, duplex and open switchboards and supervisory control	3,786,668	2,152,498
Other switchgear assemblies including cubicles, cubicle switchgear, bus trough (except 600 volts) station type cubicle switchgear, fusegear (over 600 volts) etc., but not including capacitor assemblies	4,008,011	4,727,769
Power circuit breakers (sold apart from assemblies and not including sectionalizers or reclosers)— Indoor oil or oilless circuit breakers	904,104	596,544
Outdoor oil circuit breakers	5,279,167	4,497,976
Outdoor oilless circuit breakers	1,651,083	1,102,390
Low voltage air circuit breakers (sold apart from assemblies but not including moulded case breakers)	1,004,230	736,519
Disconnecting switches— Indoor type	352,684	360,544
Outdoor type	4,582,067	3,171,908
Lightning arresters— 15 kv. and under	482,186	395,801
Over 15 kv.	598,102	446,738
Power capacitors— Units (sold apart from assemblies)	1	1
Assemblies (including units)	1	1
Low voltage switchboards (fused or circuit breaker types)	2,203,357	2,425,988
Distribution, lighting and residential panelboards (with fuses or moulded case circuit breakers)	5,404,927	8,513,145
Industrial and residential enclosed safety switches and circuit breakers	6,139,982	6,748,224
Miscellaneous cabinets, wireways, gutters, surface raceways (excluding conduit and metallic tubing) and bus ducts including feeder, plug and trolley types	2,363,013	2,792,160
Oil circuit reclosers and sectionalizers, up to and including 15,000 volts and repair parts	1	1
Potheads	1	1
Other switchgear and protective equipment	10,166,659	7,196,369
Totals	62,170,484	56,822,711

¹ Included with "Other".

TABLE 12. Production¹ of Electric Vacuum Cleaners and Parts, 1950-59 (from All Industries)

Year	Floor models		Cylinder models		Hand models		Attachments and parts		Total	
	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
		\$		\$		\$		\$		\$
1950	43,075	2,337,136	109,395	5,161,920	..	..	—	1,271,363 ²	—	8,770,419
1951	39,170	2,121,966	90,837	5,587,627	5,145	93,420	—	1,114,719	—	8,917,732
1952	41,323	2,380,470	85,587	5,059,012	2,828	59,618	—	1,156,332	—	8,655,432
1953	37,126	2,239,354	70,833	4,334,187	7,705	136,497	—	1,211,414	—	7,922,452
1954	22,801	1,523,306	88,381	4,752,451	5,435	119,772	—	967,785	—	7,363,314
1955	19,795	1,341,000	125,711	6,832,000	—	—	—	1,008,000 ²	—	9,181,000
1956	20,727	1,541,838	145,621	8,105,948	—	—	—	529,668 ²	—	10,347,454
1957	22,516	1,681,140	126,252	7,052,463	—	—	—	372,343 ²	—	9,105,946
1958	25,310	1,741,337	132,201	8,048,856	..	..	..	251,492 ²	..	10,041,685
1959	32,616	1,930,545	130,989	8,087,807	..	..	..	220,488 ²	..	10,238,840

¹ Factory shipments since 1952.

² Includes hand models.

TABLE 13. Factory Shipments of Dry Cell Batteries, 1958 and 1959 (from All Industries)

Type	Quantity	Selling value at works
		\$
1958		
Dry cell:		
6-inch batteries	No. of cells " "	1,577,144 23,492,198 17,703,723 29,257,106
Radio batteries for portable sets	" "	968,945 1,114,242 1,495,927 3,298,357
Radio batteries for non-portable sets	" "	
Flashlight batteries	" "	
Hearing-aid batteries:		
"A" batteries		83,172
"B" batteries		1,251,948
All other dry batteries		
Total		8,212,591
1959		
Dry cell:		
6-inch batteries	No. of cells " "	1,769,279 24,529,057 14,311,153 32,152,100
Radio batteries for portable sets	" "	1,198,788 1,373,486 1,237,181 3,614,381
Radio batteries for non-portable sets	" "	
Flashlight batteries	" "	
Hearing-aid batteries:		
"A" batteries		153,763
"B" batteries		1,320,945
All other dry batteries		
Total		8,898,544

TABLE 14. Factory Shipments of Electric Storage Batteries, by Types, 1958 and 1959 (from All Industries)

Type	1958		1959	
	Number	Selling value at works	Number	Selling value at works
		\$		\$
For internal combustion engine starting and ignition	2,235,253	21,516,473	2,441,913	22,769,711
For farm lighting plants (cells)	19,392	264,424	21,027	346,640
For railway service (cells)	27,499	1,062,621	27,579	1,123,511
For direct motive power (industrial trucks, mine locomotives, etc.)	2,586	1,778,573	2,844	2,141,823
For all other purposes .....	..	1,787,678	..	1,638,268
Totals .....	..	26,409,769	..	28,019,953

TABLE 15. Production¹ of Complete Radio Receiving Sets, 1950 - 1959 (from All Industries)

Year	Number of sets	Selling value at works	Year	Number of sets	Selling value at works
		\$			\$
1950	820,772	33,497,785	1955	621,957	19,176,618
1951	628,395	29,635,311	1956	740,656	23,877,863
1952	567,738	22,178,626	1957	732,827	25,642,898
1953	737,457	28,021,087	1958	745,318	25,510,943
1954	487,620	16,509,275	1959	713,309	24,485,277

¹ Factory shipments since 1952.

TABLE 16. Production¹ of Television Sets, 1950-59 (from All Industries)

Year	Number	Selling value at works	Year	Number	Selling value at works
		\$			\$
1950	32,971	7,764,952	1955	806,253	130,497,108
1951	48,657	12,902,090	1956	613,895	94,506,905
1952	141,946	30,072,795	1957	434,504	68,012,547
1953	391,974	81,304,912	1958	432,318	67,669,153
1954	611,206	105,682,414	1959	402,348	64,524,130

¹ Factory shipments since 1952.**TABLE 17. Production¹ of Radio and Television Receiving Tubes, 1950-59 and Television Picture Tubes, 1958 and 1959 (from All Industries)**

Year	Radio and television receiving tubes		Television pictures tubes (including rebuilts)	
	Number	Selling value at works	Number	Selling value at works
	\$		\$	
1950	8,181,925	4,964,463	..	..
1951	9,976,801	5,215,684	..	..
1952	7,221,495	4,672,927	..	..
1953	12,803,162	8,476,680	..	..
1954	11,368,561	6,608,481	..	..
1955	15,054,395	8,990,760	..	..
1956	15,777,865	10,291,750	..	..
1957	16,067,839	11,271,142	..	..
1958	18,405,297	13,723,605	531,901	10,535,191
1959	15,700,794	11,039,269	589,685	11,744,886

¹ Factory shipments since 1952.**TABLE 18. Production¹ of Flat Irons, 1950-59 (from All Industries)**

Year	Steam		Automatic		Non-automatic		Total	
	Number	Selling value at works	Number	Selling value at works	Number	Selling value at works	Number	Selling value at works
	\$		\$		\$			\$
1950	2	2	387,657	2,815,299	130,257	391,252	517,914	3,206,551
1951	108,824	1,167,633	235,885	1,583,904	108,511	347,844	453,220	3,099,381
1952	107,181	1,135,245	234,535	1,494,987	92,029	286,489	433,745	2,916,721
1953	160,478	1,666,554	252,306	2,350,136	69,444	217,026	482,228	4,233,716
1954	234,624	2,509,362	207,620	1,410,704	54,724	168,614	496,968	4,088,680
1955	330,791	3,347,053	202,299	1,250,161	65,351	180,000	598,411	4,777,214
1956	424,084	4,332,043	141,086	853,182	46,681	161,368	611,851	5,346,591
1957	356,714	3,865,572	134,789	828,962	33,346	115,853	524,849	4,810,387
1958	323,823	3,399,922	96,000	571,538	30,314	102,262	450,137	4,037,722
1959	328,150	3,438,689	90,493	590,854	18,770	57,512	437,413	4,087,055

¹ Factory shipments since 1952.² Breakdown not available.

TABLE 19. Production¹ of Electric Toasters, 1950-59 (from All Industries)

Year	Domestic, automatic		Domestic, non-automatic		Domestic sandwich ²		Other ³		Total	
	Number	Selling value at works	Number	Selling value at works	Number	Selling value at works	Number	Selling value at works	Number	Selling value at works
		\$		\$		\$		\$		\$
1950.....	52,424	686,852	228,021	869,703	46,225	267,508	258	10,605	326,928	1,834,668
1951.....	39,031	591,031	168,576	716,763	33,667	197,860	793	42,724	242,067	1,548,378
1952.....	26,718	476,225	127,617	462,441	41,473	241,606	2,392	77,137	198,200	1,257,409
1953.....	134,146	1,903,442	114,775	328,225	54,477	274,388	2,646	16,012	306,044	2,522,067
1954.....	159,878	2,259,324	110,455	301,333	38,623	183,271	275	12,906	309,231	2,756,834
1955.....	191,558	2,602,882	110,280	284,403	40,111	176,996	199	13,176	342,148	3,077,457
1956.....	230,387	3,099,672	94,088	224,276	49,712	214,639	274	15,770	374,461	3,554,357
1957.....	193,411	2,567,346	71,983	149,667	58,830	233,586	107	3,373	324,331	2,953,972
1958.....	202,087	2,579,355	64,151	134,476	45,317	194,265	90	1,816	311,645	2,909,912
1959.....	201,845	2,690,776	56,796	117,752	43,531	194,804	5	531	302,177	3,003,863

¹ Factory shipments since 1952.² Does not include waffle-iron sandwich toaster combination.³ Includes commercial type.TABLE 20. Production¹ of Incandescent Electric Lamps (Bulbs), 1950-59 (from All Industries)

Year	Standard size		Miniature size ²		Photo flash	
	Number	Selling value at works	Number	Selling value at works	Number	Selling value at works
		\$		\$		\$
1950.....	70,668,414	10,858,991	32,418,426	2,512,041	..	..
1951.....	60,499,640	9,715,612	33,506,684	2,461,287	..	..
1952.....	65,978,887	10,963,303	21,657,619	1,967,531	9,228,384	1,067,828
1953.....	77,421,515	12,217,077	30,885,185	2,668,048	15,071,759	1,559,285
1954.....	76,193,807	12,088,636	31,422,200	2,591,966	20,057,249	1,914,080
1955.....	81,598,979	12,380,118	41,761,596	3,833,266	25,770,117	2,428,869
1956.....	77,555,258	11,806,686	43,054,707	4,178,441	30,939,849	2,581,471
1957.....	84,293,334	13,065,758	38,996,962	4,815,420	42,796,802	3,360,521
1958.....	79,925,134	12,618,350	36,668,275	5,407,674	41,256,847	3,300,231
1959.....	84,980,081	14,656,305	40,874,581	5,449,064	46,135,142	3,627,093

¹ Factory shipments since 1952.² All types, including Christmas tree, flashlight, automobile, etc.

