

U.S. Census Bureau  
Control Instruments - 2008  
MA334C(08)-1  
Issued July 2009

Address inquiries concerning these data to Consumer Goods Industries Branch, U.S. Department of Commerce, Census Bureau, Manufacturing and Construction Division, Washington, DC 20233-6900, or call Michael D. Perkinson, 301-763-4828.

These data are also available online through STAT-USA by subscription. For further information, visit <http://www.stat-usa.gov/> or call 1-800-STAT-USA.

Table 1. Value of Shipments of Control Instruments: 2008 to 2004  
[Millions of dollars]

| Product<br>class code | Product description                                                                        | Year |    | Value   |
|-----------------------|--------------------------------------------------------------------------------------------|------|----|---------|
| 3345120               | Controls for monitoring residential and commercial environments                            | 2008 | a/ | 2,133.0 |
|                       |                                                                                            | 2007 | a/ | 2,159.5 |
|                       |                                                                                            | 2006 |    | 2,054.2 |
|                       |                                                                                            | 2005 |    | 2,216.6 |
|                       |                                                                                            | 2004 |    | 2,099.5 |
| 3345130               | Process control instruments                                                                | 2008 | b/ | 7,805.4 |
|                       |                                                                                            | 2007 | a/ | 7,387.4 |
|                       |                                                                                            | 2006 |    | 7,279.4 |
|                       |                                                                                            | 2005 |    | 7,002.5 |
|                       |                                                                                            | 2004 |    | 6,485.0 |
| 3353131               | Power circuit breakers                                                                     | 2008 | c/ | 610.8   |
|                       |                                                                                            | 2007 | b/ | 579.9   |
|                       |                                                                                            | 2006 |    | 576.2   |
|                       |                                                                                            | 2005 |    | 597.9   |
|                       |                                                                                            | 2004 |    | 559.1   |
| 3353133               | Low voltage panelboards, distribution boards, and other switching and interrupting devices | 2008 | b/ | 2,815.8 |
|                       |                                                                                            | 2007 | a/ | 2,776.0 |
|                       |                                                                                            | 2006 |    | 2,550.4 |
|                       |                                                                                            | 2005 |    | 2,343.8 |
|                       |                                                                                            | 2004 |    | 2,315.1 |
| 3353135               | Fuses and fuse equipment                                                                   | 2008 |    | 311.7   |
|                       |                                                                                            | 2007 |    | 371.9   |
|                       |                                                                                            | 2006 |    | 364.5   |
|                       |                                                                                            | 2005 |    | 408.8   |
|                       |                                                                                            | 2004 |    | 417.6   |
| 3353137               | Molded case circuit breakers                                                               | 2008 | b/ | 1,267.4 |
|                       |                                                                                            | 2007 | b/ | 1,192.9 |
|                       |                                                                                            | 2006 |    | 1,142.6 |
|                       |                                                                                            | 2005 |    | 930.1   |
|                       |                                                                                            | 2004 |    | 868.8   |
| 3353139               | Ducts, 1,000 volts and under                                                               | 2008 |    | 436.5   |
|                       |                                                                                            | 2007 |    | 402.8   |
|                       |                                                                                            | 2006 |    | 304.5   |
|                       |                                                                                            | 2005 |    | 222.5   |
|                       |                                                                                            | 2004 |    | 199.2   |
| 335313A               | Switchgear (except ducts)                                                                  | 2008 | b/ | 3,739.4 |
|                       |                                                                                            | 2007 | a/ | 3,226.4 |
|                       |                                                                                            | 2006 |    | 2,944.7 |
|                       |                                                                                            | 2005 |    | 2,429.0 |
|                       |                                                                                            | 2004 |    | 2,003.1 |
| 3353141               | Relays, general purpose                                                                    | 2008 | c/ | 567.0   |
|                       |                                                                                            | 2007 | b/ | 563.7   |
|                       |                                                                                            | 2006 |    | 617.7   |
|                       |                                                                                            | 2005 |    | 590.9   |
|                       |                                                                                            | 2004 |    | 599.5   |
| 3353143               | Specific purpose industrial controls                                                       | 2008 | c/ | 3,210.1 |
|                       |                                                                                            | 2007 | c/ | 3,057.2 |
|                       |                                                                                            | 2006 |    | 2,895.7 |
|                       |                                                                                            | 2005 |    | 2,572.8 |
|                       |                                                                                            | 2004 |    | 2,872.0 |
| 3353146               | General purpose industrial controls                                                        | 2008 | c/ | 3,741.3 |
|                       |                                                                                            | 2007 | b/ | 3,765.2 |
|                       |                                                                                            | 2006 |    | 3,626.6 |
|                       |                                                                                            | 2005 |    | 3,491.4 |
|                       |                                                                                            | 2004 |    | 3,445.6 |
| 3353147               | Motor controller accessories and parts for industrial controls                             | 2008 | c/ | 312.2   |
|                       |                                                                                            | 2007 | b/ | 292.3   |
|                       |                                                                                            | 2006 |    | 358.3   |
|                       |                                                                                            | 2005 |    | 345.3   |
|                       |                                                                                            | 2004 |    | 392.2   |

