

# Electrical Standards & Product Guide 2005

**NECA**

## 2005 ELECTRICAL STANDARDS & PRODUCT GUIDE

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NEMA is pleased to present its 2005 edition of the *Electrical Standards & Product Guide (ESPG)*. For over a decade, NEMA has been providing this valuable tool for more than 50,000 engineers, specifiers, and buyers of electrical products. This edition includes standards that define specifications for cutting edge technologies that are raising the standard of living all over the world.

This past year, NEMA released its latest edition of the Digital Imaging and Communications in Medicine (DICOM) standard. This 16-part set of standards establishes universal rules for a single language to exchange digital images and related information. Standard communication protocols for such information as patient name, reason for the procedure, instrument used, etc., makes possible a seamless, efficient system of diagnosis and patient care. The DICOM language enables users to acquire, display, store, query, retrieve, move, or print medical images between instruments, computers, and hospitals. Imaging equipment made by NEMA manufacturers is helping to provide critical health care services all over the world, and is bringing the benefit of cutting edge technology to developing and underdeveloped nations.

NEMA also is the industry leader in developing standards for automation controls, technology that is primarily used in industrial applications to monitor, control, or actuate power using apparatus, including motors. The association also produces standards that help make our homes more intelligent, including those for water heaters, baseboard heating, thermostats, and other residential controls. The standards covering these products, which help conserve energy and increase productivity, are listed in the pages of this guide.

There are more cars on the road than ever before, more congestion. This, too, becomes a quality of life issue, as well as a safety issue. To respond, NEMA, the American Association of State Highway and Transportation Officials, and the Institute of Transportation Engineers are jointly developing the National Transportation Communications for Intelligent Transportation System Protocol (NTCIP). The NTCIP is a family of standards that provides both the rules for communicating and the vocabulary necessary to allow electronic traffic control equipment from different manufacturers to operate together as a system. It is the first set of standards for the transportation industry that allows traffic control systems to be built using a mix and match approach with equipment from different manufacturers. All the currently published NTCIP standards are listed in this guide, although there are no doubt many more to follow.

In addition to these and other standards for state-of-the-art electrotechnology, including, NEMA Premium motors, batteries, distribution equipment, fire protection devices, and electrical measuring devices, NEMA is working on new standards covering even newer technology such as solid-state lighting. The Next Generation Lighting Industry Alliance, administered by NEMA, was formed to foster an industry-government partnership to accelerate the technical foundation, and ultimate commercialization, of solid-state lighting systems. Once only used for indicator lights, high-efficiency solid-state lighting technology, which uses semiconductors as a light source, is now found in a variety of specialty applications, including automotive brake lights, traffic signals, exit signs, and flashlights. Look for these standards in future issues of *ESPG*.



The standards in this issue represent the work of hundreds of volunteers devoted to the manufacture of effective, safe electrical products. The manufacturers represented in *ESPG 2005* make those products, products that power the dynamic growth of industry, commerce, and scientific endeavor around the world.

The products listed in this edition of the guide are of the highest caliber. Manufactured with pride by the best companies in the world, they provide for the compatible, safe, effective operation of electrical equipment the public demands. (See NEMA member company list on page 6.)

All NEMA standards and all NEMA member company products in the 2005 edition can be found on our newly designed website, [www.nema.org](http://www.nema.org). We encourage you to visit the site and link to our member companies to learn how you can purchase the products you need. You may purchase NEMA standards by visiting the Information Handling Service (IHS) at [www.global.ihs.com](http://www.global.ihs.com). (See IHS advertisement on page 25.)

We hope you will find the 2005 *Electrical Standards & Product Guide* a valuable and useful tool throughout the coming year.

Malcolm O'Hagan  
President  
National Electrical Manufacturers Association

The National Electrical Manufacturers Association is the largest trade association in the United States representing the interests of electroindustry manufacturers. Founded in 1926 and headquartered near Washington, D.C., its member companies manufacture products used in the generation, transmission, distribution, control, and end-use of electricity.

Annual shipments of these products exceed \$100 billion.

NEMA promotes the competitiveness of its member companies by providing quality services in the development of standards, government relations, and market economics.

3M	Bridgeport Fittings, Inc.	Dual-Lite
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Bosch Security Systems	Dresser-Rand Company	Fire-Lite Alarms/Notifier

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 GE Consumer & Industrial, Lighting Systems  
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# STANDARDS & OTHER PUBLICATIONS INDEX

This index is a quick reference guide to all of the standards available from NEMA, both NEMA and ANSI standards. It notes the latest version available, the price, and the page number on which you will find the title and a short description of the document, as well as companion standards and notices of approval or adoption by other organizations.

At least every five years, each NEMA standard is reviewed for timeliness, technical accuracy, and relevance. The dates of the reviews are published as part of the alpha-numeric standard identifier. Revisions published for NEMA standards are made available for holders of the base standard at a nominal price. The revision is automatically included in the base standard for future users and the price of the standard (base and revisions) is adjusted. When a NEMA standard is purchased through IHS/Global Engineering Documents, the customer will be sent notification of the standard's revision.

PRODUCT CATEGORY	PAGE	PAGE	PRICE	STANDARD/PUBLICATION
Arc Welding	13	22		A Brief Comparison of NEMA 250 and IEC 60529
Batteries, Dry	13	18		Annular Space Protection of Openings Created by Penetrations of Tubular Steel Conduit, A Review of UL Special Service Investigation, File NC 546, Project 90NK11650
Busway, Conduit, Raceways	14	43	\$93.00	Application Guide for AC Adjustable Speed Drive Systems
Capacitors	17	53	\$55.00	Application Guide for Isolated Ground Wiring Devices
Carbon/Manufactured Graphite Products	17	15		Bulletin 5RN 2189
Communications & Signaling Equipment	17	14		Conduit-In-Casing Construction
Conduit & Duct, Electrical	18	21	\$197.00	Electrical Installation Requirements: A Global Perspective
Connectors	18	27	\$62.00	Electrical Product Acceptance in Europe: NEMA Guide to New Approach Directives and CE Marking
DICOM Publications	40	21		Environmental Impact Analysis: Spent Mercury-Containing Lamps
Distribution Equipment	18	14		Expansion Joints for PVC Rigid Nonmetallic Conduit
Enclosures	20	28		Fluorescent Lamps and the Environment
Fire Protection	21	43	\$37.00	General Specification for Consultants, Industrial and Municipal: NEMA Premium Efficiency Electric Motors (600 Volts or Less)
General Interest	21	28	\$26.00	Getting the Most from Your Lighting Dollar (Third Edition)
Government	21	21	\$36.00	Guide for Proper Use of Smoke Detectors in Duct Applications
Industrial Control & Automation Systems	22	21	\$48.00	Guide for Proper Use of System Smoke Detectors
Insulating Products	25	29	\$28.00	Guide to Energy-Efficient Lighting Systems
International	27	29	\$26.00	Guide to Industrial Lighting
Lighting	28	29	\$26.00	Guide to Office Lighting and Productivity
Measuring Equipment, Electrical	37	22	\$48.00	Guide to Preparing a Design Proposal for Paralleling Customer Generation with an Electric Utility
Medical	39	29	\$26.00	Guide to Retail Lighting Management (Third Edition)
Motors & Generators	43	46		Guidelines for Handling Water Damaged Electrical Equipment
National Lighting Bureau Publications	28	21	\$43.00	Maps and Directories
Outlet & Switch Boxes	45	46		Meet Mr. Ouch
Pin & Sleeve Plug, Receptacle, & Connectors	45	22		NEMA Analysis of the Energy Policy Act of 1992: The Scope of Electric Motors Subject to Efficiency Standards on October 24, 1997
Power Conversion Equipment	45			
Protective Devices	45			
Residential Controls	45			
Safety	46			
Steam Turbines	47			
Transformers	47			
Transportation Management Systems	48			
Wire & Cable	49			
Wiring Devices	53			



9	\$23,074.00	NEMA Complete Set	18	\$1,332.00	AB 1-2002	25	\$75.00	ANSI/NEMA FI 1-2004
21	\$82.00	NEMA Conformity Assessment Guide, 2nd Edition, 2004	18	\$73.00	AB 3-2001	25	\$38.00	FI 2-1992 (R1999, R2005)
21	\$128.00	NEMA Guide to Code Requirements for Fire Alarm and Detection Systems	18	\$61.00	AB 4-2003	25	\$44.00	ANSI/NEMA FI 3-2004
21	\$3,792.00	NEMA Guide to Code Requirements for Fire Alarm and Detection Systems (Bulk Orders of 100, CD Version)	28	\$44.00	BL 1-1997 (R2002)	45	\$61.00	FU 1-2002
29	\$26.00	NEMA Guide to Lighting Controls	14	\$44.00	BU 1-1999	45	\$48.00	ANSI/NEMA GR 1-2001
17	\$82.00	NEMA Installation Guide for Nurse Call Systems	14	\$41.00	BU 1.1-2000	49	\$49.00	ANSI/NEMA HP 3-2001
29	\$26.00	Performing a Lighting System Audit (Revised Edition)	14	\$38.00	BU 1.1-1996 (Spanish)	50	\$52.00	ANSI/NEMA HP 4-2000
28	\$26.00	Profiting from Lighting Modernization	15	\$49.00	BU 1.2-2002	50	\$121.00	HP 100-1991 (R1999) Series (HP 100-100.4)
21		Quality Informational Guide for Automatic Fire Detection and Alarm Systems	17	\$134.00	CB 1-2000	26	\$46.00	HV 2-1991 (R1996, R2002)
18		Report of Research on Electrical Metallic Tubing for Use Over 600 Volts	18	\$61.00	CC 1-2002	22	\$129.00	ANSI/NEMA IA 2.1-1993 (R2002)/IEC 61131, Part 1
46		Safety Guide for Use of Extension Cords	17	\$49.00	CG 1-2001	22	\$337.00	ANSI/NEMA IA 2.2-1994 (R2000)/IEC 61131, Part 2
14		Solvent-Cementing Joints for PVC Rigid Nonmetallic Conduit, Duct, and Fittings	17	\$53.00	CG 2-2004	22	\$482.00	ANSI/NEMA IA 2.3- (R2000)/IEC 61131, Part 3
21		The Declining Presence of Mercury in Batteries and Municipal Solid Waste	45	\$67.00	CP 1-2000	22	\$179.00	ANSI/NEMA IA 2.4-1996 (R2000)/IEC 61131, Part 4
18		The Grounding System that Works--Steel Conduit (EMT, IMC, and Galvanized Rigid)	45	\$45.00	DC 3-2003	22	\$100.00	ICS 1-2005
27	\$48.00	The International Electrotechnical Commission and the U.S. National Committee of the IEC (USNC/IEC)--A Practical Guide	45	\$37.00	DC 5-2002	22	\$31.00	ICS 1.1-1984 (R1988, R1993, R1998, R2003)
21	\$55.00	Training Manual on Fire Alarm Systems 2003	46	\$40.00	DC 10-1983 (R1989, R2003)	23	\$30.00	ICS 1.3-1986 (R2001)
18		Tubular Steel Conduit	46	\$40.00	DC 12-1985 (R1991, R1997, R2002)	23	\$104.00	ICS 2-2005
45		Type "2" Motor Starter Protection Fuse Guide	46	\$34.00	DC 13-1979 (R1985, R1991, R1997, R2002)	23	\$61.00	ICS 2, Part 9-2002
49		User Guide to Product Specifications for Electrical Building Wire and Cable	46	\$45.00	DC 20-1992 (R2003)	23	\$46.00	ICS 2.3-1995 (R2002)
20	\$61.00	250-2003	38	\$73.00	EI 21.1-1993 (R2002)	23	\$56.00	ICS 2.4-2003
47	\$37.00	260-1996 (R2004)	38	\$35.00	EI 21.2-1991 (R1997, R2002)	23	\$46.00	ICS 3-1993 (R2000, R2005)
28	\$61.00	NEMA 410-2004	28	\$56.00	EM 1-2002	23	\$37.00	ICS 3.1-1997 (R2003)
			13	\$41.00	EW 1-1988 (R1994, R1999, R2004)	23	\$61.00	ICS 4-2005
			13	\$31.00	EW 3-1983 (R1995, R1999, R2002)	23	\$140.00	ICS 5-2005
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The following pages contain the titles and ordering information for standards and other publications developed by NEMA and ANSI (the American National Standards Institute) for electrical products and components. Publications are organized by product categories and are available for purchase through Global Engineering Documents at (800) 854-7179; outside the U.S. at (303) 397-7956; or via fax at (303) 397-2740. The information is also available on their website, [www.global.ihs.com](http://www.global.ihs.com). Be sure to note that, in some cases, a publication must be obtained directly from NEMA.

“Companion Standards” are other NEMA, ANSI, or IEC standards that might be of interest to the user. Standards approved by ANSI or adopted by the U.S. Department of Defense are so indicated. Contact information for sources for publications from other organizations are provided on page 127. Manufacturers of products related to the standard are listed under the same product category in the product and manufacturer listing, beginning on page 74.

In addition to the association’s industry standards, users may also be interested in NEMA’s other publications (guides, handbooks, reports, newsletters, and brochures) covering items of interest to electrical manufacturers, which can be found within their subject categories. Member and quantity discounts do not apply to these publications except as noted.

## ARC WELDING

### EW 1-1988 (R1994, R1999, R2004)

#### Electric Arc Welding Power Sources

Defines performance characteristics, ratings, and test procedures for ac and dc arc welding apparatus and associated equipment as well as recommended installation and test procedures for high-frequency stabilized arc welding machines.

Adopted by the U.S. Department of Defense.

Companion Standards: EW 3, WD 1  
Price: \$41.00

### EW 3-1983 (R1995, R1999, R2002)

#### Semiautomatic Wire Feed Systems for Arc Welding

Defines construction standards, performance characteristics, and test procedures for wire feed systems used in most types of arc welding processes.

Approved as an American National Standard.

Companion Standard: EW 1  
Price: \$31.00

### EW 3, Revision 1

Revises and updates EW 3.  
Price: \$28.00

### EW 4-1993 (R1999)

#### Graphic Symbols for Arc Welding and Cutting Apparatus

Establishes graphic symbols for arc welding and cutting apparatus. The symbols provided identify controls, indicators, connection points, junctions, and processes. Examples of their use are also provided.

Price: \$90.00

### EW 6-1998

#### Guidelines for Precautionary Labeling for Arc Welding and Cutting Products

Provides guidelines for the precautionary labeling of arc welding and arc cutting products, including the use of wordless (symbol only) labels.

Price: \$48.00

## BATTERIES, DRY

### ANSI C18 Series

Represents the most up-to-date requirements for battery performance and dimensions. Each standard has been divided into two parts. The first part covers general items and battery specifications. All matters related to safety are now consolidated in Part 2. This complete set of ANSI C18 standards now stands as the unrivaled model for the global battery standards community.

### ANSI C18.1M, Part 1-2005

#### For Portable Primary Cells and Batteries with Aqueous Electrolyte—General and Specifications

Applies to portable primary cells and batteries with aqueous electrolyte and a zinc anode (non-lithium). This edition includes four electrochemical systems: carbon zinc (LeClanche and zinc chloride types), alkaline manganese dioxide; silver oxide; and zinc air.

Approved as an American National Standard.

Price: \$79.00

### ANSI C18.1M, Part 2-2003

#### For Portable Primary Cells and Batteries with Aqueous Electrolyte—Safety Standard

Specifies performance requirements for portable primary batteries with aqueous electrolyte and zinc anode (non-lithium) to ensure their safe operation under normal use and reasonably foreseeable misuse.

Approved as an American National Standard.

Price: \$62.00

**ANSI C18.2M, Part 1-2003**  
**American National Standard for**  
**Portable Rechargeable Cells and**  
**Batteries—General and**  
**Specifications**

Applies to portable rechargeable or secondary cells and batteries based on the following electrochemical systems: nickel-cadmium, nickel-metal hydride, sealed lead-acid, and lithium-ion.

Approved as an American National Standard.

Price: \$69.00

**ANSI C18.2M, Part 2-1999**  
**For Portable Rechargeable Cells**  
**and Batteries—Safety Standard**

Defines performance requirements for portable rechargeable cells and batteries to ensure their safe operation under normal use and reasonably foreseeable misuse.

Approved as an American National Standard.

Price: \$35.00

**ANSI C18.3M, Part 1-2005**  
**American National Standard for**  
**Portable Lithium Primary Cells**  
**and Batteries—General and**  
**Specifications**

Applies to portable lithium primary cells and batteries, including the following electrochemical systems: lithium/carbon monofluoride, lithium/manganese dioxide, and lithium/iron disulfide.

Approved as an American National Standard.

Price: \$66.00

**ANSI C18.3M, Part 2-2003**  
**For Portable Lithium Primary Cells**  
**and Batteries—Safety Standard**

Specifies tests and requirements for primary lithium cells and batteries, both the chemical systems and the types covered in ANSI C18.3M, Part 1, to ensure their safe operation under normal use and reasonably foreseeable misuse.

Approved as an American National Standard.

Price: \$62.00

**BUSWAY, CONDUIT,**  
**RACEWAYS**

**Conduit-In-Casing Construction**

Power and communication industries are on a never-ending quest to "get the cord long enough." Conduit-in-casing construction is one method that helps make the cord long enough to get from the communication or power source to the consumer.

Downloadable from [www.nema.org](http://www.nema.org).

**Expansion Joints for PVC Rigid**  
**Nonmetallic Conduit**

Polymer Raceway Products (PVC) Technical Committee publication notes that fluctuations in temperature have a greater effect upon polyvinyl chloride (PVC) than more traditional materials such as aluminum and steel. Thermal expansion and contraction have significant effects on long straight runs of conduit; therefore, expansion joints are used to accommodate changes in length. This prevents potentially harmful thermal stresses in the conduit itself or in any supporting structures.

Downloadable from [www.nema.org](http://www.nema.org).

**Solvent-Cementing Joints for**  
**PVC Rigid Nonmetallic**  
**Conduit, Duct, and Fittings**

Four-page application guide prepared by the Polymer Raceway Products Technical Committee discusses aspects of solvent cementing of joints for PVC rigid nonmetallic conduit, duct, and fittings. Topics include: to prime or not to prime; solvent cement selection criteria, storage requirements; recommended cutting procedures for conduit or duct; cleaning procedure; application procedure; assembly precautions; and atmospheric considerations.

Downloadable from [www.nema.org](http://www.nema.org).

**BU 1-1999**

**Busways**

Provides ratings, testing standards, and application information for busways (and accessories) for distribution of power at 600 volts or less. Adopted by U.S. Department of Defense.

Companion Standards: AB 1, ANSI C37.16, BU 1.1, ICS 1, KS 1, PB 1  
 Price: \$44.00

**BU 1.1-2000**

**General Instructions for**  
**Proper Handling, Installation,**  
**Operation, and Maintenance of**  
**Busway Rated 600 Volts or Less**

Covers products for distribution of electric power at 600 volts or less, consisting of enclosed sectionalized prefabricated busbars rated at 100 amperes or more, and associated structures and fittings classified as: feeder busways, plug-in busways, and accessories. (Note: Discounts available for bulk orders. Also available in 5 x 7 format)

Price: \$41.00

**BU 1.1-1996 (Spanish edition)**  
**Instrucciones Generales Para**  
**el Manejo, Instalacion, Operacion**  
**y Mantenimiento de**  
**Electroductos Hasta**  
**600 Volts Nominales o Menos**

Esta norma se aplica a productos para la distribucion de energia electrica hasta 600 volts o menos, compuestos de electroductos en secciones prefabricadas y cubiertas, con una capacidad nominal de 100 amperes o mas, y estructuras y accesorios de montaje, clasificados en la forma siguiente: electroducto alimentador (interior o exterior), electroducto conector (interior solamente) y accesorios necesarios para completar el sistema de electroducto. Esta norma no aplica electroductos con recubrimiento metalico descrito en la Norma C37.23 de la ANSI/IEEE.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$38.00

**BU 1.2-2002****Application Information for Busway Rated 600 Volts or Less**

Covers products for distribution of electric power at 600 volts or less, consisting of enclosed sectionalized prefabricated busbars rated at 100 amperes or more.

Price: \$49.00

**Bulletin 5RN 2189****User Guide to Product Specifications for Metal Electrical Conduit and Tubing**

Published by the Steel Rigid Conduit and Electrical Metallic Tubing Section in the interest of more widely disseminating information on the proper identification of U.S. standards applicable to metal electrical conduit and tubing.

Downloadable at [www.nema.org](http://www.nema.org).

**ANSI/NEMA FB 1-2003****Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing and Cable**

Covers fittings that are a part of electrical raceway systems designed for use as intended by the requirements of NFPA 70. Specifically covers fittings for use with non-flexible tubular raceways—rigid and intermediate metal conduit, electrical metallic tubing, as well as fittings for use with flexible conduit and cable systems.

Approved as an American National Standard and adopted by the U.S. Department of Defense.

Companion Standards: WD 6, OS 1, OS 2, NEMA 250, VE 1, ANSI C80.1, ANSI C80.6

Price: \$69.00

**FB 2.10-2003****Selection and Installation Guidelines for Fittings for Use with Non-flexible Electrical Metal Conduit or Tubing (Rigid Metal Conduit, Intermediate Metal Conduit, and Electrical Metallic Tubing)**

Designed to provide guidance to installers on critical selection and installation criteria. The FB 2 Series of publications represents a commitment by NEMA's conduit and cable fittings manufacturers to quality raceway installations made in accordance with the National Electrical Code.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$50.00

**FB 2.20-2003****Selection and Installation Guidelines for Fittings for Use with Flexible Electrical Conduit and Cable**

The selection and installation guidelines offer practical information on correct product selection and industry recommended practices for the installation of fittings for flexible conduit or cable in accordance with the National Electrical Code.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$75.00

**FG 1-1993****Fiberglass Cable Tray Systems**

Covers construction and test requirements for continuous, complete non-metallic systems of ladder, ventilated, solid bottom cable trays, or channel type trays, intended for the support of power or control cables, or both.

Price: \$48.00

**RN 1-1998****Polyvinyl Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal Conduit**

Defines the minimum requirements for PVC coated conduit, which should be included in specifications written for this product.

Adopted by the U.S. Department of

Defense.

Companion Standards: ANSI C80.1, ANSI C80.3

Price: \$31.00

**RN 2-1987 (R1992, R2001)****Packaging of Master Bundles for Steel Rigid Conduit, Intermediate Metal Conduit (IMC), and Electrical Metallic Tubing**

Covers recommendations for the size and banding of master bundles of galvanized steel rigid conduit, intermediate metal conduit (IMC), and electrical metallic tubing (EMT), in 10 foot lengths only.

Price: \$37.00

**RN 3-1991 (R2002)****Product Identification Numbers for Metallic Tubular Conduit Products for Use with Bar Coding and Electronic Data Interchange Applications**

Sets forth identification numbers for metallic tubular conduit products (galvanized rigid conduit, electrical metallic tubing, intermediate metal conduit, and galvanized rigid aluminum conduit) for use in bar coding, EDI, and other business communications.

Price: \$41.00

**TC 2-2003****Electrical Polyvinyl Chloride (PVC) Tubing and Conduit**

Covers electrical polyvinyl chloride (PVC) conduit of types EPC-40—designed for normal-duty applications above ground and concrete encased applications or direct burial—and EPC-80—designed for heavy-duty (areas of physical damage) applications above ground and concrete encased applications or direct burial.

Companion Standard: TC 3

Price: \$56.00

**TC 3-2004****Polyvinyl Chloride (PVC) Fittings for Use with Rigid PVC Conduit and Tubing**

Covers PVC fittings intended to be joined in the field by means of a solvent cement system to PVC rigid conduit, tubing, and other fittings, based on the outside diameters given in NEMA Standards Publication TC 2-2002.

Adopted by the U.S. Department of Defense.

Companion Standard: TC 2  
Price: \$56.00

**TC 6&8-2003****Polyvinyl Chloride (PVC) Plastic Utilities for Underground Installations**

Defines general requirements, performance requirements, test methods, and marking for the following types of PVC plastic utilities duct, intended for installation underground for communications and electrical wire and cable: Type EB-20, designed for burial encased in concrete; Type EB-35, designed for burial encased in concrete; Type DB-60, designed for direct burial without encasement in concrete; Type DB-100, designed for direct burial without encasement in concrete; and Type DB-120, designed for direct burial without encasement in concrete.

Adopted by the U.S. Department of Defense.

Companion Standards: TC 9  
Price: \$56.00

**TC 7-2000****Smooth Wall Coilable Polyethylene Electrical Plastic Duct**

Covers requirements (general and performance) of polyethylene coilable duct for underground applications.

Price: \$37.00

**TC 9-2004****Fittings for Polyvinyl Chloride (PVC) Plastic Utilities Duct for Underground Installation**

Defines general requirements including materials, trade sizes, dimensions, and workmanship for the following types of fittings for PVC plastic utilities duct used for the underground installation of communication and electrical wire and cable: Type EB, designed for encased burial in concrete when installed in trenches underground; and Type DB, designed for direct burial in trenched underground without a requirement for encasement in concrete.

Adopted by the U.S. Department of Defense.

Companion Standard: TC 6&8  
Price: \$49.00

**TC 13-2000****Electrical Nonmetallic Tubing**

Covers electric nonmetallic tubing (ENT) made from polyvinyl chloride (PVC) for above ground use.

Adopted by the U.S. Department of Defense.

Price: \$48.00

**TC 14-2002****Reinforced Thermosetting Resin Conduit (RTRC) and Fittings**

Specifies the requirements for halogen-free reinforced thermosetting resin conduit (RTRC), and associated fittings for installation and use in accordance with the Rules of the Canadian Electrical Code, (CEC) Part I, and the National Electrical Code (NEC) for nonhazardous locations.

Adopted UL 1684 standard.

Price: \$672.00; electronic: \$252.

**TC 18-2004****Packaging of Master Bundles for EPC-40 Polyvinyl Chloride (PVC) Conduit**

Covers recommendations for the size and banding of master bundles for electrical EPC-40 PVC conduit.

Price: \$37.00

**TC 19-2001****Nonmetallic Riser U-Type Guards**

Lists dimensions, sets forth properties, and assists in selecting and obtaining the proper PVC and PE nonmetallic riser u-type guards intended to protect riser cables on utility poles.

Price: \$60.00

**TCB 2-2000****Guidelines for the Selection and Installation of Underground Nonmetallic Duct**

Covers recommendations for shipping, handling, storage, installation, and joining of underground single bore nonmetallic duct for power, lighting, signaling, and communications applications.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$37.00

**TCB 3-2001****User's Manual for the Installation of Underground Corrugated Coilable Plastic Utility Duct (CCD)**

Covers recommendations for shipping, handling, storage, installation, and joining of underground CCD for power, lighting, signaling, and communications applications.

Price: \$52.00

**VE 1-2002****Metal Cable Tray Systems**

Specifies the requirements for metal cable trays and associated fittings designed for use in accordance with the rules of the Canadian Electrical Code, Part I, and the National Electrical Code.

Joint Standard with CSA International; approved as an American National Standard.

Price: \$56.00



### VE 2-2001

#### Cable Tray Installation Guidelines

Addresses shipping, handling, storing, and installation of metal cable tray systems. Information on maintenance and system modification is also provided. Approved as an American National Standard.  
Price: \$52.00

### ANSI C80.1-1994

#### Rigid Steel Conduit— Zinc Coated (GRC)

Covers the requirements for rigid steel conduit for use as a raceway for the wire or cables of an electrical system. Approved as an American National Standard.  
Price: \$48.00

### ANSI C80.3-1994

#### Electrical Metallic Tubing—Zinc Coated (EMT)

Covers the requirements for electrical metallic tubing (steel) for use as a raceway for the wire or cables of an electrical system. Approved as an American National Standard.  
Price: \$36.00

### ANSI C80.5-1994

#### Rigid Aluminum Conduit, Specification for

Covers the requirements for seamless rigid aluminum-alloy conduit for use as a raceway for the wires or cables of an electrical system. Approved as an American National Standard.  
Price: \$48.00

### ANSI C80.6-1994

#### Intermediate Metal Conduit— Zinc Coated (IMC)

Covers the requirements for intermediate metal conduit for use as a raceway for the wires or cables of an electrical system. Approved as an American National Standard.  
Price: \$45.00

## CAPACITORS

### CP 1-2000

#### Shunt Capacitors

Applies to capacitors rated 216 V or higher, 2.5 kVAR or more, and designed for shunt connection to ac transmission and distribution systems operating at a nominal frequency of 50 or 60 Hz. Companion Standards: 107, ICS 2  
Price: \$67.00

## CARBON/

## MANUFACTURED

## GRAPHITE PRODUCTS

### CB 1-2000

#### Brushes for Electrical Machines

Records definitions, dimensions and tolerances, test procedures for physical properties, and test procedures for shunt connections for brushes used in the electrical manufacturing industry. Included are carbon, carbon-graphite, graphite, electrographite, metal-graphite, metal-impregnated, and resin-bonded brushes.  
Price: \$134.00

### CG 1-2001

#### Manufactured Graphite/ Carbon Electrodes

Defines dimensions and configurations of cylindrical manufactured graphite and carbon electrodes for use in electric arc furnaces, as well as design and physical properties of joining systems.  
Price: \$49.00

### CG 2-2004

#### Powdered Graphite

Covers terminology and test methods for those physical and chemical properties relevant to the material characterization of powdered graphite used in the electrical industry.  
Price: \$53.00

## COMMUNICATIONS &

## SIGNALING EQUIPMENT

### NEMA Installation Guide for Nurse Call Systems

Contains guidelines that cover the proper physical installation of nurse call systems. It describes system types, basic theory of operation, use of ancillary devices, installation requirements, isolation of circuits, system environmental considerations, inspection, testing, maintenance, and service.  
Price: \$82.00

### SB 10-1991 (R1998)

#### Audio Standard for Nurse Call Systems

Contains requirements and test procedures for evaluation of audio quality of installed nurse call systems.  
Price: \$31.00

### SB 28-1992 (R1997, R2003)

#### Product Safety Guide for Developing Documentation for Fire Alarm Systems and Equipment

Guidelines for developing product documentation, such as installation manuals, operation manuals, and product labels, for fire alarm systems.  
Price: \$71.00

**CONDUIT & DUCT,  
ELECTRICAL**

**Annular Space Protection of  
Openings Created by Penetrations  
of Tubular Steel Conduit,  
A Review of UL Special Service  
Investigation, File NC 546,  
Project 90NK11650**

Summary of the results of a study of various annular space protection materials installed in a concrete block wall, concrete floor assemblies, gypsum wallboard/wood joist/plywood deck floor-ceiling assemblies, and two varieties of gypsum wallboard/steel stud wall assemblies. The purpose of the investigation was to determine if commonly available construction materials could be used as annular space protection materials in conjunction with tubular steel conduit products. Tests were conducted to verify that these combinations of products will meet certain requirements contained in the BOCA, ICBO, and SBCCI Model Building Codes. To order, phone: (703) 841-3244.

**Report of Research on  
Electrical Metallic Tubing  
for Use Over 600 Volts**

To order, phone: (703) 841-3244.

**The Grounding System that  
Works—Steel Conduit  
(EMT, IMC, and Galvanized Rigid)**

Six-page brochure that describes new steel conduit analysis software for designing and analyzing distribution feeder and branch circuits; determining ground fault design; calculating new runs and optimizing safe design; and analyzing existing circuits. To order, phone: (703) 841-3244.

**Tubular Steel Conduit**

Four-page color brochure presenting the advantages of steel conduit products. To order, phone: (703) 841-3244.

**CONNECTORS**

**CC 1-2002  
Electric Power  
Connection for Substations**

Covers uninsulated connectors and bus supports that are made of metal and intended for use in substations. Price: \$61.00

**ANSI C119.1-2002  
For Electric Connectors—Sealed  
Insulated Underground Connector  
Systems Rated 600 Volts**

Covers sealed, insulated underground connector systems rated at 600 volts for utility applications and establishes electrical, mechanical, and sealing requirements for sealed underground connector systems. Approved as an American National Standard. Price: \$49.00

**ANSI C119.4-2004  
American National Standard for  
Electric Connectors—  
Connectors for Use Between  
Aluminum-to-Aluminum or  
Aluminum-to-Copper Conductors**

Covers connectors used for making electrical connections between aluminum-to-aluminum or aluminum-to-copper conductors used on distribution and transmission lines for electric utility. This standard establishes the electrical and mechanical test requirements for electrical connectors. Approved as an American National Standard. Price: \$56.00

**DISTRIBUTION  
EQUIPMENT**

**AB 1-2002  
Molded-Case Circuit Breakers,  
Molded Case Switches, and  
Circuit-Breaker Enclosures**

Covers molded-case circuit breakers, circuit breaker and ground-fault circuit interrupters, fused circuit breakers, and accessory high-fault protectors. Adopted UL 489 standard. Price: \$1,332.00; electronic: \$504.

**AB 3-2001  
Molded Case Circuit  
Breakers and Their Application**

Covers molded case circuit breakers and molded case switches, assembled as integral units in supporting housings of insulating material, having voltage ratings up to and including 1000 volts AC and 1200 volts DC, and interrupt ratings of 5000 amperes or more. Companion Standards: AB 1, AB 4, PB 2.2. Price: \$73.00

**AB 4-2003  
Guidelines for Inspection and  
Preventive Maintenance of  
Molded Case Circuit Breakers  
Used in Commercial and  
Industrial Applications**

Sets forth, for use by qualified personnel, a number of basic procedures that may be used for the inspection and preventive maintenance of molded case circuit breakers used in industrial and commercial applications rated up to and including 1000 V 50/60 Hz AC or AC/DC. Companion Standard: AB 1. Price: \$61.00

**KS 1-2001****Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum)**

Covers manually operated enclosed and miscellaneous distribution equipment switches that are rated not more than 600 volts and 6000 amperes with or without a horsepower rating; with or without provision for fuses; and with current-carrying parts and mechanisms enclosed in metallic or nonmetallic cases, or that are enclosed when mounted in enclosed switchboard or panelboard. Adopted by the U.S. Department of Defense

Companion Standards: AB 1, ICS 1, ICS 2, 250-1997  
Price: \$88.00

**PB 1-2000  
Panelboards**

Covers single panelboards or groups of panel units suitable for assembly in the form of single panelboards, including buses, with or without switches or automatic overload protective devices (fuses or circuit breakers), or both. These units are used in the distribution of electricity for light, heat, and power at 600 volts and less, with 1600 ampere mains and less and 1200 ampere branch circuits and less. Adopted by the U.S. Department of Defense.

Companion Standards: FU 1, KS 1, PB 2.2, NEMA 250, AB 1, AB 3, PB 1.1  
Price: \$71.00

**ANSI/NEMA PB 1.1-2002  
General Instructions for Proper Installation, Operation, and Maintenance of Panelboards Rated 600 Volts or Less**

Covers single panelboards or groups of panel units suitable for assembly in the form of single panelboards, including buses, and with or without switches or automatic overload protective devices (fuses or circuit breakers), or both.

Approved as an American National Standard.

Companion Standards: PB 1, PB 2.2, AB 4  
Price: \$30.00

**PB 1.1-2002 (Spanish edition)  
Instrucciones Generales para la Instalacion, Operacion y el Mantenimiento Correcto de Tableros de Alumbrado y Control hasta 600 Volts Nominales o Menos**

A guide of practical information containing instructions for the proper installation, operation, and maintenance of panelboards rated 600 volts or less.

ANSI approved.  
Companion Standards: PB 1, PB 2.2, AB 4  
Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$27.00

**PB 2-2001  
Deadfront Distribution Switchboards**

Covers floor-mounted deadfront switchboards rated 6000 amperes or less, 600 volts or less, which consist of an enclosure, molded case circuit breakers, low-voltage power circuit breakers, fusible or non-fusible switches, instruments, metering equipment, monitoring or control equipment, with associated interconnections and supporting structures. These units are used in the distribution of electricity for light, heat, and power.

Adopted by the U.S. Department of Defense.  
Companion Standards: AB 1, BU 1, ICS 1, KS 1, PB 1, PB 2.2, ANSI C37.16, ANSI C37.17, ANSI C37.50  
Price: \$63.00

**ANSI/NEMA PB 2.1-2002****General Instructions for Proper Handling, Installation, Operation, and Maintenance of Deadfront Distribution Switchboards Rated 600 Volts or Less**

Covers floor-mounted deadfront switchboards which consist of an enclosure, molded-case and low-voltage power circuit breakers, fusible or non-fusible switches, instruments, and metering, monitoring, or control equipment, with associated interconnections and supporting structures.

Approved as an American National Standard. Adopted by the U.S. Department of Defense.  
Companion Standards: PB 2, PB 2.2  
Price: \$30.00

**PB 2.1-2002 (Spanish edition)  
Instrucciones Generales para el Manejo, Instalacion, Operacion y Mantenimiento Correcto de Tableros de Distribucion de Frente Muerto hasta 600 Volts Nominales o Menos**

Proper handling, installation, operation and maintenance of deadfront distribution switchboards rated 600 volts or less.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$31.00

**PB 2.2-2004  
Application Guide for Ground Fault Protective Devices for Equipment**

A guide of practical information containing instructions for the safe and proper application of ground fault protective devices.