TABLE 21. Production¹ of Fluorescent Electric Lamps (Bulbs), 1950-59 (from All Industries)

Year	Number	Selling value at works
1950.....	5,138,552	4,110,949
1951.....	5,262,530	3,252,267
1952.....	4,098,522	2,817,174
1953.....	4,882,012	3,598,998
1954.....	4,203,105	3,109,279
1955.....	5,005,823	3,561,358
1956.....	5,799,172	4,377,750
1957.....	6,909,317	5,567,803
1958.....	7,098,152	5,684,156
1959.....	7,482,566	6,686,809

¹ Factory shipments since 1952.**TABLE 22. Factory Shipments of Electrical Wires and Cables, 1958 and 1959 (from All Industries)**

Item	1958	1959
	Value of factory shipments	Value of factory shipments
dollars		
Telephone cables — Exchange.....	20,006,770	26,095,732
Toll and toll entrance	3,195,393	3,398,754
Telephone wires, insulated (drop wires, inside wires, other telephone wires)	6,102,458	7,703,092
Telephone switchboard wires and cables	6,074,641	6,332,381
Television and radio wires and cables	1,334,044	1,296,247
Accessory material for telephone cables	151,542	150,991
Telephone cordage	790,173	1,094,563
Bare wires and cables (other than copperweld and aluminum).....	6,776,029	8,488,579
Bare copperweld wires and cables and copperweld-copper strands	857,564	1,004,122
Bare ACSR and aluminum wires and cables	17,984,726	13,374,664
Annunicator and office wires and cables	309,424	366,434
Magnet wires — Thin film insulated	8,399,766	10,341,943
Other than thin film insulated	3,195,683	3,514,001
Weatherproof wires	5,594,984	5,709,400
Power cables (copper or aluminum conductors).....	9,738,322	10,099,309
Signal and control cables	2,388,028	3,019,355
Portable and power supply cables	2,413,479	2,422,110
Building wires — Non-metallic sheathed cables	9,475,353	10,296,326
Flexible armoured building cables	5,749,787	5,552,852
Other building wires (exclusive of types covered by preceding two items).....	13,733,607	16,315,008
Flexible cords and fixture wires	4,192,771	4,630,703
Service and service entrance cables	2,139,533	2,389,037
Rubber-insulated and plastic-insulated wires and cables — general	3,101,435	4,052,508
Other wires and cables	3,106,611	2,925,582
Totals.....	136,812,123	150,573,693

TABLE 23. Factory Shipments of Stoves Made in Canada, 1957-59 (from All Industries)

		1957	1958	1959
Coal, wood and sawdust-burning cooking stoves and ranges, including ranges with gas or electric extension	No. \$	18,562 1,783,729	15,934 1,711,519	15,658 1,516,815
Coal, wood and sawdust-burning heating stoves and space-heaters, including all heaters, circulators, Quebec, box, oak, Franklin, globular and laundry	No. \$	40,483 740,979	32,789 542,753	32,399 728,932
Solid fuel and gas combination or oil and gas combination (not including stoves or ranges with gas extension)	No. \$	7,746 1,655,862	6,701 1,498,945	7,445 1,755,020
Solid fuel and electric combination or oil and electric combination (not including stoves or ranges with electric extension)	No. \$	8,604 2,066,892	7,714 1,871,042	7,050 1,742,317
Gas cooking stoves and ranges (not combinations), including all styles with ovens	No. \$	35,077 4,489,456	37,729 5,086,643	36,527 5,080,235
Gas heating stoves and space-heaters	No. \$	14,295 496,606	15,604 640,393	20,539 1,044,820
Gas cooking plates—no oven	No. \$	16,817 116,157	12,179 97,069	9,285 80,041
Cooking ovens, electric, built-in	No. \$	.. ..	.. ..	11,972 1,592,202
Electric cooking stoves or ranges (over 35 amperes), all styles with ovens	No. \$	194,178 30,336,566	226,079 33,727,324	246,532 35,910,450
Electric rangettes, including cord attachment and oven as one unit ..	No. \$	21,129 891,876	25,610 1,028,761	20,312 834,535
Electric cooking plates and grills, including stoves for glass coffee-makers	No. \$	146,962 755,744	125,119 693,478	82,747 594,372
Oil (kerosene) and gasoline cooking stoves and ranges	No. \$	.. ..	.. ..	.. ..
Oil (kerosene) and gasoline heating stoves and space-heaters	No. \$	.. ..	.. ..	.. ..
Fuel oil (distillate) cooking stoves and ranges	No. \$	9,972 1,358,152	7,609 1,127,231	8,788 1,314,864
Fuel oil (distillate) heating stoves and space-heaters	No. \$	72,050 3,573,470	53,366 2,847,850	53,285 2,866,865

TABLE 24. Production of Electric Welding Apparatus and Welding Rod,¹ 1950-59 (from All Industries)

Year	Welding apparatus		Welding rod ²	
	Electric arc welding equipment with controls	Other electric welding apparatus ³	Quantity	Value of sales
1950	\$ 894,397	\$ 108,406	tons 10,436	\$ 2,708,819
1951	1,384,136	100,108	11,183	3,344,755
1952	1,494,781	272,015	16,597	5,459,228
1953	1,584,937	2,253,992	12,919	3,728,495
1954	1,213,051	1,530,201	11,926	3,634,811
1955	1,546,582	1,837,222	15,100	4,800,000
1956	2,324,099	3,215,817	20,230	6,823,000
1957	2,426,261	1,738,617	20,199	7,675,440
1958	1,816,938	1,176,631	18,474	7,436,477
1959	1,975,855	2,300,139	21,777	8,459,932

¹ Includes both gas and electric welding rod of ferrous type only.² Factory sales.³ Includes "Resistance welding equipment with controls".

TABLE 25 A. Factory Shipments of Industrial Control Equipment, 1958, (from All Industries)

Item	Value of factory shipments
Industrial control:	\$
Traction control—Railway and mine locomotive, trolley coach, street car and self-propelled battery operated lift trucks	1
A.c. and d.c. full voltage manual starters (A.c. single and polyphase) (600 v. max.)	988,467
A.c. full voltage magnetic starters for single and multi-speed squirrel cage motors. (600 v. max. sizes 0-7)	3,519,560
A.c. multi-pole magnetic contactors (600 v. max. sizes 0-7). A.c. and d.c. multi-pole industrial control relays (except thermal overload relay heaters when sold separately)	883,544
A.c. reduced voltage manual controllers (auto-transformer, resistor, reactor, wye-delta, part winding etc., (600 v. max.) (except synchronous-and wound rotor-motor controllers)	152,963
A.c. control centres (factory assembled groups of combination magnetic switches, 600 v. max.)	3,565,180
A.c. high voltage controllers, classes E1 and E2 (all high voltage induction and synchronous motor controllers which include short-circuit interrupters of ten times the controller rating)	1,426,512
Synchronous controllers (other than those included in item directly above)	130,032
A.c. drives (mine hoists, paper-machine drives, liquid rheostats, except package adjustable voltage drives)	1
All other a.c. magnetic control, (magnetic controllers and contactors, not otherwise included, for machine tools, cranes, hoists, wound rotor motors, fire-pumps, etc. all voltages) (except package adjustable voltage drives)	1,681,181
D.c. low voltage, magnetic contactors and controllers for timeswitches and control of cranes, hoists, machine tools, single-motor mill auxiliaries, etc. (except d.c. drives, package adjustable voltage drives, and a.c. magnetic contactors with d.c. coils)	513,554
D.c. drives (steel mill, paper-machine, rubber mill and mine hoist drives, including static electronic and semi-conductor rectifier drives, except package adjustable voltage drives	1
A.c. and d.c. drum and cam-switches, controllers, dial starters and rheostats, and all motor starting resistors supplies for separate mounting (except starting resistors which are an integral part of a magnetic controller)	414,782
A.c. and d.c. brakes	303,715
Pilot control, pushbuttons and stations, limit-, pressure-, temperature-, liquid-level-, and plugging-switches, solenoids, terminal blocks, (except modification kits for linestarters, and pilot devices for appliances, air-conditioners, refrigerators, and heating and domestic installations)	1,735,780
Electronic controls, electronic relays, photo-electric controllers, resistance-welding control, voltage, load and speed control (except a.c. and d.c. drives and electronic control panels for industrial applications)	1
Renewal parts, repair and modification kits, overload relay heaters sold separately	1,746,918
All other industrial control	7,125,805
Total	24,187,993

¹ Included with "All other".

TABLE 25 B. Factory Shipments of Industrial Control Equipment, 1959 (from All Industries)

Item	Value of factory shipments
Industrial control:	\$
Traction control—railway and mine locomotive, trolley coach, street car and self-propelled battery operated lift trucks	1
A.c. single phase and d.c. full voltage fractional horsepower low voltage manual starting switches including horsepower rated snap switches 1, h.p. 250 v. max.	458,780
A.c. and d.c. full voltage single phase and 3 phase integral horsepower manual low voltage starters 71/2 h.p. 600 v. max.	592,951
A.c. full voltage single speed and multispeed low voltage magnetic linestarters size 00 and up, for squirrel cage motors, 600 v. max. (ampere rated starters for hermetic motors not included)	3,886,139
A.c. low voltage magnetic contactors size 00 and up, and a.c. or d.c. magnetic multipole relays including single-voltage, double-voltage and timing relays and thermal and magnetic relays intended for starting and running protection of motors, 600 v. max. (thermal overload relay heaters furnished separately not included)	1,281,763

¹ Included with "All other industrial control equipments".

TABLE 25 B. Factory Shipments of Industrial Control Equipment, 1959
 (from All Industries) — Concluded

Item	Value of factory shipments \$
Industrial control — Concluded:	
A.c. reduced voltage manual low voltage starters for squirrel cage motors, 600 v. max. (synchronous and wound-rotor motor controllers not included)	248,044
A.c. reduced voltage magnetic low voltage starters for squirrel cage motors, auto-transformer, resistor, reactor, part-winding and wye-delta types, 600 v. max. (synchronous, hermetic and wound-rotor motor controllers not included)	562,739
A.c. full voltage and reduced voltage ampere-rated low voltage controllers for hermetic motors, 600 v. max.	54,148
A.c. motor control centres consisting of factory assembled groups of low voltage combination magnetic starters, 600 v. max. (self-standing starter racks and assemblies not included)	3,721,738
(a) A.c. high voltage class E-1 and E-2 induction and synchronous motor controllers, 5,000 v. max., incorporating short circuit current interrupting means higher than 10 times contactor ampere rating	1,138,410
A.c. low-voltage and unfused high voltage synchronous motor controllers and field panels not included in (a)	97,471
A.c. combined motor drives including mine hoist and paper-machine drives and liquid rheostats (packaged adjustable voltage drives not included)	93,588
(b) All other a.c. motor control equipment including a.c. machine tool control and general purpose panels, wall, floor or machine mounted, consisting of grouped general purpose components, devices and starters; racked group control; a.c. magnetic crane and traffic bridge control and a.c. crane protective panels; a.c. magnetic low voltage and unfused high voltage wound-rotor motor control including magnetic secondary panels; a.c. high voltage contactors; low voltage firepump control; static adjustable voltage drives having static power conversion components; all other a.c. magnetic control n.o.p. all pushbutton and indicating light stations larger than ordinarily listed by manufacturers, (packaged adjustable voltage drives with rotating amplifiers and/or rotating converters, mine hoist drives and motor control centres not included)	1,467,036
D.c. low voltage magnetic contactors, controllers, starters and timestarters including d.c. magnetic machine tool control, d.c. magnetic crane and traffic bridge control, d.c. crane protective panels, d.c. mill auxiliaries, and all other d.c. magnetic control n.o.p. (mine hoist drives not included)	773,462
D.c. mine and mill combined drives including steelmill, paper-machine and rubber-mill drives, and static electronic and semi-conductor rectifier drives (d.c. mill auxiliaries not included)	1,798,926
A.c. and d.c. drum and cam switches and controllers, dial starters and rheostats and motor starting and speed controlling resistors mounted separately	380,642
Brakes with a.c. coils or d.c. coils, their clutches and actuators	205,384
Pushbutton and indicating light stations up to maximum grouping ordinarily listed by manufacturers, and pushbutton and indicating light components (not including pushbutton and indicating light stations in item (b))	1,048,349
Limit switches and all other pilot control equipment including pressure, vacuum, temperature, and liquid-level switches, plugging switches, speed switches, solenoids and terminal blocks, (linestarter modification kits, pilot devices used in appliances, air-conditioning, refrigeration, heating and domestic installations not included)	818,558
Resistance welding and electronic control equipment including electronic and static control assemblies, electronic and static magnetic amplifiers, electronic relays, photo-electric controllers, voltage, speed, follow-up, position, inspection and gauging apparatus and solid-state control devices, (packaged static adjustable voltage drives not included)	1
Renewal parts for industrial control equipment including modification, accessory and repair kits and separately furnished overload relay heaters	1,860,409
All other industrial control equipment	3,422,740
Total	23,911,277

¹ Included with "All other industrial control equipment".