Table 2. Shipments of Control Instruments: 2008 and 2007  
[Quantity in thousands of units. Value in thousands of dollars]

| Product code | Product description                                                                                                                                                                  | Year | No. of cos. | Quantity |      | Value     |  |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------|----------|------|-----------|--|
| 3345120      | Controls for monitoring residential and commercial environments                                                                                                                      | 2008 | (X)         | (X)      | a/   | 2,133,032 |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      | a/   | 2,159,530 |  |
| 3345120102   | Temperature responsive (thermostats)                                                                                                                                                 | 2008 | 39          | b/       |      | 311,815   |  |
|              |                                                                                                                                                                                      | 2007 |             | b/       | c/   | 317,925   |  |
| 3345120115   | Igniters                                                                                                                                                                             | 2008 | 3           | (D)      |      | (D)       |  |
|              |                                                                                                                                                                                      | 2007 |             | 16,056   |      | 95,332    |  |
| 3345120221   | Computerized energy control systems for buildings                                                                                                                                    | 2008 | 15          | a/       |      | 537,356   |  |
|              |                                                                                                                                                                                      | 2007 |             | r/       |      | 472,092   |  |
| 3345120224   | Other automatic controls                                                                                                                                                             | 2008 | 50          | (X)      |      | 783,466   |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      |      | 679,751   |  |
| 3345120225   | Temperature responsive control for major appliances                                                                                                                                  | 2008 | 10          |          |      | 113,236   |  |
|              |                                                                                                                                                                                      | 2007 |             |          | r/   | 195,432   |  |
| 3345120227   | All other controls for appliances                                                                                                                                                    | 2008 | 11          | (D)      |      | (D)       |  |
|              |                                                                                                                                                                                      | 2007 |             | 44,115   | r/   | 204,309   |  |
| 3345120229   | Parts and components for controls monitoring residential and commercial environments                                                                                                 | 2008 | 29          | (X)      |      | 168,306   |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      |      | 194,689   |  |
| 3345130      | Process control instruments                                                                                                                                                          | 2008 | (X)         | (X)      | b/   | 7,805,379 |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      | a/   | 7,387,383 |  |
| 3345130101   | Controllers (recording, indicating, or blind)1/                                                                                                                                      | 2008 | 32          |          |      | 834,191   |  |
|              |                                                                                                                                                                                      | 2007 |             |          |      | 858,765   |  |
| 3345130106   | Other unified electronic systems1/                                                                                                                                                   | 2008 | 22          |          | a/   | 74,802    |  |
|              |                                                                                                                                                                                      | 2007 |             |          | a/r/ | 59,367    |  |
| 3345130107   | Auxiliary stations and analog computing devices associated with the above, including manual loaders, auto-to-manual stations, ratio stations, adders, multipliers, integrators, etc. | 2008 | 6           | (D)      |      | (D)       |  |
|              |                                                                                                                                                                                      | 2007 |             | (D)      |      | (D)       |  |
| 3345130109   | Electronic systems, nonunified architecture type                                                                                                                                     | 2008 | 29          | (X)      | b/   | 962,528   |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      |      | 849,372   |  |
| 3345130111   | Industrial multifunction process computers                                                                                                                                           | 2008 | 30          | (X)      | c/   | 256,350   |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      | b/   | 245,140   |  |
| 3345130127   | Pneumatic systems and annunciators                                                                                                                                                   | 2008 | 18          | (X)      |      | (S)       |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      |      | (S)       |  |
| 334513022G   | Other industrial type instruments                                                                                                                                                    | 2008 | 58          | (X)      | a/   | 749,257   |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      | b/   | 590,262   |  |
| 334513021F   | Continuous process instruments                                                                                                                                                       | 2008 | 68          | (X)      | a/   | 801,221   |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      |      | 800,070   |  |
| 334513021V   | Instruments for all process variables not listed above                                                                                                                               | 2008 | 30          | (X)      | a/   | 203,467   |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      |      | 220,643   |  |
| 334513032S   | Parts for process control instruments                                                                                                                                                | 2008 | 66          | (X)      | c/   | 354,823   |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      | a/   | 341,907   |  |
| 3345130240   | Temperature measuring instruments, electrical and electronic measuring types                                                                                                         | 2008 | 64          | (X)      | a/   | 285,298   |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      |      | 260,398   |  |
| 3345130248   | Other temperature measuring instruments                                                                                                                                              | 2008 | 38          | (X)      |      | (S)       |  |
|              |                                                                                                                                                                                      | 2007 |             | (X)      | b/r/ | 240,661   |  |