Adopted by the U.S. Department of Defense.  
Companion Standards: ANSI C37.16, ANSI C37.17  
Price: \$69.00

**SG 4-2000****Alternating Current High Voltage Circuit Breaker**

Encompasses: a) All ratings for outdoor circuit breakers above 1000 volts for alternating current service. Circuit breakers for service in metal clad enclosures are included in NEMA Standard SG 5. b) Attachments for these circuit breakers, such as bushing current transformers, bushing potential devices, interlocks, undervoltage trip devices, shunt trips, overcurrent trips, and auxiliaries sold with the circuit breakers such as closing relays and structural steel supports. c) Renewal, modernizing, and spare parts for these circuit breakers and attachments. d) Recommended installation, operation, and maintenance procedures.  
Price: \$61.00

**SG 6-2000****Power Switching Equipment**

Includes requirements, preferred ratings, manufacturing specifications, and application guides for high voltage air switches. Also included are rated control voltages and the ranges for these switches. Guides for installation, operation, and maintenance of power switching equipment and design parameters for outdoor substation complete this standard.  
Price: \$46.00

**ANSI C37.50-1989  
(R1995, R2000)****Switchgear Low Voltage AC Power Circuit Breakers Used in Enclosures—Test Procedures**

Price: \$48.00

**ANSI C37.51-2003****American National Standard for Switchgear—Metal-Enclosed Low-Voltage AC Power Circuit Breaker Switchgear Assemblies—Conformance Test Procedures**

Optionally applicable to all metal-enclosed low-voltage AC power circuit breaker switchgear assemblies

designed, tested, and manufactured in accordance with ANSI/IEEE C37.20.1-2002.  
Price: \$50.00

**ANSI C37.52-1974  
(R1995, R2000)****Test Procedures for Low Voltage AC Power Circuit Protectors Used in Enclosures**

Price: \$46.00

**ANSI C37.54-2002****For Indoor Alternating Current High-Voltage Circuit Breakers Applied as Removable Elements in Metal-Enclosed Switchgear—Conformance Test Procedure**

Specifies tests to demonstrate that the circuit breaker being tested conforms with the ratings assigned to it in accordance with ANSI/IEEE C37.04.

Approved as an American National Standard.

Price: \$69.00

**ANSI C37.55-2002****American National Standard for Switchgear—Medium Voltage Metal-Clad Assemblies—Conformance Test Procedures**

Applicable to all medium voltage metal-clad switchgear assemblies designed, tested, and manufactured in accordance with ANSI/IEEE C37.20.2, Metal-Clad Switchgear. Covers selected tests to demonstrate conformance with Section 6 of ANSI/IEEE C37.20.02.

Price: \$62.00

**ANSI C37.57-2003****American National Standard for Switchgear—Metal-Enclosed Interrupter Switchgear Assemblies—Conformance Testing**

Applicable to all metal-enclosed interrupter switchgear assemblies designed, tested, and manufactured in accordance with ANSI/IEEE C37.20.3.

Price: \$64.00

**ANSI C37.58-2003****American National Standard for Switchgear—Indoor AC Medium-Voltage Switches for Use in Metal-Enclosed Switchgear—Conformance Test Procedures**

Applies to the conformance test procedure for AC medium-voltage switches rated above 1000 volts as designed, manufactured, and tested in accordance with ANSI/IEEE C37.20.2.

Price: \$50.00

**ANSI C37.85-2002****Alternating-Current High-Voltage Power Vacuum Interrupters—Safety Requirements for X-Radiation Limits**

Specifies the maximum permissible X-radiation emission from alternating-current high-voltage power vacuum interrupters that are intended to be operated at voltages above 1000 volts and up to 38,000 volts when tested in accordance with procedures described in this standard.

Price: \$49.00

**ENCLOSURES****250-2003****Enclosures for Electrical Equipment (1000 Volts Maximum)**

Consolidates the descriptions and applications, features and test criteria, and design tests of all NEMA type enclosures (except for rotary type apparatus) into a single document. Does not cover manufacturing standards for specific products; refer to the following standards: Busway—BU 1; Pin and Sleeve—FB 11; Switchboards—PB 2; Switches—KS 1; Traffic Control Systems—TS 1; Transformers—DC 20, ST 20, TR 1; Welding—EW1, EW 3.

Companion Standards: KS 1, FB 1, PB 2.1, AB 3, AB 4, ICS 6, OS 2, ANSI C57.12.29, ANSI C37.54, ANSI C57.12.28, ANSI C57.12.31, ANSI C37.22, ANSI C57.12.32, ANSI C37.50, ANSI C37.51, ANSI

C37.52, ANSI C37.57, IEC 60529  
Price: \$61.00

### **ANSI\_IEC 60529-2004**

#### **Degrees of Protection Provided by Enclosures (IP Code) (identical national adoption)**

Applies to the classification of degrees of protection provided by enclosures for electrical equipment with a rated voltage not exceeding 72,5 kV.

Price: \$75.00

## **FIRE PROTECTION**

### **Guide for Proper Use of Smoke Detectors in Duct Applications**

2001 edition. Provides much needed information concerning the proper use of smoke detectors in duct applications.

Price: \$36.00

### **Guide for Proper Use of System Smoke Detectors**

2001 edition. Provides information concerning the applications of smoke detectors used in conjunction with fire alarm systems. Basic principles to be considered are outlined as well as operating characteristics of detectors and environmental factors that may either aid or prevent their operations.

Price: \$48.00

### **NEMA Guide to Code Requirements for Fire Alarm and Detection Systems**

Outlines and compares the administrative and technical requirements for installation of fire protective signaling and detection systems in all 50 states and various major cities across the U.S. Provides information on how the regulations are promulgated and applied, and who is responsible for these activities.

Price: \$128.00

### **NEMA Guide to Code Requirements for Fire Alarm and Detection Systems (Bulk Orders of 100, CD Version)**

Price: \$3,792.00

### **Quality Informational Guide for Automatic Fire Detection and Alarm Systems**

Provides guidance to the local authority having jurisdiction (AHJ) for establishing programs to ensure highly reliable fire detection and alarm systems in his or her community. Downloadable from [www.nema.org](http://www.nema.org).

### **Training Manual on Fire Alarm Systems 2003**

Covers terminology, basic theory of operation, installation details, system startup techniques, and general maintenance of fire alarms, and is intended to be used as source material for apprentices or journeymen in a classroom environment using a qualified instructor. It emphasizes installation of basic fire alarm signaling systems instead of how to choose a system or equipment.

Price: \$55.00

## **GENERAL INTEREST**

### **Electrical Installation Requirements: A Global Perspective**

A study of NFPA 70, National Electrical Code, and IEC 60364, Electrical Installations for Buildings.

Price: \$197.00

### **Maps and Directories Industrial Trading Area Maps.**

Wall and binder size maps of the NEMA trading areas and regions. Published by NEMA/BIS. 30"x40" Map—\$43.00; additional copies: \$34.00.

8.5"x14" Map—\$9.00 single copy, \$5.00 additional copy.

### **NEMA Conformity Assessment Guide, 2nd Edition, 2004**

Provides a top-level information guide to the conformity assessment requirements for many countries. The guide is ideal for electrical and electronic manufacturers considering entry into the international product marketplace.

Price: \$82.00

### **NS 1-2001, Revision 1 Guide for Preparation of NEMA Standards Publications**

User guide for preparing documents in the NEMA approved format.

### **PDD 04.02.00**

#### **Product Descriptor Data Common Fields Requested, Version 4.02.00**

Suggests the common fields and definitions that manufacturers need to share with distributors and third-party catalog and information providers.

Approved as an American National Standard.

Price: \$45.00

## **GOVERNMENT**

### **Environmental Impact Analysis: Spent Mercury-Containing Lamps**

Analyzes the environmental impact of various types of spent lamp management disposal options.

To order, phone: (703) 841-3249.

### **The Declining Presence of Mercury in Batteries and Municipal Solid Waste**

Describes the initiatives involving both new legislation and new battery technology, which have resulted in a dramatic reduction in the use of mercury in batteries.

Downloadable from [www.nema.org](http://www.nema.org).

**NEMA Analysis of the Energy Policy Act of 1992: The Scope of Electric Motors Subject to Efficiency Standards on October 24, 1997**

The Energy Policy Act of 1992 (EPAAct) covering the efficiency levels of general purpose industrial motors became effective October 24, 1997. This brochure presents information on the Department of Energy's interpretation of the 1992 Energy Policy Act and DOE's position on the scope of products covered and non-covered (exempt) by the legislation. Motor users and OEMs can refer to the information to determine whether the motors they purchase will be covered by EPAAct and therefore must meet the standard energy-efficiency levels. Downloadable from [www.nema.org](http://www.nema.org).

**INDUSTRIAL CONTROL  
& AUTOMATION  
SYSTEMS**

**A Brief Comparison of NEMA 250 and IEC 60529**

Provides a brief comparison and explanation of some of the basic differences between NEMA 250, Enclosures for Electrical Equipment (1000 Volts Maximum) and IEC 60529, Degrees of Protection Provided by Enclosures (IP Code). Downloadable from [www.nema.org](http://www.nema.org).

**Guide to Preparing a Design Proposal for Paralleling Customer Generation with an Electric Utility**

Takes the mystery out of interface design for parallel operation by providing sound engineering guidelines. Also assists the designer with the utility approval process. Careful planning, design, and proposal preparation are the keys to assuring successful coordination and approval by the electric utility company. It will help the designer obtain speedy approval and acceptance of the system. Downloadable from [www.nema.org](http://www.nema.org). Price: \$48.00

**ANSI/NEMA IA 2.1-1993 (R2002)/IEC 61131, Part 1 Programmable Controllers—General Information**

A NEMA Adoptive Standard with deviations to accommodate the National Electrical Code and other U.S. practices. It establishes definitions and identifies principal characteristics for the selection and application of programmable controllers and their associated peripherals. Approved as an American National Standard. Price: \$129.00

**ANSI/NEMA IA 2.2-1994 (R2000)/IEC 61131, Part 2 Programmable Controllers—Equipment Requirements and Tests**

Accommodates the National Electrical Code and other U.S. practices. It specifies minimum requirements for the functional characteristics, service conditions, construction characteristics, general safety, and tests applicable to programmable controllers and their associated peripherals. Approved as an American National Standard. Price: \$337.00

**ANSI/NEMA IA 2.3-1994 (R2000)/IEC 61131, Part 3 Programmable Controllers—Programming Languages**

A NEMA Adoptive Standard with deviations to accommodate the National Electrical Code and other U.S. practices. It specifies the syntax and semantics of four programming languages—two graphical languages and two textual languages—for programmable controllers. Approved as an American National Standard. Price: \$482.00

**ANSI/NEMA IA 2.4-1996 (R2000)/IEC 61131, Part 4 Programmable Controllers—User Guidelines**

A NEMA Adoptive Standard with deviations to accommodate the National Electrical Code and other U.S. Practices. Provides guidelines that address the application of the programmable controllers (PC) and associated peripherals. Approved as an American National Standard. Price: \$179.00

**ICS 1-2005 Industrial Control and Systems: General Requirements**

The purpose of this publication is to consolidate all standards of a general nature in order to obtain uniform application of requirements throughout the range of industrial control and systems equipment. Downloadable from [www.nema.org](http://www.nema.org). Companion Standards: ICS 2 through 10, LI 1, ST 1, ANSI C84.1, IEC 947 1 Price: \$100.00

**ICS 1.1-1984 (R1988, R1993, R1998, R2003) Industrial Control and Systems: Safety Guidelines for the Application, Installation, and Maintenance of Solid State Control**

Provides general guidelines for the application, installation, and maintenance of solid state control in the form of individual devices or packaged assemblies incorporating solid state components. The emphasis is personnel safety. Downloadable from [www.nema.org](http://www.nema.org). Companion Standards: ICS 2 through 10, IEC 801 3 Price: \$31.00

**ICS 1.3-1986 (R2001)**  
**Preventive Maintenance of Industrial Control and Systems Equipment**

Covers fundamental principles, safety precautions, and common guidelines for preventive maintenance of most industrial control and systems equipment. Intended to supplement more specific maintenance instructions which may be provided for particular product lines and specific products and other NEMA standards and manufacturer publications.

Downloadable from [www.nema.org](http://www.nema.org).  
 Companion Standards: ICS 1 through 10  
 Price: \$30.00

**ICS 2-2005**  
**Industrial Control and Systems: Controllers, Contactors, and Overload Relays Rated 600 Volts**

Provides general requirements for magnetic and non-magnetic motor controllers, overload relays, lighting contactors, and disconnect devices for industrial control applications. Provides information on ratings, classification, construction, marking, and performance and the tests intended to confirm that the device meets these conditions.

Downloadable from [www.nema.org](http://www.nema.org).  
 Companion Standards: ICS 1 through 10, AB 1, MG 2, IEC 947 1, IEC 947 6  
 Price: \$104.00

**ICS 2, Part 9-2002**  
**AC Vacuum-Break Magnetic Controllers Rated 1500 Volts AC**

Applies to magnetically operated, full-voltage, vacuum-break, non-combination controllers rated 1500 volts for both motor and non-motor loads. Downloadable from [www.nema.org](http://www.nema.org).  
 Companion Standard: ICS 2  
 Price: \$61.00

**ICS 2.3-1995 (R2002)**  
**Industrial Control and Systems: Instructions for the Handling, Installation, Operation, and Maintenance of Motor Control Centers**

Contains instructions for the handling, installation, and maintenance of motor control centers rated 600 volts or less. Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$46.00

**ICS 2.4-2003**  
**Industrial Control and Systems: NEMA and IEC Devices for Motor Service—A Guide for Understanding the Differences**

The features, conventions, characteristics, and attributes identified in this guide are those of magnetic contactors and thermal overload relays. Control products compared or contrasted in this guide are those with equivalent electrical ratings; such ratings are expressed via nameplates, catalogues, or technical literature. Downloadable from [www.nema.org](http://www.nema.org).  
 Companion Standards: ICS 1, ICS 2, IEC 947 1 Part 1, IEC 947 4  
 Price: \$56.00

**ICS 3-1993 (R2000, R2005)**  
**Industrial Control and Systems: Medium Voltage Controllers Rated 2001 to 7200 Volts AC**

Applies to AC general-purpose contactors and Class E magnetic controllers rated 2001 to 7200 volts, three phase, 50 and 60 hertz. Downloadable from [www.nema.org](http://www.nema.org).  
 Companion Standards: ICS 1 through 10, NEMA 250, ANSI C37.50, IEC 470  
 Price: \$46.00

**ICS 3.1-1997 (R2003)**  
**Industrial Control and Systems: Handling, Storage, and Installation Guide for AC General-Purpose Medium Voltage Contactors and Class E Controllers, 50 and 60 Hertz**

Contains practical information for architects, electrical engineers, contractors, and maintenance personnel on the handling, storage, and installation of AC general-purpose medium voltage contactors and class E controllers. Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$37.00

**ICS 4-2005**  
**Industrial Control and Systems: Terminal Blocks**

Applies to one piece, or modular, or two piece terminal blocks with screw-type or screw-less-type clamping units intended for industrial use, and fixed to a support or to a printed circuit board to provide electrical and mechanical connection for round, solid, or stranded conductors (see standard scope for detailed specifications). The terminal blocks are intended for use in circuits of rated insulation voltage not exceeding 1000 V AC at a frequency not greater than 60 hertz, or not exceeding 1500 V DC. Downloadable from [www.nema.org](http://www.nema.org).  
 Companion Standards: ICS 1 through 10, IEC 947 7 1  
 Price: \$61.00

**ICS 5-2005**  
**Industrial Control and Systems: Control Circuit and Pilot Devices**

Provides general requirements, classifications, installation, maintenance, testing, and application information for control circuit and pilot devices and covers the requirements for control relays, limit switches, proximity switches, pushbuttons, selector switches, indicating and pushbutton stations. Downloadable from [www.nema.org](http://www.nema.org).  
 Companion Standards: ICS 1 through 10, DC 2, IEC 947 5 1, IEC 947 5 2  
 Price: \$140.00

**ICS 5, Annex B-2002**  
**Industrial Control and Systems: Typical Proximity Switch Specifications**

Contains specifications that represent common dimensions and operating characteristics of proximity switches. Downloadable from [www.nema.org](http://www.nema.org). Companion Standards: ICS 1, ICS 5 Price: \$44.00

**ICS 5, Annex E-2002**  
**Industrial Control and Systems: Additional Requirements for Proximity Switches Suitable for Use in Strong Magnetic Fields**

States the performance and test conditions for proximity switches that operate in strong magnetic fields such as electric weld fields or electrolytic fields.

Downloadable from [www.nema.org](http://www.nema.org). Companion Standards: ICS 1, ICS 5 Price: \$44.00

**ICS 5, Annex F-2002**  
**Industrial Control and Systems: High Pressure Power Wash Test Procedure for Self-Contained Control-Circuit Devices**

High-pressure power wash procedure requirements for proximity switches, limit switches, and panel mounted control devices that include pushbuttons, pilot lights, and selector switches.

Downloadable from [www.nema.org](http://www.nema.org). Companion Standards: ICS 1, ICS 5 Price: \$44.00

**ICS 6-1993 (R2001)**  
**Industrial Control and Systems: Enclosures**

Covers the enclosure requirements of all industrial control devices functioning on commercial voltages of up to 750 volts DC, or up to 7200 volts AC. Includes information concerning ratings, construction, testing, performance and manufacture.

Downloadable from [www.nema.org](http://www.nema.org). Companion Standards: ICS 1 through 10, NEMA 250, ANSI C80.5, IEC 947 7 1 Price: \$40.00

**ICS 7-2000**  
**Industrial Control and Systems: Adjustable-Speed Drives**

Covers the requirements for adjustable speed drive systems, including ratings, construction, testing, performance and manufacture. Includes information to assist users and others in the proper selection of control equipment.

Downloadable from [www.nema.org](http://www.nema.org). Companion Standards: ICS 1 through 10, MG 1, NEMA 250 Price: \$88.00

**ICS 7.1-2000**  
**Industrial Control and Systems: Safety Standards for Construction and Guide for Selection, Installation, and Operation of Adjustable-Speed Drive Systems**

Applies to all industrial equipment electrical components and wiring that are part of the electrical drive system, commencing at the point of input power. Defines safety requirements for the construction and testing of adjustable-speed drive systems and provides safety guidelines for their selection, installation, and operation.

Downloadable from [www.nema.org](http://www.nema.org). Companion Standards: ICS 1 through 10, MG 1, MG 2 Price: \$61.00

**ANSI/NEMA ICS 8-2000 (R2005)**  
**Industrial Control and Systems: Crane and Hoist Controllers**

Covers the requirements for crane and hoist controllers rated 600 volts or less, AC and DC.

Approved as an American National Standard. Companion Standards: ICS 1 through 10 Price: \$121.00

**ICS 10-2005, Part 1**  
**Industrial Control and Systems Part 1: Electromechanical AC Transfer Switch Equipment**

Covers the requirements of electro-mechanical automatic and nonautomatic transfer switches and bypass

isolation switches rated 600 volts AC or less, 60 Hertz, for use on single phase and polyphase AC circuits. Downloadable from [www.nema.org](http://www.nema.org). Companion Standards: ICS 1 through 10, MG 1, IEC 947 6 1 Price: \$38.00

**ICS 10-2005, Part 2**  
**Industrial Control and Systems AC Transfer Equipment—Part 2: Static AC Transfer Equipment**

Proliferation of critical new computing centers operating 24 hours a day, 7 days a week has established a need for higher levels of power reliability. To achieve this, static transfer switches have come into widespread use to transfer critical loads between independent and redundant sources without affecting its operation. NEMA has developed a Part 2 of the ICS 10 standard to specifically address the function and performance requirements of this new class of equipment. Downloadable from [www.nema.org](http://www.nema.org). Price: \$33.00

**ICS 12.1-1997**  
**Industrial Control and Systems: Profiles of Networked Industrial Devices—Part 1: General Rules**

Provides general rules and definitions for the development of profiles for networked industrial devices. The profile terms, structure, format, and data interchange standardized in this publication serve to aid in the common description and understanding of these devices.

Downloadable from [www.nema.org](http://www.nema.org). Price: \$74.00

**ICS 14-2004**  
**Industrial Control and Systems: Application Guide for Electric Fire Pump Controllers**

Provides general guidelines for the proper application of fire pump controllers, stressing those considerations specific to fire pump installations. Downloadable from [www.nema.org](http://www.nema.org). Price: \$56.00



### ICS 15-2004

#### **Industrial Control and Systems: Instructions for the Handling, Installation, Operation, and Maintenance of Electric Fire Pump Controllers Rated Not More than 600V**

Provided to facilitate movement, handling, installation, and maintenance of electric fire pump controllers at the job site and to help avoid personal injury and equipment damage during these processes. Includes information about handling; storage; installation of conduits, cables, and wires; pre-energization and energization; and care and maintenance.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$53.00

### ICS 16-2001

#### **Industrial Control and Systems: Motion/Position Control Motors, Controls, and Feedback Devices**

Covers rotational electric servo and stepper motors and their power requirements, feedback devices, and controls intended for use in a motion/position control system that provides precise positioning, speed control, torque control, or in any combination thereof.

Downloadable from [www.nema.org](http://www.nema.org).  
Companion Standards MG 1, MG 2  
Price: \$190.00

### ICS 18-2001

#### **Motor Control Centers**

Applies to three phase 50 and 60 hertz motor control centers rated not more than 600 volts AC.

Downloadable from [www.nema.org](http://www.nema.org).  
Companion standard: ICS 3  
Price: \$60.00

### ICS 19-2002

#### **Industrial Control and Systems: Diagrams, Device Designations, and Symbols**

Provides guidelines for representation of devices on diagrams and drawings in a standardized manner.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$69.00

### ANSI/NEMA ICS 61800-1-2002

#### **Adjustable Speed Electrical Power Drive Systems, Part 1: General Requirements—Rating Specifications for Low Voltage Adjustable Speed DC Power Drive Systems**

Applies to general purpose adjustable speed DC drive systems which include the power conversion, control equipment, and also a motor or motors. Excluded are traction and electrical vehicle drives.

Approved as an American National Standard.  
Price: \$114.00

### ICS 61800-2-2005

#### **Adjustable Speed Electrical Power Drive Systems, Part 2: General**

Requirements—Rating Specifications for Low Voltage Adjustable Frequency A.C. Power Drive Systems  
Applies to general purpose adjustable speed a.c. drive systems which include power conversion, control equipment, and also an a.c. motor or motors. Excluded are traction and electrical vehicle drives. It applies to systems connected to line voltages up to 1 kV a.c., 50 Hz or 60 Hz, and load side frequency up to 600 Hz.

Price: \$109.00

### ICS 61800-4-2004

#### **Adjustable Speed Electrical Power Drive Systems: Part 4: General Requirements—Rating Specifications for A.C. Power Drive Systems Above 1000 V A.C. and not Exceeding 35 kV**

Applies to power drive systems with converter voltages (line-to-line voltage), between 1 kV a.c. and 35 kV a.c., input side 50 Hz or 60 Hz, and load side frequencies up to 600 Hz.

Price: \$128.00

## INSULATING PRODUCTS

### ANSI/NEMA FI 1-2004

#### **Manufactured Electrical Mica**

Covers manufacturing, measurement, and testing of manufactured electrical mica.

Approved as an American National Standard.  
Price: \$75.00

### FI 2-1992 (R1999, R2005)

#### **Untreated Mica Paper Used for Electrical Insulation**

Covers the procedures, conditions, and methods of sampling and testing properties of untreated mica paper used as electrical insulation or as a component in a composite used for electrical insulating purposes.

Price: \$38.00

### ANSI/NEMA FI 3-2004

#### **Calendered Aramid Papers Used for Electrical Insulation**

Applicable to qualification and testing of calendered aramid papers in thicknesses up to 30 mils (0.76 mm) for use as electrical insulation.

Methods and properties applicable to aramid pressboards, uncalendered aramid papers, and papers made of blends of aramid with other materials are substantially different and are not considered in this standard.

Blends of aramid and mica are covered in NEMA Standard FI 1. For U.S. Government procurement purposes, this standard replaces Military Standard MIL-I-24204A.

Approved as an American National Standard.  
Price: \$44.00

**ANSI/NEMA LD 3-2005****High Pressure  
Decorative Laminates**

Covers high pressure decorative laminate (HPDL) sheets which consist of paper, fabrics, or other core materials that have been laminated at pressures of more than 750 pounds per square inch (5.17 MPa) using thermosetting condensation resins as binders. Approved as an American National Standard and adopted by U.S. Department of Defense. Companion Standards: LD 3.1, LI 1  
Price: \$121.00

**HV 2-1991 (R1996, R2002)  
Application Guide for Ceramic  
Suspension Insulators**

Guidelines for the proper application of ceramic (porcelain and toughened glass) suspension insulators. Companion Standards: ANSI C29.1, ANSI C29.2  
Price: \$46.00

**LI 1-1998  
Industrial Laminated  
Thermosetting Products**

Includes information concerning the manufacture; testing; and performance of laminated thermosetting products in the form of sheets; rods; and tubes. A new format for the standard has been established in which the requirements for the physical and electrical properties of the individual NEMA Grades have been consolidated and placed on individual specification sheets. With this format all of the information on an individual material will be found in one place.  
Price: \$184.00

**LI 6-1993 (R1999)  
Relative Temperature  
Indices of Industrial  
Thermosetting Laminates**

Determines the relative thermal indices temperature ratings of industrial laminate sheets, rods, and tubes (rolled and molded).  
Price: \$56.00

**RE 2-1999  
Electrical Insulating Varnish**

Intended to assist those responsible for the design and repair of existing electrical equipment. It presents, in concise and convenient form, all standards for electrical insulating varnishes. Approved as an American National Standard.

Companion Standard: MW 1000-1997

Price: \$136.00

**TF 1-1993 (R2000, R2005)  
Coated Electrical Slewing**

Establishes test methods and performance characteristics for flexible coated slewing for electrical insulation.

Price: \$38.00

**TF 2-1993 (R2000, R2005)  
Uncoated Treated  
Fiberglass Slewing**

Establishes test methods and performance characteristics for sheet-treated and saturated fiberglass slewing.

Price: \$38.00

**ANSI C29.1-1988 (R2002)  
Test Methods for Electrical  
Power Insulators**

Comprises a manual of test methods to be followed in making tests to determine the characteristics of electrical power insulators. Individual tests shall be made only when specified.

Price: \$44.00

**ANSI C29.2-1992 (R1999)  
Insulators—Wet Process  
Porcelain and Toughened  
Glass Suspension Type**

Covers suspension-type insulators, 4-1/4 inches (108 millimeters) in diameter and larger, made of wet-process porcelain or of toughened glass and used in the transmission and distribution of electrical energy.

Price: \$44.00

**ANSI C29.3-1986 (R2002)  
Wet Process Porcelain  
Insulators (Spool Type)**

Covers spool-type insulators made of wet-process porcelain and used in the transmission and distribution of electric energy.

Price: \$35.00

**ANSI C29.4-1989 (R2002)  
Wet Process Porcelain  
Insulators—Strain Type**

Covers strain-type insulators made of wet-process porcelain and used in the transmission and distribution of electric energy.

Price: \$35.00

**ANSI C29.5-1984 (R2002)  
Wet Process Porcelain Insulators,  
Low and Medium Voltage Pin Type**

This standard covers low- and medium-voltage-type insulators made of wet-process porcelain and used in the transmission and distribution of electric energy.

Price: \$35.00

**ANSI C29.6-1994 (R2002)  
Wet Process Porcelain  
Insulators, High Voltage Pin Type**

Covers materials, dimensions, physical characteristics, and testing information for high voltage pin insulators made of wet process porcelain and used in the transmission and distribution of energy.

Price: \$35.00

**ANSI C29.7-1996 (R2002)  
Porcelain Insulators High  
Voltage Line Post Type**

Covers materials, dimensions, physical characteristics, and testing information for high-voltage line-post type insulators made of wet process porcelain and used in the transmission and distribution of energy.

Price: \$38.00

**ANSI C29.8-1985 (R2002)****Wet Process Porcelain Insulators (Apparatus, Cap, and Pin Type)**

Covers outdoor high-voltage cap-and-pin type apparatus insulators made of wet-process porcelain and used in the transmission and distribution of electrical energy.

Price: \$35.00

**ANSI C29.9-1983 (R2002)****Wet Process Porcelain Insulators (Apparatus, Post Type)**

Covers outdoor high-voltage post-type apparatus insulators made of wet-process porcelain and used in the transmission and distribution of electrical energy.

Price: \$35.00

**ANSI C29.10-1989 (R2002)****Wet Process Porcelain Insulators (Indoor Apparatus Type)**

Covers high-voltage indoor-apparatus insulators made of wet-process porcelain and used in the transmission and distribution of electrical energy.

Price: \$35.00

**ANSI C29.11-1989 (R1996)****Tests to Composite Suspension Insulation for Overhead Transmission**

Comprises a manual of procedures to be followed in making tests to determine the characteristics of insulators used on electric power systems. This is not an insulator specification, but rather it sets forth a test method to be used in conjunction with insulator specifications.

Price: \$35.00

**ANSI C29.12-1997 (R2002)****For Insulators Composite—Suspension Type**

Covers composite suspension insulators made of a fiberglass-reinforced resin rod core, polymer material weathersheds, and metal end fittings intended for use on overhead transmission lines for electric power systems, 70 kV and above. Mechanical and electrical performance levels

specified herein are required for new insulators.

Approved as an American National Standard.

Price: \$30.00

**ANSI C29.13-2000****American National Standard for Insulators—Composite Distribution Deadend Type**

Covers composite distribution dead-end insulators made of a fiberglass-reinforced resin matrix core, polymer material weathersheds, and metal end fittings intended for use on overhead lines for electric power systems, 69 kV and below. Mechanical and electrical performance levels specified are requirements for new insulators.

Approved as an American National Standard.

Price: \$37.00

**ANSI C29.17-2002****For Insulators—Composite-Line Post Type**

Describes the qualification test procedures for composite line post insulators that are made of a fiberglass-reinforced resin matrix core, elastomeric weathersheds, and metal end fittings.

Approved as an American National Standard.

Price: \$49.00

**ANSI C29.18-2003****American National Standard for Insulators Composite—Distribution Line Post Type**

Covers composite distribution line post insulators made of a fiberglass-reinforced resin matrix core, elastomeric material weathersheds, and metal end fittings designed for use on overhead lines for electric power systems, 69 kV and below.

Price: \$50.00

**INTERNATIONAL****Electrical Product****Acceptance in Europe: NEMA Guide to New Approach Directives and CE Marking**

A comprehensive review of three directives affecting NEMA products, i.e., machinery, EMC, and low voltage, as well as summary overviews of directives on medical devices and explosive atmospheres. Explains the self declaration process, third party certification, conformity compliance, and the relationship between different standards in directive compliance. Includes a glossary of frequently used terms, appendices of supporting information, and examples of required forms.

Non-Members' Price: \$71.00

Price: \$62.00

**The International Electrotechnical Commission and the U.S. National Committee of the IEC (USNC/IEC)—A Practical Guide**

Provides a general overview of the IEC to assist individuals in learning more about the international standards process and to facilitate understanding of the recent changes in the international standardization process.

Price: \$48.00

**LIGHTING****BL 1-1997 (R2002)****Fluorescent Ballast Connector**

Covers connector systems for external connections to fluorescent lamp ballasts rated up to 347 volts & 5 amps input.

Price: \$44.00

**EM 1-2002****Exit Sign Visibility Testing and Requirements for Safety**

Contains performance requirements and test methods for evaluating exit sign visibility.

Price: \$56.00

**LE 4-2001****Recessed Luminaires, Ceiling Compatibility**

Contains definitions, dimensions, and tolerances for recessed luminaires designed to use fluorescent, high-intensity discharge and incandescent light sources.

Price: \$38.00

**LE 5-2001****Procedure for Determining Luminaire Efficacy Ratings for Fluorescent Luminaires**

Establishes a luminaire efficacy rating based on rated lumens per watt and organizes the types of luminaires into categories which will reasonably represent the characteristics of high volume luminaires.

Companion Standards: ANSI C82.2, ANSI C82.3, ANSI C78.1, ANSI C78.3

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$44.00

**LE 5A-1999****Procedure for Determining Luminaire Efficacy Ratings for Commercial, Non-Residential Downlight Luminaires**

Developed to assist the federal government, state governments, electric utilities, and manufacturers of luminaires in performing a standardized

test method for determining the luminaire efficacy rating of incandescent, compact fluorescent, and low wattage high intensity discharge downlight luminaires.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$48.00

**LE 5B-1998****Procedure for Determining Luminaire Efficacy Ratings for High-Intensity Discharge Industrial Luminaires**

Developed to assist agencies, laboratories, electrical utility companies, and manufacturers in performing standardized tests to evaluate energy efficiency of high-intensity discharge industrial luminaires.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$31.00

**LL 7-1999****Generic Designation System for Pin-Based Compact Fluorescent and T5 Twin Fluorescent Lamps**

Provides a generic designation system for pin-based compact fluorescent lamps and T5 twin fluorescent lamps. The number of different lamp types and the varying terminology used by lamp manufacturers to describe these lamps can cause confusion in the marketplace.

Price: \$27.00

**NEMA 410-2004****Performance Testing for Lighting Controls and Switching Devices with Electronic Fluorescent Ballasts**

Covers the definition, measurement, and test of characteristics relevant to the use and application of lighting controls and electronic fluorescent ballast.

Price: \$61.00

**Getting the Most from Your Lighting Dollar (Third Edition)**

Revised in 1997, this third edition gives the reader 24 illustrated pages of important basic information about lighting and steps that can be taken to save energy without sacrificing lighting benefits. Written in lay terms, the booklet covers definitions of common lighting terms, important facts about lighting, and the benefits of lighting.

Price: \$26.00

**Fluorescent Lamps and the Environment**

Recent state and federal regulations concerning fluorescent lamp disposal have become increasingly complex, affecting a wide range of U.S. businesses. Fluorescent lamps and high intensity discharge lamps contain a small quantity of mercury. Concerns over mercury releases to the air and water are driving stricter disposal regulations. This brochure, revised in 2001, helps answer questions regarding lamp technology and the presence of mercury therein, environmental concerns, industry efforts and regulatory developments.

To order, phone: (703) 841-3274

**Profiting from Lighting Modernization**

This 40-page illustrated guide to modernizing lighting covers benefits afforded by better lighting, such as productivity, retail sales, security, liability, loss prevention, curbside appeal, tax benefits, and improved profits. Also included are design considerations, lighting management options, and maintenance, together with a complete glossary of terms and contact sources.

Price: \$26.00

### **Guide to Office Lighting and Productivity**

Describes benefits of effective office lighting, from improved productivity and reduced errors to reduced absenteeism, increased space usage, enhanced image, tax advantages, and more effective security. Provides basic issues in office lighting design, including special needs created by video display terminals measuring efficiency, flexibility, and quantity, versus quality. Price: \$26.00

### **Guide to Retail Lighting Management (Third Edition)**

Case histories show that lighting has a direct impact on retail sales. This 24-page guide, written in lay terms, discusses many of these case histories and provides the information you need to help make your store's lighting system more cost-effective. Price: \$26.00

### **Guide to Energy-Efficient Lighting Systems**

Describes the use of lighting products and energy-efficient lighting. It gives specific information on retrofit options, input power savings and annual energy savings. A comprehensive document that helps building managers and facility operators, as well as the lay person, to understand the purpose of lighting systems and to evaluate cost-effective lighting systems and retrofit options. Downloadable from [www.nema.org](http://www.nema.org). Price: \$28.00

### **Guide to Industrial Lighting**

Nontechnical guide describing the many benefits of good industrial lighting. Covers industrial lighting system audits and lighting management plans. Downloadable from [www.nema.org](http://www.nema.org). Price: \$26.00

### **NEMA Guide to Lighting Controls**

Describes the benefits, definitions, and uses of lighting controls. Provides general guidance in evaluating existing lighting controls, as well as others which may be applicable, in an effort to achieve maximum lighting advantage. Developed specifically for property managers, facility managers, asset managers, and others who are responsible for lighting in buildings but who may not be highly versed in the technical specifics involved. Price: \$26.00

### **Performing a Lighting System Audit (Revised Edition)**

Should you conduct a lighting energy audit? This comprehensive guide can help you answer that question. It provides the information (written in lay terms) to help make your lighting energy audit effective. Includes facts you should have and how to obtain them, equipment and materials needed for an audit, instructions for obtaining information on requirements and restrictions, and a lighting systems audit form. Price: \$26.00

### **ANSI C78.5-2003**

#### **American National Standard for Electric Lamps—Specifications for Performance of Self-ballasted Compact Fluorescent Lamps**

Specifies the performance requirements together with the test methods and conditions required to show compliance of self-ballasted compact fluorescent lamps up to 60 watts that are intended for domestic and similar general lighting purposes. Downloadable from [www.nema.org](http://www.nema.org). Price: \$26.00

### **ANSI C78.20-2003**

#### **American National Standard for Electric Lamps—A, G, PS, and Similar Shapes with E26 Medium Screw Bases**

Sets forth the physical and electrical characteristics of the group of incandescent lamps that have A, G, PS,

and similar bulb shapes with E26 medium screw bases, including the reduced-wattage versions. Downloadable from [www.nema.org](http://www.nema.org). Price: \$105.00

### **ANSI C78.21-2003**

#### **American National Standard for Electric Lamps—PAR and R Shapes**

Provides physical and electrical characteristics of the group of incandescent lamps that have PAR and R bulb shapes. Lamps with clear, frosted, and lens end bulbs, with clear and prescription lenses, and with various reflector coatings are covered. Downloadable from [www.nema.org](http://www.nema.org). Price: \$109.00

### **ANSI C78.22-1995**

#### **Incandescent Lamps—A, G, PS, and Similar Shapes with E39 Mogul Screw Bases**

Sets forth the physical and electrical characteristics of the group of incandescent lamps that have A, G, PS, and similar bulb shapes with E39 mogul screw bases. Downloadable from [www.nema.org](http://www.nema.org). Price: \$48.00

### **ANSI C78.23-1995**

#### **Incandescent Lamps—Miscellaneous Types**

Sets forth the physical and electrical characteristics of the group of incandescent lamps that have C, S, T, or similar bulb shapes which are not covered in ANSI C78.20 and C78.22. Downloadable from [www.nema.org](http://www.nema.org). Price: \$48.00

### **ANSI C78.24-2001**

#### **Two Inch (51-mm) Integral-Reflector Lamps with Front Covers and GU5.3 or GX5.3 Bases**

Sets forth the physical and electrical characteristics of the group of incandescent lamps that have two inch (51-mm) integral-reflector lamps with front cover. Downloadable from [www.nema.org](http://www.nema.org). Price: \$56.00

**ANSI C78.30-1997****Procedure for Use in Preparation of Lamp Space Drawings**

Describes the procedures for the construction of lamp space drawings.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$38.00

**ANSI C78.40-1992****Mercury Lamps, Specifications for**

Covers the dimensional limits and other physical characteristics required to assure the commonality, interchangeability, and proper application of mercury lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$41.00

**ANSI C78.40a-1998****Specifications for Mercury Lamps—Maximum Outline Drawing of Bulb BT56**

Supplement to ANSI C78.40-1992. Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$24.00

**ANSI C78.41-2001****Low Pressure Sodium Lamps**

Covers the dimensional limits and other physical characteristics required to assure the commonality and interchangeability and proper application of low-pressure sodium lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$61.00

**ANSI C78.42-2004****American National Standard for Electric Lamps—High Pressure Sodium Lamps**

Sets forth the physical and electrical requirements for HPS lamps, to ensure performance and interchangeability. The data given also provide the basis for the electrical requirements for ballasts and ignitors, as well as the lamp-related requirements for luminaires.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$218.00

**ANSI C78.43-2004****American National Standard for Electric Lamps—Single-Ended Metal Halide Lamps**

Sets forth the physical and electrical requirements for single-ended metal halide lamps operated on 60 Hz ballasts to ensure interchangeability and safety.