TABLE 26. Factory Shipments of Domestic Water-tank Heaters, 1958 and 1959 (from All Industries)

	1958		1959	
	Number	Value of factory shipments	Number	Value of factory shipments
Cast iron, for coal, wood or oil (120 gallons or less)	988	151,318	655	62,700
Gas, automatic	81,725	5,911,895	112,283	7,048,315
Gas, not automatic	8,339	354,433	6,408	294,595
Electric, circulating type	23,518	140,164	17,912	96,456
Electric, immersion type	289,285	704,824	364,564	803,054
Clamp-on-type	12,966	61,653	9,376	46,661
Electric, automatic storage tank type, including tank and controls	85,281	5,508,107	121,692	7,645,356
Totals	502,102	12,832,394	632,890	15,997,137

TABLE 27. Production¹ of Household Mechanical Refrigerators,² 1950-59 (from All Industries)

Year	Number	Selling value at works	Year	Number	Selling value at works
1950	341,596	66,225,801	1955	271,532	49,548,437
1951	278,036	54,524,690	1956	269,213	47,443,340
1952	244,433	46,046,709	1957	235,539	42,429,856
1953	275,415	50,943,211	1958	226,523	39,759,101
1954	229,964	44,037,931	1959	256,778	44,548,660

¹ Factory shipments since 1952.² Complete units (electric and gas), all sizes.

TABLE 28. Factory Shipments of Refrigeration Equipment, 1958 and 1959 (from All Industries)

Type	1958		1959	
	Number	Selling value at works	Number	Selling value at works
Household refrigerators:		\$		\$
Household mechanical refrigerators, complete units (electric and gas), all sizes	226,523	39,759,101	256,778	44,548,660
Self-contained units:				
Milk coolers, all sizes	529	94,067	181	210,069
Ice-cream cabinets, all sizes	1,086	370,525	878	314,517
Beverage coolers, all sizes	3,720	1,174,628	4,963	1,467,695
Water-coolers, all sizes	40	19,624	14	1,437
Freezers—Frosted food cabinets	1,870	384,290	1,197	738,879
Home freezers, all sizes	31,685	6,713,992	60,665	12,103,680
Fixtures:				
Display cases, normal temperature	2,202	1,750,399	2,206	1,724,546
Low-temperature refrigerators	829	763,282	983	845,447
Reach-in refrigerators (remote only)	433	270,857	515	323,237
Sectional walk-in coolers, all types	852	1,023,891	758	1,118,114
Self-contained commercial refrigerator products:				
Display cases, all sizes	698	753,739	873	874,845
Reach-ins, all sizes	546	314,305	408	246,314
Evaporators:				
Unit cooler type, all sizes .....	..	526,166	..	720,912
Fin coils, all sizes .....	..	481,640	..	759,713
Ice-makers—Domestic .....	..	6,514	..	..
All other sizes .....	..	4,549	..	..
Compressors and condensing units:				
Domestic, for assembly in individual household cabinets	48,212	1,472,600	10,410	2,029,469
Commercial—Low pressure	3,139	1,141,991		
Evaporative condensers:				
Low pressure .....	..	190,846	..	317,219
Ammonia .....	..	24,945	..	..
All other refrigeration equipment .....	..	5,505,498	..	5,322,133
Totals	—	62,747,449	—	73,666,886

TABLE 29. Factory Shipments of Cutouts and Fuses, 1958 and 1959 (from All Industries)

Type	Selling value at works	
	1958	1959
dollars		
Open, semi-enclosed and enclosed distribution cutouts (601 volts and above), indoor and outdoor fused disconnect switches including porcelain housed, removable switch blades for use therewith (not including fuse links therefore) and repair parts	1,438,822	1,482,995
Fuse links for distribution cutouts	307,991	250,651
Oil fuse cutouts including fuse links therefore and repair parts	1	1
Power fuses (solid material type) — Up to and including 600 volts	538,149	599,790
Power fuses 601 volts and above (solid material and current limiting types), fuse supports, fuse mountings and repair parts		
Fuse links for power fuses 601 volts and above (solid material and current limiting types)	1	1
Cartridge fuses	1,556,960	1,306,985
Plug fuses		
Individual cutouts for cartridge and plug fuses	193,602	204,652
All other fuses	222,342	156,295
Renewal elements for cartridge fuses	1	1
Totals	4,257,866	4,001,368

¹ Included in "All other fuses".

TABLE 30. Factory Shipments of Electric Lighting Fixtures 1958 and 1959 (from All Industries)

Type	Selling value at works	
	1958	1959
dollars		
Residential:		
Incandescent	5,923,000	6,622,000
Fluorescent	1,567,000	1,222,000
Commercial and industrial:		
Incandescent	3,190,000	4,132,000
Fluorescent	16,136,000	20,035,000
Street-lighting	4,133,000	5,123,000
Searchlights and floodlights	1,670,000	1,871,000
Other lighting equipment ¹	3,425,000	2,836,000
Totals	36,044,000	41,841,000

¹ Does not include floor lamps or table lamps.

TABLE 31 A. Factory Shipments of Wiring Devices, 1958 (from All Industries)

Type	Selling value at works
	\$
Incandescent sockets (lamp holders) — Metal shell	446,022
Porcelain, plastic, rubber and others	1,208,267
Fluorescent sockets (lampholders) all types	400,426
Switches — Surface and flush types (except switches enclosed safety type)	1,576,375
Appliance	1,504,030
Canopy, pendant and all others	84,269
Receptacles (convenience outlets) single and duplex	1,645,791
Wall plates for switches and outlets	415,153
Attachment plugs, caps and cord connectors	275,938
Heater (or appliance) plugs	} 177,873
Current taps and attachment plugs	
Cord sets (all types)	1,470,946
Outlet and switch boxes including covers	1
Outlet box connectors for armoured and non-metallic sheathed cable	1
Other wiring devices (except automobile starting switches and time switches)	3,703,580
Total	12,908,670

¹ Included with "Conduit and fittings" in 1958.

TABLE 31 B. Factory Shipments of Wiring Devices, 1959 (from All Industries)

Type	Selling value at works
	\$
Incandescent sockets (lamp holders) — Metal shell	414,367
Porcelain, plastic, rubber and others	1,059,246
Incandescent lamp holders, outlet box type, plastic or porcelain	1
Fluorescent sockets (lampholders) all types	447,750
Switches — Surface and flush types (except switches enclosed safety type)	1,731,190
Appliance	1,693,590
Canopy, pendant and all others	106,646
Receptacles (convenience outlets) — Non-grounded type	1,312,747
Grounded type	422,568
Wall plates (all types including switch and convenience outlet type)	421,043
Attachment plugs, caps, taps, and connectors — Non-grounded type	686,802
Grounded type	153,725
Cord sets (all types) except appliance hardware and automotive harnesses	1,679,772
Fluorescent lamp starters	1
Other wiring devices	3,109,638
Total	13,239,084

TABLE 32. Factory Shipments of Converter Equipment, 1958 and 1959 (from All Industries)

Type	Number	Total rating kv.	Selling value at works \$
1958			
Motor-generator sets—A.c. to d.c.	214	105,424	2,210,404
Frequency changer sets—A.c. to a.c. ....	..	..	94,147
Mercury arc and metallic rectifiers for power purposes ....	..	..	1,315,565
Parts and supplies for converter equipment ....	..	..	329,593
Total	—	—	3,949,709
1959			
Motor-generator sets—A.c. to d.c.	178	42,990	2,048,076
Frequency changer sets—A.c. to a.c. ....	..	..	75,698
Mercury arc and metallic rectifiers for power purposes ....	..	..	282,925
Parts and supplies for converter equipment ....	..	..	463,025
Total	—	—	2,869,724

TABLE 33. Production¹ of Pole Line Hardware, 1950-59 (from All Industries)

Year	Selling value at works	Year	Selling value at works
	\$		\$
1950.....	6,395,063	1955.....	9,130,000
1951.....	9,339,000	1956.....	11,888,000
1952.....	10,213,000	1957.....	11,988,000
1953.....	8,169,000	1958.....	12,303,000
1954.....	8,065,000	1959.....	12,251,000

¹ Factory shipments since 1952.TABLE 34. Production¹ of Domestic Washing Machines, 1950-59 (from All Industries)

Year	Hand		Electric			Gasoline		Total		
			Automatic	Conventional ²						
	Number	Selling value at works	Number	Selling value at works	Number	Selling value at works	Number	Selling value at works	Number	
		\$		\$		\$		\$		
1950	2,559	40,228	30,310	4,344,593	252,926	22,815,441	15,323	1,961,979	301,110	29,162,241
1951	382	6,672	26,951	5,409,527	198,149	19,611,547	11,248	1,418,120	236,730	26,445,866
1952	641	12,915	26,523	4,985,666	216,235	21,293,150	10,184	1,255,334	253,538	27,547,065
1953	1	22	26,427	5,149,210	211,278	21,747,767	10,118	1,164,607	247,824	28,061,606
1954	—	—	27,629	5,448,977	192,198	18,780,608	6,411	712,684	226,238	24,942,269
1955	—	—	36,782	7,136,332	237,600	22,765,765	5,420	622,432	279,802	30,524,529
1956	—	—	49,765	9,292,117	250,879	23,552,620	5,278	636,245	305,922	33,480,982
1957	—	—	52,569	10,313,242	220,632	20,283,254	3,546	414,987	276,747	31,011,483
1958 .....	...	...	60,326	11,983,936	234,200	21,800,798	3,686	422,006	298,212	34,206,740
1959 .....	...	...	76,718	14,668,986	246,191	21,440,807	3,974	454,854	326,883	36,564,647

¹ Factory shipments since 1952.² Includes apartment size which amounted to 2,751 units valued at \$145,261 in 1951; 3,107 units valued at \$169,858 in 1952; 1,896 units valued at \$107,768 in 1953; 638 units valued at \$37,028 in 1954; 802 units valued at \$49,750 in 1955; 473 units valued at \$45,124 in 1956; 86 units valued at \$9,600 in 1957 and none in 1958 and 1959.