Table 2. Shipments of Control Instruments: 2008 and 2007  
[Quantity in thousands of units. Value in thousands of dollars]

| Product code | Product description                                                                                                                                             | Year | No. of cos. | Quantity |           | Value     |        |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------|----------|-----------|-----------|--------|
| 3345130249   | Thermocouples and thermocouple lead wire                                                                                                                        | 2008 | 44          | (X)      | b/        | 251,506   |        |
|              |                                                                                                                                                                 | 2007 |             | (X)      | b/        | 232,788   |        |
| 3345130251   | All other types (resistance temperature detectors, radiation and optical sensors, thermistors, etc.)                                                            | 2008 | 46          | (X)      | a/        | 166,424   |        |
|              |                                                                                                                                                                 | 2007 |             | (X)      | a/r/      | 149,350   |        |
| 3345130264   | Pressure and draft measuring instruments                                                                                                                        | 2008 | 53          | (X)      | c/        | 585,420   |        |
|              |                                                                                                                                                                 | 2007 |             | (X)      |           | 554,686   |        |
| 3345130290   | Flow and liquid level measuring instruments, differential pressure types                                                                                        | 2008 | 90          | (X)      | a/        | 1,743,584 |        |
|              |                                                                                                                                                                 | 2007 |             | (X)      | a/        | 1,680,141 |        |
| 3345130293   | Humidity instruments (controlling, recording, indicating and transmitting, and associated primary humidity elements, excluding home and general purpose type)1/ | 2008 | 10          | (D)      |           | (D)       |        |
|              |                                                                                                                                                                 | 2007 |             | (D)      |           | (D)       |        |
| 3353131      | Power circuit breakers                                                                                                                                          | 2008 | (X)         | (X)      | c/        | 610,849   |        |
|              |                                                                                                                                                                 | 2007 |             | (X)      | b/        | 579,913   |        |
| 3353131101   | Power circuit breakers (sold separately) for use in metal clad switchgear, oil and oilless, over 1,000 volts, (number of breakers)1/                            | 2008 | 12          | (S)      | c/        | 93,803    |        |
|              |                                                                                                                                                                 | 2007 |             | c/       | b/        | 72,857    |        |
| 3353131103   | All other power circuit breakers (sold separately)                                                                                                              | 2008 | 27          | (D)      |           | (D)       |        |
|              |                                                                                                                                                                 | 2007 |             | (D)      |           | (D)       |        |
| 3353131129   | Parts for all power circuit breakers                                                                                                                            | 2008 | 15          | (D)      |           | (D)       |        |
|              |                                                                                                                                                                 | 2007 |             | (D)      |           | (D)       |        |
| 3353133      | Low voltage panelboards, distribution boards, and other switching and interrupting devices, 1,000 volts and below                                               | 2008 | (X)         | (X)      | b/        | 2,815,810 |        |
|              |                                                                                                                                                                 | 2007 |             | (X)      | a/        | 2,775,975 |        |
| 3353133201   | Fusible panelboards, including combination switch fuse                                                                                                          | 2008 | 38          | (D)      |           | (D)       |        |
|              |                                                                                                                                                                 | 2007 |             | (D)      |           | (D)       |        |
| 3353133104   | Circuit breaker panelboards                                                                                                                                     | 2008 | 54          | 6,952    | b/        | 1,036,626 |        |
|              |                                                                                                                                                                 | 2007 |             | 6,794    | a/        | 1,017,898 |        |
| 3353133207   | Distribution switchboards, fusible1/                                                                                                                            | 2008 | 27          | 20,782   | a/        | 89,386    |        |
|              |                                                                                                                                                                 | 2007 |             | 23,586   | a/        | 100,277   |        |
| 3353133211   | Distribution switchboards, circuit breaker1/                                                                                                                    | 2008 | 36          | (D)      |           | (D)       |        |
|              |                                                                                                                                                                 | 2007 |             | 269,602  | a/        | 582,055   |        |
| 3353133216   | Knife switches, heavy duty1/                                                                                                                                    | 2008 | 8           | (D)      |           | (D)       |        |
|              |                                                                                                                                                                 | 2007 |             | a/       | 1,593,671 | 207,303   |        |
| 3353133225   | Knife switches, circuit breaker type                                                                                                                            | 2008 | 8           | (D)      |           | (D)       |        |
|              |                                                                                                                                                                 | 2007 |             | (D)      |           | (D)       |        |
| 3353133227   | Knife switches, other1/                                                                                                                                         | 2008 | 6           | a/       | 1,305,531 | a/        | 76,036 |
|              |                                                                                                                                                                 | 2007 |             | c/       | 1,266,160 | a/        | 75,832 |
| 3353133233   | Other switches                                                                                                                                                  | 2008 | 36          | (X)      | b/        | 290,385   |        |
|              |                                                                                                                                                                 | 2007 |             | (X)      | b/r/      | 309,627   |        |
| 3353133237   | Other low voltage switchgear apparatus                                                                                                                          | 2008 | 26          | (X)      | b/        | 176,706   |        |
|              |                                                                                                                                                                 | 2007 |             | (X)      | a/r/      | 148,759   |        |
| 3353135      | Fuses and fuse equipment, under 2,300 volts (except power distribution cutouts)                                                                                 | 2008 | (X)         | (X)      |           | 311,669   |        |
|              |                                                                                                                                                                 | 2007 |             | (X)      |           | 371,899   |        |
| 3353135109   | Nonrenewable plug and cartridge fuses                                                                                                                           | 2008 | 15          | (X)      |           | (D)       |        |