Provides the basis for the electrical requirements for ballasts and ignitors, as well as the lamp-related requirements for luminaires. Includes lamps whose arc tubes are made of quartz or ceramic materials. The following ANSI standards have been incorporated into this consolidation: C78.1372, C78.1374, C78.1375, C78.1376, C78.1377, C78.1378, C78.1379, C78.1382, C78.1384, and C78.1650.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$240.00

**ANSI C78.81-2003****Double-Capped Fluorescent Lamps—Dimensional and Electrical Characteristics**

Sets forth the physical and electrical characteristics of the principal types of fluorescent lamps intended for application on conventional line frequency circuits, and electronic high frequency circuits.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$375.00

**ANSI C78.180-2003****American National Standard for Electric Lamps—Specifications for Fluorescent Lamp Starters**

Intended to cover performance of glow switch starters used with pre-heat-type fluorescent and similar discharge lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$46.00

**ANSI C78.260-2002****Tubular Tungsten-Halogen Lamps—Physical Characteristics**

Covers the dimensional limits and other physical characteristic required to assure the commonality and interchangeability and proper application of tubular tungsten-halogen lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$74.00

**ANSI C78.261-1977****Specification for Tubular Incandescent Infrared Lamps**

ANSI copyright, contact Global for price

**ANSI C78.370-1997****Method of Designation for Electric Lamps—Photographic, Stage, and Studio**

Describes a system for the designation of photographic, stage, and studio lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$37.00

**ANSI C78.370\_390lcd-2002****American National Standard for Electric Lamps—Amendments to ANSI C78.370-1997 and ANSI C78.390-1998**

Supplements for ANSI C78.370-1997 and ANSI C78.390-1998. Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$8.00

**ANSI C78.375-1997****Fluorescent Lamps—Guide for Electrical Measurements**

Describes the procedures and the precautions to be observed in obtaining uniform and reproducible measurements of the electrical characteristics of fluorescent lamps under standard conditions, when operated on AC circuits.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$38.00

**ANSI C78.376-2001**  
**Specifications for the Chromaticity of Fluorescent Lamps**

Covers the objectives and tolerances for the chromaticity of T8, T10, and T12 fluorescent lamps with a nominal loading of from 5 to 10 watts per foot at their normal 100-hour rating point.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$40.00

**ANSI C78.379-1994**  
**Classification of the Beam Patterns of Reflector Lamps**

Covers the dimensional limits and other physical characteristics required to assure the commonality, interchangeability, and proper application of reflector lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$40.00

**ANSI C78.379a-1997**  
**MR and PAR Beam Designation and Tolerance**

Supplement to ANSI C78.379-1994—specific to MR and PAR beam designation and tolerance.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$24.00

**ANSI C78.380-2005**  
**American National Standard for Electric Lamps—**

**High-Intensity Discharge Lamps, Method of Designation**

Describes a system for the designation of high-intensity discharge lamps, including compact, enclosed-arc discharge light sources such as mercury, metal halide, high-pressure sodium, and similar types of lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$86.00

**ANSI C78.381-1961**  
**Glow Lamps—Method of Designation**

ANSI copyright, contact Global for price

**ANSI C78.385-1961**  
**Glow Lamps—Method of Measurement**

ANSI copyright, contact Global for price

**ANSI C78.386-1989**  
**Mercury Lamps—Method of Measuring Characteristics**

ANSI copyright, contact Global for price

**ANSI C78.390-1998 (R2002)**  
**Method of Designation for Electric Lamps—Miniature and Sealed-Beam Incandescent Lamps**

Describes a system for the designation of miniature and sealed-beam lamps. A form is provided for lamp manufacturers to request a designation assignment, alternative, or change.

Price: \$48.00

**ANSI C78.391-2004**  
**American National Standard for Electric Lamps—Characteristics of Miniature Lamps of T1 and T1 3/4 Shapes**

Sets forth the physical and electrical characteristics of those groups of subminiature incandescent lamps with T1 and T1-3/4 bulb shapes. Lamps with various base or termination configurations are included.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$62.00

**ANSI IEC C78.682-1997**  
**Standard Method of Measuring the Pinch Temperature of Quartz-Tungsten-Halogen Lamps**

Specifies details of the type of thermocouple to be used to measure the pinch temperature of quartz-tungsten-halogen lamps, the methods of preparation of the lamp and thermocouple, and the measurement to be made.

Approved as an American National Standard.

Price: \$33.00

**ANSI C78.901-2005**  
**American National Standards for Single Base Fluorescent Lamps—Dimensional and Electrical Characteristics**

Sets forth the physical and electrical characteristics required to assure interchangeability and to assist in the proper application of single-based fluorescent lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$400.00

**ANSI IEC C78.1195-2001**  
**Double-Capped Fluorescent Lamps—Safety Specifications**

Specifies the safety requirements for double-capped fluorescent lamps for general lighting purposes of all groups having Fa6, Fa8, G5, G13, 2G13, R17d, and W.4.3X8.5d caps.

Price: \$71.00

**ANSI IEC C78.1199-2002**  
**Single-Capped Fluorescent Lamps—Safety Specifications**

Specifies the safety requirements for single-capped fluorescent lamps for general lighting purposes of all groups having 2G7, 2GX7, GR8, 2G10, G10q, GR10q, GX10q, GY10q, 2G11, G23, GX23, G24, GX24, and GX32 caps.

Price: \$71.00

**ANSI C78.1340-1990**  
**450W Self-Ballasted Mercury Lamps**

ANSI copyright, contact Global for price

**ANSI C78.1341-1990 (R1995)**  
**750-Watt, 120-Volt Self-Ballasted Mercury Lamps**

ANSI copyright, contact Global for price

**ANSI C78.1342-1990**  
**160-Watt, 120-Volt B87 Self-Ballasted Mercury Halide Lamps**

ANSI copyright, contact Global for price

**ANSI C78.1380-1988**  
**Electric Lamps—250 Watt, 120 Volt, Self-Ballasted Mercury Lamps Specifications**

ANSI copyright, contact Global for price

**ANSI C78.1381-1998****Electric Lamps—250 Watt, 70 Watt, M85 Metal Halide Lamps**

Descriptions of metal-halide M85 lamps.

Price: \$33.00

**ANSI C78.1385-1998****150-Watt, M81****Double-Ended Metal-Halide Lamps**

Metal-halide lamp designations are assigned in accordance with ANSI C78.380.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$33.00

**ANSI C78.1386-1998****100-Watt, M91****Double-Ended Metal-Halide Lamps**

Metal-halide lamp designations are assigned in accordance with ANSI C78.380.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$33.00

**ANSI C78.1387-2001****250-Watt, M80 Double-Ended Metal Halide Lamps**

Describes bulb and base designations and general characteristics of 250-watt, M80 double-ended metal-halide lamps.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$48.00

**ANSI C78.1401-2004****American National Standard for Electric Lamps—Dimensions for Projection Lamps—Double-Contact, Medium Ring (Special B), Base-up Type**

Establishes the dimensions essential to the interchangeability of lamps of the double-contact, medium ring (Special B), base-up type.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$31.00

**ANSI C78.1402-2004****American National Standard for Electric Lamps—Dimensions for Projection Lamps—G17q and GX17q Based Four-Pin, Prefocus, for Base-down Operation**

Establishes the dimensions essential to the interchangeability of four-pin, prefocus projection lamps for base-down operation of T10 and T12 bulb sizes.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$28.00

**ANSI C78.1403-1997****Tungsten-Halogen Lamps with G6.35, GX6.35, and GY6.3 Bases**

Defines the dimensional limits and other physical characteristics required to ensure interchangeability and to assist in the proper application of tungsten-halogen lamps with G6.35, GX6.35 and GY 6.35 two-pin bases and 27.0 to 40mm nominal light center length.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$44.00

**ANSI C78.1406-2004****American National Standard for Electric Lamps—P28 Single-Contact Medium Prefocus Based Projection Lamps for Base-Down Operation—Dimensions**

Establishes the dimensions essential to interchangeability of single contact medium prefocus based projection lamps of T-10 and T-12 bulb sizes.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$28.00

**ANSI C78.1407-2004****American National Standard for Electric Lamps—Condenser-Reflector, Four-Pin Prefocus-Base Projection Lamps—Dimensions**

Specifies the dimensions essential to the interchangeability of condenser-reflector lamps having four-pin pre-focused bases, T12 or T14 bulbs, and used in 8mm motion-picture projectors.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$31.00

**ANSI C78.1408-2004****American National Standard for Electric Lamps—CBA Projection Lamp**

Provides information on the descrip-

tion, ratings, restrictions, physical characteristics, dimensions, life, illumination, seal temperature, and operating temperature of a lamp that has been Lamp Code Designated as a CBA projection lamp.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$31.00

**ANSI C78.1413-2001****Dimensions and Centering Systems for Projection Lamps—51 mm (Two-inch) Integral Reflector Rim Reference Lamps with GX5.3, GY5.3, and GU5.3 Bases**

Specifies detailed dimensions for 51 mm (two inch) integral reflector rim reference projection lamps with GX5.3, GY5.3, or GU5.3 bases to assure interchangeability within the appropriate holding systems. The lamps provide references for mounting at their reflector rims.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$58.00

**ANSI C78.1417-1997****1.65-inch (42-mm) for Integral Reflector Rim Reference Projection Lamps with GX5.3 or GY5.3 Bases—Dimensions and Centering Systems**

Specifies the detailed lamp dimensions for those lamps in the family of 1.65-in (42-mm) integral reflector, rim reference lamps with GX5.3 or GY5.3 bases such that interchangeability within the appropriate holding system will be assured.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$38.00

**ANSI C78.1420-2001****Microfilm Projection Lamps—Two-inch (51 mm) Dichroic Coated Integral Reflector, Rim Reference, Tungsten Halogen Lamps with GX5.3 Bases**

Consolidates the lamps commonly used for microfilm projectors into a single performance standard.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$64.00



**ANSI C78.1421-2002**  
**Dimensions and Centering**  
**Systems for Projection Lamps—**  
**35 mm Integral Reflector**  
**Rim Referencing Lamps with**  
**GZ4 Bases**

Specifies lamp dimensions of 35 mm (1.38 inch) diameter integral reflector rim reference projection lamps with GZ4 bases so that interchangeability with the appropriate holding systems will be assured.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$44.00

**ANSI C78.1430-1997**  
**Slide Projector Lamps,**  
**Condensing, Dichroic, 1.65 in.**  
**(42 mm), Int-Refl., Rim Ref. TH**  
**Lamps with GX5.3 Bases**

Defines the dimensional limits and other physical characteristics required to ensure commonality and interchangeability and to assist in the proper application of projection lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$31.00

**ANSI C78.1431-1997**  
**Consolidation/Rev. of C78.1405-**  
**1991, C78.1422-1991, and**  
**C78.1423-1991—Slide Projector**  
**Lamps—Condensing, Dichroic,**  
**Two-inch (51 mm), Integral**  
**Reflector, Rim Ref. with Tungsten-**  
**Halogen Lamps with GY5.3 Bases**

Consolidates the lamps commonly used for slide projectors into a single standard.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$38.00

**ANSI C78.1432-1997**  
**Tungsten-Halogen Lamps**  
**with GZ9.5 Two-Pin, Prefocus**  
**Bases and 36.5 mm Nominal**  
**Light Center Length**

Defines the dimensional limits and other physical characteristics required to ensure commonality and interchangeability and to assist in the proper application of tungsten-halogen lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$31.00

**ANSI C78.1433-2001**  
**Two-inch (51 mm) Dichroic**  
**Coated Integral Reflector, Rim**  
**Reference, Tungsten Halogen**  
**Large Screen Projection**  
**Lamps with GX5.3 Bases**

Consolidates standards for low voltage two-inch (51 mm) dichroic coated integral reflector, rim reference tungsten halogen lamp types with GX5.3 bases designed for large screen projection systems and used in 8 mm and 16 mm projection, slide projector, photo enlarger, and printing applications.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$56.00

**ANSI C78.1434-2001**  
**Condensing Dichroic Coated**  
**Integral Reflector Side Pin**  
**Tungsten Halogen Projection**  
**Lamps with GX7.9 Bases**

Consolidates previous standards for certain low voltage condensing dichroic-coated integral reflector side pin tungsten halogen projection lamps with GX7.9 bases designed for large screen projection systems and used in 8 mm and 16 mm projector applications.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$74.00

**ANSI C78.1435-2002**  
**Projection Lamps—Tungsten-**  
**Halogen Lamps with G5.3 Bases**

Consolidates projection lamps with G5.3 bases into a single standard.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$36.00

**ANSI C78.1450-1983 (R2002)**  
**Projection Lamps, Incandescent,**  
**Method for Life Testing**

Defines the dimensional limits and other physical characteristics required to ensure commonality and interchangeability and to assist in the proper application of projection lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$25.00

**ANSI C78.1451-2002**  
**For Electric Lamps—Use of**  
**Protective Shields with**  
**Tungsten-Halogen Lamps—**  
**Cautionary Notice**

A cautionary notice applying to the use of protective shields with all tungsten-halogen (T-H) lamps which do not have an integral device that protects against shattering and ultraviolet (UV) emissions.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$5.00

**ANSI C78.1452-2004**  
**American National Standard for**  
**Electric Lamps—Projection**  
**Lamps—Vocabulary**

Provides definitions for a wide range of terms used in the design, manufacturing, and application of photographic lamps. It serves as a common reference for all ANSI lamp standards in the C78.1400 series, thus reducing the number of terms that need to be defined in individual standards.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$104.00

**ANSI C78.1460-2004****American National Standard for Electric Lamps—Single-Ended Tungsten-Halogen Lamps GZ9.5 Base, T6 Bulb, 36.5 mm LCL, 76.2 mm MOL with Proximity Reflector**

Defines the dimensional, physical, and other characteristics to assist in the proper application of tungsten-halogen lamps with GZ9.5 bases, T6 (T19) bulbs at 36.5 mm LCL and 76.2 mm maximum overall length with internal proximity reflectors. Downloadable from [www.nema.org](http://www.nema.org). Price: \$52.00

**ANSI C78.1500-2001****Tungsten-Halogen Lamps with P28 Bases and 89 mm LCL**

Defines the dimensional limits and other physical characteristics required to ensure interchangeability and assist in the proper application of tungsten-halogen lamps with P28 bases and 89 mm nominal light center length. Downloadable from [www.nema.org](http://www.nema.org). Price: \$52.00

**ANSI C78.1501-2001****Tungsten-Halogen Lamps with G22 Bases and 63.5 mm LCL**

Defines the dimensional limits and other physical characteristics required to ensure interchangeability and assist in the proper application of tungsten-halogen lamps with G22 bases and 63.5 mm nominal light center length. Downloadable from [www.nema.org](http://www.nema.org). Price: \$31.00

**ANSI C78.1503-2001****Tungsten-Halogen Lamps with G9.5 Bases and 60.5 mm LCL**

Defines the dimensional limits and other physical characteristics required to ensure interchangeability and assist in the proper application of tungsten-halogen lamps with G9.5 bases and 60.5 mm nominal light center length. Downloadable from [www.nema.org](http://www.nema.org). Price: \$52.00

**ANSI C78.1504-2001****Tungsten-Halogen Lamps with P28 Bases and 55.5 mm LCL**

Defines the dimensional limits and other physical characteristics required to ensure interchangeability and assist in the proper application of tungsten-halogen lamps with P28 bases and 55.5 mm nominal light center length. Downloadable from [www.nema.org](http://www.nema.org). Price: \$31.00

**ANSI C78.1505-2001****Tungsten-Halogen Lamps with G38 Bases and 127 mm LCL**

Defines the dimensional limits and other physical characteristics required to ensure interchangeability and assist in the proper application of tungsten-halogen lamps with G38 bases and 127 mm nominal light center length. Downloadable from [www.nema.org](http://www.nema.org). Price: \$52.00

**ANSI IEC C78.60360-2002****Standard Method of Measurement of Lamp Cap Temperature Rise**

Describes the standard method of measurement of lamp cap temperature rise which is to be used when testing incandescent or discharge lamps for compliance with the limits. Temperature-rise limits for particular lamp types are, for example, listed in IEC 60432. Approved as an American National Standard. Price: \$110.00

**ANSI IEC C78.60432:1-2003****American National Standard for Electric Lamps—Incandescent Lamps—Safety Specifications, Part 1: Tungsten Filament Lamps for Domestic and Similar General Lighting Purposes**

Users of this document should purchase the newest version of IEC 60432 from ANSI. Downloadable from [www.nema.org](http://www.nema.org). Price: \$25.00

**ANSI IEC C78.60432:2-2004****American National Standard for Electric Lamps—Safety Specifications—Part 2: Tungsten Halogen Lamps for Domestic and Similar General Lighting Purposes**

Users of this document should first purchase IEC 60432-2:1999 from ANSI. Approved as an American National Standard. Downloadable from [www.nema.org](http://www.nema.org). Price: \$22.00

**ANSI IEC C78.60432:3-2004****American National Standard for Electric Lamps—Incandescent Lamps—Safety Specifications—Part 3: Tungsten Halogen Lamps (non vehicle)**

Users of this document should first purchase IEC 60432-3 : 2002-12 from ANSI. Downloadable from [www.nema.org](http://www.nema.org). Price: \$22.00

**ANSI IEC C78.62035-2004****American National Standard for Electric Lamps-Discharge Lamps (Excluding Fluorescent Lamps)-Safety Specifications**

The latest version of IEC 62035 must be obtained from the American National Standards Institute. Approved as an American National Standard. Downloadable from [www.nema.org](http://www.nema.org). Price: \$25.00

**ANSI/NEMA C78.LL 3-2003****Procedures for High Intensity Discharge Lamp Sample Preparation and the Toxicity Characteristic Leaching Procedure**

Intended to supplement the Toxicity Characteristic Leaching Procedure by supplying specific instructions for size reduction and for other critical procedures specific to the testing of HID lamps. Approved as an American National Standard. Companion Standards: C78.LL 4-2003, C78.LL 1256-2003

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$22.00

**ANSI/NEMA C78.LL 4-2003  
Procedures for Incandescent  
Lamp Sample Preparation  
and the Toxicity Characteristic  
Leaching Procedure**

Intended to supplement the Toxicity Characteristic Leaching Procedure by supplying specific instructions for size reduction and for other critical procedures specific to the testing of incandescent lamps.

Approved as an American National Standard.

Companion Standards: C78.LL 3-2003, C78.LL 1256-2003

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$22.00

**ANSI/NEMA C78.LL 1256-2003  
Procedures for Fluorescent  
Lamp Sample Preparation  
and the Toxicity Characteristic  
Leaching Procedure**

Intended to supplement the Toxicity Characteristic Leaching Procedure by supplying specific instructions for size reduction of lamps including integral electronic compact, pin-based compact, linear and U-shaped fluorescent lamps.

Approved as an American National Standard.

Companion Standards: C78.LL 3-2003, C78.LL 4-2003

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$52.00

**ANSI IEC C78.MR11-2-1997  
1.375 Inch (35 mm) Integral  
Reflector Lamps with Front  
Covers and GU4 or CZ4 Bases**

Covers the dimensional limits and other physical characteristics required to assure the commonality, interchangeability, and proper application of integral-reflector lamps.

Approved as an American National Standard.

Price: \$31.00

**ANSI C79.1-2002  
Nomenclature for Glass  
Bulbs Intended for Use  
with Electric Lamps**

Describes a system of nomenclature that provides designations for glass bulbs used as the envelopes for electric lamps.

Approved as an American National Standard.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$64.00

**ANSI IEC C81.61-2003  
American National Standard  
for Electrical Lamp Bases—  
Bases (Caps)**

Sets forth the specifications for bases (caps) used on electric lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$387.00

**ANSI IEC C81.62-2003  
American National Standard  
for Electric Lampholders**

Sets forth the specifications for lampholders for electric lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$288.00

**ANSI IEC C81.63-2004  
Gauges for Electric Lamp  
Bases and Lampholders**

Sets forth the specifications for gauges for bases (caps) and lampholders for electric lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$518.00

**ANSI C81.64-1993  
Guidelines and General  
Information for Electrical Lamp  
Bases, Lampholders, and Gauges**

Price: \$52.00

**ANSI C81.64a-1999  
Guidelines and General  
Information for Electric  
Lamp Bases, Lampholders,  
and Gauges (Supplement)**

Supplement to ANSI C81.64.

Approved as an American National Standard.

Downloadable from [www.nema.org](http://www.nema.org).

Price: \$77.00

**ANSI C82.1-2004  
American National Standard for  
Lamp Ballast—Line Frequency  
Fluorescent Lamp Ballast**

Intended to cover ballasts which have rated open-circuit voltages of 2000 volts or less and are intended to operate lamps at a frequency of 50 Hz or 60 Hz.

Approved as an American National Standard.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$62.00

**ANSI C82.2-2002  
Method of Measurement of  
Fluorescent Lamp Ballasts**

Outlines the procedures to be followed and the precautions to be observed in measuring and testing line frequency fluorescent lamp ballasts as specified in C82.1 with either hot-cathode or cold-cathode fluorescent lamps.

Price: \$96.00

**ANSI C82.3-2002  
Reference Ballasts for  
Fluorescent Lamps**

Describes the essential design features and operating characteristics of reference ballasts for fluorescent lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$46.00

**ANSI C82.4-2002  
Ballasts for High-Intensity  
Discharge and Low-Pressure  
Sodium Lamps  
(Multiple-Supply Type)**

Provides specifications for and operating characteristics of ballasts for mercury, metal-halide, high-pressure sodium (HPS), and low-pressure sodium (LPS) lamps. The ballasts operate from multiple-supply sources of 600 volts maximum at a frequency of 60 hertz.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$96.00

**ANSI C82.5-1990 (R1995)**  
**Reference Ballasts for HID and Low Pressure Sodium Lamps**

ANSI copyright, contact Global for price

**ANSI C82.6-2005**  
**American National Standard for Lamp Ballasts—Ballasts for High-intensity Discharge Lamps—Methods of Measurement**

Describes the procedures to be followed and the precautions to be taken in measuring performance of ballasts for high-intensity discharge (HID) lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$195.00

**ANSI C82.9-1996**  
**High Intensity Discharge and Low Pressure Sodium Lamps, Ballasts and Transformers—Definitions**

Covers the dimensional limits and other physical characteristics required to assure the commonality, interchangeability, and proper application of high-intensity discharge and low pressure sodium lamps.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$31.00

**ANSI C82.9b-1998**  
**Total Harmonic Distortion**

Supplement to C82.9-1996.  
 Price: \$24.00

**ANSI C82.11 Consolidated-2002**  
**High Frequency Fluorescent Lamp Ballasts**

Intended to cover high frequency ballasts which have rated open-circuit voltages of 2000 volts or less and are intended to operate at a supply frequency of 50 Hz or 60 Hz. This document revises and updates ANSI C82.11-1993 and includes additional supplements.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$123.00

**ANSI C82.12-1999**  
**American National Standard for Lamp Ballasts—Fluorescent Adapters**

Covers fluorescent lamp adapters rated for 120 and 127 volt, 60 hertz input and for use with Edison-screw lampholders. This includes adapters for hot-cathode fluorescent lamps, with either preheat (switch)-start, rapid-start (continuously heated cathodes), modified rapid start or programmed start.

Approved as an American National Standard.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$31.00

**ANSI C82.13-2002**  
**For Lamp Ballasts—Definitions—for Fluorescent Lamps and Ballasts**

Provides definitions of terms used in ANSI C78 and C82 series standards for fluorescent lamps and ballasts. Individual standards may also include additional definitions specific to that standard.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$48.00

**ANSI C82.77-2002**  
**Harmonic Emission Limits—Related Power Quality Requirements for Lighting Equipment**

Specifies harmonic limits and methods of measurement for lighting equipment.

Downloadable from [www.nema.org](http://www.nema.org).  
 Price: \$165.00

**ANSI C136.1-2004**  
**American National Standard for Roadway and Area Lighting Equipment—Filament Lamps—A Guide for Selection**

Guide for the proper selection of filament lamps for use in roadway and area lighting equipment covered by the following American National Standards: ANSI C136.4, ANSI C136.5, ANSI C136.6, and ANSI C136.11.

Price: \$27.00

**ANSI C136.2-2004**  
**American National Standard for Roadway and Area Lighting Equipment—Luminaire Voltage Classification**

Covers three voltage classifications for luminaires used in roadway and area lighting. Also covers the general testing methods for determining dielectric withstand and transient voltage withstand.

Price: \$24.00

**ANSI C136.3-2005**  
**American National Standard for Roadway and Area Lighting Equipment—Luminaire Attachments**

Covers attachment features of luminaires used in roadway and area lighting equipment. The features covered apply to luminaires that are side- or post-top-mounted.

Price: \$26.00

**ANSI C136.4-2003**  
**For Roadway and Area-Lighting Equipment—Series Sockets and Series-Socket Receptacles**

Covers the following equipment for roadway and area luminaires: Series sockets having medium impact strength and intended for service at high temperatures; series sockets having high impact strength and intended for service at limited temperatures; and series-socket receptacles in the 5000 V classification.

Price: \$37.00

**ANSI C136.5-2003**  
**American National Standard for Roadway and Area Lighting Equipment—Film Cutouts**

Covers operating and dimensional features of single-shot film cutouts used with series roadway lighting equipment and circuits, and function by dielectric breakdown and subsequent partial fusing of components to establish a shunting electrical circuit to bypass non-operative series roadway lighting equipment.

Price: \$27.00

**ANSI C136.6-2004****American National Standard for Roadway and Area Lighting Equipment—Metal Heads and Reflector Assemblies—Mechanical and Optical Interchangeability**

Covers dimensional features of luminaires with metal heads that permit mechanical and optical interchangeability of both head and reflector assemblies.

Price: \$27.00

**ANSI C136.9-2003****American National Standard for Roadway and Area Lighting Equipment—Socket Support Assemblies for Metal Heads—Mechanical Interchangeability**

Covers the following equipment for use in metal heads that are in accordance with the latest revision of ANSI C136.6: High-intensity discharge lamp ballast and socket assemblies and mogul and medium multiple incandescent lamp socket and support assemblies.

Price: \$27.00

**ANSI C136.12-2004****American National Standard for Roadway and Area Lighting Equipment—Mercury Lamps—Guide for Selection**

Covers the selection of mercury vapor lamps recommended for use in roadway and area lighting equipment.

Price: \$27.00

**ANSI C136.13-2004****American National Standard for Roadway and Area Lighting Equipment—Metal Brackets for Wood Poles**

Covers metal pipe, tubing, and structural brackets for wood poles designed to support luminaires of generally spherical, ellipsoidal, or rectangular shapes used in roadway and area lighting.

Price: \$37.00

**ANSI C136.14-2004****American National Standard for Roadway and Area Lighting Equipment—Elliptically Shaped, Enclosed Side-Mounted Luminaires for Horizontal-Burning High-intensity Discharge Lamps**

Covers dimensional, maintenance and light distribution features that permit the interchange of enclosed side-mounted luminaires for horizontal-burning high-intensity discharge lamps used in roadway and area lighting equipment.

Price: \$27.00

**ANSI C136.15-2004****American National Standard for Roadway and Area Lighting Equipment—High-Intensity Discharge and Low-Pressure Sodium Lamps in Luminaires—Field Identification**

Provides a simple, uniform method for identifying the type and wattage rating of a high-intensity discharge or low-pressure sodium lamp(s) installed in a luminaire used for roadway and area lighting.

Price: \$27.00

**ANSI C136.16-2004****For Roadway and Area Lighting Equipment—Enclosed, Post Top-Mounted Luminaires**

Covers dimensional, maintenance, and light distribution features that permit the interchange of enclosed, post top-mounted luminaires whose center of mass is approximately over the mounting tenon. Luminaires of similar size, shape, and weight meeting the requirements of this standard may be used interchangeably within a system.

Price: \$26.00

**ANSI C136.19-2004****American National Standard for Roadway and Area Lighting Equipment—High-pressure Sodium and Retrofit High-pressure Sodium Lamps for Mercury Ballasts—Guide for Selection**

Covers the selection of high-pressure

sodium lamps recommended for use in roadway and area lighting equipment.  
Price: \$27.00

**ANSI C136.21-2004****American National Standard for Roadway Lighting and Area Lighting Equipment—Vertical Tenons Used with Post Top-mounted Luminaires**

Covers the attachment features of vertical tenons on pole tops or brackets used in roadway and area lighting that permit the interchangeability of post-top-mounted luminaires.

Price: \$27.00

**ANSI C136.22-2004****American National Standard for Roadway and Area Lighting Equipment—Internal Labeling of Luminaires**

Covers internal luminaire identification labels for all styles of luminaires used for roadway lighting.

Price: \$27.00

**ANSI C136.24-2004****American National Standard for Roadway and Area Lighting Equipment—Nonlocking (Button) Type Photocontrols**

Covers the electrical and mechanical interchangeability of nonlocking type photocontrols for mounting within a roadway or off-roadway luminaire, herein called "controls." These controls are commonly called "button" photocontrols.

Price: \$37.00

**ANSI C136.26-2003****American National Standard for Roadway and Area Lighting Equipment—Trouble-shooting Guide for High-Pressure Sodium**

Intended to help the service person quickly diagnose a high pressure sodium luminaire and also assure that the problem is fixed on the first attempt. Approved as an American National Standard.

Price: \$25.00

**ANSI C136.33-2005****American National Standard for Roadway and Area Lighting—Plug-in Type Receptacle and Plug for High-intensity Discharge Igniters**

Covers the physical features, dimensions, and electrical requirements of mating receptacles for plug-in type high-intensity discharge lamp igniters used in roadway and area luminaires. Price: \$36.00

**ANSI C136.34-2004****American National Standard for Roadway and Area Lighting Equipment—Vandal Shields for Roadway and Area Lighting Luminaires**

Covers supplementary vandal shields used to protect luminaires and luminaire accessories used for roadway and area lighting. Price: \$37.00

## MEASURING EQUIPMENT, ELECTRICAL

**EI 21.1-1993 (R2002)****Instrument Transformers for Revenue Metering (110 kV BIL and Less)**

Covers general requirements, ratings, accuracy classifications, burdens, and pertinent dimensions applicable to instrument current and voltage transformers for revenue metering rated 110 kV BIL and less. Price: \$73.00

**EI 21.2-1991 (R1997, R2002)****Instrument Transformers for Revenue Metering (125 kV BIL through 350 kV BIL)**

Covers general requirements, ratings, accuracy classifications, burdens, and pertinent dimensions applicable to instrument current and voltage transformers for revenue metering rated 125 kV BIL through 350 kV BIL. Price: \$35.00

**ANSI C12.1-2001****Code for Electricity Metering**

Establishes acceptable performance criteria for new types of ac watthour meters, demand meters, demand registers, pulse devices, and auxiliary devices. Describes acceptable in-service performance levels for meters and devices used in revenue metering. It also includes information on recommended measurement standards, installation requirements, test methods, and test schedules.

Approved as an American National Standard.

Price: \$110.00

**ANSI C12.4-1984 (R2002)****Registers, Mechanical Demand**

Covers the voltage and frequency rating, full-scale values, scale classes, demand intervals, multiplying constants, timing mechanism, and other general features of mechanical demand registers required for use on watthour meters. Since mechanical demand registers are designed for use as accessories in watthour meters, items relating to watthour meters are not covered in this standard; these items are dealt with in several other standards.

Price: \$107.00

**ANSI C12.5-1978 (R2002)****Meters, Thermal Demand**

Covers the class designations, voltage and frequency ratings, scale values, demand intervals, multiplying constants, mounting dimensions, terminal arrangements, and other features of general-service-type thermal watt demand meters and watthour-thermal watt demand meters. Although this standard specifically refers to watt demand meters, it is suggested that ampere and volt-ampere demand meters follow the applicable requirements so far as practicable.

Price: \$63.00

**ANSI C12.6-1987 (R2002)****Phase-Shifting Devices Used in Metering, Marking and Arrangement of Terminals for**

Applies to phase-shifting devices designed to provide the proper lagged voltages required for kvar and kVA measurement.

Price: \$116.00

**ANSI C12.7-2005****American National Standard—Requirements for Watthour Meter Sockets**

Covers the general requirements and pertinent dimensions applicable to watthour meter sockets rated up to and including 600 V and up to and including 320 A continuous duty per socket opening.

Price: \$59.00

**ANSI C12.8-1981 (R2002)****Test Blocks and Cabinets for Installation of Self-Contained A-Base Watthour Meters**

Covers the dimensions and functions of test blocks and cabinets used in self-contained A-base watthour meters. Approved as an American National Standard.

Price: \$33.00

**ANSI C12.9-2005****American National Standard for Test Switches for Transformer-Rated Meters**

Intended to encompass the dimensions and functions of meter test switches for transformer-rated watthour meters when used in conjunction with instrument transformers.

Price: \$47.00

**ANSI C12.10-2004****American National Standard for Physical Aspects of Watthour Meters—Safety Standard**

Covers the physical aspects of both detachable and bottom-connected watthour meters and associated registers. These include ratings, internal wiring arrangements, pertinent dimensions, markings, and other general specifications. Refer to the latest version of ANSI C12.1 and ANSI C12.20 for performance requirements. Price: \$69.00

**ANSI C12.11-1987 (R1993)****Instrument Transformers for Revenue Metering, 10 kV BIL through 350 kV BIL (0.6 kV NSV through 69 kV NSV)**

Covers the general requirements, metering accuracy, thermal ratings, and dimensions applicable to current and inductively coupled voltage transformers for revenue metering. Price: \$170.00

**ANSI C12.18-1996 (R2002)****Protocol Specification for ANSI Type 2 Optical Port**

Details the criteria required for communications with an electric power metering device by another device via an optical port. Also provides details for a complete implementation of an OSI 7-layer model. Price: \$48.00

**ANSI C12.19-1997****Utility Industry End Device Data Tables**

Defines a table structure for utility application data to be passed between an end device and a computer. Does not define device design criteria nor specify the language or protocol used to transport that data. The purpose of the tables is to define structures for transporting data to and from end devices.

Approved as an American National Standard. Price: \$149.00

**ANSI C12.20-2002****For Electricity Meters 0.2 and 0.5 Accuracy Classes**

Establishes the physical aspects and acceptable performance criteria for 0.2 and 0.5 accuracy class electricity meters meeting Blondel's Theorem. Approved as an American National Standard. Price: \$56.00

**ANSI C12.21-1999****Protocol Specification for Telephone Modem Communication**

Details the criteria required for communications between an electric power metering device and a utility host via a modem connected to the switched telephone network. The utility host could be a laptop computer, a master station system, an electric power metering device, or some other electronic communications device. The standard does not specify implementation requirements of the telephone switched network to the modem, nor does it include definitions for the establishment of the communication channel.

Approved as an American National Standard.

Price: \$84.00

**ANSI/NEMA C93.1-1999****Requirements for Power-Line Carrier Coupling Capacitors and Coupling Capacitor Voltage Transformers (CCVT)**

Applies to capacitors for coupling power-line carriers and for reducing rate of rise of breaker transient recovery voltage, and to coupling capacitor voltage transformers (CCVT) for connection to a high voltage power circuit to supply a low voltage.

Approved as an American National Standard.

Price: \$62.00

**MEDICAL****MS 1-2001****Determination of Signal-to-Noise Ratio (SNR) in Diagnostic Magnetic Resonance Imaging**

Describes test methods for measuring the signal-to-noise ratio performance of diagnostic magnetic resonance imaging systems under a specific set of conditions, using head and body coils and performing proton imaging. Price: \$41.00

**MS 2-2003****Determination of Two-Dimensional Geometric Distortion in Diagnostic Magnetic Resonance Images**

Describes a method for determining the maximum percent difference between measured distances in an image and actual corresponding phantom dimensions. Evaluates geometric distortion in three orthogonal planes passing through the center of the specification volume.

Price: \$44.00

**MS 3-2003****Determination of Image Uniformity in Diagnostic Magnetic Resonance Images**

Defines a test method for measuring image-uniformity performance of diagnostic magnetic resonance imaging systems using head and body coils and performing proton imaging. Does not address the use of surface coils, chemical shift imaging, or spectroscopy.

Price: \$44.00

**MS 4-1989 (R1997) (Revision 1998)****Acoustic Noise Measurement Procedure for Diagnostic Magnetic Resonance Imaging Devices**

Designed to measure worst-case sound levels a scanner may produce in clinical applications.