TABLE 35. Production¹ of Domestic Electric Ironing Machines, 1950-59 (from All Industries)

Year	Number	Selling value at works	Year	Number	Selling value at works
		\$			\$
1950	19,129	1,527,938	1955	3,900	367,000
1951	10,342	895,429	1956	4,647	380,000
1952	12,316	906,010	1957	2,740	310,000
1953	11,112	886,979	1958	1,754	230,000
1954	6,020	530,035	1959	1,115	177,342

¹ Factory shipments since 1952.**TABLE 36. Production of Miscellaneous Electrical Appliances, 1957-59 (from All Industries)**

Item	1957		1958		1959	
	Number	Selling value at works	Number	Selling value at works	Number	Selling value at works
		\$		\$		\$
Heating pads	144,277	499,245	144,237	494,160	176,219	548,998
Clothes dryers, automatic	65,950	9,191,492	81,868	10,693,460	105,813	13,589,450
Floor polishers	205,525	6,559,657	218,747	6,743,815	227,258	6,742,781
Coffee makers, domestic	131,049	1,510,628	108,312	1,301,567	124,806	1,582,752
Kettles	330,065	2,176,199	343,982	2,320,366	352,728	2,299,049
Fry pans	339,070	3,910,672	307,752	3,523,144	256,251	2,950,823
Fans:						
Portable	164,337	1,547,071	164,334	1,548,796	81,627	759,954
All other	15,303	491,041	20,489	529,989	30,192	652,396

TABLE 37. Production¹ of Watt-hour Meters, 1950-59 (from All Industries)

Year	Quantity	Selling value at works	Year		Quantity	Selling value at works
			No.	\$		
1950	488,932	6,668,164	1955		471,354	7,053,000
1951	509,752	7,211,494	1956		534,742	8,019,000
1952	391,232	6,190,325	1957		469,188	7,951,000
1953	411,523	6,936,263	1958		399,935	6,915,000
1954	434,169	7,368,439	1959		410,943	7,493,000

¹ Factory shipments since 1952.**TABLE 38. Factory Shipments of Capacitors, 1958 and 1959 (from All Industries)**

Item	1958		1959	
	Quantity	Value of factory shipments	Quantity	Value of factory shipments
Radio and TV capacitors, including radio condensers	3,292,963	..	3,256,908
Capacitors for electronic application (other than radio and TV)	2,635,997	..	2,716,212
Fluorescent ballast capacitors	5,928,960	..	5,973,120
Miscellaneous capacitors (excluding power)				
Totals				

TABLE 39. Production Workers, by Months, 1959

Month	Establishments reporting monthly detail ¹	
	Male	Female
January	31,325	13,559
February	31,524	13,736
March	31,669	13,734
April	31,876	13,974
May	32,383	14,149
June	32,902	14,516
July	32,739	14,348
August	33,140	14,924
September	33,863	15,308
October	33,227	15,249
November	32,997	14,784
December	32,291	13,992
Average for establishments reporting monthly detail	32,494	14,357
Average estimated for small establishments ²	1,317	852
Average for all establishments	33,811	15,209

¹ The number of production workers, by months, was collected only for larger establishments.² Small establishments were not asked to report details of employment.

TABLE 40. Employees and Earnings in the Electrical Apparatus and Supplies Industry, by Provinces, 1958 and 1959

Province	Employees					Earnings		
	Supervisory and office		Production and related workers		Total employees	Supervisory and office	Production and related workers	Total earnings
	Male	Female	Male	Female				
number								
1958								
Newfoundland, Nova Scotia, Quebec and New Brunswick	6,105	2,017	10,335	4,337	22,794	42,537,347	52,724,643	95,261,990
Ontario	13,170	4,609	22,357	9,855	49,991	91,651,881	120,571,454	212,223,335
Manitoba	205	70	626	104	1,005	1,197,129	2,689,074	3,886,203
Saskatchewan and Alberta	50	13	159	13	235	288,139	593,386	881,525
British Columbia	232	86	502	99	919	1,784,587	2,320,133	4,104,720
Canada	19,762	6,795	33,979	14,408	74,944	137,459,083	178,898,690	316,357,773
1959								
Newfoundland, Nova Scotia, New Brunswick and Quebec	6,110	1,970	10,484	4,795	23,359	44,191,110	57,474,446	101,665,556
Ontario	11,974	4,182	22,033	10,145	48,334	86,216,885	120,256,743	206,473,628
Manitoba	175	46	549	123	893	1,042,920	2,125,673	3,168,593
Saskatchewan and Alberta	51	17	188	17	273	301,595	723,844	1,025,439
British Columbia	253	85	557	129	1,024	1,840,488	2,683,382	4,523,870
Canada	18,563	6,300	33,811	15,209	73,883	133,592,998	183,264,088	316,857,086

**TABLE 41. Capital and Repair Expenditures in the Electrical Apparatus and Supplies Industry,
1955-59**

Industry	Capital expenditures		Repair and maintenance expenditures		Total capital and repair expenditures	
	Construction	Machinery and equipment	Construction	Machinery and equipment		
thousands of dollars						
1955						
Batteries	175	823	75	449	1,522	
Heavy electrical machinery and equipment	1,921	5,073	753	4,332	12,079	
Radios and radio parts ¹	1,398	4,265	453	1,491	7,607	
Refrigerators, vacuum cleaners, and appliances....	1,386	1,895	333	1,083	4,697	
Miscellaneous electrical products	3,229	8,481	1,218	5,961	18,889	
Totals	8,109	20,537	2,832	13,316	44,794	
1956						
Batteries	2	645	118	516	1,279	
Heavy electrical machinery and equipment	4,383	6,959	841	4,576	16,759	
Radios and radio parts ¹	1,392	3,228	693	1,230	6,543	
Refrigerators, vacuum cleaners, and appliances....	1,075	2,407	336	1,325	5,143	
Miscellaneous electrical products	7,834	13,636	1,771	7,948	31,189	
Totals	14,684	26,875	3,759	15,595	60,913	
1957						
Batteries	901	990	52	391	2,334	
Heavy electrical machinery and equipment	3,394	7,583	1,133	3,905	16,015	
Telecommunication equipment ¹	929	2,841	443	1,521	5,734	
Refrigerators, vacuum cleaners, and appliances....	1,855	1,939	331	1,201	5,326	
Miscellaneous electrical products	6,707	17,174	1,369	8,440	33,690	
Totals	13,786	30,527	3,328	15,458	63,099	
1958						
Batteries	733	710	107	520	2,070	
Heavy electrical machinery and equipment	905	4,480	956	3,397	9,738	
Telecommunications equipment ¹	291	2,117	493	1,299	4,200	
Refrigerators, vacuum cleaners, and appliances....	570	2,149	294	1,157	4,170	
Miscellaneous electrical products	4,768	12,322	1,111	7,775	25,976	
Totals	7,267	21,778	2,961	14,148	46,154	
1959 ^a						
Batteries	64	491	83	606	1,244	
Heavy electrical machinery and equipment	704	4,675	818	3,114	9,311	
Telecommunications equipment ¹	569	2,579	486	1,492	5,126	
Refrigerators, vacuum cleaners, and appliances....	1,671	2,603	419	1,375	6,068	
Miscellaneous electrical products	4,516	11,879	1,201	7,982	25,578	
Totals	7,524	22,227	3,007	14,569	47,327	

¹ See footnote to Table 3.

^a Included in "Heavy electrical machinery and equipment."

TABLE 42. Imports and Exports of Selected Commodities Considered to be of Interest to the Electrical Industry, 1958 and 1959

Product	1958		1959	
	Quantity	Value	Quantity	Value
(a) Imports		\$		\$
Batteries for flashlights, and parts.....	..	262,168	..	197,736
Batteries, hearing-aid, and parts .....	..	417,845	..	456,322
Batteries, electric and galvanic primary, and complete parts, n.o.p. ....	..	941,307	..	1,060,743
Storage batteries, n.o.p., and parts, including separator walls of wood.....	..	1,817,439	..	2,095,220
Cleaners, electric vacuum..... No.	136,288	4,761,722	162,765	5,396,668
Cleaners, hand-vacuum, and attachments, and complete parts of all vacuum cleaners.....	..	2,336,690	..	2,855,581
Cooking stoves, electric, valued at more than \$25 each .. "	6,361	758,938	4,404	684,148
Space-heating and cooking apparatus, electric, n.o.p. ....	..	3,578,948	..	3,900,841
Heating apparatus, electric, other than for cooking or space-heating.....	..	2,001,599	..	2,311,970
DYNAMOS or generators, and parts .....	..	12,113,738	..	10,181,332
Fuses, fuse plugs and cutouts, electric, and complete parts, n.o.p. ....	..	1,340,943	..	1,170,351
Fluorescent tubes and other arc lamps	" 591,198	584,711	1,133,980	1,101,463
Home or farm freezers, electric.....	" 49,290	8,329,067	41,024	6,959,179
Photoflash lamps.....	" 3,109,466	201,786	5,406,466	232,400
Lamps, electric, incandescent, carbon filament.....	" -	-	-	-
Lamps, electric, incandescent, metal filament.....	" 31,565,877	3,304,979	12,726,258	2,740,667
Lights — Electric, head, side and tail lights, n.o.p., electric torches or flashlights and parts.....	..	1,830,632	..	597,879
Electric light fixtures and appliances, n.o.p., and complete parts .....	..	6,916,442	..	7,730,045
Lightning arresters, choke coils, reactors and other protective devices, and complete parts, n.o.p. ....	..	458,559	..	524,976
Magnetos and complete parts, for the manufacture of internal combustion engines .....	..	44,025	..	17,891
Electrical instruments and apparatus of precision of a class or kind not made in Canada, as enumerated in tariff item 445n.....	..	15,760,723	..	13,314,359
Meters, electric, and complete parts .....	..	2,756,336	..	2,667,789
Motors, electric, valued at less than \$10 each..... "	" 171,636	664,920	421,344	2,406,561
Motors, electric, n.o.p., valued at \$10 or over and complete parts .....	..	15,522,840	..	10,458,100
Refrigerators, electric, domestic or store, completely equipped or not	" 105,034	16,661,386	91,200	15,833,023
Refrigerators, n.o.p., equipped or not	" 3,303	231,138	3,362	278,895
Refrigerators, parts of .....	..	9,573,369	..	14,846,078
Rheostats, controllers and other starting and controlling devices, and parts, n.o.p. ....	..	10,254,202	..	13,150,961
Sad irons, electric, and parts .....	..	605,856	..	823,220
Self-contained lighting outfits and parts, n.o.p. ....	..	12,744	..	5,819
Sockets, outlets and receptacles and parts, n.o.p. ....	..	1,856,374	..	2,238,101
Spark plugs, magnetos, n.o.p., and other ignition apparatus and parts .....	..	1,146,988	..	1,721,252
Switches, switchboards, n.o.p., circuit breakers and parts .....	..	11,965,667	..	12,798,549
Switch gear, flame-proof, electric, for use underground in coal mines and parts.....	..	107,755	..	61,483
Telegraph apparatus, electric, and parts.....	..	4,553,633	..	5,081,614
Telephone apparatus, electric, and parts .....	..	15,020,488	..	11,727,624
Television receiving sets"	13,960	1,929,133	12,735	1,743,133

TABLE 42. Imports and Exports of Selected Commodities Considered to be of Interest to the Electrical Industry, 1958 and 1959 — Continued