Table 2. Shipments of Control Instruments: 2008 and 2007  
[Quantity in thousands of units. Value in thousands of dollars]

| Product code | Product description                                                                                                                                                                                 | Year | No. of cos. | Quantity |       | Value     |         |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------|----------|-------|-----------|---------|
|              |                                                                                                                                                                                                     | 2007 |             | (X)      |       | (D)       |         |
| 3353135113   | Other fuses and open fuse material, including renewable, cutouts, clips, bases, etc.                                                                                                                | 2008 | 14          | (X)      |       | (D)       |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      |       | (D)       |         |
| 3353137      | Molded case circuit breakers, 1,000 volts and under                                                                                                                                                 | 2008 | (X)         | (X)      | b/    | 1,267,402 |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      | b/    | 1,192,883 |         |
| 3353137105   | Molded case circuit breakers, industrial type                                                                                                                                                       | 2008 | 31          | (X)      | a/    | 650,731   |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      | r/    | 589,625   |         |
| 3353137112   | Molded case circuit breakers, residential or light duty type                                                                                                                                        | 2008 | 9           | (X)      |       | (D)       |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      |       | (D)       |         |
| 3353137117   | Molded case circuit breakers, marine, navy, aircraft and aerospace type                                                                                                                             | 2008 | 8           | (D)      |       | (D)       |         |
|              |                                                                                                                                                                                                     | 2007 |             | (D)      |       | (D)       |         |
| 3353137131   | Molded case circuit breakers, all other types, including automotive and electronic                                                                                                                  | 2008 | 13          | (D)      |       | (D)       |         |
|              |                                                                                                                                                                                                     | 2007 |             | (D)      |       | (D)       |         |
| 3353139      | Ducts, including plug-in units and accessories, 1,000 volts and under, consisting of enclosed sectionalized pre-fabricated bus bars rated 20 amperes or more and associated structures and fittings | 2008 | (X)         | (X)      |       | 436,461   |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      |       | 402,824   |         |
| 335313A      | Switchgear (except ducts)                                                                                                                                                                           | 2008 | (X)         | (X)      | b/    | 3,739,433 |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      | a/    | 3,226,425 |         |
| 335313A101   | Automatic and manual control panels (generators, transformers, feed-controls, etc.)                                                                                                                 | 2008 | 56          | (X)      | a/    | 385,555   |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      | r/    | 333,131   |         |
| 335313A204   | Metal clad switchgear (using power circuit breakers, oil and oilless), all voltages above 1,000 volts, up to and including 38kV, excluding load interrupter switchgear                              | 2008 | 30          | (X)      | c/    | 1,172,632 |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      | r/    | 881,881   |         |
| 335313A307   | Metal enclosed load interrupter switchgear assemblies, all voltages, including parts                                                                                                                | 2008 | 28          | (X)      | c/    | 442,515   |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      | b/    | 380,433   |         |
| 335313A311   | Metal enclosed low voltage power circuit breaker switchgear assemblies 1,000 volts and below, including parts and excluding load interrupter switchgear                                             | 2008 | 24          | (X)      | b/    | 336,510   |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      | a/    | 258,621   |         |
| 335313A313   | Metal enclosed bus bars when sold separately, above 1,000 volts, including isolated, segregated, nonsegregated and cable bus bars                                                                   | 2008 | 8           | (X)      | c/    | 64,926    |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      | c/    | 65,070    |         |
| 335313A321   | Power switching equipment, indoor and outdoor, excluding structures                                                                                                                                 | 2008 | 28          | (X)      | b/    | 670,306   |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      |       | 638,916   |         |
| 335313A332   | Power and ground connectors, overhead transmission and distribution, all types                                                                                                                      | 2008 | 7           | (X)      |       | (D)       |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      |       | (D)       |         |
| 335313A335   | Power fuses, fuse links, and distribution cutouts                                                                                                                                                   | 2008 | 8           | (X)      |       | (D)       |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      |       | (D)       |         |
| 335313A337   | Other switchgear devices, including regulators and miscellaneous switchboard devices (for sale separately)                                                                                          | 2008 | 21          | (X)      | b/    | 219,057   |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      | a/r/  | 176,002   |         |
| 3353141      | General purpose and other relays                                                                                                                                                                    | 2008 | (X)         | (X)      | c/    | 566,959   |         |
|              |                                                                                                                                                                                                     | 2007 |             | (X)      | b/    | 563,688   |         |
| 3353141101   | Industrial control relays (all voltages), n.e.c.                                                                                                                                                    | 2008 | 46          | b/       | 7,727 | b/        | 195,051 |

Table 2. Shipments of Control Instruments: 2008 and 2007  
[Quantity in thousands of units. Value in thousands of dollars]