Price: \$40.00

**MS 5-2003****Determination of Slice Thickness in Diagnostic Magnetic Resonance Imaging**

Describes a method for determining the slice thickness of proton images. Does not address spectroscopy, chemical shift imaging, and warped slices. Price: \$49.00

**MS 6-1991 (R2000)****Characterization of Special Purpose Coils for Diagnostic Magnetic Resonance Images**

Defines test methods for measuring signal-to-noise ratio and image nonuniformity of diagnostic magnetic resonance imaging systems using special purpose coils and performing proton imaging (receive only and transmit receive coils). Price: \$34.00

**MS 8-1993 (R2000)****Characterization of the Specific Absorption Rate for Magnetic Resonance Imaging Systems**

Describes calorimetric and pulse energy methods of whole body SAR measurements. Specifies tests for volume RF transmit coils which produce relatively homogeneous RF fields. Price: \$58.00

**MS 9-2001****Characterization of Phased Array Coils for Diagnostic Magnetic Resonance Images**

Defines test methods for measuring the signal-to-noise ratio, image uniformity, and image nonuniformity of MR images produced using phased array coils. Price: \$52.00

**NU 1-2001****Performance Measurements of Scintillation Cameras**

Provides a uniform criterion for the measurement and reporting of scintillation camera performance parameters for single and multiple crystal cameras and tomographic devices that image a section or reconstruction image volume, or both. Companion Standard: IEC 789 Price: \$75.00

**NU 2-2001****Performance Measurements of Positron Emission Tomographs**

Provides a uniform and consistent method for measuring and reporting performance parameters of positron emission tomographs. Included are time of flight and non time of flight coincidence systems, discrete and continuous detector designs, single and multiple slice devices, and multi-planar and volume reconstruction models. Price: \$60.00

**NU 3-2004****Performance Measurements and Quality Control Guidelines for Non-Imaging Intraoperative Gamma Probes**

Establishes definitions and describes quantitative measurements of performance characteristics and quality control tests for non-imaging intraoperative gamma probes. Price: \$61.00

**DICOM PUBLICATIONS****PS 3 2004 Set****DICOM Set (paper version)**

Set includes PS 3.1 through PS 3.18. Price: \$910.00

**PS 3.1-2004****Digital Imaging and Communications in Medicine (DICOM) Part 1:****Introduction and Overview**

Provides an overview of the entire Digital Imaging and Communications in Medicine (DICOM) Standard. It describes the history, scope, goals, and structure of the standard. In particular, it contains a brief description of the contents of each part of the standard.

Companion Standards: PS 3.2 through PS 3.18

Price: \$49.00

**PS 3.2-2004****DICOM Part 2: Conformance**

Specifies the purpose and structure of a conformance statement. Describes general conformance requirements that must be met by any implementation claiming conformance to the DICOM Standard.

Companion Standards: PS 3.1 through PS 3.18

Price: \$176.00

**PS 3.3-2004****DICOM Part 3:****Information Object Definitions**

Specifies the set of Information Object Definitions (IODs) which provide an abstract definition of real-world objects applicable to communication of digital medical information.

Companion Standards: PS 3.1 through PS 3.18

Price: \$265.00



**PS 3.4-2004****DICOM Part 4:  
Service Class Specifications**

Specifies the set of service class definitions which provide an abstract definition of real world activities applicable to communication of digital medical information.

Companion Standards: PS 3.1 through PS 3.18  
Price: \$181.00

**PS 3.5-2004****DICOM Part 5:  
Data Structures and Encoding**

Specifies the structure and encoding of data sets.

Companion Standards: PS 3.1 through PS 3.18  
Price: \$107.00

**PS 3.6-2004****DICOM Part 6: Data Dictionary**

Contains the registry of all DICOM data elements and all DICOM unique identifiers that are defined within the DICOM Standard.

Companion Standards: PS 3.1 through PS 3.18  
Price: \$100.00

**PS 3.7-2004****DICOM Part 7: Message Exchange**

Specifies the DICOM Message Service Element (DIMSE), which defines an Application Service Element (both the service and protocol) used by peer DICOM Application Entities for the purpose of exchanging medical images and related information.

Companion Standards: PS 3.1 through PS 3.18  
Price: \$114.00

**PS 3.8-2004****DICOM Part 8: Network  
Communication Support for  
Message Exchange**

The Communication Protocols specified in this part of the DICOM standard closely fit the ISO Open Systems Interconnection Basic Reference Model (ISO 7498-1).

Companion Standards: PS 3.1 through PS 3.18  
Price: \$75.00

**PS 3.10-2004****DICOM Part 10: Media Storage and  
File Format for Media Interchange**

Specifies a general model for the storage of medical imaging information on removable media. It provides a framework allowing the interchange of various types of medical images and related information on a broad range of physical media.

Companion Standards: PS 3.1 through PS 3.18  
Price: \$61.00

**PS 3.11-2004****DICOM Part 11:  
Media Storage Application Profiles**

Specifies application specific subsets of the DICOM Standard to which an implementation may claim conformance. Such a conformance statement applies to the interoperable interchange of medical images and related information on storage media for specific clinical uses.

Companion Standards: PS 3.1 through PS 3.18  
Price: \$88.00

**PS 3.12-2004****DICOM Part 12:  
Media Formats and Physical  
Media for Media Interchange**

Facilitates the interchange of information between digital imaging computer systems in medical environments. This interchange enhances diagnostic imaging and potentially other clinical applications.

Companion Standards: PS 3.1 through PS 3.18  
Price: \$75.00

**PS 3.14-2004****DICOM Part 14: Grayscale  
Standard Display Function**

Specifies a standardized display function for the display of grayscale images. Display systems include, for example, monitors with associated driving electronics.

Companion Standards: PS 3.1 through PS 3.18  
Price: \$75.00

**PS 3.15-2004****DICOM Part 15: Security and  
System Management Profiles**

Specifies Security and System Management Profiles to which implementations may claim conformance.

Companion Standards: PS 3.1 through PS 3.16  
Price: \$88.00

**PS 3.16-2004****DICOM Part 16:  
Content Mapping Resource**

Specifies the DICOM Content Mapping Resource (DCMR), which defines the templates and context groups used elsewhere in the standard.

Companion Standards: PS 3.1 through PS 3.18  
Price: \$235.00

**PS 3.17-2004**

**DICOM Part 17:  
Explanatory Information**

Contains explanatory information in the form of Normative and Informative Annexes.

Companion Standards: PS 3.1

through PS 3.18

Price: \$160.00

**PS 3.18-2004**

**DICOM Part 18: Web Access to  
DICOM Persistent Objects (WADO)**

Specifies a web-based service for accessing and presenting DICOM persistent objects (e.g. images, medical imaging reports).

Companion Standards: PS 3.1

through PS 3.17

Price: \$56.00

**UD 2-2004**

**Acoustic Output Measurement  
Standard for Diagnostic  
Ultrasound Equipment, Revision 3**

Covers all active ultrasound apparatus designed for medical diagnostic use, including ultrasonic echo ranging devices (both manual and automatically scanned), through-transmission devices, Doppler echo equipment, and combinations thereof.

Price: \$133.00

**UD 3-2004**

**Standard for Real-Time Display of  
Thermal and Mechanical Acoustic  
Output Indices on Diagnostic  
Ultrasound Equipment, Revision 2**

Applies to diagnostic ultrasound equipment that is intended for use on humans, and is capable of exceeding a thermal index of 1.0, or a mechanical index of 1.0.

Published in cooperation with American Institute of Ultrasound in Medicine.

Price: \$75.00

**XR 5-1992 (R1999)**

**Measurement of Dimensions and  
Properties of Focal Spots of  
Diagnostic X-Ray Tubes**

Provides test methods for assessing the properties of focal spots for medical diagnostic X-ray tubes and is not intended for use with X-ray tubes used in computed tomography scanners.

Companion Standard: IEC 336

Price: \$48.00

**XR 7-1995 (R2000)**

**High Voltage X-Ray Cables  
and Receptacles**

Defines electrical and structural test requirements of high-voltage cable assemblies and receptacles used in diagnostic medical X-ray equipment from 10 kV to 200 kV.

Companion Standard: IEC 526

Price: \$31.00

**XR 9-1984 (R1994, R2000)**

**Power Supply Guidelines  
for X-Ray Machines**

Covers conventional medical and dental diagnostic X-ray equipment. Computed tomography (CT), battery powered therapy, and industrial equipment are not included.

Price: \$30.00

**XR 10-1986 (R1992, R1998)**

**Measurement of the Maximum  
Symmetrical Radiation Field  
from a Rotating Anode X-Ray  
Tube Used for Medical Diagnosis**

Provides methods for measuring the maximum symmetrical radiation field from a rotating anode X-ray tube used for medical diagnosis.

Companion Standard: IEC 806

Price: \$34.00

**XR 11-1993 (R1999)**

**Test Standard for  
Determination of the Limiting  
Spatial Resolution of X-Ray  
Image Intensifier Systems**

These systems include optical viewing systems, video systems, photofluorographic film recording systems, and cine film recording and projection systems.

Price: \$46.00

**XR 13-1990 (R1995, R2000)**

**Mechanical Safety Standard for  
Power Driven Motions of  
Electromedical Equipment**

Covers all power-driven equipment motions that are accessible to patient or operator during intended use.

Price: \$31.00

**XR 14-1990 (R1995, R2000)**

**Recommended Practices for Load  
Bearing Mechanical Assemblies  
Used in Diagnostic Imaging**

Outlines practices for the design, construction, and use of load bearing castings, weldments, and threaded fasteners.

Price: \$31.00

**XR 15-1991 (R1996, R2001)**

**Test Standard for the  
Determination of the Visible  
Entrance Field Size of an X-Ray  
Image Intensifier System**

Defines the test standard method for the determination of the visible entrance field size of an X-ray image intensifier (XRII) system. Includes direct viewing systems, video systems, photofluorographic film recording systems, and cine film recording and projection system.

Price: \$35.00

**XR 16-1991 (R1996, R2001)**

**Test Standard for the Determination of the System Contrast Ratio and the System Veiling Glare Index of an X-Ray Image Intensifier System**

Determines the system contrast ratio (SCR) and the system veiling glare index (SVGI) at the center of the image produced by an XRII system under a given set of test conditions. The measurement procedures described pertain to images formed by the photofluorographic film system, the cine film system, the video system, and the direct viewing system. Price: \$37.00

**XR 17-1993 (R1999)**

**Test Standard for the Measurement for the Image Signal Uniformity of an X-Ray Image Intensifier System**

Procedures for defining the method of measuring the image signal uniformity produced by an XRII system under a given set of test conditions. Price: \$36.00

**XR 18-1993 (R1999)**

**Test Standard for the Determination of the Radial Image Distortion of an X-Ray Image Intensifier System**

Defines the NEMA standard method for determining radial image distortion of XRII systems under a given set of test conditions. Price: \$46.00

**XR 19-1993 (R1999)**

**Electrical, Thermal, and Loading Characteristics of X-Ray Tubes Used for Medical Diagnosis**

Provides test and presentation of data methods for assessing the electrical and thermal performance of X-ray tubes used in medical diagnosis. Price: \$47.00

**XR 21-2000**

**Characteristics of and Test Procedures for a Phantom to Benchmark Cardiac Fluoroscopic and Fluorographic Performance**

The performance of any medical imaging system can be divided into two categories: (1) suitability of the images for the clinical procedure and (2) the amount of energy administered the patient while acquiring the images. The phantom and test procedures described test systems under conditions simulating a range of fluoroscopically guided invasive and interventional procedures. Price: \$46.00

**MOTORS & GENERATORS**

**Application Guide for AC Adjustable Speed Drive Systems**

Covers AC electrical drive systems, rated 600 volts or less, consisting of three-phase induction motors, voltage source pulse width modulated adjustable frequency controls, and associated components. It addresses common issues that should be considered in the selection of drive system components and the installation and application of the drive system. Price: \$93.00

**General Specification for Consultants, Industrial and Municipal: NEMA Premium Efficiency Electric Motors (600 Volts or Less)**

Outlines the minimum requirements for three-phase AC induction motors applied to municipal and industrial applications for operation on voltages 600 volts or less, rated 500 HP or less, operating more than 2000 hours per year at >75% of full-load. Downloadable from [www.nema.org](http://www.nema.org). Price: \$37.00

**ANSI/NEMA MG 1-2003 Motors and Generators**

Assists users in the proper selection and application of motors and generators. Revised periodically, the standard provides for changes in user needs, advances in technology, and changing economic trends. Practical information concerning performance, safety, test, construction, and manufacture of alternating-current and direct-current motors and generators. Companion Standards: MG 3, MG 10, ANSI C84.1, IEC 60341 Price: \$227.00

**ANSI/NEMA MG 1-2003 (CD version) Motors and Generators**

Assists users in the proper selection and application of motors and generators. Revised periodically, the standard provides for changes in user needs, advances in technology, and changing economic trends. Practical information concerning performance, safety, test, construction, and manufacture of alternating-current and direct-current motors and generators. Companion Standards: MG 3, MG 10, ANSI C84.1, IEC 60341 Price: \$227.00

**MG 1 Condensed-2002 Information Guide for General Purpose Industrial AC Small and Medium Squirrel-Cage Induction Motor Standards**

A condensation of the standards included in NEMA Standards Publication Motors and Generators, MG 1-1998 through Revision 2. Some standards are reprinted in their entirety while others have been combined or abbreviated. Provides charts of motor frame sizes and dimensions. Price: \$82.00

### **MG 1-2003, Revision 1-2004 Motors and Generators, Revision 1**

Completely revises Part 5 and brings MG 1 into alignment with the IEC 60034-5 standard, and includes the revision of the application of v-belt sheaves to alternating current motors having antifriction bearings.  
Price: \$82.00

### **MG 2-2001 Safety Standard and Guide for Selection, Installation, and Use of Electric Motors and Generators**

Provides recommendations for the selection, installation, and use of rotating electric machines in such a manner as to provide for the practical safeguarding of persons and property. Companion Standards: MG 1, MG 10  
Price: \$61.00

### **MG 3-1974 (R1995, R2000, R2005) Sound Level Prediction for Installed Rotating Electrical Machines**

Provides a method for estimating sound pressure levels of installed rotating electrical machines.  
Price: \$40.00

### **MG 10-2001 Energy Management Guide for Selection and Use of Fixed Frequency Medium AC Squirrel-Cage Polyphase Induction Motors**

Provides practical information concerning the proper selection and application of medium AC polyphase squirrel-cage induction motors including installation, operation, and maintenance in fixed frequency applications. Adopted by the U.S. Department of Defense.  
Companion Standard: MG 1  
Price: \$55.00

### **MG 11-1977 (R1997, R2001) Energy Management Guide for Selection and Use of Single Phase Motors**

Provides practical information concerning the proper selection and application of single phase motors

including installation, operation, and maintenance.

Adopted by the U.S. Department of Defense.  
Price: \$31.00

## **OUTLET & SWITCH BOXES**

### **ANSI/NEMA OS 1-2003 Sheet-Steel Outlet Boxes, Device Boxes, Covers, and Box Supports**

Covers those general-purpose metal outlet boxes, device boxes, covers, and supports that are widely used by the consumer. They are designed to facilitate the pulling of wires, to protect and facilitate wiring splices and taps, to provide a means of mounting and protecting wiring devices, and to provide a connection for rigid conduit, electrical metallic tubing, armored cable, metal clad cable, nonmetallic sheathed cable, flexible metallic conduit and knob-and-tube wiring. Adopted by the U.S. Department of Defense and approved as an American National Standard.  
Companion Standards: WD 6, OS 2  
Price: \$114.00

### **ANSI/NEMA OS 2-2003 Nonmetallic Outlet Boxes, Device Boxes, Covers, and Box Supports**

Covers general-purpose nonmetallic outlet boxes, device boxes, covers, and supports that are widely used by the consumer. They are designed to facilitate the pulling of wires, to protect and facilitate wiring splices and taps, to provide a means of mounting and protecting wiring devices, and to provide a connection for nonmetallic sheathed cable, nonmetallic tubing, rigid nonmetallic conduit, and electrical nonmetallic tubing or other approved raceways. Approved as an American National Standard.  
Companion Standards: WD 6, OS 1  
Price: \$69.00

### **OS 3-2002 Selection and Installation Guidelines for Electrical Outlet Boxes**

Covers guidelines for selection and installation of general purpose and specialty metallic, nonmetallic, and composite outlet boxes such as device, fixture, and junction boxes; extension rings; covers; and flush device cover plates.  
Price: \$69.00

## **PIN & SLEEVE PLUG, RECEPTACLE & CONNECTORS**

### **FB 11-2000 Plugs, Receptacles, and Connectors of the Pin and Sleeve Type for Hazardous Locations**

Requirements apply to all plugs, receptacles, and connectors up to 600 volts AC, 250 volts DC, and all current ratings up to 200 amperes. Approved as an American National Standard.  
Companion Standard: NEMA 250  
Price: \$48.00

## **POWER CONVERSION EQUIPMENT**

### **LA 1-1992 (R1999) Surge Arresters**

Supplements ANSI/IEEE C62.1-1990, "American National Standard for Surge Arresters for Alternating Current Power Circuits." Applies to all valve surge arresters for AC systems, including arresters that are an integral part of other apparatus.  
Price: \$31.00

**PE 1-2003****Uninterruptible Power Systems (UPS)—Specification and Performance Verification**

Provides guidance to manufacturers and users for specifying and verifying the performance of uninterruptible power systems.

Price: \$37.00

**PE 5-1997 (R2003)****Utility Type Battery Chargers**

Provides definitions, minimum requirements, and test methods for stabilized constant-potential-type filtered and unfiltered utility-type battery chargers.

Price: \$52.00

**PE 7-1997 (R2003)****Communication Type Battery Chargers**

Provides definitions, minimum requirements, and test methods for stabilized constant-potential-type filtered and unfiltered communications-type battery chargers.

Price: \$52.00

**ANSI C84.1-1995 (R2001,R2005)****Electrical Power Systems and Equipment—Voltage Ratings (60Hz)**

Establishes normal voltage ratings and operating tolerances for 60-hertz electric power systems above 100 volts and through 230 kilovolts.

Price: \$41.00

**PROTECTIVE DEVICES****Type "2" Motor Starter Protection Fuse Guide**

Four-page brochure discusses the electrical power distribution system—a plant's lifeline and the application of Type "2" Coordination (No-Damage Protection) that assures that the motor starter will be operable after a fault occurs and the fault is corrected. Type "2" Coordination cannot prevent the initial fault from occurring, however, it assures all other components in the motor starter remain functional. Downloadable from [www.nema.org](http://www.nema.org) or by contacting (703) 841-3297.

**FU 1-2002****Low Voltage Cartridge Fuses**

Covers fuses G, H, J, K, L, R, T, and CC low voltage cartridge fuses rated 600 volts or less, alternating current and direct current.

Price: \$61.00

**ANSI/NEMA GR 1-2001 Grounding Rod Electrodes and Grounding Rod Electrode Couplings**

Provides practical information concerning construction, test, performance, and manufacture of ground rod electrodes and ground rod electrode couplings.

Approved as an American National Standard

Price: \$48.00

**LS 1-1992 (R2000)****Low Voltage Surge Protection Devices**

Addresses a uniform specification of low voltage surge protection devices specifically manufactured for use with line service voltages of less than 1000 VRMS.

Price: \$31.00

**ANSI C62.61-1993****Gas Tube Surge Arresters on Wire Line Telephone Circuits**

Applies to gas tube arresters to be used for the limitation of voltage surges due to lightning or power disturbances on wire line telephone facilities in accordance with the National Electrical Code, in the limiting of voltages on telephone cable facilities, and in the limiting of voltages on equipment intended to coordinate with the gas tube surge arresters covered by this standard.

Price: \$37.00

**RESIDENTIAL CONTROLS****DC 3-2003****Residential Controls—Electrical Wall-Mounted Room Thermostats**

Covers self-contained, electrical and electronic, wall-mounted room thermostats for controlling the temperature of the space in which the thermostat is mounted by controlling the applied energy for heating, cooling, or heating-cooling.

Adopted by the U.S. Department of Defense.

Downloadable from [www.nema.org](http://www.nema.org). Companion Standard: DC 12, DC 13  
Price: \$45.00

**DC 5-2002****Residential Controls—Surface-Type Controls for Electric Storage Water Heaters**

Applies to surface-type control thermostats and temperature limiting controls for electric storage water heaters.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$37.00

**DC 10-1983 (R1989, R2003)****Residential Controls—  
Temperature Limit Controls  
for Electric Baseboard Heaters**

Describes constructional details, classifications, ratings, and other characteristics of temperature limit controls and control systems of the linear-sensing or spot types, which are suitable for mounting inside electric baseboard heaters for the purpose of disconnecting the electrical load when the heater reaches abnormally high temperatures.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$40.00

**DC 12-1985  
(R1991, R1997, R2002)****Residential Controls:  
Hot Water Immersion Controls**

Defines basic construction standards and performance characteristics of electric switch type hot water immersion controls intended primarily for use with hot water boilers and heaters used in residential heating.

Downloadable from [www.nema.org](http://www.nema.org).  
Companion Standard: DC 3  
Price: \$40.00

**DC 13-1979  
(R1985, R1991, R1997, R2002)****Line Voltage Integrally Mounted  
Thermostats for Electric Heaters**

Defines basic construction standards and performance characteristics of integrally mounted thermostats.

Downloadable from [www.nema.org](http://www.nema.org).  
Companion Standard: DC 3  
Price: \$34.00

**DC 20-1992 (R2003)****Residential Controls—  
Class 2 Transformers**

Covers Class 2 transformers intended primarily for use in 30 volts rms maximum low-voltage residential control circuits. It includes definitions, electrical ratings, performance standards, mounting dimensions, and marking requirements.

Downloadable from [www.nema.org](http://www.nema.org).  
Price: \$45.00

**SAFETY****Guidelines for Handling Water  
Damaged Electrical Equipment**

Provides advice on the safe handling of electrical equipment that has been exposed to water through flooding, fire fighting activities, hurricanes, etc. This 12-page brochure is designed for use by suppliers, installers, inspectors, and users of electrical products. It outlines which items will require complete replacement or can be reconditioned by a trained professional. Equipment covered includes electrical distribution equipment, motor circuits, power equipment, transformers, wire, cable and flexible cords, wiring devices, GFCIs and surge protectors, lighting fixtures and ballasts, motors, electronic products including signaling, protection, communication systems, and industrial controls, and cable.

Downloadable from [www.nema.org](http://www.nema.org).

**Meet Mr. Ouch**

Responds to questions that might arise about the background and purpose of the "Mr. Ouch" labeling systems.

To order, phone: (703) 841-3242

**Safety Guide for Use  
of Extension Cords**

Important information on purchasing and use of extension cords. Copies are downloadable from [www.nema.org](http://www.nema.org).

To order, phone: (703) 841-3266

**ANSI Z535 Set**

Contains all five of the Z535 standards.  
Price: \$313.00

The ANSI Z535 standards are available on CD for standalone use and licensed use over a local area network (LAN). Network pricing also available, see page 10.

**ANSI Z535 Set (CD Version)**

Contains all five of the Z535 standards.

Price: \$313.00

**ANSI Z535 Color Chart  
Color Chart for use with  
Z535 Safety Standards**

Price: \$27.00

**ANSI Z535.1-2002  
Safety Color Code**

Sets forth the technical definitions, color standards, and color tolerances for safety colors.

Approved as an American National Standard.

Companion Standards: ANSI Z535.2, ANSI Z535.3, ANSI Z535.4, ANSI Z535.5

Price: \$61.00

**ANSI Z535.2-2002  
Environmental and  
Facility Safety Signs**

Establishes requirements for a uniform visual system of identification related to potential hazards in the environment. It provides for the design, application, and use of signs and placards employing this visual alerting system.

Approved as an American National Standard.

Companion Standards: ANSI Z535.1, ANSI Z535.3, ANSI Z535.4, ANSI Z535.5

Price: \$61.00

**ANSI Z535.3-2002  
Criteria for Safety Symbols**

Provides general criteria for the design, evaluation, and use of safety symbols to identify and warn against specific hazards, and to provide information to avoid personal injury.

Approved as an American National Standard.

Companion Standards: ANSI Z535.1, ANSI Z535.2, ANSI Z535.4, ANSI Z535.5

Price: \$116.00

**ANSI Z535.4-2002****Product Safety Signs and Labels**

Sets forth performance requirements for the design, application, use, and placement of safety signs and labels intended to identify potential hazards for persons using, operating, servicing, or in proximity to, a wide variety of products.

Approved as an American National Standard.

Companion Standards: ANSI Z535.1, ANSI Z535.2, ANSI Z535.3, ANSI Z535.5

Price: \$61.00

**ANSI Z535.5-2002****Safety Tags and Barricade Tapes (for Temporary Hazards)**

Describes safety tags and barricade tapes that shall be used to identify a temporary hazard. They shall be used only until such time as the identified hazard is eliminated or the hazardous operation is completed. If a permanent sign or label is presented in a tag configuration, it shall comply with the provisions of ANSI Z535.4-2002, or ANSI Z535.2-2002.

Approved as an American National Standard.

Companion Standards: ANSI Z535.1, ANSI Z535.2, ANSI Z535.3, ANSI Z535.4

Price: \$61.00

**STEAM TURBINES****SM 23-1991 (R1997, R2002)****Steam Turbines for Mechanical Drive Service**

Covers single stage and multistage mechanical drive steam turbines intended to drive pumps, fans, compressors, etc. Also applicable to turbines expanding various gases or compressed air. In addition, applies to auxiliary equipment associated with the turbine only. Does not apply to the driven equipment or the other equipment in the steam cycle.

Approved as an American National Standard.

Price: \$52.00

**SM 24-1991 (R1997, R2002)****Land-Based Steam Turbine Generator Sets 0 to 33,000 kW**

Covers single-stage and multistage steam turbines, reduction gears, air cooled electric generators, switchgear, and auxiliary systems. Applicable to turbines expanding various gases or compressed air. Does not apply to other equipment in the steam cycle or electrical distribution systems.

Companion Standards: NEMA 250, AB 1, SM 23, MG 1

Price: \$67.00

**TRANSFORMERS****260-1996 (R2004)****Safety Labels for Padmounted Switchgear and Transformers Sited in Public Areas**

Details labels used on pad mounted switchgear and transformers sited in public areas; i.e., utility easements adjacent to residential properties, shopping centers, schools, etc. May be used for equipment sited in utility or industrial properties which are not normally accessible to the general public.

Price: \$37.00

**ST 1-1988 (R1994, R1997)****Specialty Transformers (Except General Purpose Type)**

Covers control, industrial control, Class 2, signaling, ignition, and luminous tube transformers. Contains service conditions, tests, classifications, performance characteristics, and construction data for the transformers. Adopted by the U.S. Department of Defense.

Price: \$41.00

**ST 20-1992 (R1997)****Dry Type Transformers for General Applications**

Applies to single-phase and polyphase dry type transformers (including both autotransformers and noncurrent limiting reactors) for supplying energy to power, heating, and lighting circuits. Approved as an American National Standard and adopted by the U.S. Department of Defense.

Companion Standard: NEMA 250, ANSI C57.12.70

Price: \$57.00

**TP 1-2002**

**Guide for Determining Energy Efficiency for Distribution Transformers**

Intended for use as a basis for determining the energy efficiency performance of certain single-phase and three-phase dry-type and liquid-filled distribution transformers and to assist in the proper selection of such equipment.  
Price: \$49.00

**TP 2-1998**

**Standard Test Method for Measuring the Energy Consumption of Distribution Transformers**

Intended for use as a basis for determining the energy efficiency performance of the equipment covered and to assist in the proper selection of such equipment. It covers single-phase and three-phase dry-type and liquid immersed distribution transformers.  
Price: \$41.00

**TP 3-2000**

**Standard for the Labeling of Distribution Transformer Efficiency**

Defines the labeling of distribution transformers tested to the efficiency levels specified in TP 1. The label shall be affixed to the transformer in a permanent manner. The label becomes the certificate of conformance to the established efficiency of the transformer.  
Price: \$26.00

**TR 1-1993 (R2000)**

**Transformers, Regulators, and Reactors**

Provides a list of all ANSI C57 standards that have been approved by NEMA. In addition, it includes certain NEMA standard test methods, test codes, and properties of liquid immersed transformers, regulators, and reactors that are not American National Standards.  
Adopted by the U.S. Department of Defense.  
Companion Standard: ANSI C84.1  
Price: \$40.00

**TRANSPORTATION  
MANAGEMENT  
SYSTEMS**

**NTCIP 1101:1996  
(formerly TS 3.2-1996)**

**Simple Transportation Management Framework**

Covers integrated management of transportation networks, networking devices, and transportation-specific equipment attached to NTCIP-based networks.  
Price: \$71.00

**NTCIP 1201:1996  
(formerly TS 3.4-1996)**

**Global Object Definitions**

The standard for messaging between Transportation Management and field devices is accomplished by using the NTCIP Application Layer services to convey requests to access or modify values stored in a given device; these values are referred to as objects. The purpose of this publication is to identify and define these objects, definitions that may be supported by multiple device types (e.g., actuated signal controllers and variable message signs).  
Price: \$81.00

**NTCIP 1202:1996  
(formerly TS 3.5-1996)**

**Object Definitions for Actuated Traffic Signal Controller Units**

Defines the data elements and conformance requirements for Actuated Traffic Signal Controller Units. It defines requirements that are applicable to all NTCIP Actuated Traffic Signal Controller Units and it also contains optional and conditional clauses that are applicable to specific environments for which they are intended.  
Price: \$108.00

**NTCIP 1203:1997  
(formerly TS 3.6-1997)**

**Object Definitions for Dynamic Message Signs (DMS)**

Defines the data elements and conformance requirements for Dynamic Message Signs. It defines requirements that are applicable to all NTCIP Dynamic Message Signs and it also contains optional and conditional clauses that are applicable to specific environments for which they are intended.  
Price: \$84.00

**NTCIP 1204:1998  
(formerly TS 3.7-1998)**

**Object Definitions for Environmental Sensor Stations (ESS)**

Provides definitions of data elements for use with environmental sensor stations (ESS).  
Price: \$56.00

**NTCIP 1205:2001  
Object Definitions for Closed Circuit Television (CCTV) Camera Control**

Limited to the functionality related to CCTV Camera Control within a transportation environment. Defines objects which are specific to CCTV and also defines standardized object groups which can be used for conformance statements.  
Price: \$56.00

**NTCIP 1207:2001  
Object Definitions for Ramp Meter Control (RMC) Units**

Limited to the functionality related to RMCs used within a transportation environment. The limits and descriptions of the parameters are established to give users maximum flexibility to operate devices that exist now or in the future.  
Price: \$108.00



**NTCIP 2101:2001****Point to Multi-Point Protocol Using RS-232 Subnetwork Profile**

Applicable to transportation related devices that must operate in a typical primary/secondary configuration where one device is the designated primary while one or more other devices are connected to one channel acting as secondaries. As a subnetwork profile, it specifies a set of protocols and standards applicable to the data link and physical layers of the OSI Reference Model.

Price: \$37.00

**NTCIP 2202:2001****Internet (TCP/IP and UDP/IP) Transport Profile**

Applies to transportation devices and management systems that must operate in Intelligent Transportation Systems. As a transport profile, it specifies a set of protocols and standards applicable to the transport and network layers of the ISO-OSI Reference Model.

Price: \$48.00

**NTCIP 2301:2001****Simple Transportation Management Framework Application Profile**

Applies to transportation devices and management systems that must operate in an Intelligent Transportation System.

Price: \$45.00

**NTCIP 2302:2001****Trivial File Transfer Protocol Application Profile**

Applies to traffic control and transportation related devices that must operate in an Intelligent Transportation System.

Price: \$31.00

**NTCIP 2303:2001****File Transfer Protocol Application Profile**

Applies to traffic control and transportation devices concerned with operating in an Intelligent Transportation System.

As an NTCIP application profile, it specifies a set of protocols and standards for the application, presentation, and session layers of the ISO-OSI Reference Model.

Price: \$37.00

**NTCIP 8003:2001****Profile Framework**

Applies to traffic control and transportation related devices which must operate in an Integrated Transportation System.

Develops the terminology, content, structure, and organization of standardized profiles.

Price: \$31.00

**TS 1-1989 (R1994, R2000)****Traffic Control Systems (Not Recommended for New Designs)**

Defines traffic signaling equipment used to facilitate and expedite the safe movement of vehicular and pedestrian traffic. This standard has been reaffirmed to make it available for support of legacy traffic control equipment. For new equipment installations, the use of TS 2-1998, Traffic Controller Assemblies with NTCIP Requirements, is recommended.

Price: \$92.00

**TS 2-2003****Traffic Controller Assemblies with NTCIP Requirements, Version 02.06**

Covers traffic signaling equipment used to facilitate and expedite the safe movement of pedestrians and vehicular traffic.

Companion Standard: NEMA 250

Price: \$154.00

**TS 4-2005****Hardware Standards for Dynamic Message Signs (DMS) with NTCIP Requirements**

Provides the user with safe, dependable, functional, and easily maintained Dynamic Message Sign equipment. The requirements of this standard were developed by industry consensus, taking into account current user needs, available commercial technologies, engineering research, traffic engineering applications, human factors engineering, and engineering judgment.

Price: \$107.00

**WIRE & CABLE****User Guide to Product Specifications for Electrical Building Wire and Cable**

One-page guide listing commonly used electrical building wire and cable and the applicable U.S. standards recognized by the National Electrical Code (NFPA-70).

To order, phone: (703) 841-3264

**ANSI/NEMA HP 3-2001****Electrical and Electronic PTFE (Polytetrafluoroethylene) Insulated High Temperature Hook-Up Wire; Types ET (250 Volts), E (600 Volt), and EE (1000 Volt)**

Covers specific requirements for PTFE (polytetrafluoroethylene) insulated solid and stranded wire, designed for the internal wiring of high reliability electrical and electronic equipment. Approved as an American National Standard. Adopted by the U.S. Dept. of Defense as an alternative non-government standard to MIL-C-16878 for PTFE.

Companion Standard: WC 52

Price: \$49.00

**ANSI/NEMA HP 4-2000  
Electrical and Electronic FEP  
(Fluorinated Ethylene Propylene)  
Insulated High Temperature Hook-  
Up Wire, Types KT (250 Volt), K  
(600 Volt), and KK (1000 Volt)**

Covers specific requirements for fluorinated ethylene propylene (FEP) insulated solid and stranded wire, designed for the internal wiring of high reliability electrical and electronic equipment.

Approved as an American National Standard. Adopted by the U.S. Dept. of Defense as an alternative non-government standard to MIL-C-16878 for FEP.

Companion Standards: WC 52, WC 56  
Price: \$52.00

**HP 100-1991 (R1999)  
Series (HP 100-100.4)  
High Temperature Instrumentation  
and Control Cables**

Covers requirements and test procedures for a series of multiple conductor, high temperature instrumentation and control cables for use in ducts, conduit, and trays.

Price: \$121.00

**MW 750-1996 (R2001)  
Dynamic Coefficient of Friction  
of Film Insulated Magnet Wire**

Provides a method and equipment used for determining the coefficient of friction of film insulated round magnet wire for sizes AWG 14-44.

Price: \$41.00

**MW 765-2003  
Reclaiming of Magnet  
Wire Packaging**

Specifies the required physical and visual characteristics of reclaimed plastic spools/reels and other components used for packaging of magnet wire.

Price: \$56.00

**MW 785-2000  
Simulated Insertion Force Test for  
Film Insulated Round Magnet Wire**

Developed to enable magnet wire manufacturers to evaluate the effects that various characteristics of magnet wire have on forces that are present as a magnet wire coil is inserted into the stator slot of an electric motor.

Insertion force exerted by coil injection equipment is critical since excessive amounts of force can result in magnet wire insulation damage, which can lead to electrical failures.

Price: \$36.00

**MW 790-2000  
AC Overload Test for Film  
Insulated Magnet Wire**

Describes a method and the equipment that may be used for determining the current overload due to resistance heating of 18 AWG heavy build film-insulated round copper wire.

Price: \$34.00

**ANSI/NEMA MW 1000-2003  
Magnet Wire**

Definitions, type designations, dimensions, construction, performance, and methods of testing magnet wire generally used in the winding of coils for electrical equipment.

Adopted by the U.S. Department of Defense to replace JW-1177 and approved as an American National Standard.

Companion Standards: MW 750, MW 755, MW 760, MW 800  
Price: \$160.00

**ANSI/NEMA MW 1000-2003  
(CD Version)  
Magnet Wire**

Definitions, type designations, dimensions, construction, performance, and methods of testing magnet wire generally used in the winding of coils for electrical equipment.

Adopted by the U.S. Department of Defense to replace JW-1177 and approved as an American National Standard.

Companion Standards: MW 750, MW 755, MW 760, MW 800  
Price: \$160.00

**RV 1-2004, Revision 1  
Application and Installation  
Guidelines for Armored Cable  
and Metal-Clad Cable**

Offers practical information on correct usage and industry recommended practices for the installation of Type AC and Type MC cables in accordance with the *National Electrical Code*.

Price: \$61.00

**RV 2-2005  
Application and Installation  
Guidelines for Nonmetallic-  
Sheathed Cable and Underground  
Feeder and Branch Circuit Cable**

Offers practical information on correct usage and industry recommended practices for the installation of Type NM-B nonmetallic-sheathed cable and Type UF-B underground feeder and branch circuit cable in accordance with the *National Electrical Code*.

Price: \$56.00

**WC 26-2000/EEMAC 201  
Binational Wire and Cable  
Packaging Standard**

Covers uniform requirements for packaging electrical wire and cable for the North American wire and cable industry.

Adopted by the U.S. Department of Defense.

Price: \$60.00

**WC 50-1976/ICEA P-53-426  
2nd Ed. (R1993, R1999)  
Ampacities, Including Effect of  
Shield Losses for Single  
Conductor Solid Dielectric Power  
Cable 15 kV through 69 kV**

Provides calculated ampacities for single conductor solid dielectric 15-69 kV power cables with bonded and grounded shields, copper or aluminum conductors, spaced or trefoil configurations, single or double circuits.

Price: \$86.00

**ANSI/NEMA WC 51-2003/  
ICEA P-54-440**

**Ampacities of Cables  
Installed in Cable Trays**

Covers the ampacity ratings for 600-15,000 volt solid dielectric cables installed in cable trays. Ampacity ratings are tabulated for single conductor cables, triplexed assemblies of single conductor cables, and three-conductor cables incorporating an overall jacket.