Product	1958		1959	
	Quantity	Value	Quantity	Value
(a) Imports — Concluded:		\$		\$
Transformers and parts, n.o.p. ....	..	8,098,613	..	7,720,535
Washing machines, electric domestic	No.	31,129	4,389,881	42,211
Washing machines, domestic, parts of .....		..	3,855,729	..
Radio & T.V. receiving tubes	"	7,762,119	7,423,459	9,167,653
Radio receiving sets	"	288,131	6,531,304	576,306
Radio receiving sets, parts of, as enumerated in tariff item 4450 .....		..	6,206,447	..
Radio tube parts as enumerated in tariff item 445p .....		..	7,109,562	..
Radio and wireless apparatus, electric, n.o.p. ....		..	33,287,335	..
Electric dry-shaving machines, for use in removing human hair, and parts thereof .....		..	3,688,468	..
Electric steam turbo generator sets, 700 h.p. and greater, of a class or kind not made in Canada, and parts	"	10	12,187,607	13
Electric or gas welding apparatus, not including motors .....		..	5,459,661	..
Sound equipment .....		..	3,033,030	..
Tape recorders and parts .....		..	2,298,696	..
Electrical apparatus, n.o.p., and parts .....		..	30,582,738	..
Welding rods or welding wires of all kinds	cwt.	134,321	3,814,637	141,690
Equipment for generating electric power for farm purposes only .....		..	56,041	..
Sewing machines	No.	196,313	6,130,244	158,165
Dental engines, electric	"	351	59,169	446
Ice-making and refrigerating machinery, n.o.p., and parts .....		..	8,100,172	..
Water turbines, n.o.p., and parts .....		..	2,060,852	..
Air-conditioning apparatus, including blowers and ventilating machinery, and parts .....		..	9,932,659	..
Air conditioners, room size	"	12,153	1,839,979	16,522
Ironers, domestic electric	"	1,044	50,345	402
Clothes dryers, domestic electric	"	14,585	2,823,779	24,681
Oil burners, n.o.p.	"	1,913	176,352	1,642
Heating and cooking apparatus, parts of .....		..	13,294,615	..
Industrial furnaces and parts .....		..	3,072,118	..
Water heater parts, including automatic pilots, thermostatic and other controlling devices .....		..	551,464	..
Water heaters, gas	"	28,414	1,492,666	16,920
Water heaters, electric	"	16,751	590,607	11,279
Water heaters, n.o.p.	"	3,830	276,445	4,863
Aluminum wire and cable, twisted, stranded or not, reinforced with steel or not	cwt.	27,009	978,725	7,468
Copper wire, n.o.p.	lb.	210,440	109,557	50,239
Non-ferrous wire, single or several, covered with any material, including cable so covered .....		..	6,849,013	..
Non-ferrous wire, twisted, braided or stranded, including wire rope and wire cable, coated or not, n.o.p. ....		..	284,848	..
Non-ferrous wire of all kinds, n.o.p. ....		..	613,529	..
Insulators, electric, porcelain and parts .....		..	736,973	..
Insulators, electric, n.o.p., and complete parts .....		..	672,113	..
Phonographs, graphophones, gramophones and finished parts .....		..	2,008,498	..
Phonographs, coin-operated	No.	1,320	810,901	1,607
X-ray apparatus .....		..	4,664,536	..

TABLE 42. Imports and Exports of Selected Commodities Considered to be of Interest to the Electrical Industry, 1958 and 1959 — Concluded

Product	1958		1959		
	Quantity	Value	Quantity	Value	
(b) Exports:		\$		\$	
Storage batteries	No.	2,757	39,440	5,381	62,630
Storage battery parts .....		..	43,624	..	125,009
Batteries and parts, n.o.p. ....		..	118,732	..	89,114
Radio receiving sets (except batteries)	"	643	205,063	17,402	907,423
Radio and wireless apparatus, n.o.p. (except batteries) .....		..	5,968,634	..	8,974,436
Telegraph and telephone apparatus, n.o.p. ....		..	1,837,007	..	2,878,555
Transformers and parts .....		..	2,609,534	..	2,863,237
DYNAMOS and generators, and parts .....		..	1,861,340	..	4,255,685
Electric meters and parts .....		..	1,749,768	..	947,118
Electric motors and parts	"	..	1,095,977	..	2,294,241
Electric stoves and parts	"	709	136,834	2,334	352,200
Electric heating and cooking devices, domestic, n.o.p. ....		..	91,610	..	48,768
Spark plugs .....		..	2,169,325	..	1,952,112
Electrical parts for vehicles and engines .....		..	212,392	..	639,832
Switches, sockets and other wiring devices .....		..	94,198	..	164,974
Electric lamps and shades .....		..	17,392	..	20,118
Electric light fixtures and parts .....		..	149,597	..	180,520
Washing machines, domestic, electric	"	9,615	821,598	10,139	868,132
Electrical vacuum cleaners and parts	"	283	17,250	14	5,378
Refrigerators and parts, power	"	1,562	267,830	4,113	564,984
Electrical apparatus, n.o.p. ....		..	6,772,030	..	6,216,164

TABLE 43. Fuel and Electricity used in the Electrical Apparatus and Supplies Industry, 1959

Kind		Quantity	Cost at plant
1. Establishments reporting commodity detail:¹			\$
Bituminous coal:			
(a) From Canadian mines	ton	13,071	134,942
(b) Imported	"	94,902	1,038,746
Sub-bituminous coal (from Alberta mines only)	"	631	9,295
Anthracite coal	"	1,502	26,087
Lignite coal	"	390	2,372
Coke	"	487	14,967
Gasoline (including gasoline used in cars and trucks)	Imp. gal.	1,100,951	440,388
Fuel oil including kerosene or coal oil	"	7,387,150	1,815,861
Gas (a) Liquefied petroleum gases	Imp. gal.	799,779	142,616
(b) Other manufactured gas	Mcf.	22,172	23,097
(c) Natural gas	"	688,961	735,042
Other fuel		—	222,924
Electricity purchased	kwh.	516,196,610	4,934,143
Steam purchased		—	257,802
2. Estimate for establishments for which no data were collected:²			
Cost of fuel and electricity .....		...	378,873
3. All establishments:			
Total cost of fuel and electricity .....		...	10,177,155

¹ Commodity detail was requested only from larger firms.

² Totals only for fuel and electricity were collected from smaller firms.

Directory of Firms Included in the Electrical Apparatus and Supplies Industry, 1959

Name of firm	Location of plant
(a) Batteries	
Newfoundland:	
Hanning Electric Co. Ltd.	Topsail Hill, St. John's
Quebec:	
Cipel (Canada) Ltd.	Rue Notre Dame, Valleyfield
Hart Battery Co. (Canada) 1957	170 St. George St., St. Johns
New Era Battery Company	2240 Belleschasse St., Montreal
Service Specialty Company Ltd.	6205 Cote DeLiesse, Rd., Montreal
Ontario:	
Burgess Battery Company	415 Buttrey St., Niagara Falls
Electric Storage Battery Co. (Canada) Ltd.	663 Warden Ave., Scarborough & 2301 Dixie Rd., Cooksville
General Motors of Canada Ltd.	Oshawa
Globe Union Canada (1953) Ltd.	Ajax
Globelite Batteries (Eastern) Ltd.	Maplelane Kingston
Gould-National Batteries of Canada, Ltd.	Fort Erie
Hay Battery Co., Limited, The	1300 Barton St. E., Hamilton
Mallory Battery Company of Canada Limited	228 St. Helen's Ave., Toronto
National Carbon Company	805 Davenport Road, Toronto and Walkerton
Prest-O-Lite Battery Co. & Auto-Lite Batteries of Canada	1352-60 Dufferin St., Toronto
Manitoba:	
Globelite Batteries Limited	1717 Wellington Ave., Winnipeg
Ray-O-Vac (Canada) Limited	Barry St. and Sargent, St. James
Alberta:	
Alberta Battery Company Ltd.	1312 Centre St. S., Calgary
Electric Storage Battery Co. of Canada Ltd.	104-58th Ave., Calgary
Globelite Batteries (Eastern) Ltd.	510C-6th St. E., Calgary
Prest-O-Lite Battery Co. Ltd.	58th Ave. & 4th St. S. E., Calgary
British Columbia:	
Dollina Enterprises Ltd.	901 E. Hastings, Vancouver
Francis Battery Service	1412 Quadra St. W., Victoria
Giant Battery Co. Ltd.	1290 Howe St., Vancouver
Globelite Batteries (B.C.) Limited	202 # 6 Road, Richmond
Jones Bros. Batteries	1314 Quadra St., Victoria
Major Batteries Ltd.	271 Ingram St., Duncan
Russell Batteries	16 Nicol St., Nanaimo
(b) Heavy Electrical Machinery and Equipment	
Quebec:	
Air Reduction Canada Limited	905 Hodge St., Montreal
Alpha Electronic Products Co. Ltd.	205 St. Zotique St., Montreal
Associated Electrical Industries (Canada) Ltd.	562 Montee De Liesse, Montreal
Beauper Engineering Works Co.	3935 Newmarch St., Verdun
Brown, Boveri (Canada) Ltd.	St. Johns
Devoe Electric Switch Co. Ltd., The	325 Decelles St. Granby
Eastern Power Devices Ltd.	8355 Mountain Sights, Montreal
Electrical Mfg. Co. Ltd.	4th St., Montmagny
Electric Switchgear (1958) Ltd.	115 St. Denis Ave., St. Lambert, Montreal
Federal Pacific Electric of Canada	561 Maisonneuve St., Granby
Girard, Roger Inc.	10123 Hotel De Ville, Montreal
Kearney, James R. Corp. of Canada Ltd.	101 La Belle Blvd., St. Therese
Klockner Moeller Canada Ltd.	505 Edouard, Granby
Tamper Limited	160 St. Joseph St., Lachine
Ontario:	
Acme Electric Corporation Ltd.	Northline Rd. #50, Toronto
Allanson Manufacturing Corporation Ltd.	33 Cranfield Rd., Toronto
Allen-Bradley Canada Ltd.	135 Dundas St., Galt
Amalgamated Electric Corp. Ltd.	384 Pape Ave., Toronto
Amplifone Canada Ltd.	40 Dussek St., Belleville
Bogus Electric of Canada, Ltd.	River Rd., Billings Bridge
Bull Dog Electric Products Company (Canada) Ltd.	80 Clayton Road, Weston
Canadian Allis Chalmers Limited	55 Burwell Rd., St. Thomas
Canadian Atlas Transformer Co. Ltd.	17 Carlaw Ave., Toronto
Canadian Controllers Limited	1550 Birchmount Rd., Scarborough
Canadian Electric Box and Stampings Ltd.	950 Warden Ave., Scarborough
Canadian General Electric Co. Ltd.	Guelph
Canadian General Electric Co. Ltd.	940 Lansdowne Ave., Toronto
Canadian General Electric Co. Ltd.	107 Park St., Peterborough
Canadian Sterling Electric Ltd.	430 Cannon St. E., Hamilton
Canadian Westinghouse Co. Ltd.	286 Sanford Ave. N., Hamilton & Stratford
Canadian Westinghouse Co. Ltd.	Clark Side Road & Huron St., London
Canadian Westinghouse Co. Ltd.	1475 Queensway, Etobicoke
Cansfield Electrical Works Limited	260 Geary Ave., Toronto
Crompton Parkinson Electrical Ltd.	Shaver St., Brantford
Crothers Mfg. Ltd.	772 Warden Ave., Scarborough
Dominion Cutout Co. Limited	250 Richmond St. W., Toronto
Dresser Electric Ltd.	877 Walker Rd., Windsor