| Product code | Product description                                                                                                                    | Year | No. of cos. | Quantity |        | Value |           |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------|------|-------------|----------|--------|-------|-----------|
|              |                                                                                                                                        | 2007 |             | a/       | 7,975  | a/    | 193,320   |
| 3353141112   | General purpose relays, over 100 MV and sealed                                                                                         | 2008 | 9           |          | (X)    |       | (D)       |
|              |                                                                                                                                        | 2007 |             |          | (X)    |       | (D)       |
| 3353141117   | General purpose relays, over 100 MV and NOT sealed                                                                                     | 2008 | 10          |          | (X)    |       | (D)       |
|              |                                                                                                                                        | 2007 |             |          | (X)    |       | (D)       |
| 3353141153   | High performance military/aerospace/aircraft relays and contactors (generally pertaining to Mil-\$5757, 6106, 19523, 25108, and 39016) | 2008 | 6           |          | (X)    | c/    | 126,588   |
|              |                                                                                                                                        | 2007 |             |          | (X)    | c/    | 109,262   |
| 3353141180   | Timing relays (timers)                                                                                                                 | 2008 | 34          |          | (S)    |       | (S)       |
|              |                                                                                                                                        | 2007 |             | c/       | 2,964  | c/    | 51,176    |
| 3353141183   | All other general purpose and special purpose relays, including parts                                                                  | 2008 | 43          |          | (X)    | b/    | 178,487   |
|              |                                                                                                                                        | 2007 |             |          | (X)    | a/    | 177,797   |
| 3353143      | Specific purpose industrial controls and power circuit devices                                                                         | 2008 | (X)         |          | (X)    | c/    | 3,210,140 |
|              |                                                                                                                                        | 2007 |             |          | (X)    | c/    | 3,057,177 |
| 3353143301   | U.S. Coast Guard, Navy, and Marine auxiliary controls and accessories1/                                                                | 2008 | 17          |          | (S)    |       | 152,611   |
|              |                                                                                                                                        | 2007 |             |          | (S)    |       | 166,235   |
| 3353143307   | Crane and hoist controls, constant and adjustable voltage, including operators' desks and stations1/                                   | 2008 | 10          |          | 50,272 |       | 142,800   |
|              |                                                                                                                                        | 2007 |             | b/       | 55,201 |       | 138,965   |
| 3353143311   | Definite purpose contactors and starters (600 volts and less)                                                                          | 2008 | 17          |          | (D)    |       | (D)       |
|              |                                                                                                                                        | 2007 |             |          | (D)    |       | (D)       |
| 3353143317   | Stand alone motion controllers, computer numerical controls (CNC)                                                                      | 2008 | 14          |          | (X)    |       | (S)       |
|              |                                                                                                                                        | 2007 |             |          | (X)    |       | 195,317   |
| 3353143323   | Other stand alone motion controls (include robotic controls)                                                                           | 2008 | 18          |          | (X)    |       | (D)       |
|              |                                                                                                                                        | 2007 |             |          | (X)    |       | (D)       |
| 3353143328   | Programmable controllers, sold separately                                                                                              | 2008 | 44          |          | (S)    |       | 1,031,905 |
|              |                                                                                                                                        | 2007 |             |          | (S)    |       | 1,052,777 |
| 3353143333   | Other specific or special purpose a.c. and d.c. controllers, other definite purpose devices                                            | 2008 | 96          |          | (X)    | b/    | 1,525,055 |
|              |                                                                                                                                        | 2007 |             |          | (X)    | b/r/  | 1,334,217 |
| 3353146      | General purpose industrial controls and power circuit devices                                                                          | 2008 | (X)         |          | (X)    | c/    | 3,741,257 |
|              |                                                                                                                                        | 2007 |             |          | (X)    | b/    | 3,765,184 |
| 3353146101   | A.c. full voltage noncombination magnetic starters, 1,000 volts or less                                                                | 2008 | 25          |          | (S)    |       | (S)       |
|              |                                                                                                                                        | 2007 |             | c/       | 468    |       | (S)       |
| 3353146109   | A.c. full voltage combination magnetic starters, 1,000 volts or less1/                                                                 | 2008 | 19          |          | (S)    |       | (S)       |
|              |                                                                                                                                        | 2007 |             | c/r/     | 95,084 |       | (S)       |
| 3353146111   | Disconnect switches, 600 volts or less                                                                                                 | 2008 | 28          |          | (S)    | c/    | 86,087    |
|              |                                                                                                                                        | 2007 |             |          | (S)    | b/    | 94,011    |
| 3353146117   | A.c. full voltage manual controllers, 1,000 volts or less                                                                              | 2008 | 13          |          | (X)    | c/    | 46,518    |
|              |                                                                                                                                        | 2007 |             |          | (X)    |       | 43,335    |
| 3353146123   | A.c. contactors, 1,000 volts or less, excluding controls for packaged adjustable speed drives and synchronous motor controls           | 2008 | 19          |          | (X)    | b/    | 60,517    |
|              |                                                                                                                                        | 2007 |             |          | (X)    | b/r/  | 71,553    |
| 3353146131   | Motor control centers, 1,000 volts or less                                                                                             | 2008 | 23          |          | (X)    | c/    | 352,975   |
|              |                                                                                                                                        | 2007 |             |          | (X)    |       | 339,088   |