Price: \$69.00

**WC 52-1985 (R1991, R2000)  
High Temperature and  
Electronic Insulated Wire  
Impulse Dielectric Testing**

This procedure is intended for the dielectric testing of insulation of unshielded single conductor wires. It is not intended for use with multi-conductor cable.

Price: \$35.00

**ANSI/NEMA/ICEA T-27-581-2002/  
WC 53-2000**

**Standard Test Methods for  
Extruded Dielectric Power,  
Control, Instrumentation, and  
Portable Cables for Test**

Applies to the testing of extruded dielectric insulated power, control, instrumentation, and portable cables.

Approved as an American National Standard.

Price: \$90.00

**ANSI/ICEA T-26-465/WC 54-2001  
Guide for Frequency of Sampling  
Extruded Dielectric Power,  
Control, Instrumentation, and  
Portable Cables for Test**

Provides a combination of plans for frequencies at which cable samples may be obtained for tests to determine conformance to appropriate requirements of ICEA standards publications.

Approved as an American National Standard.

Price: \$44.00

**WC 56-1986 (R2000, R2005)  
3.0 kHz Insulation Continuity  
Proof Testing of Hook Up Wire**

Covers a general procedure for continuous voltage proof testing of hook up wire. Intended to apply primarily to the final inspection of wire for the purpose of finding and eliminating defects prior to shipment or before use.

Price: \$31.00

**ANSI/NEMA WC 57-2004/  
ICEA S-73-532  
Standard for Control,  
Thermocouple Extension, and  
Instrumentation Cables**

Applies to materials, construction, and testing of multiconductor control, thermocouple extension, and instrumentation cables rated up to and including 125 degrees C.

Approved as an American National Standard.

Companion Standards: WC 53, WC 54

Price: \$94.00

**WC 58-1997/ICEA S-75-381  
Portable and Power Feeder  
Cables for Use in Mines and  
Similar Applications**

Applies to materials, construction, and testing of insulated cables used for the distribution of electrical energy in surface and underground mines and similar applications. Included are portable cables for use in mining machines, dredges, shovels, and mine power cables for use as connections between units of mine distribution systems.

Approved as an American National Standard.

Price: \$133.00

**WC 60.1-1995  
Bar Coding and Control  
Wire and Cable Products**

Defines required and optional data fields to be used in conjunction with tags or labels used on power and control wire and cable products.

Price: \$40.00

**WC 60.2-1994  
Product Identification and  
Bar Coding Requirements  
for Building Wire Products**

Sets forth product identification and bar coding techniques for standard copper and aluminum building wire and cable products. It also lists standard item identification numbers for building wire and cable products produced by multiple manufacturers on a repetitive basis.

Price: \$90.00

**ANSI/NEMA WC 61-2005  
Transfer Impedance Testing**

Intended to provide a reliable surface transfer impedance test method for coaxial cables and shielded multiconductor cables over the frequency range from dc to 100 MHz.

Approved as an American National Standard and adopted by the U.S. Department of Defense as an alternative non-government standard.

Price: \$42.00

**WC 62-1992 (R1999, R2004)**  
**Repeated Spark/Impulse Dielectric Testing**

Discusses the validity of repeat continuity proof testing of insulated wire.

Price: \$31.00

**WC 63.1-2000**  
**Performance Standard for Twisted Pair Premise Voice and Data Communications Cables**

Defines minimum electrical performance characteristics, material, and mechanical specifications of premise wiring cables for voice and data applications. Definitions and applicable test methods are included.

Adopted by the U.S. Department of Defense as an alternative non-government standard.

Price: \$82.00

**WC 63.2-1996 (R2003)**  
**Performance Standard for Coaxial Premise Data Communications**

Defines minimum electrical performance characteristics, material, and mechanical specifications of premise wiring cables for data applications. Definitions and applicable test methods are included.

Approved as an American National Standard and adopted by the U.S. Department of Defense as an alternative non-government standard.

Price: \$30.00

**WC 65-1995 (R2003)**  
**A Reasoned Approach to Solving Solderability Problems with Tin-Coated and Nickel-Coated Stranded Conductors in High Performance Wire and Cable Applications**

Contains a review of solderability problems with tin-coated and nickel-coated stranded conductors, existing solderability standards, and a discussion of the root causes of these problems. The publication makes recommendations which may supply solutions for specific applications.

Adopted by the U.S. Department of Defense as an alternative non-govern-

ment standard.

Price: \$36.00

**ANSI/NEMA WC 66-2001**  
**Performance Standard for Category 6 and Category 7 100 Ohm Shielded and Unshielded Twisted Pair Cables**

Defines minimum electrical performance and allowable conductor sizes, stranding, and shielding for premise wiring cables for voice and data applications for 100 ohm shielded and unshielded twisted pair cables.

Approved as an American National Standard and adopted by the Department of Defense.

Price: \$58.00

**WC 67-1997 (R2003)**  
**Standard for Uninsulated Conductors Used in Electrical and Electronic Applications**

Assures that all included conductors, both metric and English sizes, will meet the current requirements associated with high-reliability aerospace, electrical, and electronic equipment.

Adopted by the U.S. Department of Defense as an alternative non-government standard to MIL-W-29606.

Price: \$44.00

**ANSI/NEMA WC 70-1999/ ICEA S-95-658-1999**  
**Nonshielded Power Cables Rated 2000 Volts or less for the Distribution of Electrical Energy**

Applies to materials, construction, and testing of 2000 volt and below nonshielded thermoplastic, cross-linked polyethylene, and cross-linked rubber insulated wires and cables which are used for the transmission and distribution of electrical energy for normal conditions of installation and service, either indoors, outdoors, aerial, underground, or submarine.

Price: \$125.00

**ANSI/NEMA WC 71-1999/ ICEA S-96-659-1999**  
**Standard for Nonshielded Cables Rated 2001-5000 Volts for use in the Distribution of Electric Energy**

Applies to materials, construction, and testing of 2001 through 5000 volt nonshielded power cables having insulations of thermoplastic polyethylene, cross-linked polyethylene or crosslinked rubber. The insulation shall be covered with a discharge resistant jacket or shall be a discharge-resistant material without a jacket.

Price: \$105.00

**WC 72-1999 (R2004)**  
**Continuity of Coating Testing for Electrical Conductors**

Contains a review of the problems that have occurred when polysulfide testing has been improperly imposed on tin, silver, and nickel coated copper and copper alloy stranded conductors or on tin, silver, or nickel coated copper and copper alloy single or stranded conductors after insulating.

Price: \$33.00

**WC 73-2000**  
**Wire Selection Guidelines for Wires Rated at 200-450 deg./C**

Contains guidelines for calculating amperages and selecting wires for temperatures from 200 to 450 degrees Celsius and for voltage ratings up to and including 1000 volts rms. Ampacity charts, temperature correction factors, and derating factors are provided along with extensive examples of calculations.

Price: \$38.00

**WC 74-2000/ICEA S-93-639**  
**5-46 kV Shielded Power Cable for Use in the Transmission and Distribution of Electric Energy**

Applies to materials, construction, and testing of 5000 volt to 46,000 volt shielded cross-linked polyethylene and ethylene propylene rubber insulated wires and cables, which are used for the transmission and distribution of electrical energy for normal conditions of installation and service, either indoors, outdoors, aerial, underground, or submarine. Approved as an American National Standard.  
 Price: \$125.00

**ANSI/NEMA WC 27500-2000**  
**Standard for Aerospace and Industrial Electrical Cable**

A non-governmental standard replacement for the MIL-DTL-27500 specification for electrical cable, which is widely used in aerospace and other industries. It provides requirements for finished cables. The component wires are covered by other referenced standards. These cables are intended for signal and low-voltage power applications with defined environment or temperature conditions found in commercial aircraft, military aircraft, and high performance vehicles. Approved as an American National Standard.  
 Price: \$72.00

## WIRING DEVICES

**Application Guide for Isolated Ground Wiring Devices**

Covers wiring devices and accessories intended to help protect sensitive equipment from malfunction due to noise on the equipment grounding path. Devices include receptacles, single or duplex with straight blade or locking NEMA configurations, rated 15A to 60A and 125V to 600V.  
 Price: \$55.00

**WD 1-1999 (R2005)**  
**General Color Requirements for Wiring Devices**

Contains color references for AC switches, plugs and cord connectors, receptacles, and other related wiring devices.  
 Companion Standard: WD 6  
 Price: \$27.00

**ANSI/NEMA WD 6-2002**  
**Wiring Devices—Dimensional Requirements**

Covers dimensional requirements for plugs and receptacles rated up to 60 A and 600 V, including dimensions for wall plates.  
 Approved as an American National Standard.  
 Companion Standard: WD 1  
 Price: \$133.00

**WD 7-2000**  
**Occupancy Motion Sensors**

Covers the definition and measurement of characteristics relevant to the use and application of occupancy motion sensors of passive infrared and ultrasonic types. These sensors are used in systems for control of lighting; heating, ventilating, and air conditioning (HVAC); and other devices.  
 Price: \$31.00

**UC 2-1993 (R2000)**  
**Undercarpet Power Distribution Systems**

Defines component parts of the Type FCC system and establishes ratings, electrical and mechanical performance properties, and test procedures for installed systems.  
 Companion Standards: OS 1, OS 2, FB 1, WD 1, WD 6  
 Price: \$48.00

# PRODUCT CATEGORY INDEX

The following pages list over 600 companies and the products they manufacture. The companies are arranged by product category. To find a specific product, consult the product category index that begins below.

Manufacturers are listed alphabetically, with their phone numbers. Standards related to the product are listed under the same product category in the standards listing, beginning on page 24.

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Steel conduit		Molded rubber connectors	Distributed control systems	
Steel electrical metallic tubing & elbows		Overhead lines connectors	Drum switches	
Thermoplastic raceway (PVC, polyethylene, polyolefin)		Pressure connectors	Electromechanical & solid-state contactors	
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Polymer guards		Twist-on wire connectors	Indicating lights	
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Clock and program systems		Circuit breaker enclosures	Proximity switches	
Fire protective signaling systems, devices, and accessories		Contactors	Register and synchronizing controls	
		Pushbutton	Relays and contactors	
		Switch	Rheostats and resistors	
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			Switches	
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Emergency lighting		Secondary power sources		Lighting control systems		NTCIP-conforming control software	
Lighting control devices		AC/DC power converters		Lighting control devices		Transportation vehicle sensor tems and components (loops, video, and other technologies)	
Indoor lighting		Battery chargers		Indoor lighting		Roadside control cabinets, enclosures, components and subassemblies	
Lamps		AC/AC power converters		Lampsholders		Dynamic message sign (all types of VMS and CMS) hardware and software	
Lampholders		DC/AC power converters		Outdoor lighting		Transportation control center management software and software utilities	
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		Large power transformers					

## ARC WELDING

### Arc welding wire

American Insulated Wire	(401) 726-0700
Bohler Thyssen Welding USA	(281) 499-1212
ESAB Welding & Cutting Products	(800) ESAB-123
Lincoln Electric	(216) 481-8100

### Arc welding power sources

#### Automatic/manual continuous electrode wire feeders

ESAB Welding & Cutting Products	(800) ESAB-123
Lincoln Electric	(216) 481-8100
Miller Electric Mfg. Co.	(800) 4-A-MILLER
Systematics	(610) 696-9040

#### AC generator or AC generator with rectifier

Lincoln Electric	(216) 481-8100
Miller Electric Mfg. Co.	(800) 4-A-MILLER

#### DC generator

Lincoln Electric	(216) 481-8100
Miller Electric Mfg. Co.	(800) 4-A-MILLER

#### Electrical attachments

ESAB Welding & Cutting Products	(800) ESAB-123
Leviton Mfg. Co.	(800) 323-8920
Lincoln Electric	(216) 481-8100

#### Polyphase transformer or transformer-rectifier

ESAB Welding & Cutting Products	(800) ESAB-123
Lincoln Electric	(216) 481-8100
Miller Electric Mfg. Co.	(800) 4-A-MILLER
Systematics	(610) 696-9040

#### Plasma welding and cutting machine

ESAB Welding & Cutting Products	(800) ESAB-123
Hypertherm	(603) 643-3441
Lincoln Electric	(216) 481-8100
Miller Electric Mfg. Co.	(800) 4-A-MILLER

#### Single-phase transformer or transformer-rectifier

ESAB Welding & Cutting Products	(800) ESAB-123
Lincoln Electric	(216) 481-8100
Miller Electric Mfg. Co.	(800) 4-A-MILLER
Systematics	(610) 696-9040

#### Stick electrode holders & repair parts

ESAB Welding & Cutting Products	(800) ESAB-123
Lincoln Electric	(216) 481-8100

#### Cooling systems

Miller Electric Mfg. Co.	(800) 4-A-MILLER
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#### Torches

ESAB Welding & Cutting Products	(800) ESAB-123
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## BATTERIES, DRY

### Primary dry cell

Duracell North Atlantic Group	(203) 796-4000
Energizer	(800) 383-7323
Moltech Power Systems	(386) 462-3911
Panasonic OEM Batteries	(877) 726-2228
Quallion LLC	(818) 833-2001
Spectrum Brands, Inc.	(608) 275-3340
Renata Batteries U.S.	(972) 234-8091
SAFT America, Inc.	(912) 247-2331

### Alkaline primary

Duracell North Atlantic Group	(203) 796-4000
Eastman Kodak	(716) 724-3579
Energizer	(800) 383-7323
Moltech Power Systems	(386) 462-3911
Panasonic OEM Batteries	(877) 726-2228
Spectrum Brands, Inc.	(608) 275-3340
SAFT America, Inc.	(912) 247-2331

### Primary leclanche

Energizer	(800) 383-7323
Moltech Power Systems	(386) 462-3911
Spectrum Brands, Inc.	(608) 275-3340

### Lithium (primary dry cell)

Duracell North Atlantic Group	(203) 796-4000
Eastman Kodak	(716) 724-3579
Energizer	(800) 383-7323
Moltech Power Systems	(386) 462-3911
Panasonic OEM Batteries	(877) 726-2228
Quallion LLC	(818) 833-2001
Spectrum Brands, Inc.	(608) 275-3340
Renata Batteries U.S.	(972) 234-8091
SAFT America, Inc.	(912) 247-2331
Wilson Greatbatch Ltd.	(716) 759-6901

### Portable rechargeable

Duracell North Atlantic Group	(203) 796-4000
Energizer	(800) 383-7323
GE Home Electric Products	(216) 266-2121
Moltech Power Systems	(386) 462-3911
Panasonic OEM Batteries	(877) 726-2228
Quallion LLC	(818) 833-2001
Renata Batteries U.S.	(972) 234-8091
SAFT America, Inc.	(912) 247-2331

### Sealed nickel cadmium

Energizer	(800) 383-7323
GE Home Electric Products	(216) 266-2121
Moltech Power Systems	(386) 462-3911
Panasonic OEM Batteries	(877) 726-2228
SAFT America, Inc.	(912) 247-2331

### Lithium (portable rechargeable)

Energizer	(800) 383-7323
GE Home Electric Products	(216) 266-2121
Moltech Power Systems	(386) 462-3911
Panasonic OEM Batteries	(877) 726-2228
Quallion LLC	(818) 833-2001
Spectrum Brands, Inc.	(608) 275-3340
Renata Batteries U.S.	(972) 234-8091
SAFT America, Inc.	(912) 247-2331
Wilson Greatbatch Ltd.	(716) 759-6901

### Other (zinc air, nickel metal hydride, battery graphites)

Duracell North Atlantic Group	(203) 796-4000
Energizer	(800) 383-7323
GE Home Electric Products	(216) 266-2121
Moltech Power Systems	(386) 462-3911
Panasonic OEM Batteries	(877) 726-2228
Spectrum Brands, Inc.	(608) 275-3340
Renata Batteries U.S.	(972) 234-8091
SAFT America, Inc.	(912) 247-2331
Superior Graphite Co.	(312) 559-2999



## Flashlights and lanterns

Duracell North Atlantic Group	(203) 796-4000
Energizer	(800) 383-7323
GE Home Electric Products	(216) 266-2121
Moltech Power Systems	(386) 462-3911
Spectrum brands, inc	(608) 275-3340

## BUSWAY, CONDUIT,

## RACEWAYS

### Busway

#### Busway accessories

Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Metron Inc.	(303) 592-1903
Moeller Electric Corp...	(713) 933-0999
MP Husky	(864) 234-4800
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

#### Feeder busway

Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Metron Inc.	(303) 592-1903
Moeller Electric Corp.	(713) 933-0999
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Plug-in busways	
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Moeller Electric Corp.	(713) 933-0999
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

## Conduit and cable fittings

#### Fittings for hazardous locations

Adalet	(216) 267-9000
AGFA Division of Miles, Inc.	(864) 421-1600
Cooper Crouse-Hinds	(315) 477-5531
EGS Electrical Group	(847) 268-6000
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460
Perma-Cote	(903) 843-4388
Producto Electric Corp.	(845) 359-4900
Robroy Industries	(412) 828-2100
Robroy Industries — Plastic-Bond	(903) 843-5591
Thomas & Betts	(901) 252-5000

#### Fittings for ordinary locations

Adalet	(216) 267-9000
AFC Cable Systems	(508) 998-1131
Arlington Industries	(570) 562-0270
Bridgeport Fittings	(203) 377-5944
CANTEX INC.	(800) 433-5623
Carlson, Lamson & Sessions	(216) 464-3400
Cooper Crouse-Hinds	(315) 477-5531
Cummins Power Generation	(800) 888-6626
EGS Electrical Group	(847) 268-6000
The Halex Company	(440) 439-1616
Heyco Products Inc.	(732) 286-4336
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
IPEX Inc.	(800) 463-9572
Killark Electric Manufacturing	(314) 531-0460
Perma-Cote	(903) 843-4388
Producto Electric Corp.	(845) 359-4900
RACO, Inc.	(800) 722-6437
Regal Mfg. Co.	(800) 582-3092
Robroy Industries	(412) 828-2100
Robroy Industries — Plastic-Bond	(903) 843-5591
Steel City	(901) 252-5000
Steel Electric Products Co. Inc. (SEPCO)	(800) 626-1223
Thomas & Betts	(901) 252-5000
Woodhead L.P.	(847) 272-7990

#### Cast conduit bodies

Adalet	(216) 267-9000
Arlington Industries	(570) 562-0270
Bridgeport Fittings	(203) 377-5944
Cooper Crouse-Hinds	(315) 477-5531
EGS Electrical Group	(847) 268-6000
The Halex Company	(440) 439-1616
Killark Electric Manufacturing	(314) 531-0460
Producto Electric Corp.	(845) 359-4900
Regal Mfg. Co.	(800) 582-3092
Robroy Industries	(412) 828-2100
Steel City	(901) 252-5000
Steel Electric Products Co. Inc. (SEPCO)	(800) 626-1223
Thomas & Betts	(901) 252-5000

#### Conduit hangers, straps & hardware

Adalet	(216) 267-9000
AGFA Division of Miles, Inc.	(864) 421-1600
Allied Tube & Conduit, Electrical Div	(800) 882-5543
Arlington Industries	(570) 562-0270
Bridgeport Fittings	(203) 377-5944
CANTEX INC.	(800) 433-5623
Champion Fiberglass	(281) 655-8900
Cooper B-Line	(618) 654-2184
Cooper Crouse-Hinds	(315) 477-5531
Cummins Power Generation	(800) 888-6626
EGS Electrical Group	(847) 268-6000
ERICO Inc.	(440) 248-0100
The Halex Company	(440) 439-1616
Heyco Products Inc.	(732) 286-4336
MacLean Power Systems	(847) 455-0014
Minerallac Co.	(630) 543-7080
Perma-Cote	(903) 843-4388
Producto Electric Corp.	(845) 359-4900
Progressive Machine Die, Inc.	(330) 405-6600
Regal Mfg. Co.	(800) 582-3092
Robroy Industries	(412) 828-2100
Robroy Industries — Plastic-Bond	(903) 843-5591
Steel City	(901) 252-5000
Steel Electric Products Co. Inc. (SEPCO)	(800) 626-1223
Thomas & Betts	(901) 252-5000

## Nonmetallic cable trays

### Ladder type nonmetallic cable trays

Allied Tube & Conduit	(800) 882-5543
Champion Fiberglass	(281) 655-8900
Cooper B-Line	(618) 654-2184
Hill-Rom	(800) 990-2725 x3378
MP Husky	(864) 234-4800
Polygon Co.	(574) 586-3145
P-W Industries	(770) 565-7907
T.J. Cope, Div of Allied Tube & Conduit	(800) 882-5543
Thomas & Betts	(901) 252-5000
The Wiremold Company	(800) 621-0049

### Trough type nonmetallic cable trays

Allied Tube & Conduit	(800) 882-5543
Champion Fiberglass	(281) 655-8900
Cooper B-Line	(618) 654-2184
MP Husky	(864) 234-4800
Polygon Co.	(574) 586-3145
P-W Industries	(770) 565-7907
T.J. Cope, Div of Allied Tube & Conduit	(800) 882-5543
Thomas & Betts	(901) 252-5000
The Wiremold Company	(800) 621-0049

### Other nonmetallic cable tray systems

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Champion Fiberglass	(281) 655-8900
ERICO Inc.	(440) 248-0100
MP Husky	(864) 234-4800
P-W Industries	(770) 565-7907
The Wiremold Company	(800) 621-0049

## Metal cable trays

### Channel type metal cable trays

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Chalfant Mfg Co	(216) 521-7922
Cooper B-Line	(618) 654-2184
GS Metals Corp.	(618) 357-5353
MP Husky	(864) 234-4800
P-W Industries	(770) 565-7907
T.J. Cope, Div of Allied Tube & Conduit	(800) 882-5543
Thomas & Betts	(901) 252-5000
Wiremold Canada, Inc.	(514) 843-4332
The Wiremold Company	(800) 621-0049

### Ladder type metal cable trays

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Chalfant Mfg Co	(216) 521-7922
Cooper B-Line	(618) 654-2184
GS Metals Corp.	(618) 357-5353
MP Husky	(864) 234-4800
P-W Industries	(770) 565-7907
T.J. Cope, Div of Allied Tube & Conduit	(800) 882-5543
Thomas & Betts	(901) 252-5000
The Wiremold Company	(800) 621-0049

### Trough type metal cable trays

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Cablofil, Inc.	(800) 658-4641
Chalfant Mfg Co	(216) 521-7922
Cooper B-Line	(618) 654-2184
GS Metals Corp.	(618) 357-5353
Milbank Mfg. Co.	(816) 483-5314
MP Husky	(864) 234-4800
P-W Industries	(770) 565-7907
T.J. Cope, Div of Allied Tube & Conduit	(800) 882-5543
Thomas & Betts	(901) 252-5000
Wiremold Canada, Inc.	(514) 843-4332

### Single rail type metal cable trays

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Chalfant Mfg Co	(216) 521-7922
Cooper B-Line	(618) 654-2184
MP Husky	(864) 234-4800
P-W Industries	(770) 565-7907
T.J. Cope, Div of Allied Tube & Conduit	(800) 882-5543
Thomas & Betts	(901) 252-5000

### Wire mesh/basket type metal cable trays

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Cablofil, Inc.	(800) 658-4641
Chalfant Mfg Co	(216) 521-7922
Cooper B-Line	(618) 654-2184
ERICO Inc.	(440) 248-0100
GS Metals Corp.	(618) 357-5353
MP Husky	(864) 234-4800
P-W Industries	(770) 565-7907

T.J. Cope, Div of Allied Tube & Conduit	(800) 882-5543
Thomas & Betts	(901) 252-5000
The Wiremold Company	(800) 621-0049

### Other metallic cable tray systems

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Chalfant Mfg Co	(216) 521-7922
ERICO Inc.	(440) 248-0100
MP Husky	(864) 234-4800
P-W Industries	(770) 565-7907
T.J. Cope, Div of Allied Tube & Conduit	(800) 882-5543
Thomas & Betts	(901) 252-5000
The Wiremold Company	(800) 621-0049

## Nonmetallic wire duct

ABB LVPS	(888) 385-1221
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## Steel conduit

### Elbows, couplings & nipples for steel conduit

The Halex Company	(440) 439-1616
Perma-Cote	(903) 843-4388
Picoma Industries	(717) 762-9141
Producto Electric Corp.	(845) 359-4900
Robroy Industries — Plastic-Bond	(903) 843-5591
Thomas & Betts	(901) 252-5000
Wheatland Tube Co.	(856) 854-5400

### Electrical metallic tubing

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Republic Conduit	(800) 840-8823
Western Tube & Conduit Corp.	(310) 537-6300
Wheatland Tube Co.	(856) 854-5400

### Galvanized rigid conduit

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Republic Conduit	(800) 840-8823
Western Tube & Conduit Corp.	(310) 537-6300
Wheatland Tube Co.	(856) 854-5400

Intermediate metal conduit

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Republic Conduit	(800) 840-8823
Western Tube & Conduit Corp.	(310) 537-6300
Wheatland Tube Co.	(856) 854-5400

PVC coated steel conduit

Perma-Cote	(903) 843-4388
Robroy Industries	(412) 828-2100
Robroy Industries — Plastic-Bond	(903) 843-5591
Thomas & Betts	(901) 252-5000

**Steel electrical metallic tubing & elbows**

Picoma Industries	(717) 762-9141
Producto Electric Corp.	(845) 359-4900
Thomas & Betts	(901) 252-5000
Wheatland Tube Co.	(856) 854-5400

**Thermoplastic raceway (PVC, polyethylene, polyolefin)**

Accessories for use with thermoplastic raceway

Allied Tube & Conduit, Electrical Div	(800) 882-5543
CANTEX INC.	(800) 433-5623
Carlton, Lamson & Sessions	(216) 464-3400
Dura-Line Corporation	(800) 847-7661
The Halex Company	(440) 439-1616
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815
Panduit Corp.	(800) 777-3300
Picoma Industries	(717) 762-9141
Southern Pipe	(704) 463-5202
Thomas & Betts	(901) 252-5000
Underground Devices, Inc.	(847) 205-9000
The Wiremold Company	(800) 621-0049

Boxes (thermoplastic raceway)

Allied Tube & Conduit, Electrical Div	(800) 882-5543
CANTEX INC.	(800) 433-5623
Carlton, Lamson & Sessions	(216) 464-3400
Cooper Crouse-Hinds	(315) 477-5531
Dura-Line Corporation	(800) 847-7661
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815
Panduit Corp.	(800) 777-3300
Picoma Industries	(717) 762-9141
Producto Electric Corp.	(845) 359-4900
Southern Pipe	(704) 463-5202
Thomas & Betts	(901) 252-5000
The Wiremold Company	(800) 621-0049

Conduit bodies

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Arlington Industries	(570) 562-0270
CANTEX INC.	(800) 433-5623
Carlton, Lamson & Sessions	(216) 464-3400
Dura-Line Corporation	(800) 847-7661
The Halex Company	(440) 439-1616
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815
Picoma Industries	(717) 762-9141
Producto Electric Corp.	(845) 359-4900
Southern Pipe	(704) 463-5202
Thomas & Betts	(901) 252-5000

Elbows (thermoplastic raceway)

Allied Tube & Conduit, Electrical Div	(800) 882-5543
Arlington Industries	(570) 562-0270
CANTEX INC.	(800) 433-5623
Carlton, Lamson & Sessions	(216) 464-3400
Dura-Line Corporation	(800) 847-7661
The Halex Company	(440) 439-1616
IPEX Inc.	(800) 463-9572
J-M Manufacturing	(800) 621-4404
Kraloy	(800) 265-1815
Panduit Corp.	(800) 777-3300
Picoma Industries	(717) 762-9141
Producto Electric Corp.	(845) 359-4900
Southern Pipe	(704) 463-5202
Thomas & Betts	(901) 252-5000
The Wiremold Company	(800) 621-0049

Fittings (thermoplastic raceway)

AFC Cable Systems	(508) 998-1131
Allied Tube & Conduit, Electrical Div	(800) 882-5543
Arlington Industries	(570) 562-0270
CANTEX INC.	(800) 433-5623
Carlton, Lamson & Sessions	(216) 464-3400
Dura-Line Corporation	(800) 847-7661
The Halex Company	(440) 439-1616
Heyco Products Inc.	(732) 286-4336
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815
Panduit Corp.	(800) 777-3300
Picoma Industries	(717) 762-9141
Producto Electric Corp.	(845) 359-4900
Southern Pipe	(704) 463-5202
Thomas & Betts	(901) 252-5000
The Wiremold Company	(800) 621-0049

Raceways (thermoplastic raceway)

AFC Cable Systems	(508) 998-1131
Alflex Corporation	(310) 886-8300
Allied Tube & Conduit, Electrical Div	(800) 882-5543
CANTEX INC.	(800) 433-5623
Carlton, Lamson & Sessions	(216) 464-3400
Dura-Line Corporation	(800) 847-7661
Heyco Products Inc.	(732) 286-4336
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
IPEX Inc.	(800) 463-9572
J-M Manufacturing	(800) 621-4404
Kraloy	(800) 265-1815
Panduit Corp.	(800) 777-3300
Southern Pipe	(704) 463-5202
Thomas & Betts	(901) 252-5000
The Wiremold Company	(800) 621-0049

**Thermoset raceway (fiberglass)**

Accessories for use with thermoset raceway

Champion Fiberglass	(281) 655-8900
FRE Composites (2005), Inc.	(888) 849-9909

Boxes (thermoset raceway)

Champion Fiberglass	(281) 655-8900
Cooper Crouse-Hinds	(315) 477-5531
FRE Composites (2005), Inc.	(888) 849-9909

**Conduit Bodies (thermoset raceway)**

Champion Fiberglass (281) 655-8900  
FRE Composites (2005), Inc. (888) 849-9909

**Elbows (thermoset raceway)**

Champion Fiberglass (281) 655-8900  
FRE Composites (2005), Inc. (888) 849-9909

**Fittings (thermoset raceway)**

Champion Fiberglass (281) 655-8900  
FRE Composites (2005), Inc. (888) 849-9909

**Raceways (thermoset raceway)**

Champion Fiberglass (281) 655-8900  
FRE Composites (2005), Inc. (888) 849-9909  
Polygon Co. (574) 586-3145

**Strut type channel raceway**

Allied Tube & Conduit,  
Electrical Div (800) 882-5543  
Cooper B-Line (618) 654-2184  
ERICO Inc. (440) 248-0100  
GS Metals Corp. (618) 357-5353  
Thomas & Betts (901) 252-5000

**Surface metal raceway**

Thomas & Betts (901) 252-5000  
The Wiremold Company (800) 621-0049

**Polymer guards**

**Guy**

Custom Utility (847) 640-4732  
Hubbell Power Systems (573) 682-5521  
IPEX Inc. (800) 463-9572

**Ground wire**

Custom Utility (847) 640-4732

**Riser cables**

Carlton, Lamson & Sessions (216) 464-3400  
Custom Utility (847) 640-4732

**CAPACITORS**

**Series capacitors**

AREVA T&D Inc. (484) 799-8100  
Cooper Power Systems (262) 524-3300  
GE Electrical Distribution &  
Control (860) 747-7234

**Shunt capacitors**

ABB Capacitors (418) 650-4488  
ABB LVPS (888) 385-1221  
AREVA T&D Inc. (484) 799-8100  
Cooper Power Systems (262) 524-3300  
GE Electrical Distribution &  
Control (860) 747-7234  
GE Industrial Systems (260) 439-3447

**CARBON/  
MANUFACTURED  
GRAPHITE PRODUCTS**

**Electrical components**

**Brush holders**

Graphite Metallizing Corp. (914) 968-8400  
Helwig Carbon (414) 354-2411



Phoenix Electric Mfg Co. (773) 477-8855

**Brushes and contacts**

Graphite Metallizing Corp. (914) 968-8400  
Helwig Carbon (414) 354-2411  
Polygon Co. (574) 586-3145

**Lightning arresters**

ABB LVPS (888) 385-1221

**Pantograph parts**

Helwig Carbon (414) 354-2411

**Plates**

Graphite Metallizing Corp. (914) 968-8400  
Helwig Carbon (414) 354-2411

**Electrodes**

**Cathodes**

GrafTech International Ltd. (931) 552-5191  
Quallion LLC (818) 833-2001

**Electrical discharge  
machining electrodes**

GrafTech International Ltd. (931) 552-5191  
Graphite Metallizing Corp. (914) 968-8400

**Electrochemical anodes**

GrafTech International Ltd. (931) 552-5191

**Electrolytic anodes**

GrafTech International Ltd. (931) 552-5191

**Graphite gouging and welding rods**

GrafTech International Ltd. (931) 552-5191

**Graphite electrodes**

GrafTech International Ltd. (931) 552-5191  
Quallion LLC (818) 833-2001  
Showa Denko Carbon (843) 875-3200  
Superior Graphite Co. (312) 559-2999

**Grounding anodes**

GrafTech International Ltd. (931) 552-5191

**Heating rods**

GrafTech International Ltd. (931) 552-5191

**Open arc electrodes**

GrafTech International Ltd. (931) 552-5191  
Superior Graphite Co. (312) 559-2999

**Plates & parts**

GrafTech International Ltd. (931) 552-5191  
Quallion LLC (818) 833-2001

**Spectroscopic materials**

GrafTech International Ltd. (931) 552-5191

## Mechanical products

### Bearings

Genlyte Thomas Group LLC	(502) 893-4690
Graphite Metallizing Corp.	(914) 968-8400
Helwig Carbon	(414) 354-2411
Polygon Co.	(574) 586-3145

### Compressor vanes & rotors

Graphite Metallizing Corp.	(914) 968-8400
Helwig Carbon	(414) 354-2411

### Friction parts

Graphite Metallizing Corp.	(914) 968-8400
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### Graphite lubricants

GrafTech International Ltd.	(931) 552-5191
Graphite Metallizing Corp.	(914) 968-8400
Superior Graphite Co.	(312) 559-2999

### Pipe slides

GrafTech International Ltd.	(931) 552-5191
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### Piston rings

GrafTech International Ltd.	(931) 552-5191
Graphite Metallizing Corp.	(914) 968-8400
Helwig Carbon	(414) 354-2411

### Pistons

GrafTech International Ltd.	(931) 552-5191
Graphite Metallizing Corp.	(914) 968-8400

### Rings

GrafTech International Ltd.	(931) 552-5191
Graphite Metallizing Corp.	(914) 968-8400
Helwig Carbon	(414) 354-2411

### Refractory coated graphite

GrafTech International Ltd.	(931) 552-5191
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### Rupture discs

Fike Protection Systems	(800) 937-3453
GrafTech International Ltd.	(931) 552-5191
Helwig Carbon	(414) 354-2411

### Seals

GrafTech International Ltd.	(931) 552-5191
Graphite Metallizing Corp.	(914) 968-8400
Helwig Carbon	(414) 354-2411

### Turbine packing rings

Graphite Metallizing Corp.	(914) 968-8400
Helwig Carbon	(414) 354-2411

### Valve parts & seals

GrafTech International Ltd.	(931) 552-5191
Graphite Metallizing Corp.	(914) 968-8400
Helwig Carbon	(414) 354-2411
Siemens Building Technologies Inc.	(847) 215-1000

## Refractory, metallurgical, and chemical products

### Composite tooling

GrafTech International Ltd.	(931) 552-5191
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### Expandable graphite

Superior Graphite Co.	(312) 559-2999
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### Granular material

GrafTech International Ltd.	(931) 552-5191
Showa Denko Carbon	(843) 875-3200

### Heaters and parts

GrafTech International Ltd.	(931) 552-5191
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### Material handling and forming parts

Helwig Carbon	(414) 354-2411
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### Medical, dental & foundry parts

GrafTech International Ltd.	(931) 552-5191
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### Molds and crucibles

GrafTech International Ltd.	(931) 552-5191
Helwig Carbon	(414) 354-2411

### Nuclear

GrafTech International Ltd.	(931) 552-5191
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### Piping

GrafTech International Ltd.	(931) 552-5191
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### Rocket nozzles

GrafTech International Ltd.	(931) 552-5191
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### Semiconductor manufacturing components

GrafTech International Ltd.	(931) 552-5191
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### Susceptors

GrafTech International Ltd.	(931) 552-5191
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### Tubing

GrafTech International Ltd.	(931) 552-5191
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## COMMUNICATIONS & SIGNALING EQUIPMENT

### Alarm devices

#### Audible alarm devices

Air Products and Controls Inc.	(248) 332-3900
Bosch Security Systems	(716) 223-4060
BRK Brands	(630) 851-7330
Cooper Crouse-Hinds	(315) 477-5531
Crest Electronics	(800) 328-8908
Electronic Control Systems	(203) 853-4300
Faraday, Siemens Building Technologies	(973) 593-2600
Federal Signal Corporation	(708) 534-4756
Fire Control Instruments	(781) 487-0088
Fire-Lite Alarms	(203) 484-1200
GE Infrastructure Security Inc.	(856) 662-8477

Gentex Corporation	(800) 436-8391
Harrington Signal, Inc.	(800) 577-5758
Honeywell	(800) 328-5111
Joslyn Clark Controls	(803) 286-8491
National Time & Signal Corp.	(248) 380-6264

Quantum Group	(858) 566-9959
Rauland-Borg Corp.	(847) 679-0900
Siemens Building Technologies	(800) 222-0108
Simplex Grinnell	(800) SIMPLEX
System Sensor	(630) 377-6580

Tektone Sound & Signal Mfg. Co.	(800) 327-8466
Therm Technology/Family Safety Products	(616) 530-6540
Wheelock Inc.	(800) 631-2148

#### Visible alarm devices

Bosch Security Systems	(716) 223-4060
BRK Brands	(630) 851-7330
Cooper Crouse-Hinds	(315) 477-5531
Crest Electronics	(800) 328-8908
Electronic Control Systems	(203) 853-4300
Faraday, Siemens Building Technologies	(973) 593-2600
Federal Signal Corporation	(708) 534-4756
Fire Control Instruments	(781) 487-0088
Fire-Lite Alarms	(203) 484-1200
GE Infrastructure Security Inc.	(856) 662-8477