Directory of Firms Included in the Electrical Apparatus and Supplies Industry, 1959 — Continued

Name of firm	Location of plant
(b) Heavy Electrical Machinery and Equipment — Concluded	
Ontario — Concluded:	
Eastern Power Devices Limited	2401 Dixie Rd., Port Credit
English Electric Company of Canada Ltd.	George Street, St. Catharines
Ferranti-Packard Electric Limited	Industry St., Mount Dennis, Toronto
Ferranti-Packard Electric Limited	St. Catharines
F.H. Welding Machines Ltd.	92 North Queen St., Toronto
Gregory Fasteners Ltd.	108 Tyco Dr., Toronto
Hammond Manufacturing Co. Ltd.	Speedvale Ave. & Edinburgh Rd., Guelph
Industrial Transformer Products	120 Manville Rd., Scarborough
Jones & Moore Electric Co. Ltd.	296 Adelaide St. W., Toronto
Leland Electric Canada Ltd.	50 Crimea St., Guelph
Lincoln Electric Co. of Canada Ltd.	179 Wicksteed Ave., Leaside
Link Welder of Canada Ltd.	2930 College Ave., Windsor
Lovatt Engineering Limited	3545 Danforth Ave., Scarborough
Mechron Engineering Products Ltd.	2437 Kaladar Ave., Ottawa
Milton Electric & Machinery Ltd.	208 Chestnut St. E., Whitby
Modern Handling Methods Ltd.	55 Head St., Dundas
Moloney Electric Co. of Canada Ltd.	213-219 Sterling Road, Toronto
Pioneer Electric Eastern Ltd.	2 Audley St., Toronto
Potter & Brumfield Canada Ltd.	135 Oxford St., Guelph
Powerlite Devices Ltd.	54 Atomic Ave., Toronto
Progressive Welder (Canada) Ltd.	635 Richmond St., Chatham
Randall, Douglas, (Canada) Ltd.	126 Manville Rd., Scarborough
Redmond Electric Motors of Canada Ltd.	121 Woodworth Ave., St. Thomas
Reliance Electric & Engineering (Canada) Limited	130 Dennistoun St., Welland
Richardson-Allen of Canada Ltd.	1236 Birchmount Rd., Scarborough
Robbins & Myers Co. of Canada Ltd., The	Morrell Street, Brantford
Sangamo Company, Limited	215 Laird Drive, Leaside, Toronto
Shoe Machine Parts Ltd.	60 Tecumseh St., Toronto
Sois Electric (Canada) Ltd.	377 Evans Ave., Toronto
Square D Company of Canada Limited	Industry Street, Toronto
Stark, H.G. & Co. Ltd.	126 Willowdale St., Willowdale
Stegg Electric Ltd.	34 Bertram Blvd., Belleville
Union Switch Box Co. Ltd.	35 McCaul St., Toronto
Ward Leonard of Canada Ltd.	1070 Birchmount Rd., Toronto
Weld-O-Matic Machines Ltd.	519 Parkdale Ave. N., Hamilton
Manitoba:	
Amalgamated Electric Corp. Ltd.	677 Notre Dame Ave., Winnipeg
Pioneer Electric Limited	1 Rockwood Place, Fort Garry
Pioneer Electric Brandon Ltd.	11th & Richmond Avenue, Brandon
Stephenson, J.R. Ltd.	555 Madison St., St. James
Saskatchewan:	
Pioneer Electric (Sask.) Ltd.	1600 — 1st Ave., Regina
Smith-Roles Ltd.	34th St. & Albert Ave., Saskatoon
Alberta:	
Camrose Electric Controls Ltd.	5612-49th Ave., Camrose
Pioneer Electric Alberta Ltd.	5727-53A Ave., Red Deer
Timewell Controls, Ltd.	5220-1A St. S.E., Calgary
British Columbia:	
British Columbia Transformer Co. Ltd.	6336 Lougheed Hwy., North Burnaby
Canadian Westinghouse Co. Ltd.	281 Industrial Ave., Vancouver
Electric Panel Manufacturing Ltd.	1100 W. 6th Ave., Vancouver
Federal Pacific Electric of Canada	22 East 5th Avenue, Vancouver
Transco Mfg. Ltd.	7545 Conway St., Burnaby
(c) Telecommunication Equipment (Formerly Radios and Radio Parts)	
Nova Scotia:	
Emi-Cossor Electronics Ltd.	Dartmouth
Quebec:	
Amplitrol Electronics Ltd.	7080 Hutchison St., Montreal
Audio-Vox Intercom Inc.	4510 DeLaroche, Montreal
Canadian Aviation Electronics Ltd.	6214 Cote De Liesse Road, Montreal
Canadian Marconi Company	2442 Trenton Road, Montreal
Central Dynamics Ltd.	147 Hymus Blvd., Pointe Claire
Chaput, Paul, Limitée	2626 Bates Rd., Montreal
Constanta Co. of Canada Ltd., The	280 Regine Ave., Verdun
Electrical Products Mfg. Co. Ltd.	5785 Pare St., Montreal
Electrolabs Reg'd.	7385 St. Lawrence Blvd., Montreal
Electronic Enterprises Ltd.	270 Vitre St. W., Montreal
International Systems Ltd.	6235 Mountain Sights Ave., Montreal
King's Electronics (Canada) Ltd.	2425 Grand Blvd., Montreal
Lifco Record Players	699 St. Maurice, Montreal
Montreal Phono Co. Ltd.	52 Nazareth St., Montreal
Multi-Vox Ltd.	9967 St. Michel Blvd., Montreal
Norel Electrical Products	282 Ontario St. W., Montreal
Pylon Electronic Development Company Limited	161 Clement St., Ville La Salle

Directory of Firms Included in the Electrical Apparatus and Supplies Industry, 1959 — Continued

Name of firm	Location of plant
(c) Telecommunication Equipment — Continued	
Quebec — Concluded:	
RCA Victor Company Limited	1001 Lenoir St., Montreal
Radio Engineering Products	325 Decelles St., Granby
Record Players Corp.	9500 St. Lawrence Blvd., Montreal
Shelburn Industries (Canada) Ltd.	642 de Courcelle St., Montreal
Standard Telephones and Cables Mfg. Co. (Canada) Ltd.	9600 St. Lawrence Blvd., Montreal
Superior Electronic Inc.	7205 St. Urbain St., Montreal
Televox Systems Reg'd.	410 Lafayette Street, Quebec
United Car Fastener Company of Canada Limited	St. Remi
Ontario:	
Addison Industries Ltd.	40 Queen Elizabeth Blvd., Toronto
Aerovox Canada Limited	1551 Barton St. E., Hamilton
Airtron Canada Ltd.	349 Carlaw Ave., Toronto
Allied Circuit Techniques Ltd.	29 Brock St., Oakville
Andrew Antenna Corp. Ltd.	606 Beech St., Whitby
Antiference (Canada) Ltd.	189 Bartley Dr., Toronto
Arrow Radio Co.	1829 Davenport Rd., Toronto
Audio Transformer Co.	202 Regina St., Waterloo
Automatic Coil Mfg. Ltd.	50 Wingold Ave., Toronto
Automatic Radio of Canada, Ltd.	25 Bermonday Rd., Toronto
Avionics Limited	Stone Rd., Niagara-on-the-Lake
Beama Engineering Ltd.	76 Densley Ave., Toronto
Benco Television Associates Ltd.	27 Tabor Rd., Rexdale
Berlet Electronics & Controls	Galt
Canadian Admiral Corp. Ltd.	501 Lakeshore Rd., Port Credit
Canadian Arsenals Limited, Instrument & Radar Division	651 Warden Ave., Scarborough
Canadian Astatic Limited	2271-2273 Danforth Ave., Toronto
Canadian General Electric Co. Ltd.	830 Lansdowne Ave., Toronto
Canadian General Electric Co. Ltd.	189 Dufferin St., Toronto
Canadian Industrial Consultants Ltd.	60 Newcastle St., Toronto
Canadian Stack Pole Ltd.	550 Evans Ave., Toronto
Canadian Westinghouse Co. Ltd.	Brantford
Canadian Westinghouse Co. Ltd.	Longwood Rd., Hamilton
Canadian Westinghouse Co. Ltd.	Aberdeen Ave., Hamilton
Cannon Electric Canada Ltd.	160 Bartley Drive, Toronto
Centralab Canada Ltd.	Ajax
Coiben Manufacturing Co. Limited	5 Thorpe, Dundas
Collins Radio Co. of Canada Ltd.	11 Bermondsey Rd., Toronto
Consolidated Electronic Equipment Co.	94 Sheppard Ave. W., Willowdale
Craven Limited	500 Beech St., Whitby
Crown Metal Products	P.O. Box 156, Belmont
Darcy, J.H. Ltd.	51 Abbott St., Smiths Falls
Deca Mfg.	870 Eastern Ave., Toronto
Delhi Metal Products Co.	Waverly St., Delhi
Dominion Electrohome Industries Ltd.	809 Wellington St., Kitchener
Eclipse Electronic Co.	153 Logan Ave., Toronto
Electronic Controls Ltd.	257 Coleman St., Belleville
Electronic Craftsmen Ltd.	30 Weber St. N., Waterloo
Electronic Materials International Ltd.	342 Gladstone Ave., Ottawa
Electronics Corp. of America (Canada) Ltd.	104 Advance Rd., Toronto
Erie Resistor of Canada Ltd.	7 Fraser Ave., Trenton
Essex Electronics of Canada Ltd.	99 Wragge St., Trenton
General Instruments — F.W. Sickles of Canada Ltd.	Weber St. S., Waterloo
Gordon Ruth & Co.	354 Princess Ave., London
Gromard Electronics Ltd.	180 Chatham St., Hamilton
International Resistance Co. Ltd.	349 Carlaw Ave., Toronto
Lindsay Antenna & Speciality Products	11 Wellington St., Lindsay
Marsland Engineering Ltd.	154 Victoria St., Kitchener
Marsland, Eric, & Co.	824 Victoria St., Kitchener
McCurdy Radio Industries	22 Front St. W., Toronto
Measurement Engineering Limited	Arnprior
Meredith, C.C. & Co. Ltd.	80 Thomas St., Streetsville
Methode Mfg. Canada Ltd.	10th Ave., Hanover
Northern Electric Co. Ltd.	250 Sidney St., Belleville
Northern Radio Manufacturing	1950 Bank St., Ottawa
Philco Corporation of Canada Ltd.	Don Mills Road, Don Mills
Phillips Electronics Industries	11-19 Brentcliffe Rd., Leaside
Precision Electronic Components (1956) Ltd.	50 Wingold Avenue, Toronto
Quality Hermetics Ltd.	45 Hollinger Rd., Toronto
Radio Components Ltd.	50 Wingold Ave., Toronto
Radio Condenser Co. Ltd.	6 Bermondsey Rd., Toronto
Radio Speakers (Canada) Ltd.	37 Hanna Ave., Toronto
Raytheon Canada Limited	61 Laurel St. East, Waterloo
RCA Victor Company Limited	Prescott
RCA Victor Company Limited	Renfrew
Rotronic Corp. Ltd.	380 Adelaide St. W., Toronto
Servomechanisms (Canada) Ltd.	Rexdale Blvd. & Kipling Ave., Toronto
Sinclair Radio Laboratories Ltd.	21 Toro Road, Downsview
Smailwood, S.G., Limited	397 King St. E., Kitchener
Snelgrove, C.R., Co. Ltd.	141 Bond St., Don Mills
Soundmaster Limited	283½ Bank St., Ottawa
Sparton of Canada Limited	Elm and Pine Sts., London
Standard Television Products Ltd.	108 Sydney St., Kitchener
Stanwyck Coil Products Ltd.	17 Laurier St., Hawkesbury
Sylvania Electric (Canada) Limited	Broad Street East, Dunnville
Telequipment Mfg. Co. Ltd.	729 Dundas St. (rear), London
Tenatronics Ltd.	Davis Drive, Newmarket
Titania Electric Corporation of Canada Limited	Herbert & Brock Sts., Gananoque
Tri-View Electronics Ltd.	10 Leswyn Rd., Toronto