Table 2. Shipments of Control Instruments: 2008 and 2007  
[Quantity in thousands of units. Value in thousands of dollars]

| Product code | Product description                                            | Year | No. of cos. | Quantity |         | Value        |
|--------------|----------------------------------------------------------------|------|-------------|----------|---------|--------------|
| 3353146137   | Brakes and clutches                                            | 2008 | 17          | (X)      | a/      | 120,057      |
|              |                                                                | 2007 |             | (X)      | a/      | 123,914      |
| 3353146142   | Other general purpose controls                                 | 2008 | 26          | (X)      | c/      | 157,581      |
|              |                                                                | 2007 |             | (X)      | b/      | 181,091      |
| 3353146143   | Electromechanical positioning sensors                          | 2008 | 14          | (X)      |         | (S)          |
|              |                                                                | 2007 |             | (X)      |         | (S)          |
| 3353146146   | Movement sensors                                               | 2008 | 21          | (X)      | a/      | 70,160       |
|              |                                                                | 2007 |             | (X)      | a/t/    | 58,083       |
| 3353146149   | Nonoptical proximity sensors                                   | 2008 | 20          | (X)      |         | (S)          |
|              |                                                                | 2007 |             | (X)      | c/t/    | 79,430       |
| 3353146152   | Optical proximity sensors                                      | 2008 | 15          | (X)      | a/      | 227,639      |
|              |                                                                | 2007 |             | (X)      | a/t/    | 228,817      |
| 3353146169   | Pushbuttons, under 30mm                                        | 2008 | 22          | (X)      |         | (D)          |
|              |                                                                | 2007 |             | (X)      |         | (D)          |
| 3353146171   | Pushbuttons, 30 mm and larger                                  | 2008 | 28          | (X)      |         | 27,367       |
|              |                                                                | 2007 |             | (X)      |         | 29,131       |
| 3353146176   | Controls for a.c. packaged drives1/                            | 2008 | 30          | c/       | 752,854 | c/ 673,621   |
|              |                                                                | 2007 |             | c/t/     | 651,487 | b/t/ 605,757 |
| 3353146179   | Controls for d.c. packaged drives1/                            | 2008 | 20          | a/       | 137,373 | (S)          |
|              |                                                                | 2007 |             | a/t/     | 153,354 | c/t/ 39,951  |
| 3353146182   | A.c. drives systems1/                                          | 2008 | 32          | c/       | 44,664  | (S)          |
|              |                                                                | 2007 |             | a/t/     | 41,725  | 367,266      |
| 3353146185   | D.c. drives systems1/                                          | 2008 | 16          | (D)      |         | (D)          |
|              |                                                                | 2007 |             | (D)      |         | (D)          |
| 3353146188   | Solid state motor controllers (all voltages)1/                 | 2008 | 34          | (S)      |         | (S)          |
|              |                                                                | 2007 |             | (S)      |         | (S)          |
| 3353146192   | All other general industry devices                             | 2008 | 89          | (X)      | c/      | 984,532      |
|              |                                                                | 2007 |             | (X)      | c/t/    | 1,058,214    |
| 3353147      | Motor controller accessories and parts for industrial controls | 2008 | (X)         | (X)      | c/      | 312,197      |
|              |                                                                | 2007 |             | (X)      | b/      | 292,339      |
| 3353147102   | Motor controller accessories                                   | 2008 | 39          | (X)      | c/      | 133,289      |
|              |                                                                | 2007 |             | (X)      | b/      | 134,552      |
| 3353147104   | Parts for industrial controls                                  | 2008 | 68          | (X)      | c/      | 178,908      |
|              |                                                                | 2007 |             | (X)      | c/      | 157,787      |

Footnotes:

1/ The quantity for this product code is in actual number of units.

Table 3. Shipments, Exports, and Imports of Control Instruments: 2008 and 2007  
[Value in thousands of dollars]