Gentex Corporation	(800) 436-8391
Harrington Signal, Inc.	(800) 577-5758

Honeywell (800) 328-5111  
 Joslyn Clark Controls (803) 286-8491  
 Killark Electric Manufacturing (314) 531-0460  
 National Time & Signal Corp. (248) 380-6264  
 Quantum Group (858) 566-9959  
 Rauland-Borg Corp. (847) 679-0900  
 Russellstoll—T&B (800) 888-0211 x8680  
 Siemens Building Technologies (800) 222-0108  
 Simplex Grinnell (800) SIMPLEX  
 System Sensor (630) 377-6580  
 Tektone Sound & Signal Mfg. Co. (800) 327-8466  
 Therm Technology/Family Safety Products (616) 530-6540  
 Wheelock Inc. (800) 631-2148

### Automatic initiating devices

#### Gas detecting devices

Bosch Security Systems (716) 223-4060  
 BRK Brands (630) 851-7330  
 City Technology 0044 2392 325511  
 Electronic Control Systems (203) 853-4300  
 Figaro USA, Inc. (847) 832-1701  
 Fire Control Instruments (781) 487-0088  
 Fire-Lite Alarms (203) 484-1200  
 Harrington Signal, Inc. (800) 577-5758  
 Honeywell (800) 328-5111  
 Quantum Group (858) 566-9959  
 Simplex Grinnell (800) SIMPLEX  
 Texas Instruments, Inc. (508) 236-3800  
 Therm Technology/Family Safety Products (616) 530-6540

#### Flame detecting devices

Electronic Control Systems (203) 853-4300  
 Fire Control Instruments (781) 487-0088  
 GE Infrastructure Security Inc. (856) 662-8477  
 Harrington Signal, Inc. (800) 577-5758  
 Honeywell (800) 328-5111  
 Siemens Building Technologies (800) 222-0108  
 Simplex Grinnell (800) SIMPLEX  
 System Sensor (630) 377-6580  
 White-Rodgers (314) 533-3600

#### Heat detecting devices

Electronic Control Systems (203) 853-4300  
 SDi LLC (732) 751-9266  
 System Sensor (630) 377-6580

#### Smoke detecting devices

Air Products and Controls Inc. (248) 332-3900  
 Bosch Security Systems (716) 223-4060  
 BRK Brands (630) 851-7330  
 Electronic Control Systems (203) 853-4300  
 Faraday, Siemens Building Technologies (973) 593-2600  
 Fire Control Instruments (781) 487-0088  
 Fire-Lite Alarms (203) 484-1200  
 Gentex Corporation (800) 436-8391  
 Harrington Signal, Inc. (800) 577-5758  
 Honeywell (800) 328-5111  
 National Time & Signal Corp. (248) 380-6264  
 Rauland-Borg Corp. (847) 679-0900  
 SDi LLC (732) 751-9266  
 Siemens Building Technologies (800) 222-0108  
 Siemens Building Technologies Inc. (847) 215-1000  
 Simplex Grinnell (800) SIMPLEX  
 System Sensor (630) 377-6580

### Clock and program systems

ABB LVPS (888) 385-1221  
 Faraday, Siemens Building Technologies (973) 593-2600  
 Federal Signal Corporation (708) 534-4756  
 GE Infrastructure Security Inc. (856) 662-8477  
 Leviton Mfg. Co. (800) 323-8920  
 National Time & Signal Corp. (248) 380-6264  
 Rauland-Borg Corp. (847) 679-0900  
 Siemens Building Technologies (800) 222-0108  
 Simplex Grinnell (800) SIMPLEX  
 Wheelock Inc. (800) 631-2148

### Fire protective signaling systems, devices & accessories

#### Automatic sprinkler & supervisory panels

Bosch Security Systems (716) 223-4060  
 Fike Protection Systems (800) 937-3453  
 Fire Control Instruments (781) 487-0088  
 Fire-Lite Alarms (203) 484-1200  
 GE Infrastructure Security Inc. (856) 662-8477  
 Honeywell (800) 328-5111  
 National Time & Signal Corp. (248) 380-6264  
 Simplex Grinnell (800) SIMPLEX

#### Central station protective signalling systems

Bosch Security Systems (716) 223-4060  
 Faraday, Siemens Building Technologies (973) 593-2600  
 Fire Control Instruments (781) 487-0088  
 Fire-Lite Alarms (203) 484-1200  
 Harrington Signal, Inc. (800) 577-5758  
 Honeywell (800) 328-5111  
 Johnson Controls (414) 274-4000  
 Siemens Building Technologies Inc. (847) 215-1000  
 Simplex Grinnell (800) SIMPLEX

#### Coded systems

Faraday, Siemens Building Technologies (973) 593-2600  
 Fire Control Instruments (781) 487-0088  
 Fire-Lite Alarms (203) 484-1200  
 GE Infrastructure Security Inc. (856) 662-8477  
 Harrington Signal, Inc. (800) 577-5758  
 Honeywell (800) 328-5111  
 National Time & Signal Corp. (248) 380-6264  
 Siemens Building Technologies (800) 222-0108  
 Simplex Grinnell (800) SIMPLEX  
 Wheelock Inc. (800) 631-2148

**Control unit**

ABB LVPS	(888) 385-1221
Bosch Security Systems	(716) 223-4060
Electronic Control Systems	(203) 853-4300
Faraday, Siemens Building Technologies	(973) 593-2600
Fire Control Instruments	(781) 487-0088
Fire-Lite Alarms	(203) 484-1200
GE Infrastructure Security Inc.	(856) 662-8477
Harrington Signal, Inc.	(800) 577-5758
Honeywell	(800) 328-5111
National Time & Signal Corp.	(248) 380-6264
Rauland-Borg Corp.	(847) 679-0900
Siemens Building Technologies	(800) 222-0108
Simplex Grinnell	(800) SIMPLEX
Wheelock Inc.	(800) 631-2148

**Non-coded systems**

ABB LVPS	(888) 385-1221
Fire Control Instruments	(781) 487-0088
Fire-Lite Alarms	(203) 484-1200
Harrington Signal, Inc.	(800) 577-5758
National Time & Signal Corp.	(248) 380-6264
Siemens Building Technologies	(800) 222-0108
Simplex Grinnell	(800) SIMPLEX
Wheelock Inc.	(800) 631-2148

**Water flow switches for sprinkler systems**

Faraday, Siemens Building Technologies	(973) 593-2600
Fire Control Instruments	(781) 487-0088
Fire-Lite Alarms	(203) 484-1200
GE Infrastructure Security Inc.	(856) 662-8477
Honeywell	(800) 328-5111
Simplex Grinnell	(800) SIMPLEX
System Sensor	(630) 377-6580

**Health care communication systems****Doctor paging**

CORNELL Communications, Inc.	(414) 351-4660
GE Infrastructure Security Inc.	(856) 662-8477
Simplex Grinnell	(800) SIMPLEX
Tektone Sound & Signal Mfg. Co.	(800) 327-8466

**Nurse call**

Aiphone Corp.	(800) 692-0200
CORNELL Communications, Inc.	(414) 351-4660
Crest Electronics	(800) 328-8908
Curbell, Inc.	(716) 667-3377
Dukane	(630) 584-2300
GE Infrastructure Security Inc.	(856) 662-8477
Hill-Rom	(800) 990-2725 x3378
Rauland-Borg Corp.	(847) 679-0900
Simplex Grinnell	(800) SIMPLEX
Tektone Sound & Signal Mfg. Co.	(800) 327-8466
Tel-Tron Technologies Corp.	(386) 255-1921

**Room monitoring**

CORNELL Communications, Inc.	(414) 351-4660
GE Infrastructure Security Inc.	(856) 662-8477
Hill-Rom	(800) 990-2725 x3378
Simplex Grinnell	(800) SIMPLEX
Tektone Sound & Signal Mfg. Co.	(800) 327-8466
Tel-Tron Technologies Corp.	(386) 255-1921
Wheelock Inc.	(800) 631-2148

**Manually operating contact devices**

Cooper Crouse-Hinds	(315) 477-5531
EGS Electrical Group	(847) 268-6000
Faraday, Siemens Building Technologies	(973) 593-2600
Federal Signal Corporation	(708) 534-4756
Fire Control Instruments	(781) 487-0088
Fire-Lite Alarms	(203) 484-1200
GE Infrastructure Security Inc.	(856) 662-8477

Reliance Controls Corp.	(262) 634-6155
SDi LLC	(732) 751-9266
Simplex Grinnell	(800) SIMPLEX
Tektone Sound & Signal Mfg. Co.	(800) 327-8466

**Notification appliances (Non-fire alarm or nurse call systems)****Bells (notification appliances)**

Cooper Crouse-Hinds	(315) 477-5531
Faraday, Siemens Building Technologies	(973) 593-2600
Federal Signal Corporation	(708) 534-4756
Fire Control Instruments	(781) 487-0088
Fire-Lite Alarms	(203) 484-1200
GE Infrastructure Security Inc.	(856) 662-8477
Gentex Corporation	(800) 436-8391
Harrington Signal, Inc.	(800) 577-5758
Simplex Grinnell	(800) SIMPLEX
System Sensor	(630) 377-6580
Tektone Sound & Signal Mfg. Co.	(800) 327-8466
Wheelock Inc.	(800) 631-2148

**Buzzers (notification appliances)**

Federal Signal Corporation	(708) 534-4756
GE Infrastructure Security Inc.	(856) 662-8477
Simplex Grinnell	(800) SIMPLEX
Tektone Sound & Signal Mfg. Co.	(800) 327-8466
Wheelock Inc.	(800) 631-2148

**Horns (notification appliances)**

Cooper Crouse-Hinds	(315) 477-5531
Faraday, Siemens Building Technologies	(973) 593-2600
Federal Signal Corporation	(708) 534-4756
Fire Control Instruments	(781) 487-0088
Fire-Lite Alarms	(203) 484-1200
GE Infrastructure Security Inc.	(856) 662-8477
Gentex Corporation	(800) 436-8391
Harrington Signal, Inc.	(800) 577-5758
Rauland-Borg Corp.	(847) 679-0900
Simplex Grinnell	(800) SIMPLEX
Tektone Sound & Signal Mfg. Co.	(800) 327-8466
Wheelock Inc.	(800) 631-2148

**Sirens (notification appliances)**

Cooper Crouse-Hinds	(315) 477-5531
Faraday, Siemens Building Technologies	(973) 593-2600
Federal Signal Corporation	(708) 534-4756
GE Infrastructure Security Inc.	(856) 662-8477
Harrington Signal, Inc.	(800) 577-5758
Simplex Grinnell	(800) SIMPLEX
Wheelock Inc.	(800) 631-2148

**Paging systems**

CORNELL Communications, Inc.	(414) 351-4660
Dukane	(630) 584-2300
Federal Signal Corporation	(708) 534-4756
Fire Control Instruments	(781) 487-0088
Fire-Lite Alarms	(203) 484-1200
GE Infrastructure Security Inc.	(856) 662-8477
Rauland-Borg Corp.	(847) 679-0900
Simplex Grinnell	(800) SIMPLEX
Tektone Sound & Signal Mfg. Co.	(800) 327-8466
Wheelock Inc.	(800) 631-2148

**Power sources**

**Primary power sources**

CORNELL Communications, Inc.	(414) 351-4660
Fire Control Instruments	(781) 487-0088

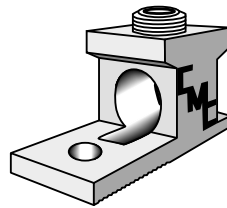
**Secondary power sources**

Fire Control Instruments	(781) 487-0088
GE Infrastructure Security Inc.	(856) 662-8477
Wheelock Inc.	(800) 631-2148

**Security signaling systems**

CORNELL Communications, Inc.	(414) 351-4660
GE Infrastructure Security Inc.	(856) 662-8477
Honeywell	(800) 328-5111
Rauland-Borg Corp.	(847) 679-0900
Siemens Building Technologies Inc.	(847) 215-1000
Simplex Grinnell	(800) SIMPLEX
Tektone Sound & Signal Mfg. Co.	(800) 327-8466
Wheelock Inc.	(800) 631-2148

**CONNECTORS**



Connector Mfg. (513) 860-4455

**Clamp type electric connectors**

3M Electrical Markets	(800) 815-6492 (Option 1)
ABB LVPS	(888) 385-1221
Bridgeport Fittings	(203) 377-5944
C3 Controls	(724) 775-7926
Connector Castings	(314) 421-5895
Connector Mfg.	(513) 860-4455
EGS Electrical Group	(847) 268-6000
FCI USA	(800) 346-4175
Galvan Industries, Inc.	(704) 455-5102
The Halex Company	(440) 439-1616
Homac Mfg Co.	(386) 677-9110
Hubbell Power Systems	(573) 682-5521
ILSCO	(513) 533-6200
MacLean Power Systems	(847) 455-0014
Penn-Union Corp.	(814) 734-1631
Phoenix Contact Inc.	(717) 944-1300
Producto Electric Corp.	(845) 359-4900
Steel Electric Products Co. Inc. (SEPCO)	(800) 626-1223
Thomas & Betts	(901) 252-5000
Wago Corporation	(800) 346-7245
Woodhead L.P.	(847) 272-7990

**Electric power connectors**

3M Electrical Markets	(800) 815-6492 (Option 1)
C3 Controls	(724) 775-7926
Connector Mfg.	(513) 860-4455
Cooper Bussmann	(888) 937-6246
Cooper Power Systems	(262) 524-3300
Crouse-Hinds Molded Products	(252) 566-3014
EGS Electrical Group	(847) 268-6000
Ericson Mfg.	(440) 951-8000

FCI USA	(800) 346-4175
Galvan Industries, Inc.	(704) 455-5102
Heyco Products Inc.	(732) 286-4336
Homac Mfg Co.	(386) 677-9110
Hubbell Incorporated—Wiring Devices-Kellems	(203) 882-4800
Hubbell Power Systems	(573) 682-5521



ILSCO	(513) 533-6200
Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
MacLean Power Systems	(847) 455-0014
MIPCO—T&B	(800) 888-0211 x8680
Panduit Corp.	(800) 777-3300
Penn-Union Corp.	(814) 734-1631
Porcelain Products	(419) 396-7621
Reliance Controls Corp.	(262) 634-6155
Russellstoll—T&B	(800) 888-0211 x8680
Thomas & Betts	(901) 252-5000
Tyco Electronics/AMP	(800) 522-6752
Wago Corporation	(800) 346-7245
Woodhead L.P.	(847) 272-7990

**Electronic connectors**

ABB LVPS	(888) 385-1221
Cooper Bussmann	(888) 937-6246
ETCO Incorporated	(401) 467-2400
FCI USA	(800) 346-4175
Penn-Union Corp.	(814) 734-1631
Pepperl+Fuchs	(330) 425-3555
Phoenix Electric Mfg Co.	(773) 477-8855
Russellstoll—T&B	(800) 888-0211 x8680
Tyco Electronics/AMP	(800) 522-6752
Wago Corporation	(800) 346-7245
Woodhead L.P.	(847) 272-7990

**Grounding accessories**

3M Electrical Markets	(800) 815-6492 (Option 1)
ABB LVPS	(888) 385-1221
Bridgeport Fittings	(203) 377-5944
C3 Controls	(724) 775-7926
Connector Castings	(314) 421-5895



Cooper Wiring Devices	(718) 361-4914
EGS Electrical Group	(847) 268-6000
ERICO Inc.	(440) 248-0100
FCI USA	(800) 346-4175
Galvan Industries, Inc.	(704) 455-5102
The Halex Company	(440) 439-1616
Homac Mfg Co.	(386) 677-9110
Hubbell Power Systems	(573) 682-5521
ILSCO	(513) 533-6200
Leviton Mfg. Co.	(800) 323-8920
MacLean Power Systems	(847) 455-0014
Panduit Corp.	(800) 777-3300
Penn-Union Corp.	(814) 734-1631
Porcelain Products	(419) 396-7621
Producto Electric Corp.	(845) 359-4900
Steel Electric Products Co. Inc. (SEPCO)	(800) 626-1223
Thomas & Betts	(901) 252-5000
Tyco Electronics/AMP	(800) 522-6752
Wago Corporation	(800) 346-7245

## Installation tooling

FCI USA	(800) 346-4175
Galvan Industries, Inc.	(704) 455-5102
The Halex Company	(440) 439-1616
ILSCO	(513) 533-6200
Penn-Union Corp.	(814) 734-1631
Thomas & Betts	(901) 252-5000

## Metalclad or armored connectors

3M Electrical Markets (800) 815-6492 (Option 1)	
Adalet	(216) 267-9000
AFC Cable Systems	(508) 998-1131
Bridgeport Fittings	(203) 377-5944
EGS Electrical Group	(847) 268-6000
FCI USA	(800) 346-4175
The Halex Company	(440) 439-1616
Killark Electric Manufacturing	(314) 531-0460
Producto Electric Corp.	(845) 359-4900
Regal Mfg. Co.	(800) 582-3092
Steel City	(901) 252-5000
Steel Electric Products Co. Inc. (SEPCO)	(800) 626-1223
Thomas & Betts	(901) 252-5000

## Molded rubber connectors

3M Electrical Markets  
(800) 815-6492 (Option 1)



Connector Mfg.	(513) 860-4455
Cooper Power Systems	(262) 524-3300
Crouse-Hinds Molded Products	(252) 566-3014
Ericson Mfg.	(440) 951-8000
ETCO Incorporated	(401) 467-2400
FCI USA	(800) 346-4175
Homac Mfg Co.	(386) 677-9110
Hubbell Power Systems	(573) 682-5521
ILSCO	(513) 533-6200
Leviton Mfg. Co.	(800) 323-8920
Thomas & Betts	(901) 252-5000
Thomas & Betts/Elastimold	(901) 252-5000
Tyco Electronics/Raychem Wire and Cable	(919) 557-8863
Woodhead L.P.	(847) 272-7990

## Overhead lines connectors

3M Electrical Markets  
(800) 815-6492 (Option 1)

Connector Mfg.	(513) 860-4455
FCI USA	(800) 346-4175
Galvan Industries, Inc.	(704) 455-5102
Homac Mfg Co.	(386) 677-9110
Hubbell Power Systems	(573) 682-5521
ILSCO	(513) 533-6200
MacLean Power Systems	(847) 455-0014
Penn-Union Corp.	(814) 734-1631
Sicame Corporation	(513) 772-3423
Thomas & Betts	(901) 252-5000
Tyco Electronics/AMP	(800) 522-6752

## Pressure connectors

3M Electrical Markets  
(800) 815-6492 (Option 1)

Connector Mfg.	(513) 860-4455
EGS Electrical Group	(847) 268-6000
FCI USA	(800) 346-4175
Galvan Industries, Inc.	(704) 455-5102
The Halex Company	(440) 439-1616
Homac Mfg Co.	(386) 677-9110

Hubbell Power Systems	(573) 682-5521
ILSCO	(513) 533-6200
MacLean Power Systems	(847) 455-0014
Panduit Corp.	(800) 777-3300
Penn-Union Corp.	(814) 734-1631
Phoenix Contact Inc.	(717) 944-1300
Producto Electric Corp.	(845) 359-4900
Thomas & Betts	(901) 252-5000
Tyco Electronics/AMP	(800) 522-6752
Wago Corporation	(800) 346-7245

## Split bolt connectors

Connector Castings	(314) 421-5895
Connector Mfg.	(513) 860-4455
EGS Electrical Group	(847) 268-6000
ERICO Inc.	(440) 248-0100
FCI USA	(800) 346-4175
Galvan Industries, Inc.	(704) 455-5102
The Halex Company	(440) 439-1616
Homac Mfg Co.	(386) 677-9110
Hubbell Power Systems	(573) 682-5521
ILSCO	(513) 533-6200
Panduit Corp.	(800) 777-3300
Penn-Union Corp.	(814) 734-1631
Porcelain Products	(419) 396-7621
Producto Electric Corp.	(845) 359-4900
Steel Electric Products Co. Inc. (SEPCO)	(800) 626-1223
Thomas & Betts	(901) 252-5000

## Twist-on wire connectors

3M Electrical Markets  
(800) 815-6492 (Option 1)

FCI USA	(800) 346-4175
Heyco Products Inc.	(732) 286-4336
Hubbell Power Systems	(573) 682-5521
Panduit Corp.	(800) 777-3300
Producto Electric Corp.	(845) 359-4900
Thomas & Betts	(901) 252-5000
Wago Corporation	(800) 346-7245

## Substation connectors

ERICO Inc.	(440) 248-0100
FCI USA	(800) 346-4175
Galvan Industries, Inc.	(704) 455-5102
Homac Mfg Co.	(386) 677-9110
Hubbell Power Systems	(573) 682-5521
Penn-Union Corp.	(814) 734-1631
Thomas & Betts	(901) 252-5000

## Underground distribution type cable connectors

3M Electrical Markets	(800) 815-6492 (Option 1)
Connector Castings	(314) 421-5895
Connector Mfg.	(513) 860-4455
Cooper Power Systems	(262) 524-3300
ERICO Inc.	(440) 248-0100
FCI USA	(800) 346-4175
G&W Electric Co.	(708) 388-5010
Homac Mfg Co.	(386) 677-9110
Hubbell Power Systems	(573) 682-5521
ILSCO	(513) 533-6200
MacLean Power Systems	(847) 455-0014
Penn-Union Corp.	(814) 734-1631
Producto Electric Corp.	(845) 359-4900
Reuel Inc.	(919) 734-0460
Sicame Corporation	(513) 772-3423
Thomas & Betts	(901) 252-5000
Thomas & Betts/Elastimold	(901) 252-5000
Tyco Electronics/AMP	(800) 522-6752

## DISTRIBUTION EQUIPMENT



Olsun Electrics Corporation (800) 336-5786

## Circuit breaker enclosures, 250 type

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Cooper Crouse-Hinds	(315) 477-5531
Cummins Power Generation	(800) 888-6626
EGS Electrical Group	(847) 268-6000
GE Electrical Distribution & Control	(860) 747-7234
Killark Electric Manufacturing	(314) 531-0460
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Reliance Controls Corp.	(262) 634-6155
Robroy Industries	(412) 828-2100
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

## Panelboards & distribution boards

### Auxiliary enclosures

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Carlton, Lamson & Sessions	(216) 464-3400
GE Electrical Distribution & Control	(860) 747-7234
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Rittal Corporation	(937) 399-0500
Square D	(847) 397-2600

### Auxiliary gutters

ABB LVPS	(888) 385-1221
Carlton, Lamson & Sessions	(216) 464-3400
Cooper B-Line	(618) 654-2184
GE Electrical Distribution & Control	(860) 747-7234
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Penn Panel & Box	(610) 586-2700
Square D	(847) 397-2600
Wiegmann	(618) 539-3193

### Circuit breaker load center equipment

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
GE Electrical Distribution & Control	(860) 747-7234
Killark Electric Manufacturing	(314) 531-0460
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Milbank Mfg. Co.	(816) 483-5314
MIPCO—T&B	(800) 888-0211 x8680
Russellstoll—T&B	(800) 888-0211 x8680
Siemens Energy & Automation	(770) 751-2000
Solidstate Controls Inc.	(614) 846-7500
Square D	(847) 397-2600

### Distribution switchboards

ABB LVPS	(888) 385-1221
Ametek Solidstate Controls	(614) 846-7500
ASCO Power Technologies	(973) 966-2128
Cummins Power Generation	(800) 888-6626
Cutler-Hammer	(800) 356-1243
Danaher Power Solutions	(804) 236-3300
GE Electrical Distribution & Control	(860) 747-7234
GE Zenith Controls	(773) 299-6600
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Leviton Mfg. Co.	(800) 323-8920
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Russelectric Inc.	(781) 749-6000
Siemens Energy & Automation	(770) 751-2000
Solidstate Controls Inc.	(614) 846-7500
Square D	(847) 397-2600

### Enclosed panel & distribution board units

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Ametek Solidstate Controls	(614) 846-7500
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
GE Electrical Distribution & Control	(860) 747-7234
Killark Electric Manufacturing	(314) 531-0460
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
MIPCO—T&B	(800) 888-0211 x8680
Russellstoll—T&B	(800) 888-0211 x8680
Siemens Energy & Automation	(770) 751-2000
Solidstate Controls Inc.	(614) 846-7500
Square D	(847) 397-2600

## Equipment ground fault protective devices

ABB LVPS	(888) 385-1221
Boltswitch	(815) 459-6900
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
GE Electrical Distribution & Control	(860) 747-7234
Hubbell Incorporated—Wiring Devices-Kellems	(203) 882-4800
Hubbell Power Systems	(573) 682-5521
Killark Electric Manufacturing	(314) 531-0460
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Metron Inc.	(303) 592-1903
Pringle Electrical Mfg. Co.	(215) 699-0100
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

## Fusible load center equipment

ABB LVPS	(888) 385-1221
Ametek Solidstate Controls	(614) 846-7500
GE Electrical Distribution & Control	(860) 747-7234
Metron Inc.	(303) 592-1903
MIPCO—T&B	(800) 888-0211 x8680
Russellstoll—T&B	(800) 888-0211 x8680
Solidstate Controls Inc.	(614) 846-7500

## Panelboards &amp; enclosing cabinets

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Allied Moulded Products	(419) 636-4217
Carlo Gavazzi	(847) 465-6100
Cooper B-Line	(618) 654-2184
Cutler-Hammer	(800) 356-1243
Danaher Power Solutions	(804) 236-3300
EGS Electrical Group	(847) 268-6000
ERICO Inc.	(440) 248-0100
GE Electrical Distribution & Control	(860) 747-7234
Hammond Mfg Co. Inc.	(716) 651-0086
Hoffman Enclosures	(763) 421-2240
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
MIPCO—T&B	(800) 888-0211 x8680
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500

Robroy Industries	(412) 828-2100
Russellstoll—T&B	(800) 888-0211x8680
Siemens Energy & Automation	(770) 751-2000
Solidstate Controls Inc.	(614) 846-7500
Square D	(847) 397-2600
Wiegmann	(618) 539-3193

## Telephone cabinets

Carlo Gavazzi	(847) 465-6100
Cooper B-Line	(618) 654-2184
Hoffman Enclosures	(763) 421-2240
Leviton Mfg. Co.	(800) 323-8920
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Square D	(847) 397-2600

## Theater control boards

Leviton Mfg. Co.	(800) 323-8920
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## Watt-hour meter sockets &amp; service entrance devices

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

## Wireway

Carlson, Lamson & Sessions	(216) 464-3400
Cooper B-Line	(618) 654-2184
GE Electrical Distribution & Control	(860) 747-7234
Hammond Mfg Co. Inc.	(716) 651-0086
Hoffman Enclosures	(763) 421-2240
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Square D	(847) 397-2600
Wiegmann	(618) 539-3193

## Switchgear

## Air break switches

AREVA T&D Inc.	(484) 799-8100
Federal Pacific	(276) 466-4084
Ferraz Shawmut Inc.	(978) 462-6662
GE Zenith Controls	(773) 299-6600
Hubbell Power Systems	(573) 682-5521
Meltric Corp.	(800) 824-4031
Penn Panel & Box	(610) 586-2700
Powercon Corp.	(301) 621-7400
Square D	(847) 397-2600

## Bolted pressure contact switches

Boltswitch	(815) 459-6900
Metron Inc.	(303) 592-1903
Penn Panel & Box	(610) 586-2700
Powercon Corp.	(301) 621-7400
Pringle Electrical Mfg. Co.	(215) 699-0100
Square D	(847) 397-2600
Toshiba International Co.	(713) 466-0277

## Disconnecting and isolating switches

ABB LVPS	(888) 385-1221
AREVA T&D Inc.	(484) 799-8100
C3 Controls	(724) 775-7926
Cooper Crouse-Hinds	(315) 477-5531
Cooper Power Systems	(262) 524-3300
Federal Pacific	(276) 466-4084
Ferraz Shawmut Inc.	(978) 462-6662
Hubbell Power Systems	(573) 682-5521
Joslyn Clark Controls	(803) 286-8491
Meltric Corp.	(800) 824-4031
Metron Inc.	(303) 592-1903
Powercon Corp.	(301) 621-7400
Pringle Electrical Mfg. Co.	(215) 699-0100
Russelectric Inc.	(781) 749-6000
S&C Electric Company	(773) 338-1000
Square D	(847) 397-2600

## High pressure butt contact switches

GE Electrical Distribution & Control	(860) 747-7234
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## High voltage fuses

Cooper Power Systems	(262) 524-3300
Cutler-Hammer	(800) 356-1243
Ferraz Shawmut Inc.	(978) 462-6662
G&W Electric Co.	(708) 388-5010
GE Electrical Distribution & Control	(860) 747-7234
Hubbell Power Systems	(573) 682-5521
Penn Panel & Box	(610) 586-2700
S&C Electric Company	(773) 338-1000

Square D (847) 397-2600  
 Thomas & Betts/Elastimold (901) 252-5000

**Low voltage power circuit breakers**

ABB Inc. (919) 856-2360  
 ABB LVPS (888) 385-1221  
 Controlled Power/Myers Power Products (330) 834-3200  
 Cutler-Hammer (800) 356-1243  
 GE Electrical Distribution & Control (860) 747-7234  
 GE Zenith Controls (773) 299-6600  
 L-3 Comm/SPD Electrical Systems (215) 677-4900  
 Metron Inc. (303) 592-1903  
 Moeller Electric Corp. (713) 933-0999  
 Penn Panel & Box (610) 586-2700  
 Powercon Corp. (301) 621-7400  
 Russelectric Inc. (781) 749-6000  
 Siemens Energy & Automation (770) 751-2000  
 Square D (847) 397-2600

**Medium voltage indoor oilless drawout power circuit breakers**

ABB Inc. (919) 856-2360  
 AREVA T&D Inc. (484) 799-8100  
 Controlled Power/Myers Power Products (330) 834-3200  
 Cutler-Hammer (800) 356-1243  
 GE Electrical Distribution & Control (860) 747-7234  
 GE Zenith Controls (773) 299-6600  
 L-3 Comm/SPD Electrical Systems (215) 677-4900  
 Metron Inc. (303) 592-1903  
 Pedersen Power Products (402) 734-3900  
 Penn Panel & Box (610) 586-2700  
 Powercon Corp. (301) 621-7400  
 Russelectric Inc. (781) 749-6000  
 Square D (847) 397-2600  
 Toshiba International Co. (713) 466-0277

**Medium voltage load interrupter switches**

ABB Inc. (919) 856-2360  
 AREVA T&D Inc. (484) 799-8100  
 C3 Controls (724) 775-7926  
 Controlled Power/Myers Power Products (330) 834-3200  
 Cooper Power Systems (262) 524-3300  
 Cutler-Hammer (800) 356-1243  
 Federal Pacific (276) 466-4084  
 Ferraz Shawmut Inc. (978) 462-6662  
 G&W Electric Co. (708) 388-5010  
 Hubbell Power Systems (573) 682-5521  
 Metron Inc. (303) 592-1903  
 Pedersen Power Products (402) 734-3900  
 Penn Panel & Box (610) 586-2700  
 Powercon Corp. (301) 621-7400  
 Russelectric Inc. (781) 749-6000  
 S&C Electric Company (773) 338-1000  
 Square D (847) 397-2600  
 Thomas & Betts (901) 252-5000  
 Thomas & Betts/Elastimold (901) 252-5000  
 Toshiba International Co. (713) 466-0277

**Padmounted switching equipment**

ABB Inc. (919) 856-2360  
 AREVA T&D Inc. (484) 799-8100  
 Cooper Power Systems (262) 524-3300  
 Federal Pacific (276) 466-4084  
 G&W Electric Co. (708) 388-5010  
 GE Electrical Distribution & Control (860) 747-7234  
 GE Zenith Controls (773) 299-6600  
 Hubbell Power Systems (573) 682-5521  
 Penn Panel & Box (610) 586-2700  
 Reuel Inc. (919) 734-0460  
 S&C Electric Company (773) 338-1000  
 Thomas & Betts (901) 252-5000  
 Thomas & Betts/Elastimold (901) 252-5000

**Outdoor high voltage power circuit breakers**

ABB Inc. (919) 856-2360  
 AREVA T&D Inc. (484) 799-8100  
 Cooper Power Systems (262) 524-3300  
 Cutler-Hammer (800) 356-1243  
 GE Electrical Distribution & Control (860) 747-7234  
 Hubbell Power Systems (573) 682-5521  
 S&C Electric Company (773) 338-1000

**Outdoor high voltage switches**

ABB Inc. (919) 856-2360  
 AREVA T&D Inc. (484) 799-8100  
 Cooper Power Systems (262) 524-3300  
 G&W Electric Co. (708) 388-5010  
 Pringle Electrical Mfg. Co. (215) 699-0100  
 S&C Electric Company (773) 338-1000

**Pull-out switches**

Boltswitch (815) 459-6900  
 C3 Controls (724) 775-7926  
 Cooper Bussmann (888) 937-6246  
 Cutler-Hammer (800) 356-1243

**Reclosers**

Cooper Power Systems (262) 524-3300  
 Federal Pacific (276) 466-4084  
 G&W Electric Co. (708) 388-5010

**Safety switches**

ABB LVPS (888) 385-1221  
 Boltswitch (815) 459-6900  
 C3 Controls (724) 775-7926  
 Cooper Bussmann (636) 394-2877  
 Cooper Crouse-Hinds (315) 477-5531  
 Cutler-Hammer (800) 356-1243  
 Electro Switch (781) 335-5200  
 GE Electrical Distribution & Control (860) 747-7234  
 Honeywell (800) 328-5111  
 Honeywell Sensing and Control (800) 537-6945  
 Hubbell Industrial Controls (336) 434-2800  
 Hubbell/Lexington (336) 434-2800  
 Leviton Mfg. Co. (800) 323-8920  
 Pepperl+Fuchs (330) 425-3555  
 Rockwell Automation—Allen-Bradley (414) 382-2000  
 Square D (847) 397-2600

**Sectionalizers**

ABB Inc. (919) 856-2360  
 Cooper Power Systems (262) 524-3300  
 Federal Pacific (276) 466-4084  
 G&W Electric Co. (708) 388-5010  
 Hubbell Power Systems (573) 682-5521  
 Reuel Inc. (919) 734-0460  
 S&C Electric Company (773) 338-1000  
 Thomas & Betts (901) 252-5000

## ENCLOSURES

**Non-hazardous locations:  
types 1,2,3,3R,3S,4,4X,5,  
6,6P,12,12K,13**

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Air Products and Controls Inc.	(248) 332-3900
Allied Moulded Products	(419) 636-4217
C3 Controls	(724) 775-7926
Carlo Gavazzi	(847) 465-6100
Carlton, Lamson & Sessions	(216) 464-3400
Connector Mfg.	(513) 860-4455
Cooper B-Line	(618) 654-2184
Hammond Mfg Co. Inc.	(716) 651-0086
Hoffman Enclosures	(763) 421-2240
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Moeller Electric Corp.	(713) 933-0999
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Weidmuller, Inc.	(804) 794-2877
Wheelock Inc.	(800) 631-2148
Wiegmann	(618) 539-3193

**Hazardous locations:  
types 7,8,9,10**

Adalet	(216) 267-9000
Boltswitch	(815) 459-6900
Hoffman Enclosures	(763) 421-2240
Metron Inc.	(303) 592-1903
Producto Electric Corp.	(845) 359-4900

**Auxiliary enclosures**

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Carlton, Lamson & Sessions	(216) 464-3400
GE Electrical Distribution & Control	(860) 747-7234
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Rittal Corporation	(937) 399-0500
Square D	(847) 397-2600

**Circuit breaker enclosures**

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Cooper Crouse-Hinds	(315) 477-5531
Cummins Power Generation	(800) 888-6626
EGS Electrical Group	(847) 268-6000
GE Electrical Distribution & Control	(860) 747-7234
Killark Electric Manufacturing	(314) 531-0460
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Reliance Controls Corp.	(262) 634-6155
Robroy Industries	(412) 828-2100
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

**Contactors**

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Bryant Electric, Inc.	(800) 323-2792
Carlo Gavazzi	(847) 465-6100
Carlton, Lamson & Sessions	(216) 464-3400
Joslyn Clark Controls	(803) 286-8491
Lovato Electric, Inc.	(757) 545-4700
Metron Inc.	(303) 592-1903
Robroy Industries	(412) 828-2100

**Pushbutton**

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Allied Moulded Products	(419) 636-4217
C3 Controls	(724) 775-7926
Carlo Gavazzi	(847) 465-6100
Carlton, Lamson & Sessions	(216) 464-3400
Crouse-Hinds Molded Products	(252) 566-3014
Cutler-Hammer	(800) 356-1243
Hammond Mfg Co. Inc.	(716) 651-0086
Hoffman Enclosures	(763) 421-2240
Joslyn Clark Controls	(803) 286-8491
Lovato Electric, Inc.	(757) 545-4700
Metron Inc.	(303) 592-1903
Robroy Industries	(412) 828-2100
Wiegmann	(618) 539-3193

**Starters**

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
ASI Robicon	(742) 339-9231
Carlo Gavazzi	(847) 465-6100
Cooper Crouse-Hinds	(315) 477-5531
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
GE Electrical Distribution & Control	(860) 747-7234
Joslyn Clark Controls	(803) 286-8491
Lovato Electric, Inc.	(757) 545-4700
Metron Inc.	(303) 592-1903
Moeller Electric Corp.	(713) 933-0999
Robroy Industries	(412) 828-2100
Rockwell Automation— Allen-Bradley	(414) 382-2000
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Texas Instruments, Inc.	(508) 236-3800
Toshiba International Co.	(713) 466-0277
WEG Electric Motors Corp.	(770) 338-5656

**Switch****Boxes**

Adalet	(216) 267-9000
Allied Moulded Products	(419) 636-4217
Carlton, Lamson & Sessions	(216) 464-3400
Meter Devices	(330) 455-0301
Penn Panel & Box	(610) 586-2700
Producto Electric Corp.	(845) 359-4900
Rittal Corporation	(937) 399-0500
Thomas & Betts	(901) 252-5000