Directory of Firms Included in the Electrical Apparatus and Supplies Industry, 1959 - Continued

Name of firm	Location of plant
(c) Telecommunication Equipment - Concluded	
Ontario - Concluded:	
Turret Electronics Ltd.	31 Hayes Ave., Guelph
Valerio Electronics Ltd.	3 Victoria Road, Guelph
Varian Associates of Canada Ltd.	45 River Drive, Georgetown
Watkins Electronics Ltd.	281 Dufferin St., Toronto
Welwyn Canada Ltd.	1255 Brydes St., London
Winco Electronics Co. Ltd.	362 Chilver Rd., Windsor
Manitoba:	
Canadian Aviation Electronics	387 Sutherland Ave., Winnipeg
Alberta:	
Electronic Research & Development Co. Ltd.	210-9th Ave., Calgary
British Columbia:	
Barvic Engineering Limited	909 Beach Ave., Vancouver
Chisholm Industries Ltd.	Electronic Ave., Vancouver
Ekolite Limited	525 East Hastings St., Vancouver
Humble Manufacturing Co. Ltd.	1895 West 2nd Ave., Vancouver
McCarter Radio & Television Ltd.	1825 W. 3rd Ave., Vancouver
Research Industries Ltd.	3158 Lake City Way, Burnaby
Sims Laboratories	Sidney
Spilsbury & Tindall Ltd.	120 E. Cordova St., Vancouver
Vision Manufacturing Limited	1430 River Rd., Richmond
West Coast Radio Telephone Mfg. Co.	1366 W. Pender St., Vancouver
(d) Refrigerators, Vacuum Cleaners and Appliances	
Quebec:	
Calsan Ltd.	638 St. Paul St., W., Montreal
Canadian Armature Works	6595 St. Urbain St., Montreal
Canadian General Electric Company Ltd.	5781 Notre Dame St. E., Montreal
Danby Appliance Co., The	5770 Ferrier St., Montreal
Defrostomatic Co. Ltd.	Granby
Electrolux (Canada) Limited	201 Laurier Ave., E. Montreal
Electro-Steam Manufacturing Co. Ltd.	154 Fairmount St. W., Montreal
Giant Electric Mfg. Co. Ltd.	40 Hurtubise Blvd., Montreal E.
Home Steel Products Co.	148 Port Royal W., Montreal
Lalonde, Frank P., Ltd.	Dorval
Progress Restaurant & Equipment Mfg. Ltd.	4863 St. Lawrence Blvd., Montreal
Roy, E., Industries, Ltd.	L'Assomption
Wright, P.M., Electrical Co.	7055 Alexandra St., Montreal
Ontario:	
Alpaca Electric Appliances Ltd.	369 Danforth Rd., Toronto
Brewes Electric	127 Raleigh Ave., Toronto
Brock Snyder Mfg. Co., The	21 John St., Grimsby
Canadian Chromalox Co. Ltd.	210 Rexdale Blvd., Rexdale
Canadian Curtis Refrigeration Co. Ltd.	20 St. George St., Hamilton
Canadian Fractional Motors	R.R. # 2, Wiarton
Canadian General Electric Co. Ltd.	30 Bradford St., Barrie
Canadian General Electric Co. Ltd.	24 Ward St., Toronto
Canadian Westinghouse Co. Ltd.	Longwood Road, Hamilton
Canadian Wilber B. Driver	50 Ronson Drive, Rexdale
Carrier Engineering Ltd.	70 Queen Elizabeth Blvd., Toronto
Chandler Electric Co.	3180 Dundas St. W., Toronto
Clyde Fans Limited	241 King St. East, Toronto
Continental Electric Co. Ltd.	310 Spadina Ave., Toronto
Cory Corporation Canada Ltd.	3300 Dufferin St., Toronto
Domestic Electric Co.	272 Church St., Toronto
Endress, George W., Co. Ltd.	Finley Ave., Ajax
Ever-Bright Ltd.	1415 Weston Rd., Toronto
Filter Queen Corp. Ltd.	252 Victoria St., Toronto
Filtro Electric Limited	5 Parneil Ave., Toronto
Force Electric Products Limited	163 Church St., Acton
Franklin Mfg. Co. (Canada) Ltd.	501 Franklin Blvd., Galt
Frigidaire Products of Canada Ltd.	1901 Eglinton Ave. E., Scarborough
General Freezer Ltd.	13 Wallace St., Woodbridge
Gilson Manufacturing Co. Ltd.	York Road Guelph
Glassheat of Canada Ltd.	1603 The Queensway, Toronto
Graham Metal Products Ltd.	Bishop St., Preston
Groh's Cooler Limited	Concession Rd., Preston
Hankscraft, (Canada) Ltd.	Finley Ave., Ajax
Hoover Company Ltd., The	Gage and Barton Sts., Hamilton
Hygrade Electric Mfg. Co.	636 Woburn Ave., Toronto
Keep Rite Products Ltd.	44 Elgin St., Brantford
Kelvinator of Canada Ltd.	1152 Dundas St. E., London
Knight Rebound Controlers Ltd.	361 Jackson St. W., Hamilton
Leader Fan Co. Ltd.	1228-30 Dupont St., Toronto
McGraw Electric Co. (Canada) Ltd.	75 Chisholm St., Oakville
Mccormack-Smyth Ltd.	242 Mineola Road, Port Credit
National Electric Mfg. Ltd.	53 Fraser Ave., Toronto

Directory of Firms Included in the Electrical Apparatus and Supplies Industry, 1959 — Continued

Name of firm	Location of plant
(d) Refrigerators, Vacuum Cleaners and Appliances — Concluded	
Ontario — Concluded:	
OHM-Rite Electric Ltd.	482 Wellington St. W., Toronto
Pyrexon Ray Co. Ltd.	17 Advance Rd., Toronto
Renfrew Electric Ltd.	Renfrew
Rotor Electric Company Ltd.	195 Rexdale Blvd., Toronto
Samson Dominion Ltd.	24-30 Curity Ave., Toronto
Schultz Mfg. Co. Ltd.	154-158 York St., Hamilton
Sea Breeze Mfg. Ltd. and Audio Tool & Eng. Ltd.	32 River St., Toronto
Sheraton Mfg. Co. Ltd.	604 King St., Toronto
Sloan Engineering Ltd.	1492 Don Mills Rd., Toronto
Standard Appliance Mfg. Co. Ltd.	1542 Queenway, Toronto
Sterling - Radiant Devices Limited	175 Eileen Ave., Toronto
Sunbeam Corporation (Canada) Ltd.	220 Islington Avenue South, Toronto
Superior Electrics Limited	Pembroke St. E., Pembroke
Switson Industries Ltd.	201 Major St., Welland
Thermax Division of Moffats Ltd.	79 West St. South, Orillia
Triad Equipment Ltd.	1 Torbarrie Rd., Downsview
Universal Cooler Co. Ltd.	145 Sherwood Drive, Brantford
Wood, W.C., Ltd., The	5 Arthur St. S., Guelph
Manitoba:	
Coldstream Refrigerator Mfg. Ltd.	1855 Sargent Ave., Winnipeg
Element Specialty Mfg. Co.	223 Morley Ave., Winnipeg
Master Products Co.	548 Selkirk Ave., Winnipeg
Red Devil Heater Mfg. Co.	272 Selkirk Ave., Winnipeg
Supreme Electric Appliances Ltd.	1098 Winnipeg Ave., Winnipeg
British Columbia:	
Allied Engineering of B.C. Ltd.	Granville Island, Zone 1
Elco Manufacturing Co. Ltd.	75 W. 3rd Ave., Vancouver
Leeders Pacific Ltd.	New Westminster
(e) Miscellaneous Electrical Products	
Quebec:	
American Metal Spinning Reg.	3176 Rachel St. E., Montreal
Amesse Rene, Enr.	103 Rue Elmslie, Ville La Salle
Canadian Cameo Chime Co. Ltd.	10332 Lille St., Montreal
Canadian General Electric Co. Ltd.	St. Malo
Canadian General Electric Co. Ltd.	Faillon St. W., Montreal
Canadian Westinghouse Co. Ltd.	Granby
Canadian Westinghouse Co. Ltd.	Trois Rivières
Columbia Electric Limited	261 Queen St., Montreal
Conduits National Company Limited	10150 Notre Dame St. E., Montreal
Crystal Craft Co.	704 Notre Dame W., Montreal
Dominion Electric Protection Co.	2040 Clark St., Montreal
Electric Sales & Service and Dave's Repair Shop	710 St. James St., Montreal
Electroliter Manufacturing Co. Ltd.	5849 Boyer St., Montreal
Federal Pacific Electric of Canada	1030 St. Alexander St., Montreal
Flex-i-Con Mfg. Company Ltd.	6155 Lafontaine St., Montreal
General Precision Industries Ltd.	Granby
Hale Brothers Limited	8255 St. Michel Blvd., Montreal
Haliburton & White Limited	8235 Mountain Sights Ave., Montreal
Hi-Scale Products (Canada) Ltd.	7893 St. Lawrence Blvd., Montreal
Iberville Fittings Limited	100 Longtin St., St. Johns
J.R. Electric Reg'd.	2520 Charland St., Montreal
Keith Lighting Co.	748 Lusignan St., Montreal
Kirkland, H.R. (Canada) Ltd.	4604 Coolbrook Ave., Montreal
Kitai-Electric	6911 Park Ave., Montreal
L'Air-Liquide Society	5030 Rouen St., Montreal
Mid-Day Fluorescent Fixtures Inc.	931 Amherst St., Montreal
Modulite Inc.	970 McEacherd, Outremont
National Electric Coil Can. Ltd.	450 St. Michel St., St. John's
National Semiconductors Ltd.	230 Authier St., Montreal
Northern Electric Co. Ltd.	1261 Shearer St., Montreal
Peerless Electric Limited	5585 Fullum St., Montreal
Progress Luminaire Ltd.	5525 Pare, Town of Mount Royal
Rest-Glow Mfg. Co. Ltd.	5600 Pare St., Montreal
Rosemount Industries Co. Ltd.	2090 Moreau St., Montreal
Schonbek, A., & Co. Ltd.	950 Montee de Liesse, Montreal
Snoe Lighting Reg'd.	8465 St. Maurice St., St. Hyacinthe
Speer Carbon Co. of Canada Ltd.	305 Decarie Blvd., Ville St. Laurent
Standard Electric Time Co. of Canada Ltd., The	103 Gun St., Pointe Claire
Sylvania Electric (Canada) Ltd.	1 Sylvan Rd., Drummondville
Temco Electric Mfg. Co.	4700 Amiens Street, Montreal
Universal Electric Products Co. Ltd.	2155 Moreau St., Montreal
Vogue Lighting Products	10570 Cobourg Ave., Montreal
Ontario:	
Allied Fluorescent & Incandescent Ltd.	2562 Stanfield Rd., Port Credit
Alwyn Lighting Products	469 King St. W., Toronto
Amcan Electrical Harness Ltd.	53 Fraser Ave., Toronto
Amphenol Canada Ltd.	349 Carlaw Ave., Toronto
Ardron-Mackie Ltd.	9 Niagara St., Toronto