| Product code 1/ | Product description                                                                                    | Year |      | Manufacturers' shipments<br>(value f.o.b. plant) | Exports of domestic merchandise 2/<br>(value at port) | Imports for consumption 3/ |
|-----------------|--------------------------------------------------------------------------------------------------------|------|------|--------------------------------------------------|-------------------------------------------------------|----------------------------|
| 334512000T      | Temperature responsive automatic controls (thermostats)                                                | 2008 |      | 425,051                                          | 112,027                                               | 537,828                    |
|                 |                                                                                                        | 2007 | a/   | 513,357                                          | 109,291                                               | 510,024                    |
| 334512200T      | Pressure responsive automatic, hydraulic automatic, pneumatic automatic, and automatic control, n.e.c. | 2008 |      | (D)                                              | 938,089                                               | 1,506,445                  |
|                 |                                                                                                        | 2007 |      | 1,451,484                                        | 958,906                                               | 1,908,825                  |
| 3345120229      | Parts and components for automatic controls, sold separately                                           | 2008 |      | 168,306                                          | 598,881                                               | 601,162                    |
|                 |                                                                                                        | 2007 |      | 194,689                                          | 589,501                                               | 642,061                    |
| 335313100T      | Power circuit breakers                                                                                 | 2008 |      | (D)                                              | 95,178                                                | 78,171                     |
|                 |                                                                                                        | 2007 |      | (D)                                              | 69,692                                                | 48,920                     |
| 3353131129      | Parts for power circuit breakers                                                                       | 2008 |      | (D)                                              | 254,487                                               | 211,523                    |
|                 |                                                                                                        | 2007 |      | (D)                                              | 218,191                                               | 169,370                    |
| 335313200T      | Low voltage panelboards and distribution boards                                                        | 2008 |      | (D)                                              | (NA)                                                  | 223,923                    |
|                 |                                                                                                        | 2007 |      | (D)                                              | (NA)                                                  | 199,147                    |
| 335313300T      | Knife switches                                                                                         | 2008 |      | (D)                                              | 358,875                                               | 675,379                    |
|                 |                                                                                                        | 2007 |      | (D)                                              | 277,420                                               | 623,727                    |
| 3353133237      | Other low voltage switchgear apparatus                                                                 | 2008 | b/   | 176,706                                          | 18,769                                                | 24,376                     |
|                 |                                                                                                        | 2007 | a/r/ | 148,759                                          | 17,296                                                | 33,030                     |
| 335313500T      | Fuses and fuse equipment, under 2,300 volts                                                            | 2008 |      | 311,669                                          | 125,459                                               | 206,407                    |
|                 |                                                                                                        | 2007 |      | 371,899                                          | 119,817                                               | 201,072                    |
| 335313700T      | Molded case circuit breakers, 1,000 volts to 2,300 volts                                               | 2008 | b/   | 1,267,402                                        | 666,582                                               | 523,745                    |
|                 |                                                                                                        | 2007 | b/   | 1,192,883                                        | 774,762                                               | 502,087                    |
| 3353139100      | Duct, including plug in units and accessories                                                          | 2008 |      | 436,461                                          | 53,185                                                | (NA)                       |
|                 |                                                                                                        | 2007 |      | 402,824                                          | 52,904                                                | (NA)                       |
| 335313A00T      | Switchgear and switchgear assemblies                                                                   | 2008 | b/   | 3,291,501                                        | 64,253                                                | (NA)                       |
|                 |                                                                                                        | 2007 | a/r/ | 2,734,054                                        | 58,618                                                | (NA)                       |
| 335313A332      | Power and ground connectors and transmission and distribution connectors, all types                    | 2008 |      | (D)                                              | 112,407                                               | 121,484                    |
|                 |                                                                                                        | 2007 |      | (D)                                              | 114,819                                               | 94,679                     |
| 335313A335      | Power fuses, fuse links, and distribution cutouts                                                      | 2008 |      | (D)                                              | 22,192                                                | 70,173                     |
|                 |                                                                                                        | 2007 |      | (D)                                              | 14,482                                                | 47,830                     |
| 335314100T      | Relays                                                                                                 | 2008 | c/   | 566,959                                          | 498,343                                               | 820,447                    |
|                 |                                                                                                        | 2007 | b/   | 563,688                                          | 519,074                                               | 897,252                    |
| 3353143328      | Programmable controllers                                                                               | 2008 |      | 1,031,905                                        | 627,183                                               | 797,031                    |
|                 |                                                                                                        | 2007 |      | 1,052,777                                        | 646,558                                               | 763,122                    |
| 3353146131      | Motor control centers, 1,000 volts or less                                                             | 2008 | c/   | 352,975                                          | 162,751                                               | 244,807                    |
|                 |                                                                                                        | 2007 |      | 339,088                                          | 132,390                                               | 265,371                    |
| 3353146137      | Brakes and clutches                                                                                    | 2008 | a/   | 120,057                                          | 65,905                                                | 96,087                     |
|                 |                                                                                                        | 2007 | a/   | 123,914                                          | 44,483                                                | 89,871                     |
| 335314600T      | Limit switches                                                                                         | 2008 | c/   | 123,556                                          | 21,607                                                | (NA)                       |
|                 |                                                                                                        | 2007 | c/   | 111,805                                          | 19,144                                                | (NA)                       |

Footnotes:

1/ For comparison of the North American Industry Classification System (NAICS)-based product codes with Schedule B export codes and HTSUSA import codes, see Table 4.

2/ Source: Census Bureau report EM 545, U.S. Exports.

3/ Source: Census Bureau report IM 145, U.S. Imports for Consumption.

Table 4. Comparison of combined North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2008

| Combined code | Product code                                         | Product description                                                                             | Export code 1/                                               | Import code 2/                                                                               |
|---------------|------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 334512000T    | 3345120102<br>3345120225                             | Temperature responsive automatic controls (thermostats)                                         | 9032.10.0000                                                 | 9032.10.0030<br>9032.10.0060<br>9032.10.0090                                                 |
| 334512200T    | 3345120115<br>3345120221<br>3345120224<br>3345120227 | Pressure responsive automatic, hydraulic automatic, pneumatic automatic, and automatic controls | 9032.20.0000<br>9032.81.0080<br>9032.89.6020<br>9032.89.6085 | 9032.20.0000<br>9032.81.0080<br>9032.89.6015<br>9032.89.6025<br>9032.89.6085                 |
| 3345120229    | 3345120229                                           | Parts and components for automatic controls, sold seperately                                    | 9032.90.0000                                                 | 9032.90.2000<br>9032.90.4000<br>9032.90.6020<br>9032.90.6040<br>9032.90.6060<br>9032.90.6080 |
| 335313100T    | 3353131101<br>3353131103                             | Power circuit breakers                                                                          | 8535.21.0000<br>8535.29.0020                                 | 8535.21.0000<br>8535.29.0020                                                                 |
| 3353131129    | 3353131129                                           | Parts for power circuit breakers                                                                | 8535.29.0040<br>8536.20.0040                                 | 8535.29.0040<br>8536.20.0040                                                                 |
| 335313200T    | 3353133104<br>3353133201<br>3353133207<br>3353133211 | Low voltage panelboards and distribution boards                                                 | 8538.90.8020                                                 | 8538.90.8020                                                                                 |
| 335313300T    | 3353133216<br>3353133225<br>3353133227               | Knife switches                                                                                  | 8537.10.9050                                                 | 8537.10.9050                                                                                 |
| 3353133237    | 3353133237                                           | Other low voltage switchgear apparatus                                                          | 8536.50.9045                                                 | 8536.50.9045                                                                                 |
| 335313500T    | 3353135109<br>3353135113                             | Fuses and fuse equipment, under 2,300 volts                                                     | 8535.10.0040<br>8536.10.0020<br>8536.10.0040                 | 8535.10.0040<br>8536.10.0020<br>8536.10.0040                                                 |
| 335313700T    | 3353137105<br>3353137112<br>3353137117<br>3353137131 | Molded case circuit breakers, 1,000 volts to 2,300 volts                                        | 8536.20.0020                                                 | 8536.20.0020                                                                                 |