**Cutout switch boxes**

Carlton, Lamson & Sessions	(216) 464-3400
Meter Devices	(330) 455-0301
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Wiegmann	(618) 539-3193

**Junction switch boxes**

Adalet	(216) 267-9000
Carlton, Lamson & Sessions	(216) 464-3400
Hammond Mfg Co. Inc.	(716) 651-0086
Hoffman Enclosures	(763) 421-2240
Meter Devices	(330) 455-0301
Penn Panel & Box	(610) 586-2700
Producto Electric Corp.	(845) 359-4900
Rittal Corporation	(937) 399-0500
Thomas & Betts	(901) 252-5000
Wiegmann	(618) 539-3193

Pull switch boxes

Adalet	(216) 267-9000
Carlson, Lamson & Sessions	(216) 464-3400
Hoffman Enclosures	(763) 421-2240
Meter Devices	(330) 455-0301
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Thomas & Betts	(901) 252-5000

Terminal switch boxes

Adalet	(216) 267-9000
Carlson, Lamson & Sessions	(216) 464-3400
Hoffman Enclosures	(763) 421-2240
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Wiegmann	(618) 539-3193

Cabinets & enclosures

Adalet	(216) 267-9000
Carlo Gavazzi	(847) 465-6100
Hammond Mfg Co. Inc.	(716) 651-0086
Hoffman Enclosures	(763) 421-2240
Meter Devices	(330) 455-0301
Rittal Corporation	(937) 399-0500

Electrical & electronic cabinets

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Allied Moulded Products	(419) 636-4217
Carlo Gavazzi	(847) 465-6100
Cooper B-Line	(618) 654-2184
Cutler-Hammer	(800) 356-1243
Danaher Power Solutions	(804) 236-3300
EGS Electrical Group	(847) 268-6000
ERICO Inc.	(440) 248-0100
GE Electrical Distribution & Control	(860) 747-7234
Hammond Mfg Co. Inc.	(716) 651-0086
Hoffman Enclosures	(763) 421-2240
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
MIPCO—T&B	(800) 888-0211 x8680
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Russellstoll—T&B	(800) 888-0211 x8680
Siemens Energy & Automation	(770) 751-2000
Solidstate Controls Inc.	(614) 846-7500
Square D	(847) 397-2600
Wiegmann	(618) 539-3193

Telephone cabinets

Carlo Gavazzi	(847) 465-6100
Cooper B-Line	(618) 654-2184
Hoffman Enclosures	(763) 421-2240
Leviton Mfg. Co.	(800) 323-8920
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Square D	(847) 397-2600

Cases (electrical & electronic switch)

Adalet	(216) 267-9000
Cooper B-Line	(618) 654-2184
Hammond Mfg Co. Inc.	(716) 651-0086
Meter Devices	(330) 455-0301
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Wiegmann	(618) 539-3193

Consoles(electrical & electronic switch)

Hammond Mfg Co. Inc.	(716) 651-0086
Hoffman Enclosures	(763) 421-2240
Meter Devices	(330) 455-0301
Rittal Corporation	(937) 399-0500
Wiegmann	(618) 539-3193

Distribution boards

ABB LVPS	(888) 385-1221
Ametek Solidstate Controls	(614) 846-7500
ASCO Power Technologies	(973) 966-2128
Cummins Power Generation	(800) 888-6626
Cutler-Hammer	(800) 356-1243
Danaher Power Solutions	(804) 236-3300
GE Electrical Distribution & Control	(860) 747-7234
GE Zenith Controls	(773) 299-6600
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Leviton Mfg. Co.	(800) 323-8920
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Ruselectric Inc.	(781) 749-6000
Siemens Energy & Automation	(770) 751-2000
Solidstate Controls Inc.	(614) 846-7500
Square D	(847) 397-2600

Gutters

ABB LVPS	(888) 385-1221
Carlson, Lamson & Sessions	(216) 464-3400
Cooper B-Line	(618) 654-2184
GE Electrical Distribution & Control	(860) 747-7234
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Penn Panel & Box	(610) 586-2700
Square D	(847) 397-2600
Wiegmann	(618) 539-3193

Housings

Adalet	(216) 267-9000
Metron Inc.	(303) 592-1903
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100

Instrument housings

ABB Inc.	(919) 856-2360
AREVA T&D Inc.	(484) 799-8100
G.E.C. Durham Industries	(417) 532-7121
GE Meter	(603) 692-2100
Itron Electricity Metering	(864) 638-8300
Meter Devices	(330) 455-0301
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Square D	(847) 397-2600

Meter (switch housing)

Adalet	(216) 267-9000
Meter Devices	(330) 455-0301
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100

Relay (switch)

Adalet	(216) 267-9000
Meter Devices	(330) 455-0301
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100

## Control panels

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
C3 Controls	(724) 775-7926
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
GE Zenith Controls	(773) 299-6600
Honeywell	(800) 328-5111
Honeywell Sensing and Control	(800) 537-6945
Hubbell Industrial Controls	(336) 434-2800
Hubbell/Lexington	(336) 434-2800
Johnson Controls	(414) 274-4000
Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Moeller Electric Corp.	(713) 933-0999
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Rockwell Automation— Allen-Bradley	(414) 382-2000
Ruselectric Inc.	(781) 749-6000
SEW Eurodrive	(864) 439-7537
Siemens Building Technologies Inc.	(847) 215-1000
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
TornaTech	(514) 334-0523
Toshiba International Co.	(713) 466-0277
The Watt Stopper, Inc.	(800) 879-8585
WEG Electric Motors Corp.	(770) 338-5656
Wide-Lite	(512) 392-5821

## Panelboards

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Allied Moulded Products	(419) 636-4217
Carlo Gavazzi	(847) 465-6100
Cooper B-Line	(618) 654-2184
Cutler-Hammer	(800) 356-1243
Danaher Power Solutions	(804) 236-3300
EGS Electrical Group	(847) 268-6000

ERICO Inc.	(440) 248-0100
GE Electrical Distribution & Control	(860) 747-7234
Hammond Mfg Co. Inc.	(716) 651-0086
Hoffman Enclosures	(763) 421-2240
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
MIPCO—T&B	(800) 888-0211 x8680
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Russellstoll—T&B	(800) 888-0211 x8680
Siemens Energy & Automation	(770) 751-2000
Solidstate Controls Inc.	(614) 846-7500
Square D	(847) 397-2600
Wiegmann	(618) 539-3193

## Wireways

Carlou, Lamson & Sessions	(216) 464-3400
Cooper B-Line	(618) 654-2184
GE Electrical Distribution & Control	(860) 747-7234
Hammond Mfg Co. Inc.	(716) 651-0086
Hoffman Enclosures	(763) 421-2240
Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Milbank Mfg. Co.	(816) 483-5314
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Square D	(847) 397-2600
Wiegmann	(618) 539-3193

## Wiring troughs

Hammond Mfg Co. Inc.	(716) 651-0086
Hoffman Enclosures	(763) 421-2240
Meter Devices	(330) 455-0301
Penn Panel & Box	(610) 586-2700
Robroy Industries	(412) 828-2100
Wiegmann	(618) 539-3193

## Pressurization and purging equipment and systems

Hoffman Enclosures	(763) 421-2240
Metron Inc.	(303) 592-1903
Pepperl+Fuchs	(330) 425-3555
Rittal Corporation	(937) 399-0500

## HEATING ELEMENTS, ELECTRIC

### Consumer appliance elements

Apcom, Inc.	(615) 794-5574
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### Heating cable elements

#### Immersion heater elements

Apcom, Inc.	(615) 794-5574
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#### Tubular heater elements

Apcom, Inc.	(615) 794-5574
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## INDUSTRIAL CONTROL & AUTOMATION SYSTEMS

### AC & DC brakes & clutches

Cutler-Hammer	(800) 356-1243
GE Industrial Control & Automation Systems	(540) 387-8288
LEESON Electric	(262) 377-8810
Rockwell Automation—Reliance	(216) 266-7000
SEW Eurodrive	(864) 439-7537
Square D	(847) 397-2600

### Adjustable speed drive systems

ABB Inc.	(262) 785-3200
ASI Robicon	(742) 339-9231
Cutler-Hammer	(800) 356-1243
Danfoss Drives	(815) 639-8600
GE Industrial Control & Automation Systems	(540) 387-8288
LEESON Electric	(262) 377-8810
Lovato Electric, Inc.	(757) 545-4700
Mitsubishi Electric Automation	(847) 478-2100
Peerless-Winsmith, Subsidiary of HBD Industries	(716) 592-9310
Powertec Industrial Motors, Inc.	(830) 328-1888
Rockwell Automation— Allen-Bradley	(414) 382-2000
Rockwell Automation—Reliance	(216) 266-7000

SEW Eurodrive (864) 439-7537  
 Siemens Energy & Automation (770) 751-2000  
 Square D (847) 397-2600  
 Toshiba International Co. (713) 466-0277  
 WEG Electric Motors Corp. (770) 338-5656  
 Yaskawa Electric America (800) 927-5292

**Analog-digital converters & transducers**

ABB LVPS (888) 385-1221  
 Allied Moulded Products (419) 636-4217  
 Honeywell (800) 328-5111  
 Mitsubishi Electric Automation (847) 478-2100  
 Pepperl+Fuchs (330) 425-3555  
 Phoenix Contact Inc. (717) 944-1300  
 Siemens Energy & Automation (770) 751-2000  
 Square D (847) 397-2600  
 Wago Corporation (800) 346-7245

**Automatic transfer switches**

ASCO Power Technologies (973) 966-2128  
 Cooper Power Systems (262) 524-3300  
 Cutler-Hammer (800) 356-1243  
 G&W Electric Co. (708) 388-5010  
 GE Zenith Controls (773) 299-6600  
 Hubbell Industrial Controls (336) 434-2800  
 Hubbell/Lexington (336) 434-2800  
 Leviton Mfg. Co. (800) 323-8920  
 Metron Inc. (303) 592-1903  
 Rockwell Automation—Allen-Bradley (414) 382-2000

**Electromechanical automatic transfer switches**

Cummins Power Generation (800) 888-6626  
 Hubbell Industrial Controls (336) 434-2800  
 Russelectric Inc. (781) 749-6000  
 TornaTech (514) 334-0523

**Solid state automatic transfer switch**

Lovato Electric, Inc. (757) 545-4700

**Autotransformers & reactors**

Acme Electric Corp. (800) 334-5214  
 Cutler-Hammer (800) 356-1243  
 Leviton Mfg. Co. (800) 323-8920



Olsun Electrics Corporation (800) 336-5786  
 Rockwell Automation—Allen-Bradley (414) 382-2000

**Communications networks & devices**

ABB LVPS (888) 385-1221  
 AREVA T&D Inc. (484) 799-8100  
 ASCO Power Technologies (973) 966-2128  
 Cummins Power Generation (800) 888-6626  
 Cutler-Hammer (800) 356-1243  
 GE Fanuc Automation (434) 978-5000  
 GE Zenith Controls (773) 299-6600  
 Honeywell (800) 328-5111  
 Honeywell Sensing and Control (800) 537-6945  
 Hubbell Industrial Controls (336) 434-2800  
 Hubbell/Lexington (336) 434-2800  
 Johnson Controls (414) 274-4000  
 Leviton Mfg. Co. (800) 323-8920  
 Mitsubishi Electric Automation (847) 478-2100  
 Rockwell Automation—Allen-Bradley (414) 382-2000  
 Rockwell Automation—Reliance (216) 266-7000  
 Siemens Energy & Automation (770) 751-2000  
 Square D (847) 397-2600  
 TopWorx (502) 969-8000  
 Toshiba International Co. (713) 466-0277  
 Wago Corporation (800) 346-7245  
 Wheelock Inc. (800) 631-2148

**Control circuits & control devices**

ABB LVPS (888) 385-1221  
 ASCO Power Technologies (973) 966-2128  
 C3 Controls (724) 775-7926  
 Cutler-Hammer (800) 356-1243  
 GE Electrical Distribution & Control (860) 747-7234  
 GE Zenith Controls (773) 299-6600  
 Honeywell (800) 328-5111  
 Honeywell Sensing and Control (800) 537-6945  
 Johnson Controls (414) 274-4000  
 Killark Electric Manufacturing (314) 531-0460  
 Leviton Mfg. Co. (800) 323-8920  
 Lovato Electric, Inc. (757) 545-4700  
 Markland Specialty Engineering (416) 244-4980  
 Moeller Electric Corp. (713) 933-0999  
 Ohio Magnetics (800) 486-6446  
 Omron Electronics LLC (847) 843-7900  
 Reliance Controls Corp. (262) 634-6155  
 Rockwell Automation—Allen-Bradley (414) 382-2000  
 Rockwell Automation—Reliance (216) 266-7000  
 Siemens Building Technologies Inc. (847) 215-1000  
 Siemens Energy & Automation (770) 751-2000  
 Square D (847) 397-2600  
 Texas Instruments, Inc. (508) 236-3800  
 Toshiba International Co. (713) 466-0277  
 Wago Corporation (800) 346-7245  
 WEG Electric Motors Corp. (770) 338-5656  
 Wheelock Inc. (800) 631-2148

**Control panels**

ABB LVPS (888) 385-1221  
 Adalet (216) 267-9000  
 C3 Controls (724) 775-7926  
 Cutler-Hammer (800) 356-1243  
 EGS Electrical Group (847) 268-6000  
 GE Zenith Controls (773) 299-6600  
 Honeywell (800) 328-5111  
 Honeywell Sensing and Control (800) 537-6945  
 Hubbell Industrial Controls (336) 434-2800  
 Hubbell/Lexington (336) 434-2800  
 Johnson Controls (414) 274-4000  
 Killark Electric Manufacturing (314) 531-0460  
 Leviton Mfg. Co. (800) 323-8920



Meter Devices	(330) 455-0301
Metron Inc.	(303) 592-1903
Moeller Electric Corp.	(713) 933-0999
Penn Panel & Box	(610) 586-2700
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Rockwell Automation— Allen-Bradley	(414) 382-2000
Ruselectric Inc.	(781) 749-6000
SEW Eurodrive	(864) 439-7537
Siemens Building Technologies Inc.	(847) 215-1000
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
TornaTech	(514) 334-0523
Toshiba International Co.	(713) 466-0277
The Watt Stopper, Inc.	(800) 879-8585
WEG Electric Motors Corp.	(770) 338-5656
Wide-Lite	(512) 392-5821

### Digital display devices

ABB LVPS	(888) 385-1221
Carlo Gavazzi	(847) 465-6100
Cutler-Hammer	(800) 356-1243
Honeywell	(800) 328-5111
Johnson Controls	(414) 274-4000
Leviton Mfg. Co.	(800) 323-8920
Lovato Electric, Inc.	(757) 545-4700
Mitsubishi Electric Automation	(847) 478-2100
Rockwell Automation— Allen-Bradley	(414) 382-2000
Rockwell Automation—Reliance	(216) 266-7000
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

### Distributed control systems

ABB Inc.	(919) 856-2360
ABB LVPS	(888) 385-1221
ASCO Power Technologies	(973) 966-2128
Carlo Gavazzi	(847) 465-6100
Cummins Power Generation	(800) 888-6626
Cutler-Hammer	(800) 356-1243
G&W Electric Co.	(708) 388-5010
GE Electrical Distribution & Control	(860) 747-7234
GE Fanuc Automation	(434) 978-5000
GE Zenith Controls	(773) 299-6600
Honeywell	(800) 328-5111
Honeywell Sensing and Control	(800) 537-6945

Johnson Controls	(414) 274-4000
Leviton Mfg. Co.	(800) 323-8920
Mitsubishi Electric Automation	(847) 478-2100
Phoenix Contact Inc.	(717) 944-1300
Rockwell Automation—Reliance	(216) 266-7000
Ruselectric Inc.	(781) 749-6000
Siemens Building Technologies Inc.	(847) 215-1000
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Toshiba International Co.	(713) 466-0277
Wago Corporation	(800) 346-7245
The Watt Stopper, Inc.	(800) 879-8585

### Drum switches

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Hubbell Industrial Controls	(336) 434-2800
Hubbell/Lexington	(336) 434-2800
Lovato Electric, Inc.	(757) 545-4700
Rockwell Automation— Allen-Bradley	(414) 382-2000
Square D	(847) 397-2600

### Electromechanical & solid-state contactors

ABB LVPS	(888) 385-1221
ASCO Power Technologies	(973) 966-2128
Carlo Gavazzi	(847) 465-6100
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
GE Zenith Controls	(773) 299-6600
Hubbell Industrial Controls	(336) 434-2800
Hubbell/Lexington	(336) 434-2800
Joslyn Clark Controls	(803) 286-8491
Lovato Electric, Inc.	(757) 545-4700
Moeller Electric Corp.	(713) 933-0999
Rockwell Automation— Allen-Bradley	(414) 382-2000
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
WEG Electric Motors Corp.	(770) 338-5656

### Fire pump controls

ASCO Power Technologies	(973) 966-2128
Cutler-Hammer	(800) 356-1243
Hubbell Industrial Controls	(336) 434-2800
Hubbell/Lexington	(336) 434-2800
Joslyn Clark Controls	(803) 286-8491
Master Control Systems	(847) 295-1010
Metron Inc.	(303) 592-1903
TornaTech	(514) 334-0523

### Indicating lights

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
C3 Controls	(724) 775-7926
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Honeywell	(800) 328-5111
Honeywell Sensing and Control	(800) 537-6945
Joslyn Clark Controls	(803) 286-8491
Lovato Electric, Inc.	(757) 545-4700
Moeller Electric Corp.	(713) 933-0999
Rockwell Automation— Allen-Bradley	(414) 382-2000
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Wheelock Inc.	(800) 631-2148

### Industrial computers

ABB LVPS	(888) 385-1221
GE Fanuc Automation	(434) 978-5000
Honeywell	(800) 328-5111
Mitsubishi Electric Automation	(847) 478-2100
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Toshiba International Co.	(713) 466-0277
Wago Corporation	(800) 346-7245

### Industrial control software

ABB LVPS	(888) 385-1221
Cummins Power Generation	(800) 888-6626
GE Fanuc Automation	(434) 978-5000
GE Industrial Control & Automation Systems	(540) 387-8288
GE Zenith Controls	(773) 299-6600
Honeywell	(800) 328-5111
Mitsubishi Electric Automation	(847) 478-2100
Moeller Electric Corp.	(713) 933-0999

Omron Electronics LLC (847) 843-7900  
 Rockwell Automation—  
 Allen-Bradley (414) 382-2000  
 Rockwell Automation—Reliance  
 (216) 266-7000  
 Siemens Building Technologies Inc.  
 (847) 215-1000  
 Siemens Energy & Automation  
 (770) 751-2000  
 Square D (847) 397-2600  
 Toshiba International Co. (713) 466-0277  
 Wago Corporation (800) 346-7245

**Logic devices**

ABB LVPS (888) 385-1221  
 Cutler-Hammer (800) 356-1243  
 Honeywell Sensing and Control  
 (800) 537-6945  
 Joslyn Clark Controls (803) 286-8491  
 Lovato Electric, Inc. (757) 545-4700  
 Mitsubishi Electric Automation  
 (847) 478-2100  
 Moeller Electric Corp. (713) 933-0999  
 Omron Electronics LLC (847) 843-7900  
 Rockwell Automation—  
 Allen-Bradley (414) 382-2000  
 Rockwell Automation—Reliance  
 (216) 266-7000  
 Siemens Energy & Automation  
 (770) 751-2000  
 Square D (847) 397-2600  
 Wago Corporation (800) 346-7245

**Medium voltage controllers**

ABB LVPS (888) 385-1221  
 ASI Robicon (742) 339-9231  
 Cutler-Hammer (800) 356-1243  
 G&W Electric Co. (708) 388-5010  
 GE Electrical Distribution &  
 Control (860) 747-7234  
 GE Industrial Control &  
 Automation Systems (540) 387-8288  
 Joslyn Clark Controls (803) 286-8491  
 Rockwell Automation—  
 Allen-Bradley (414) 382-2000  
 Rockwell Automation—  
 Reliance (216) 266-7000  
 Square D (847) 397-2600  
 Toshiba International Co. (713) 466-0277  
 Wago Corporation (800) 346-7245

**Motion control**

Danfoss Drives (815) 639-8600  
 Empire Magnetics (707) 584-2801  
 GE Fanuc Automation (434) 978-5000  
 Kollmorgen (866) 316-8437  
 Mitsubishi Electric Automation  
 (847) 478-2100  
 Pacific Scientific (815) 226-3100  
 Renco Encoders (805) 968-1525  
 SEW Eurodrive (864) 439-7537  
 Square D (847) 397-2600  
 Yaskawa Electric America (800) 927-5292

**Amplifiers**

GE Fanuc Automation (434) 978-5000  
 Honeywell (800) 328-5111  
 Kollmorgen (866) 316-8437  
 Mitsubishi Electric Automation  
 (847) 478-2100  
 Pacific Scientific (815) 226-3100  
 Rockwell Automation—  
 Allen-Bradley (414) 382-2000  
 Square D (847) 397-2600  
 Yaskawa Electric America (800) 927-5292

**Resolvers and encoders**

Empire Magnetics (707) 584-2801  
 GE Fanuc Automation (434) 978-5000  
 Honeywell (800) 328-5111  
 Omron Electronics LLC (847) 843-7900  
 Pepperl+Fuchs (330) 425-3555  
 Renco Encoders (805) 968-1525  
 Rockwell Automation—  
 Allen-Bradley (414) 382-2000  
 Square D (847) 397-2600  
 Stegmann, Inc. (937) 454-1956

**Motor controllers**

ABB LVPS (888) 385-1221  
 ASI Robicon (742) 339-9231  
 Bryant Electric, Inc. (800) 323-2792  
 Carlo Gavazzi (847) 465-6100  
 Cooper Bussmann (636) 394-2877  
 Cooper Wiring Devices (718) 361-4914  
 Cutler-Hammer (800) 356-1243  
 Danfoss Drives (815) 639-8600  
 EGS Electrical Group (847) 268-6000  
 G&W Electric Co. (708) 388-5010  
 GE Electrical Distribution &  
 Control (860) 747-7234  
 Hubbell Industrial Controls (336) 434-2800

Hubbell/Lexington (336) 434-2800  
 Joslyn Clark Controls (803) 286-8491  
 Kollmorgen (866) 316-8437  
 LEESON Electric (262) 377-8810  
 Lovato Electric, Inc. (757) 545-4700  
 Meltric Corp. (800) 824-4031  
 Metron Inc. (303) 592-1903  
 Mitsubishi Electric Automation  
 (847) 478-2100  
 Moeller Electric Corp. (713) 933-0999  
 Pacific Scientific (815) 226-3100  
 Pass & Seymour/Legrand (800) 776-4035  
 Peerless-Winsmith, Subsidiary of HBD  
 Industries (716) 592-9310  
 Rockwell Automation—  
 Allen-Bradley (414) 382-2000  
 Rockwell Automation—  
 Reliance (216) 266-7000  
 SEW Eurodrive (864) 439-7537  
 Siemens Energy & Automation  
 (770) 751-2000  
 Square D (847) 397-2600  
 TornaTech (514) 334-0523  
 Toshiba International Co. (713) 466-0277  
 WEG Electric Motors Corp. (770) 338-5656

**Motor control centers**

Cutler-Hammer (800) 356-1243  
 EGS Electrical Group (847) 268-6000  
 GE Electrical Distribution &  
 Control (860) 747-7234  
 Moeller Electric Corp. (713) 933-0999  
 Rockwell Automation—  
 Allen-Bradley (414) 382-2000  
 Rockwell Automation—  
 Reliance (216) 266-7000  
 Siemens Energy & Automation  
 (770) 751-2000  
 Square D (847) 397-2600  
 Toshiba International Co. (713) 466-0277

**Overload devices**

ABB LVPS (888) 385-1221  
 Cooper Crouse-Hinds (315) 477-5531  
 Cutler-Hammer (800) 356-1243  
 GE Electrical Distribution &  
 Control (860) 747-7234  
 Joslyn Clark Controls (803) 286-8491  
 Lovato Electric, Inc. (757) 545-4700  
 Moeller Electric Corp. (713) 933-0999  
 Rockwell Automation—  
 Allen-Bradley (414) 382-2000  
 Siemens Energy & Automation  
 (770) 751-2000

Square D	(847) 397-2600
Texas Instruments, Inc.	(508) 236-3800
Toshiba International Co.	(713) 466-0277
Wago Corporation	(800) 346-7245
WEG Electric Motors Corp.	(770) 338-5656

### Photoelectric relays

ABB LVPS	(888) 385-1221
Carlo Gavazzi	(847) 465-6100
Cutler-Hammer	(800) 356-1243
Joslyn Clark Controls	(803) 286-8491
Omron Electronics LLC	(847) 843-7900
Pepperl+Fuchs	(330) 425-3555
Rockwell Automation— Allen-Bradley	(414) 382-2000
Siemens Energy & Automation	(770) 751-2000

### Presence sensors

C3 Controls	(724) 775-7926
Pepperl+Fuchs	(330) 425-3555
Wide-Lite	(512) 392-5821

### Programmable controllers

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
GE Fanuc Automation	(434) 978-5000
Honeywell	(800) 328-5111
Johnson Controls	(414) 274-4000
LEESON Electric	(262) 377-8810
Mitsubishi Electric Automation	(847) 478-2100
Moeller Electric Corp.	(713) 933-0999
Omron Electronics LLC	(847) 843-7900
Rockwell Automation— Allen-Bradley	(414) 382-2000
Rockwell Automation—Reliance	(216) 266-7000
Siemens Building Technologies Inc.	(847) 215-1000
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Toshiba International Co.	(713) 466-0277
Wago Corporation	(800) 346-7245
The Watt Stopper, Inc.	(800) 879-8585
Wide-Lite	(512) 392-5821

### Proximity switches

ABB LVPS	(888) 385-1221
C3 Controls	(724) 775-7926
Pepperl+Fuchs	(330) 425-3555
Square D	(847) 397-2600
TopWorx	(502) 969-8000

### Register & synchronizing controls

GE Zenith Controls	(773) 299-6600
Rockwell Automation— Allen-Bradley	(414) 382-2000

### Relays & contactors

ABB Inc.	(919) 856-2360
ABB LVPS	(888) 385-1221
ASCO Power Technologies	(973) 966-2128
C3 Controls	(724) 775-7926
Carlo Gavazzi	(847) 465-6100
Cooper Crouse-Hinds	(315) 477-5531
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
GE Zenith Controls	(773) 299-6600
Hubbell Industrial Controls	(336) 434-2800
Hubbell/Lexington	(336) 434-2800
Joslyn Clark Controls	(803) 286-8491
Lovato Electric, Inc.	(757) 545-4700
Moeller Electric Corp.	(713) 933-0999
Omron Electronics LLC	(847) 843-7900
Phoenix Contact Inc.	(717) 944-1300
Rockwell Automation— Allen-Bradley	(414) 382-2000
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Texas Instruments, Inc.	(508) 236-3800
Toshiba International Co.	(713) 466-0277
Traffic Sensor Corp.	(909) 388-1300
Wago Corporation	(800) 346-7245
The Watt Stopper, Inc.	(800) 879-8585
WEG Electric Motors Corp.	(770) 338-5656
White-Rodgers	(314) 533-3600

### Rheostats & resistors

Cutler-Hammer	(800) 356-1243
Hubbell Industrial Controls	(336) 434-2800
Hubbell/Lexington	(336) 434-2800
Joslyn Clark Controls	(803) 286-8491

### Solenoids

Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
White-Rodgers	(314) 533-3600

### Starters

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
ASI Robicon	(742) 339-9231
Carlo Gavazzi	(847) 465-6100
Cooper Crouse-Hinds	(315) 477-5531
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
GE Electrical Distribution & Control	(860) 747-7234
Joslyn Clark Controls	(803) 286-8491
Lovato Electric, Inc.	(757) 545-4700
Metron Inc.	(303) 592-1903
Moeller Electric Corp.	(713) 933-0999
Robroy Industries	(412) 828-2100
Rockwell Automation— Allen-Bradley	(414) 382-2000
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Texas Instruments, Inc.	(508) 236-3800
Toshiba International Co.	(713) 466-0277
WEG Electric Motors Corp.	(770) 338-5656

### Switches

#### Limit switches

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Honeywell	(800) 328-5111
Honeywell Sensing and Control	(800) 537-6945
Hubbell Industrial Controls	(336) 434-2800
Hubbell/Lexington	(336) 434-2800
Joslyn Clark Controls	(803) 286-8491
Lovato Electric, Inc.	(757) 545-4700
Moeller Electric Corp.	(713) 933-0999
Omron Electronics LLC	(847) 843-7900
Pepperl+Fuchs	(330) 425-3555
Rockwell Automation— Allen-Bradley	(414) 382-2000
Siemens Building Technologies Inc.	(847) 215-1000
Square D	(847) 397-2600
TopWorx	(502) 969-8000

**Liquid level switches**

ABB LVPS	(888) 385-1221
Carlo Gavazzi	(847) 465-6100
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Honeywell	(800) 328-5111
Honeywell Sensing and Control	(800) 537-6945
Omron Electronics LLC	(847) 843-7900
Pepperl+Fuchs	(330) 425-3555
Rockwell Automation— Allen-Bradley	(414) 382-2000
Scientific Technologies, Inc.	(888) 525-7300
Square D	(847) 397-2600

**Pressure switches**

ABB LVPS	(888) 385-1221
GE Electrical Distribution & Control	(860) 747-7234
Honeywell	(800) 328-5111
Honeywell Sensing and Control	(800) 537-6945
Rockwell Automation— Allen-Bradley	(414) 382-2000
Scientific Technologies, Inc.	(888) 525-7300
Siemens Building Technologies Inc.	(847) 215-1000
Square D	(847) 397-2600
Texas Instruments, Inc.	(508) 236-3800

**Safety switches**

ABB LVPS	(888) 385-1221
Boltswitch	(815) 459-6900
C3 Controls	(724) 775-7926
Cooper Bussmann	(636) 394-2877
Cooper Crouse-Hinds	(315) 477-5531
Cutler-Hammer	(800) 356-1243
Electro Switch	(781) 335-5200
GE Electrical Distribution & Control	(860) 747-7234
Honeywell	(800) 328-5111
Honeywell Sensing and Control	(800) 537-6945
Hubbell Industrial Controls	(336) 434-2800
Hubbell/Lexington	(336) 434-2800
Leviton Mfg. Co.	(800) 323-8920
Pepperl+Fuchs	(330) 425-3555
Rockwell Automation— Allen-Bradley	(414) 382-2000
Square D	(847) 397-2600

**Speed switches**

C3 Controls	(724) 775-7926
Carlo Gavazzi	(847) 465-6100
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Honeywell	(800) 328-5111
Hubbell Industrial Controls	(336) 434-2800
Hubbell/Lexington	(336) 434-2800
Rockwell Automation— Allen-Bradley	(414) 382-2000
Square D	(847) 397-2600

**Temperature switches**

Honeywell	(800) 328-5111
Honeywell Sensing and Control	(800) 537-6945
Omron Electronics LLC	(847) 843-7900
Reliance Controls Corp.	(262) 634-6155
Rockwell Automation— Allen-Bradley	(414) 382-2000
Siemens Building Technologies Inc.	(847) 215-1000
Square D	(847) 397-2600
Texas Instruments, Inc.	(508) 236-3800
Therm-O-Disc/Midwest Components	(231) 777-2602

**Vacuum switches**

Honeywell	(800) 328-5111
Rockwell Automation— Allen-Bradley	(414) 382-2000
Square D	(847) 397-2600

**System elements**

**Computer elements**

Honeywell	(800) 328-5111
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**Encoders**

GE Electrical Distribution & Control	(860) 747-7234
Omron Electronics LLC	(847) 843-7900
Pepperl+Fuchs	(330) 425-3555
Rockwell Automation— Allen-Bradley	(414) 382-2000

**Gauging equipment**

Honeywell	(800) 328-5111
Rockwell Automation— Allen-Bradley	(414) 382-2000

**Man-machine interface devices**

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243
GE Fanuc Automation	(434) 978-5000
Honeywell	(800) 328-5111
Honeywell Sensing and Control	(800) 537-6945
Mitsubishi Electric Automation	(847) 478-2100
Moeller Electric Corp.	(713) 933-0999
Omron Electronics LLC	(847) 843-7900
Rockwell Automation— Allen-Bradley	(414) 382-2000
Rockwell Automation— Reliance	(216) 266-7000

**Sensors & transmitters**

Carlo Gavazzi	(847) 465-6100
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Honeywell	(800) 328-5111
Honeywell Sensing and Control	(800) 537-6945
Omron Electronics LLC	(847) 843-7900
Pepperl+Fuchs	(330) 425-3555
Rockwell Automation— Allen-Bradley	(414) 382-2000
Siemens Building Technologies Inc.	(847) 215-1000

**Software**

Cutler-Hammer	(800) 356-1243
GE Fanuc Automation	(434) 978-5000
Siemens Building Technologies Inc.	(847) 215-1000
Square D	(847) 397-2600

**System integration services**

Cutler-Hammer	(800) 356-1243
GE Fanuc Automation	(434) 978-5000
Siemens Building Technologies Inc.	(847) 215-1000

## Terminal blocks

ABB LVPS	(888) 385-1221
Cooper Bussmann	(888) 937-6246
Cutler-Hammer	(800) 356-1243
FCI USA	(800) 346-4175
GE Electrical Distribution & Control	(860) 747-7234
ILSCO	(513) 533-6200
Mitsubishi Electric Automation	(847) 478-2100
Pass & Seymour/Legrand	(800) 776-4035
Penn-Union Corp.	(814) 734-1631
Phoenix Contact Inc.	(717) 944-1300
Rockwell Automation—Allen-Bradley	(414) 382-2000
Square D	(847) 397-2600
Wago Corporation	(800) 346-7245
Weidmuller, Inc.	(804) 794-2877

## Timers

ABB LVPS	(888) 385-1221
Air Products and Controls Inc.	(248) 332-3900
Carlo Gavazzi	(847) 465-6100
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Leviton Mfg. Co.	(800) 323-8920
Lovato Electric, Inc.	(757) 545-4700
Moeller Electric Corp.	(713) 933-0999
Omron Electronics LLC	(847) 843-7900
Pass & Seymour/Legrand	(800) 776-4035
Reliance Controls Corp.	(262) 634-6155
Rockwell Automation—Allen-Bradley	(414) 382-2000
Square D	(847) 397-2600

## INSULATING PRODUCTS

### Decorative laminates

Firetrol	(919) 460-5200
Formica Corp.	(513) 786-3400
Wilsonart International	(254) 207-7000

### Electrical tape, pressure sensitive

3M Electrical Markets	(800) 815-6492 (Option 1)
Cutler-Hammer	(800) 356-1243
Permacel, A Nitto Denko Company	(800) 755-TAPE
Producto Electric Corp.	(845) 359-4900

## Insulation, flexible and mica

3M Electrical Markets	(800) 815-6492 (Option 1)
Bedford Materials Co., Inc.	(800) 773-4276
DuPont	(800) 453-8527
EHV Weidmann Industries Inc.	(508) 532-1200
EHV-Weidman Industries	(802) 748-8106
Hubbell Power Systems	(573) 682-5521
Innovative Paper Technologies	(603) 545-3020
Kaneka High-Tech Materials	(800) 222-8128
Lectromat	(724) 625-3502
Polygon Co.	(574) 586-3145
Von Roll Isola USA, Inc.	(518) 344-7100
Von Roll Isola, Midwest Mica Division	(216) 433-7474

## Insulating resins

Resins in combination with solvents, additive fillers, reinforcing materials & and curing agents

3M Electrical Markets	(800) 815-6492 (Option 1)
Crosslink Technology	(800) 563-3769
DuPont	(800) 453-8527
Haysite Reinforced Plastics	(814) 868-3691
Henkel Corp.	(949) 789-2500
John C. Dolph	(732) 329-2333
Lectromat	(724) 625-3502
P.D. George Company	(314) 621-5700
Reuel Inc.	(919) 734-0460
Thermoset, Lord Chemical Products	(800) 746-8343
Von Roll Isola USA, Inc.	(518) 344-7100

Synthetic organic resins/polymers and hardeners/thermoset & thermoplastic

Crosslink Technology	(800) 563-3769
DuPont	(800) 453-8527
Henkel Corp.	(949) 789-2500
John C. Dolph	(732) 329-2333
P.D. George Company	(314) 621-5700
Reuel Inc.	(919) 734-0460
Thermoset, Lord Chemical Products	(800) 746-8343
Von Roll Isola USA, Inc.	(518) 344-7100

## High voltage insulators

Clamps, fittings, and accessory hardware for high voltage insulators

3M Electrical Markets	(800) 815-6492 (Option 1)
ABB Inc.	(919) 856-2360
ERICO Inc.	(440) 248-0100
FCI USA	(800) 346-4175
Hubbell Power Systems	(573) 682-5521
Lapp Insulator Company	(716) 768-6221
MacLean Power Systems	(847) 455-0014
Newell Porcelain Co. Inc.	(304) 387-2700
Victor Insulators	(716) 924-2127

## Non-ceramic composites

ABB Inc.	(919) 856-2360
Crosslink Technology	(800) 563-3769
Hendrix Wire and Cable	(603) 673-2040
Hubbell Power Systems	(573) 682-5521
K-Line Insulators USA	(585) 235-2870
Lapp Insulator Company	(716) 768-6221
MacLean Power Systems	(847) 455-0014
NGK-Locke Polymer Insulators	(757) 460-3649
Porcelain Products	(419) 396-7621
Reuel Inc.	(919) 734-0460
Victor Insulators	(716) 924-2127
Von Roll Isola USA, Inc.	(518) 344-7100

## Toughened glass

MacLean Power Systems	(847) 455-0014
Von Roll Isola USA, Inc.	(518) 344-7100

## Wet-process porcelain

ABB Inc.	(919) 856-2360
Cooper Power Systems	(262) 524-3300
Lapp Insulator Company	(716) 768-6221
Locke Insulators	(410) 347-1700
Newell Porcelain Co. Inc.	(304) 387-2700
Porcelain Products	(419) 396-7621
Victor Insulators	(716) 924-2127