Directory of Firms Included in the Electrical Apparatus and Supplies Industry, 1959 - Continued

Name of firm	Location of plant
(e) Miscellaneous Electrical Products - Continued	
Ontario - Concluded:	
Arrow Fluorescent Co. Ltd.	1480 Dundas Hwy. East, Toronto
Arrow-Hart & Hegeman (Canada) Ltd.	Industry Street, Toronto
Automatic Alarms & Signals Ltd.	87A Awde St., Toronto
Automatic Electric (Canada) Ltd.	100 Strowger Blvd., Brockville
Automatic Watchdog Controls Ltd.	4249 Dundas St. W., Toronto
Bach-Simpson Limited	1255 Brydges St., London
Bayly Engineering Ltd.	Hunt St., Ajax
Beck Electric Mfg. Co. Ltd.	10 Alcorn Ave., Toronto
Bowman Electric Herder	Petersburg
Branston, Chas. A., Limited	2508 Yonge St., Toronto
Brite-Lite Products Co. Ltd.	9 Magnificent Rd., Toronto
Burger Lighting Products Ltd.	27 Sackville Place, Toronto
Burdy Canada Ltd.	1530 Birchmount Rd., Scarborough
C. & M. Products Ltd.	124 Crockford Blvd., Toronto
C.L.M. Industries	3595 St. Clair Ave. E., Scarborough Jct.
Camesco Lighting Ltd.	280 Lansdowne Ave., Toronto
Canadian Electric Resistors Ltd.	Curity Ave., Toronto
Canadian Fluorescent Light Co.	308-310 Adelaide St. W., Toronto
Canadian General Electric Co. Ltd.	Dufferin St., Toronto
Canadian General Electric Co. Ltd.	400 South Service Rd., Oakville
Canadian General Electric Co. Ltd.	155 Brandon Ave., Toronto
Canadian General Electric Co. Ltd.	830 Lansdowne Ave., Toronto
Canadian General Electric Co. Ltd.	24 Ward St., Toronto
Canadian General Electric Co. Ltd.	299 Adelaide St. W., Toronto
Caneurop Mfg. Co.	82 North Line Rd., North York
Carriere & MacFeeters Ltd.	South End Adams St., Hamilton
Chadwick-Carrol Brass & Fixtures Limited	2700 Jane St., Downsview
Clare, C.P. Canada Ltd.	45 Knoll St., Port Colborne
Colonial Lighting Co., The	482 Wellington St. W., Toronto
Commercial Enclosed Fuse Co.	33 Labatt Ave., Toronto
Conduits National Company Ltd.	149 Sterling Rd., Toronto
Cords (Canada) Ltd.	1160 Birchmount Rd., Scarborough
Crouse-Hinds Company of Canada Ltd.	19 Sydenham St., Brantford
Crown Electrical Mfg. Ltd.	195 Wicksteed Ave., Toronto
Curtis Lighting of Canada Ltd.	140 Kendal Ave., Toronto
Daly-Capacitors Ltd.	550 Evans Ave., Toronto
Dominion Carbon Brush Co. Ltd.	60 Leslie St., Toronto
Dominion Electric Mfg. Company Ltd.	18 Hook Ave., Toronto
Dominion Machine & Tool Co. Ltd.	625-6th St. E., Owen Sound
Edwards of Canada Ltd.	Hunt St., Ajax
Elektrikords & Harness Ltd.	1850 Wilson Ave., Weston
Etlin, H.B., Co. Ltd.	50 Fnd St., Hamilton
Fanner Electrical Products Ltd.	19 Waterman Ave., Toronto
Federal Pacific Electric of Canada	130 King St. E., Toronto
Flxtrulite Mfg. Co.	1074 South Service Rd., Oakville
Frost, L.H. (Canada)	1244 Dufferin St., Toronto
Garcy Company of Canada Ltd.	482 Wellington St. W., Toronto
Globe Connectors Ltd.	155 Edwards St. Aurora
Hart Manufacturing (Canada) Ltd.	45 Racine Rd., Rexdale
Hoskins Alloys of Canada Ltd.	15 Towns Rd., Toronto
Jacka, E. Metal Fabricating Co.	216 Norseman St., Toronto
Jensen Electrical Mfg. Co. Ltd.	P.O. Box 213, Weston
Kamro Lighting Products	430 Elizabeth St., Guelph
Kearney, James R., Corp. of Canada Ltd.	130 Willowdale Ave., Willowdale
Kelk, George Limited	South Street, Preston
Kondi Mfg. Co. Ltd.	56 Charles St., Newmarket
Line & Cable Accessories Ltd.	67 Ontario St. S., Kitchener
Magnetic Coil Co.	23 Lewis St., Fort Erie
Markel Electric Products Ltd.	160 Perth Ave., Toronto
Mari Electric Ltd.	370 Olivewood Rd., Toronto
Mellon Electric Limited	1527 Crawford St., Windsor
Monitor Industries (Windsor) Ltd.	49 Mobile Drive, Toronto
Morganite Canada Limited	Industrial Ave., Woodstock
Nepco of Canada Ltd.	10 Vansco Rd., Etobicoke
Neosid (Canada) Ltd.	4544 Dufferin St., Toronto
Nichols, R.H., Ltd.	1340-2nd Ave., Owen Sound
Noma Lites Canada Ltd.	95 Wesley St., Etobicoke
Osborne Electric Co. Ltd.	426 Cannon St. E., Hamilton
Pasteuray of Canada Ltd.	105 Tyco Dr., Toronto
Pittsburgh Reflector of Canada Ltd.	50 Bermondsey Rd., Toronto
Powertronic Equipment Limited	33 Ingram Drive, Toronto
Pyle-National (Canada) Ltd.	296 Rexdale Blvd., Rexdale
Regent Equipment Mfg. Co. Ltd.	8 Vansco Rd., Toronto
S. & C. Electric Canada Ltd.	197 King St., London
Service Lamp Co. Ltd.	Don Mills
Setco Manufacturing Co. Ltd.	2 Sydney St., Hamilton
Slater, N., Co. Ltd.	Georgetown
Smith & Stone Limited	Ajax
Stark Electronics Instruments Ltd.	152 Lappin Ave., Toronto
Sterne Equipment Co. Ltd.	14 George St., Hamilton
Swift Devices Limited	625 Princess Ave., London
Taylor Electric Mfg. Co. Ltd.	50 Bertal Rd., Toronto
Telegraph Condenser Co. (Canada) Ltd.	32 Eastern Ave., Toronto
Toronto Metal Spinning Ltd.	19 Curity Ave., Toronto
Virden, John C., Limited	3160 Dundas St. W., Toronto
Vulcan Electric Products Ltd.	Commissioner's Rd., London
Wakefield Lighting Ltd.	45 Crockford Blvd., Scarborough
Waldman, Harvey, & Co.	1500 Kildare Road, Walkerville
Walker Metal Products Ltd.	Markham
White-Rodgers Ltd.	280 Lakeshore Rd., Toronto 14

Directory of Firms Included in the Electrical Apparatus and Supplies Industry, 1959 — Concluded

Name of firm	Location of plant
(e) Miscellaneous Electrical Products — Concluded	
Manitoba:	
Advance Lighting Co.	106 Midland St., Winnipeg
Globe Electric Manufacturers	446 Selkirk Ave., Winnipeg
Ideal Electric Mfg. Co. Ltd.	372 Selkirk Ave., Winnipeg
Lighting Materials Ltd.	803 Erin St., Winnipeg
L. & S. Electric Mfg. Ltd.	468 Ross Ave., Winnipeg
Super-Lite Electric Mfg. Co. Ltd.	1901 Logan Ave., Brooklands
Alberta:	
Technical Enterprises	6328 — 104th St., Edmonton
British Columbia:	
All-Brite Lighting (B.C.) Ltd.	650 Barnard St., Vancouver
Canadian Lighting Products Co.	319 W. Pender St., Vancouver
Duck, John, & Son, Limited	1246 Hornby St., Vancouver
Freeman, W., & Son	275 Woodland Drive, Vancouver
Lenkurt Electric Co. of Canada Ltd.	7018 Lougheed Hwy., N. Burnaby
Marine Electric Limited	137 W. 2nd St., North Vancouver
Vancouver Electric Boxes Ltd.	2060 W. Broadway, Vancouver
Vancouver Lighting Co. Ltd.	926 Hastings St., Vancouver
West Coast Electric Ltd.	1980 Cypress St., Vancouver
Western Lighting Fixture Co. Ltd.	462 East 5th Ave., Vancouver
(f) Wires and Cables	
New Brunswick:	
Western Wire & Cable Co. Ltd.	951 Fairville Blvd., Lancaster
Quebec:	
Aluminum Co. of Canada, Ltd.	Shawinigan Falls
Canada Wire & Cable Co. Ltd.	Durocher St., Montreal
Northern Electric Co. Ltd.	150 Metropolitan Blvd., Lachine
Phillips Electrical Co. (1953) Ltd.	5795 De Gaspé St., Montreal
Pirelli Cables Conduits Ltd.	77 Richelieu St., St. Johns
Royal Electric Co. (Que) Inc.	171 Hymus Blvd., Pointe Claire
Universal Wire & Cable Co. Ltd., The	2155 Moreau St., Montreal
Ontario:	
Boston Insulated Wire and Cable Co. Ltd.	118 Shaw St., Hamilton
Canada Wire & Cable Co. Ltd.	Laird Dr., Leaside
Canada Wire & Cable Co. Ltd.	Gilbertson Drive, Simcoe
Canadian General Electric Co., Ltd.	107 Park St., Peterborough
Federal Wire & Cable Co. Ltd.	265 Suffolk St., Guelph
General Wire & Cable Co. Ltd.	William St., Cobourg
Hawkesbury Wire & Cable Co. Ltd.	17 Laurier, Hawkesbury
Industrial Wire & Cable Ltd.	Index Rd., Toronto
Phillips Electrical Co. (1953) Ltd.	King St. W., Brockville
Pyrotexan of Canada Ltd.	Trenton
Standard Wire & Cable Ltd.	70 Wingold Ave., Toronto
Triangle Conduit & Cables (Canada) Ltd.	756 Warden Ave., Scarborough
Manitoba:	
Canada Wire & Cable Co. Ltd.	Fort Garry
Telecables & Wires Ltd.	Fennell St., Fort Garry
Saskatchewan:	
Western Wire & Cable Co. Ltd.	Weyburn
Alberta:	
Western Wire & Cable Co. Ltd.	12357 — 127th Ave., Edmonton
British Columbia:	
Canada Wire and Cable Co. Ltd.	Annacis Island, New Westminster
Phillips Electrical Co. Ltd.	8330 Chester St., Vancouver
Western Wire & Cable Co. Ltd.	2015 Columbia St., Vancouver

STATISTICS CANADA LIBRARY
BIBLIOTHÈQUE STATISTIQUE CANADA



1010316336

c. 3



THE ELECTRICAL APPARATUS AND SUPPLIES INDUSTRY - 1959