Table 4. Comparison of combined North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2008

| Combined code | Product code                                                                                   | Product description                                                      | Export code 1/                                                                                                                                                               | Import code 2/                                                                                                                                                               |
|---------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3353139100    | 3353139100                                                                                     | Duct, including plug in units and accessories                            | 8536.90.8010                                                                                                                                                                 | 8536.90.8010                                                                                                                                                                 |
| 335313A00T    | 335313A101<br>335313A204<br>335313A307<br>335313A311<br>335313A313<br>335313A321<br>335313A337 | Switchgear and switchgear assemblies                                     | 8537.20.0020                                                                                                                                                                 | 8537.20.0020                                                                                                                                                                 |
| 335313A332    | 335313A332                                                                                     | Power and ground connectors and transmission and distribution connectors | 8535.90.8040                                                                                                                                                                 | 8535.90.8040                                                                                                                                                                 |
| 335313A335    | 335313A335                                                                                     | Power fuses, fuse links, and distribution cutouts                        | 8535.10.0020                                                                                                                                                                 | 8535.10.0020                                                                                                                                                                 |
| 335314100T    | 3353141101<br>3353141112<br>3353141117<br>3353141153<br>3353141180<br>3353141183               | Relays                                                                   | 8536.41.0005<br>8536.41.0020<br>8536.41.0030<br>8536.41.0045<br>8536.41.0050<br>8536.41.0060<br>8536.49.0050<br>8536.49.0055<br>8536.49.0065<br>8536.49.0075<br>8536.49.0080 | 8536.41.0005<br>8536.41.0020<br>8536.41.0030<br>8536.41.0045<br>8536.41.0050<br>8536.41.0060<br>8536.49.0050<br>8536.49.0055<br>8536.49.0065<br>8536.49.0075<br>8536.49.0080 |
| 3353143328    | 3353143328                                                                                     | Programmable controllers                                                 | 8537.10.9060                                                                                                                                                                 | 8537.10.9060                                                                                                                                                                 |
| 3353146131    | 3353146131                                                                                     | Motor control centers, 1,000 volts or less                               | 8537.10.6000                                                                                                                                                                 | 8537.10.6000                                                                                                                                                                 |
| 3353146137    | 3353146137                                                                                     | Brakes and clutches                                                      | 8505.20.0000                                                                                                                                                                 | 8505.20.0000                                                                                                                                                                 |
| 335314600T    | 3353146143<br>3353146146                                                                       | Limit switches                                                           | 8536.50.9055                                                                                                                                                                 | 8536.50.9055                                                                                                                                                                 |

Footnotes:

1/ Source: 2007 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/ Source: Harmonized Tariff Schedule of the United States, Annotated (2007).

Symbols:

- (D) - Withheld to avoid disclosing data of individual companies.
- (X) - Not applicable.
- (NA) - Not available.
- r/ - Revised by 5 percent or more from previously published data.
- (n.e.c.) - Not elsewhere classified.
- (n.s.k.) - Not specified by kind.
- (nehp) - Net engine horsepower
- (btuh) - British thermal units per hour
- (pt.) Part.
- Represents zero.

Estimation symbols - Percent of estimation for each item is indicated as follows:

- a/ - 10 to 19 percent of this item has been estimated.
- b/ - 20 to 29 percent of this item has been estimated.
- c/ - 30 to 49 percent of this item has been estimated.
- (S) - Withheld because estimates did not meet publication standards

## HISTORICAL NOTE

The Census Bureau has collected data on switchgear, switchboard apparatus, relays, and industrial controls since 1971 on survey MA335A.

The Census Bureau has collected data on selected instruments and related products since 1961 on survey MA334B.

Beginning in 2005, data for MA335A, Switchgear, Switchboard Apparatus, Relays, and Industrial Controls, and a portion of MA334B, Selected Instruments and Related Products, will be published under the new survey MA334C, Control Instruments. Additional data for MA334B can be found on surveys MA334A, Analytical and Biomedical Instruments, MA334D, Defense, Navigational and Aerospace Electronics, and MA334T, Meters and Test Devices.

Historical Current Industrial Reports data may be obtained from a Federal Depository Library. To locate a Federal Depository Library in your area, please visit <http://www.gpoaccess.gov/libraries.html>.