**Industrial laminates****Electromechanical laminates**

Accurate Plastics	(800) 431-2274
GE Electrical Distribution & Control	(860) 747-7234
Glastic Corp.	(216) 486-0100
Haysite Reinforced Plastics	(814) 868-3691
ILNorpex, Inc.	(563) 864-7321
Iten Industries	(440) 997-6134
Polygon Co.	(574) 586-3145
Von Roll Isola USA, Inc.	(518) 344-7100

**Electronics laminates**

Haysite Reinforced Plastics	(814) 868-3691
ILNorpex, Inc.	(563) 864-7321
Iten Industries	(440) 997-6134
Polygon Co.	(574) 586-3145
Von Roll Isola USA, Inc.	(518) 344-7100

**Custom molded parts (thermoset)**

Crosslink Technology	(800) 563-3769
Formica Corp.	(513) 786-3400
Glastic Corp.	(216) 486-0100
Haysite Reinforced Plastics	(814) 868-3691
ILNorpex, Inc.	(563) 864-7321
Iten Industries	(440) 997-6134
Reuel Inc.	(919) 734-0460
Von Roll Isola USA, Inc.	(518) 344-7100

**Molding compounds (thermoset)**

Haysite Reinforced Plastics	(814) 868-3691
ILNorpex, Inc.	(563) 864-7321
Reuel Inc.	(919) 734-0460

**Pultruded shapes (thermoset)**

Glastic Corp.	(216) 486-0100
Haysite Reinforced Plastics	(814) 868-3691
ILNorpex, Inc.	(563) 864-7321
Iten Industries	(440) 997-6134
Polygon Co.	(574) 586-3145

**Sheet (thermoset) glass reinforced**

Glastic Corp.	(216) 486-0100
Haysite Reinforced Plastics	(814) 868-3691
ILNorpex, Inc.	(563) 864-7321
Iten Industries	(440) 997-6134
Polygon Co.	(574) 586-3145
Von Roll Isola USA, Inc.	(518) 344-7100

**Tubing & sleeving**

Varflex Corp. (800) 648-4014

**Coated electrical sleeving**

Federal-Mogul Systems Protection Group	(800) 926-2472
Hilec LLC	(585) 492-2212
Hubbell Power Systems	(573) 682-5521
Polygon Co.	(574) 586-3145
Regal Sleeving and Tubing LLC D/B/A Suflex	(603) 659-5555
Sofanou Inc.	(716) 215-0300
Sumitomo Electric Interconnect Products	(408) 734-8880
Tyco Electronics/Raychem Wire and Cable	(919) 557-8863



Varflex Corp. (800) 648-4014

**Fabric-based plastic & rubber tubing & sleeving**

Hilec LLC	(585) 492-2212
Hubbell Power Systems	(573) 682-5521
Tyco Electronics/Raychem Wire and Cable	(919) 557-8863



Varflex Corp. (800) 648-4014

**Flexible & semi-rigid tubing & sleeving**

3M Electrical Markets (800) 815-6492 (Option 1)	
EHV Weidmann Industries Inc.	(508) 532-1200
Hilec LLC	(585) 492-2212
Hubbell Power Systems	(573) 682-5521
Panduit Corp.	(800) 777-3300
Regal Sleeving and Tubing	

LLC D/B/A Suflex	(603) 659-5555
Sofanou Inc.	(716) 215-0300
Thomas & Betts	(901) 252-5000
Tyco Electronics/Raychem Wire and Cable	(919) 557-8863



Varflex Corp. (800) 648-4014

**Heat shrinkable tubing**

3M Electrical Markets (800) 815-6492 (Option 1)	
FCI USA	(800) 346-4175
ILSCO	(513) 533-6200
Panduit Corp.	(800) 777-3300
Penn-Union Corp.	(814) 734-1631
Regal Sleeving and Tubing LLC D/B/A Suflex	(603) 659-5555
Stone Industrial, Div of Precision Products Group	(301) 474-3100
Sumitomo Electric Interconnect Products	(408) 734-8880
Thomas & Betts	(901) 252-5000

**Spiral wound tubing**

3M Electrical Markets (800) 815-6492 (Option 1)	
Panduit Corp.	(800) 777-3300
Paramount Tube	(260) 484-4111
Polygon Co.	(574) 586-3145
Stone Industrial, Div of Precision Products Group	(301) 474-3100
Thomas & Betts	(901) 252-5000

## LIGHTING

## Adverse location lighting

## Hazardous location fixtures

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Dual-Lite	(203) 699-2000
EGS Electrical Group	(847) 268-6000
Genlyte Thomas Group LLC	(502) 893-4690
Gilbert Industries, Inc.	(870) 932-6070
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815
Lightolier	(508) 679-8131
Paramount Industries, Inc.	(800) 521-5405
Thomas & Betts	(901) 252-5000
TIR Systems Ltd.	(604) 294-2877
U.S. Traffic Corp.	(562) 923-9600
Wide-Lite	(512) 392-5821

## Marine duty location fixtures

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
EGS Electrical Group	(847) 268-6000
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815
Paramount Industries, Inc.	(800) 521-5405
TIR Systems Ltd.	(604) 294-2877
Wide-Lite	(512) 392-5821

## Ballast

## Electronic ballasts

Acuity Lighting Group	(770) 922-9000
Advance Transformer Company	(847) 390-5000
GE Consumer & Industrial, Lighting	(800) 435-4448
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Killark Electric Manufacturing	(314) 531-0460
Lutron Electronics	(610) 282-3800
OSRAM SYLVANIA General Lighting	(978) 777-1900
Progress Lighting	(864) 599-6000
Radionic Industries	(773) 804-0100
Robertson Transformer	(800) 323-5633
Tridonic	(770) 717-0556
Universal Lighting Technologies	(615) 316-5100
Wide-Lite	(512) 392-5821

## Fluorescent electronic ballasts

Advance Transformer Company	(847) 390-5000
GE Consumer & Industrial, Lighting	(800) 435-4448
Genlyte Thomas Group LLC	(502) 893-4690
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
Progress Lighting	(864) 599-6000
Radionic Industries	(773) 804-0100
Robertson Transformer	(800) 323-5633
Tridonic	(770) 717-0556
Universal Lighting Technologies	(615) 316-5100

## High intensity discharge electronic ballasts

Acuity Lighting Group	(770) 922-9000
Advance Transformer Company	(847) 390-5000
Advanced Lighting Technologies	(800) 451-3510
OSRAM SYLVANIA General Lighting	(978) 777-1900
Robertson Transformer	(800) 323-5633
Universal Lighting Technologies	(615) 316-5100

## Low pressure sodium electronic ballasts

Robertson Transformer	(800) 323-5633
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## Electromagnetic ballasts

Acuity Lighting Group	(770) 922-9000
Advance Transformer Company	(847) 390-5000
Advanced Lighting Technologies	(800) 451-3510
Cooper Lighting	(770) 486-4800
EYE Lighting International	(888) 665-2677
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Killark Electric Manufacturing	(314) 531-0460
OSRAM SYLVANIA General Lighting	(978) 777-1900
Radionic Industries	(773) 804-0100
Robertson Transformer	(800) 323-5633
Universal Lighting Technologies	(615) 316-5100
Wide-Lite	(512) 392-5821

## Emergency lighting



Lithonia Lighting	(770) 922-9000
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## Exit signs

Acuity Lighting Group	(770) 922-9000
Big Beam Emergency Systems	(815) 459-6100
Controlled Power Co.	(800) 521-4792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Lighting	(770) 486-4800
CORNELL Communications, Inc.	(414) 351-4660
Day-Brite Lighting	(800) 234-1890
Dual-Lite	(203) 699-2000
Genlyte Thomas Group LLC	(502) 893-4690
Gilbert Industries, Inc.	(870) 932-6070
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Killark Electric Manufacturing	(314) 531-0460

Lightolier	(508) 679-8131
Lithonia Lighting	(770) 922-9000
Sure-Lites	(847) 956-8400
Thomas & Betts	(901) 252-5000
U.S. Traffic Corp.	(562) 923-9600

**Emergency lights**

Acuity Lighting Group	(770) 922-9000
Big Beam Emergency Systems	(815) 459-6100
The Bodine Company, Inc.	(800) 223-5728
Controlled Power Co.	(800) 521-4792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Lighting	(770) 486-4800
Day-Brite Lighting	(800) 234-1890
Dual-Lite	(203) 699-2000
Genlyte Thomas Group LLC	(502) 893-4690
Gilbert Industries, Inc.	(870) 932-6070
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Killark Electric Manufacturing	(314) 531-0460
Lightolier	(508) 679-8131
Lithonia Lighting	(770) 922-9000
Paramount Industries, Inc.	(800) 521-5405
SPI Lighting Group	(262) 242-1420
Sure-Lites	(847) 956-8400
Thomas & Betts	(901) 252-5000
U.S. Traffic Corp.	(562) 923-9600

**Lighting control systems**

Acuity Lighting Group	(770) 922-9000
ASCO Power Technologies	(973) 966-2128
Color Kinetics	(617) 423-9999
Controlled Power Co.	(800) 521-4792
Cooper Lighting	(770) 486-4800
Cutler-Hammer	(800) 356-1243
Day-Brite Lighting	(800) 234-1890
GE Total Lighting Control	(877) 584-2685
Genlyte Thomas Group LLC	(502) 893-4690
Halo Lighting	(847) 956-8400
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Honeywell	(800) 328-5111
Hubbell Building Automation	(888) 732-4107
Hubbell Lighting	(540) 382-6111
HUNT Dimming	(970) 484-9048
Leviton Mfg. Co.	(800) 323-8920
Lightolier	(508) 679-8131



Lithonia Lighting	(770) 922-9000
Lutron Electronics	(610) 282-3800
Metron Inc.	(303) 592-1903
Novitas, Inc.	(310) 218-5360
TIR Systems Ltd.	(604) 294-2877
Tridonic	(770) 717-0556
Universal Lighting Technologies	(615) 316-5100
The Watt Stopper, Inc.	(800) 879-8585

**Lighting control devices**

**Dimmers**

Acuity Lighting Group	(770) 922-9000
Bryant Electric, Inc.	(800) 323-2792
Color Kinetics	(617) 423-9999
Cooper Lighting	(770) 486-4800
Cooper Wiring Devices	(718) 361-4914
GE Home Electric Products	(216) 266-2121
Genlyte Thomas Group LLC	(502) 893-4690
Halo Lighting	(847) 956-8400
Hubbell Incorporated—Wiring Devices-Kellems	(203) 882-4800
HUNT Dimming	(970) 484-9048
Leviton Mfg. Co.	(800) 323-8920
Lightolier	(508) 679-8131
Lutron Electronics	(610) 282-3800
Pass & Seymour/Legrand	(800) 776-4035
Progress Lighting	(864) 599-6000
Rockwell Automation—Reliance	(216) 266-7000
The Watt Stopper, Inc.	(800) 879-8585

**Light Sensors**

Novitas, Inc.	(310) 218-5360
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**Manual override sensors**

Novitas, Inc.	(310) 218-5360
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**On/off controls**

Novitas, Inc.	(310) 218-5360
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**Light level controls**

Novitas, Inc.	(310) 218-5360
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**Occupancy sensors**

Acuity Lighting Group	(770) 922-9000
Bryant Electric, Inc.	(800) 323-2792
Cooper Wiring Devices	(718) 361-4914
Day-Brite Lighting	(800) 234-1890
GE Home Electric Products	(216) 266-2121
GE Total Lighting Control	(877) 584-2685
Genlyte Thomas Group LLC	(502) 893-4690
Hubbell Incorporated—Wiring Devices-Kellems	(203) 882-4800
Leviton Mfg. Co.	(800) 323-8920
Lightolier	(508) 679-8131
Lutron Electronics	(610) 282-3800
Novitas, Inc.	(310) 218-5360
Pass & Seymour/Legrand	(800) 776-4035
The Watt Stopper, Inc.	(800) 879-8585

**Other lighting controls**

Acuity Lighting Group	(770) 922-9000
ASCO Power Technologies	(973) 966-2128
Bryant Electric, Inc.	(800) 323-2792
Color Kinetics	(617) 423-9999
Controlled Power Co.	(800) 521-4792
Cooper Wiring Devices	(718) 361-4914
Day-Brite Lighting	(800) 234-1890
GE Home Electric Products	(216) 266-2121
GE Total Lighting Control	(877) 584-2685
Genlyte Thomas Group LLC	(502) 893-4690
Leviton Mfg. Co.	(800) 323-8920
Lightolier	(508) 679-8131
Lutron Electronics	(610) 282-3800
Novitas, Inc.	(310) 218-5360
Pass & Seymour/Legrand	(800) 776-4035
Progress Lighting	(864) 599-6000
The Watt Stopper, Inc.	(800) 879-8585

**Programmable master lighting controllers**

Novitas, Inc.	(310) 218-5360
TIR Systems Ltd.	(604) 294-2877
Wago Corporation	(800) 346-7245

**Indoor lighting**



Lithonia Lighting	(770) 922-9000
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**Fluorescent lighting**

Acuity Lighting Group	(770) 922-9000
Alera Lighting	(509) 921-8300



Columbia Lighting	(509) 924-7000
Cooper Crouse-Hinds	(315) 477-5531
Cooper Lighting	(770) 486-4800
Day-Brite Lighting	(800) 234-1890
EGS Electrical Group	(847) 268-6000
Ericson Mfg.	(440) 951-8000
GE Consumer & Industrial, Lighting	(800) 435-4448
Genlyte Thomas Group LLC	(502) 893-4690
Halo Lighting	(847) 956-8400
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Indy Lighting Inc.	(317) 849-1233
Juno Lighting, Inc.	(847) 827-9880
Killark Electric Manufacturing	(314) 531-0460
Lightolier	(508) 679-8131



Lithonia Lighting	(770) 922-9000
Metalux Lighting	(847) 956-8400
Paramount Industries, Inc.	(800) 521-5405
Progress Lighting	(864) 599-6000
Radionic Industries	(773) 804-0100
SLI Lighting Products Inc.	(800) 922-6693
SPI Lighting Group	(262) 242-1420
U.S. Traffic Corp.	(562) 923-9600
Wide-Lite	(512) 392-5821
Woodhead L.P.	(847) 272-7990

#### HID lighting

Acuity Lighting Group	(770) 922-9000
Advanced Lighting Technologies	(800) 451-3510
Cooper Crouse-Hinds	(315) 477-5531
Cooper Lighting	(770) 486-4800
Day-Brite Lighting	(800) 234-1890
EGS Electrical Group	(847) 268-6000
EYE Lighting International	(888) 665-2677
Genlyte Thomas Group LLC	(502) 893-4690
Halo Lighting	(847) 956-8400
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Indy Lighting Inc.	(317) 849-1233
Juno Lighting, Inc.	(847) 827-9880
Killark Electric Manufacturing	(314) 531-0460
Kim Lighting	(626) 968-5666

Lightolier	(508) 679-8131
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Lithonia Lighting	(770) 922-9000
Paramount Industries, Inc.	(800) 521-5405
Progress Lighting	(864) 599-6000
SLI Lighting Products Inc.	(800) 922-6693
SPI Lighting Group	(262) 242-1420
TIR Systems Ltd.	(604) 294-2877
U.S. Traffic Corp.	(562) 923-9600
Wide-Lite	(512) 392-5821
Woodhead L.P.	(847) 272-7990

#### Incandescent lighting

Acuity Lighting Group	(770) 922-9000
Cooper Crouse-Hinds	(315) 477-5531
Cooper Lighting	(770) 486-4800
EGS Electrical Group	(847) 268-6000
Ericson Mfg.	(440) 951-8000
Genlyte Thomas Group LLC	(502) 893-4690
Halo Lighting	(847) 956-8400
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Indy Lighting Inc.	(317) 849-1233
Juno Lighting, Inc.	(847) 827-9880
Killark Electric Manufacturing	(314) 531-0460
Lightolier	(508) 679-8131



Lithonia Lighting	(770) 922-9000
Lucifer Lighting Company	(210) 227-7329
Paramount Industries, Inc.	(800) 521-5405
Progress Lighting	(864) 599-6000
SLI Lighting Products Inc.	(800) 922-6693
SPI Lighting Group	(262) 242-1420
TIR Systems Ltd.	(604) 294-2877
Wide-Lite	(512) 392-5821
Woodhead L.P.	(847) 272-7990

## Lamps

#### Decorative lamps

GE Home Electric Products	(216) 266-2121
GE Consumer & Industrial, Lighting	(800) 435-4448
Halco Lighting Corporation	(800) 677-3334
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
SLI Lighting Products Inc.	(800) 922-6693
Trojan Inc.	(859) 498-0526
Westinghouse Lighting Corporation	(215) 671-2000

#### Electric discharge lamps

Advanced Lighting Technologies	(800) 451-3510
EYE Lighting International	(888) 665-2677
GE Consumer & Industrial, Lighting	(800) 435-4448
Halco Lighting Corporation	(800) 677-3334
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
SLI Lighting Products Inc.	(800) 922-6693
Ushio America	(714) 236-8600
Welch Allyn	(315) 685-4100
Westinghouse Lighting Corporation	(215) 671-2000

#### Fluorescent lamps

GE Home Electric Products	(216) 266-2121
GE Consumer & Industrial, Lighting	(800) 435-4448
Gilbert Industries, Inc.	(870) 932-6070
Halco Lighting Corporation	(800) 677-3334
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
Radionic Industries	(773) 804-0100
SLI Lighting Products Inc.	(800) 922-6693
Trojan Inc.	(859) 498-0526
Ushio America	(714) 236-8600
Westinghouse Lighting Corporation	(215) 671-2000

**General lighting high intensity discharge lamps**

Advanced Lighting Technologies	(800) 451-3510
EYE Lighting International	(888) 665-2677
GE Consumer & Industrial, Lighting	(800) 435-4448
Halco Lighting Corporation	(800) 677-3334
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
SLI Lighting Products Inc.	(800) 922-6693
Trojan Inc.	(859) 498-0526
Ushio America	(714) 236-8600
Westinghouse Lighting Corporation	(215) 671-2000

**Infrared lamps**

GE Consumer & Industrial, Lighting	(800) 435-4448
Halco Lighting Corporation	(800) 677-3334
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
Trojan Inc.	(859) 498-0526
Ushio America	(714) 236-8600
Westinghouse Lighting Corporation	(215) 671-2000

**Large incandescent lamps**

GE Consumer & Industrial, Lighting	(800) 435-4448
Halco Lighting Corporation	(800) 677-3334
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
SLI Lighting Products Inc.	(800) 922-6693
Trojan Inc.	(859) 498-0526
Ushio America	(714) 236-8600
Westinghouse Lighting Corporation	(215) 671-2000

**Miniature & subminiature incandescent lamps**

EYE Lighting International	(888) 665-2677
GE Consumer & Industrial, Lighting	(800) 435-4448
Halco Lighting Corporation	(800) 677-3334
Lucifer Lighting Company	(210) 227-7329
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
Radionic Industries	(773) 804-0100
Ushio America	(714) 236-8600

Welch Allyn	(315) 685-4100
Westinghouse Lighting Corporation	(215) 671-2000

**Projection lamps**

EYE Lighting International	(888) 665-2677
GE Consumer & Industrial, Lighting	(800) 435-4448
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
SLI Lighting Products Inc.	(800) 922-6693
Ushio America	(714) 236-8600
Westinghouse Lighting Corporation	(215) 671-2000

**Reflector & PAR lamps**

Advanced Lighting Technologies	(800) 451-3510
EYE Lighting International	(888) 665-2677
GE Consumer & Industrial, Lighting	(800) 435-4448
Halco Lighting Corporation	(800) 677-3334
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
SLI Lighting Products Inc.	(800) 922-6693
Trojan Inc.	(859) 498-0526
Ushio America	(714) 236-8600
Westinghouse Lighting Corporation	(215) 671-2000

**Sealed beam lamps**

GE Consumer & Industrial, Lighting	(800) 435-4448
Halco Lighting Corporation	(800) 677-3334
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660

**Special-purpose incandescent lamps**

GE Consumer & Industrial, Lighting	(800) 435-4448
Halco Lighting Corporation	(800) 677-3334
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
SLI Lighting Products Inc.	(800) 922-6693
Trojan Inc.	(859) 498-0526
Ushio America	(714) 236-8600
Welch Allyn	(315) 685-4100
Westinghouse Lighting Corporation	(215) 671-2000
Woodhead L.P.	(847) 272-7990

**Three-way lamps**

GE Consumer & Industrial, Lighting	(800) 435-4448
Halco Lighting Corporation	(800) 677-3334
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
SLI Lighting Products Inc.	(800) 922-6693
Westinghouse Lighting Corporation	(215) 671-2000

**Tungsten halogen lamps**

Cooper Lighting	(770) 486-4800
EYE Lighting International	(888) 665-2677
GE Consumer & Industrial, Lighting	(800) 435-4448
Halco Lighting Corporation	(800) 677-3334
OSRAM SYLVANIA General Lighting	(978) 777-1900
Philips Lighting Co.	(908) 563-3660
SLI Lighting Products Inc.	(800) 922-6693
Trojan Inc.	(859) 498-0526
Ushio America	(714) 236-8600
Welch Allyn	(315) 685-4100
Westinghouse Lighting Corporation	(215) 671-2000

**UV lamps**

OSRAM SYLVANIA General Lighting	(978) 777-1900
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**Lampholders**

Allied Moulded Products	(419) 636-4217
Cooper Crouse-Hinds	(315) 477-5531
OSRAM SYLVANIA General Lighting	(978) 777-1900
Pass & Seymour/LeGrand	(800) 776-4035
Porcelain Products	(419) 396-7621
Thomas & Betts	(901) 252-5000

**Outdoor lighting**



Lithonia Lighting	(770) 922-9000
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**Area lighting**

Acuity Lighting Group	(770) 922-9000
Color Kinetics	(617) 423-9999
Cooper Lighting	(770) 486-4800
Cooper Wiring Devices	(718) 361-4914

Day-Brite Lighting	(800) 234-1890
EGS Electrical Group	(847) 268-6000
Genlyte Thomas Group LLC	(502) 893-4690
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Juno Lighting, Inc.	(847) 827-9880
Kim Lighting	(626) 968-5666
Lithonia Lighting	(770) 922-9000
Paramount Industries, Inc.	(800) 521-5405
Progress Lighting	(864) 599-6000
Spaulding Lighting	(513) 541-3486
TIR Systems Ltd.	(604) 294-2877
U.S. Traffic Corp.	(562) 923-9600
Wide-Lite	(512) 392-5821
Woods Industries, Inc.	(317) 844-7261

**Architectural large area lighting**

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
EGS Electrical Group	(847) 268-6000
Genlyte Thomas Group LLC	(502) 893-4690
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Juno Lighting, Inc.	(847) 827-9880
Kim Lighting	(626) 968-5666
Leviton Mfg. Co.	(800) 323-8920
Lithonia Lighting	(770) 922-9000
Spaulding Lighting	(513) 541-3486
TIR Systems Ltd.	(604) 294-2877
U.S. Traffic Corp.	(562) 923-9600
Wide-Lite	(512) 392-5821

**Garden, patio, yard fixtures**

Acuity Lighting Group	(770) 922-9000
Color Kinetics	(617) 423-9999
Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Kim Lighting	(626) 968-5666
Producto Electric Corp.	(845) 359-4900
Progress Lighting	(864) 599-6000
Thomas & Betts	(901) 252-5000
Woods Industries, Inc.	(317) 844-7261

**Small area fixtures**

Acuity Lighting Group	(770) 922-9000
Carlson, Lamson & Sessions	(216) 464-3400
Color Kinetics	(617) 423-9999
Cooper Lighting	(770) 486-4800
Cooper Wiring Devices	(718) 361-4914
Ericson Mfg.	(440) 951-8000
Genlyte Thomas Group LLC	(502) 893-4690
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Juno Lighting, Inc.	(847) 827-9880
Kim Lighting	(626) 968-5666
Lithonia Lighting	(770) 922-9000
Paramount Industries, Inc.	(800) 521-5405
Progress Lighting	(864) 599-6000
Thomas & Betts	(901) 252-5000
Wide-Lite	(512) 392-5821

**Roadway lighting**

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Lithonia Lighting	(770) 922-9000
MacLean Power Systems	(847) 455-0014
U.S. Traffic Corp.	(562) 923-9600
Wide-Lite	(512) 392-5821

**Architectural fixtures**

Acuity Lighting Group	(770) 922-9000
Carlson, Lamson & Sessions	(216) 464-3400
Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Kim Lighting	(626) 968-5666
Lithonia Lighting	(770) 922-9000
MacLean Power Systems	(847) 455-0014
TIR Systems Ltd.	(604) 294-2877
Wide-Lite	(512) 392-5821

**Cobra head fixtures**

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Hubbell Lighting	(540) 382-6111

**Deep set-back roadway fixtures**

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Lithonia Lighting	(770) 922-9000
U.S. Traffic Corp.	(562) 923-9600

**Dusk to dawn fixtures**

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
Hubbell Lighting	(540) 382-6111
Wide-Lite	(512) 392-5821

**Fluorescent roadway fixtures**

Genlyte Thomas Group LLC	(502) 893-4690
U.S. Traffic Corp.	(562) 923-9600

**High mast fixtures**

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Wide-Lite	(512) 392-5821

**LPS roadway fixtures**

Acuity Lighting Group	(770) 922-9000
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Spaulding Lighting	(513) 541-3486

**Luminaire supports**

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Kim Lighting	(626) 968-5666

Photoelectric street lighting control devices

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Wide-Lite	(512) 392-5821

Attachments, accessories & renewal parts

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Wide-Lite	(512) 392-5821

**Floodlighting**

Acuity Lighting Group	(770) 922-9000
Cooper Crouse-Hinds	(315) 477-5531
Cooper Lighting	(770) 486-4800
Day-Brite Lighting	(800) 234-1890
EGS Electrical Group	(847) 268-6000
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Juno Lighting, Inc.	(847) 827-9880
Killark Electric Manufacturing	(314) 531-0460
Kim Lighting	(626) 968-5666



Lithonia Lighting	(770) 922-9000
Phoenix Contact Inc.	(717) 944-1300
Spaulding Lighting	(513) 541-3486
TIR Systems Ltd.	(604) 294-2877
Wide-Lite	(512) 392-5821
Woodhead L.P.	(847) 272-7990
Woods Industries, Inc.	(317) 844-7261

General and heavy-duty floodlighting fixtures

Acuity Lighting Group	(770) 922-9000
Cooper Crouse-Hinds	(315) 477-5531
Cooper Lighting	(770) 486-4800
Day-Brite Lighting	(800) 234-1890
EGS Electrical Group	(847) 268-6000
Ericson Mfg.	(440) 951-8000

Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Juno Lighting, Inc.	(847) 827-9880
Killark Electric Manufacturing	(314) 531-0460
Kim Lighting	(626) 968-5666
Lithonia Lighting	(770) 922-9000
TIR Systems Ltd.	(604) 294-2877
Wide-Lite	(512) 392-5821
Woodhead L.P.	(847) 272-7990

Quartz lighting fixtures

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Day-Brite Lighting	(800) 234-1890
EGS Electrical Group	(847) 268-6000
Genlyte Thomas Group LLC	(502) 893-4690
Hubbell Lighting	(540) 382-6111
Juno Lighting, Inc.	(847) 827-9880
Killark Electric Manufacturing	(314) 531-0460
Lithonia Lighting	(770) 922-9000
Thomas & Betts	(901) 252-5000
Wide-Lite	(512) 392-5821
Woodhead L.P.	(847) 272-7990

R and PAR type fixtures

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Day-Brite Lighting	(800) 234-1890
Genlyte Thomas Group LLC	(502) 893-4690
Hubbell Lighting	(540) 382-6111
Juno Lighting, Inc.	(847) 827-9880
Kim Lighting	(626) 968-5666
Producto Electric Corp.	(845) 359-4900
Thomas & Betts	(901) 252-5000
Woodhead L.P.	(847) 272-7990

Sports lighting fixtures

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Day-Brite Lighting	(800) 234-1890
EGS Electrical Group	(847) 268-6000
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Juno Lighting, Inc.	(847) 827-9880
Lithonia Lighting	(770) 922-9000
Wide-Lite	(512) 392-5821

Attachments, accessories & renewal parts

Acuity Lighting Group	(770) 922-9000
Cooper Lighting	(770) 486-4800
Day-Brite Lighting	(800) 234-1890
EGS Electrical Group	(847) 268-6000
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Producto Electric Corp.	(845) 359-4900
Woodhead L.P.	(847) 272-7990

Specialty lighting

Acuity Lighting Group	(770) 922-9000
Color Kinetics	(617) 423-9999
Cooper Crouse-Hinds	(315) 477-5531
Cooper Lighting	(770) 486-4800
Day-Brite Lighting	(800) 234-1890
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Kim Lighting	(626) 968-5666
Paramount Industries, Inc.	(800) 521-5405
TIR Systems Ltd.	(604) 294-2877
U.S. Traffic Corp.	(562) 923-9600
Wide-Lite	(512) 392-5821
Woodhead L.P.	(847) 272-7990

Pool lighting

Acuity Lighting Group	(770) 922-9000
Color Kinetics	(617) 423-9999
Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Hubbell Lighting	(540) 382-6111
U.S. Traffic Corp.	(562) 923-9600

Service station lighting

Acuity Lighting Group	(770) 922-9000
Color Kinetics	(617) 423-9999
Cooper Crouse-Hinds	(315) 477-5531
Cooper Lighting	(770) 486-4800
Day-Brite Lighting	(800) 234-1890
Genlyte Thomas Group LLC	(502) 893-4690
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Paramount Industries, Inc.	(800) 521-5405
Spaulding Lighting	(513) 541-3486
TIR Systems Ltd.	(604) 294-2877
Wide-Lite	(512) 392-5821

**Sign lighting**

Acuity Lighting Group	(770) 922-9000
Color Kinetics	(617) 423-9999
Cooper Lighting	(770) 486-4800
Cooper Wiring Devices	(718) 361-4914
Day-Brite Lighting	(800) 234-1890
GELcore LLC	(216) 606-6555
Genlyte Thomas Group LLC	(502) 893-4690
Gilbert Industries, Inc.	(870) 932-6070
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Holophane A Div of Acuity Lighting Group	(740) 349-4100
Hubbell Lighting	(540) 382-6111
Juno Lighting, Inc.	(847) 827-9880
Kim Lighting	(626) 968-5666
TIR Systems Ltd.	(604) 294-2877
U.S. Traffic Corp.	(562) 923-9600

**Underwater fountain lighting**

Acuity Lighting Group	(770) 922-9000
Color Kinetics	(617) 423-9999
Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Lithonia Lighting	(770) 922-9000

**Loading dock lighting**

Acuity Lighting Group	(770) 922-9000
GELcore LLC	(216) 606-6555
Genlyte Thomas Group LLC	(502) 893-4690
Kim Lighting	(626) 968-5666
Paramount Industries, Inc.	(800) 521-5405

**Insect light traps**

Gilbert Industries, Inc.	(870) 932-6070
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**Fiber optic lighting (remote illumination lighting systems)****Illuminators**

Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Lucifer Lighting Company	(210) 227-7329
TIR Systems Ltd.	(604) 294-2877

**Optical fibers & light guides**

Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Lucifer Lighting Company	(210) 227-7329
TIR Systems Ltd.	(604) 294-2877

**Fittings, couplers & associated equipment**

Cooper Lighting	(770) 486-4800
Genlyte Thomas Group LLC	(502) 893-4690
HADCO, Genlyte Thomas Group, LLC	(717) 359-7131
Leviton Mfg. Co.	(800) 323-8920
Lucifer Lighting Company	(210) 227-7329
TIR Systems Ltd.	(604) 294-2877

**Solid state lighting****Semiconductor light sources**

Color Kinetics	(617) 423-9999
Cree, Inc.	(919) 313-5321
GELcore LLC	(216) 606-6555
Norlux Div Uniroyal Optoelectronics	(813) 630-9100
OSRAM SYLVANIA General Lighting	(978) 777-1900
TIR Systems Ltd.	(604) 294-2877

**Light emitting diodes (LEDs)**

Color Kinetics	(617) 423-9999
Cree, Inc.	(919) 313-5321
GELcore LLC	(216) 606-6555
Kim Lighting	(626) 968-5666
Norlux Div Uniroyal Optoelectronics	(813) 630-9100
OSRAM SYLVANIA General Lighting	(978) 777-1900
TG North America	(248) 280-7314
Toyoda Gosei North America	(248) 280-7341

**Other semiconductor light sources**

OSRAM SYLVANIA General Lighting	(978) 777-1900
TIR Systems Ltd.	(604) 294-2877

**Solid state lighting devices**

ABB LVPS	(888) 385-1221
Color Kinetics	(617) 423-9999
Farlight LLC	(310) 830-0181
GELcore LLC	(216) 606-6555
Gilbert Industries, Inc.	(870) 932-6070
Kim Lighting	(626) 968-5666
Norlux Div Uniroyal Optoelectronics	(813) 630-9100
OSRAM SYLVANIA General Lighting	(978) 777-1900
TIR Systems Ltd.	(604) 294-2877
U.S. Traffic Corp.	(562) 923-9600

**Fixtures & luminaires**

Color Kinetics	(617) 423-9999
Farlight LLC	(310) 830-0181
GELcore LLC	(216) 606-6555
Kim Lighting	(626) 968-5666
Norlux Div Uniroyal Optoelectronics	(813) 630-9100
OSRAM SYLVANIA General Lighting	(978) 777-1900
Paramount Industries, Inc.	(800) 521-5405
TIR Systems Ltd.	(604) 294-2877
U.S. Traffic Corp.	(562) 923-9600

**Power supplies**

Color Kinetics	(617) 423-9999
Farlight LLC	(310) 830-0181
GELcore LLC	(216) 606-6555
Norlux Div Uniroyal Optoelectronics	(813) 630-9100
OSRAM SYLVANIA General Lighting	(978) 777-1900
TIR Systems Ltd.	(604) 294-2877

**Mechanical/electronic controls**

Color Kinetics	(617) 423-9999
Farlight LLC	(310) 830-0181
GELcore LLC	(216) 606-6555
Norlux Div Uniroyal Optoelectronics	(813) 630-9100
OSRAM SYLVANIA General Lighting	(978) 777-1900
TIR Systems Ltd.	(604) 294-2877

**Other, including software**

Color Kinetics	(617) 423-9999
Farlight LLC	(310) 830-0181
Norlux Div Uniroyal Optoelectronics	(813) 630-9100
TIR Systems Ltd.	(604) 294-2877

**MEASURING  
EQUIPMENT,  
ELECTRICAL**

**Electromechanical  
electricity meters**

ABB Inc.	(919) 856-2360
Apcom, Inc.	(615) 794-5574
Elster Electricity LLC	(919) 212-4800
GE Meter	(603) 692-2100
Itron Electricity Metering	(864) 638-8300
Reliance Controls Corp.	(262) 634-6155

**Instrument transformers**

ABB Inc.	(919) 856-2360
AREVA T&D Inc.	(484) 799-8100
G.E.C. Durham Industries	(417) 532-7121
GE Meter	(603) 692-2100
Itron Electricity Metering	(864) 638-8300
Meter Devices	(330) 455-0301
Rittal Corporation	(937) 399-0500
Robroy Industries	(412) 828-2100
Square D	(847) 397-2600

**Meter mounting  
& test equipment**

ABB Inc.	(919) 856-2360
Carlo Gavazzi	(847) 465-6100
Cooper B-Line	(618) 654-2184
The Durham Company	(417) 532-7121
Itron Electricity Metering	(864) 638-8300
Meter Devices	(330) 455-0301
Siemens Energy & Automation	(770) 751-2000

**Solid-state electricity meters**

ABB Inc.	(919) 856-2360
Allied Moulded Products	(419) 636-4217
Carlo Gavazzi	(847) 465-6100
Cutler-Hammer	(800) 356-1243
Elster Electricity LLC	(919) 212-4800
GE Meter	(603) 692-2100
Itron Electricity Metering	(864) 638-8300
Lovato Electric, Inc.	(757) 545-4700
Reliance Controls Corp.	(262) 634-6155

**MEDICAL**

**Magnetic resonance systems**

Bruker Biospin MRI Inc.	(978) 667-9580
Fonar Corporation	(631) 694-2929
GE Medical Systems	(414) 544-3011
Hitachi Medical Systems America	(330) 425-1313
IGC-Medical Advances	(518) 782-1122
Philips Medical Systems, NA	(425) 487-7000
Siemens Medical Solutions USA	(610) 448-4500
Sonora Medical Systems	(303) 682-5871
Toshiba America Medical Systems	(714) 730-5000
USA Instruments Inc.	(330) 562-1000

**Medical imaging informatics**

AGFA Division of Miles, Inc.	(864) 421-1600
Camtronics, Ltd., Medical Systems	(262) 367-0700
DeJarnette Research Systems	(410) 583-0680
Dynamic Imaging	(888) 303-7227
Eastman Kodak	(716) 724-3579
Fujifilm Medical Systems USA	(203) 324-2000

GE Medical Systems	(414) 544-3011
IMPAC Medical Systems	(888) 464-6722
Konica Minolta Medical Imaging USA	(800) 934-1034
McKesson Medical Imaging Company	(604) 279-5422
Philips Medical Systems, NA	(425) 487-7000
Sectra Intec AB	(203) 925 0899
Siemens Medical Solutions USA	(610) 448-4500
TomTec Imaging Systems	(303) 545-9000

**Nuclear diagnostic equipment**

Capintec	(412) 963-1988
Fluke Biomedical Radiation Mgmt Svcs	(888) 466-8257
GE Medical Systems	(414) 544-3011
GE/SMV America	(330) 425-1340
Hitachi Medical Systems America	(330) 425-1313
IS2 Medical Systems Inc.	(613) 228-8755
Philips Medical Systems, NA	(425) 487-7000
Siemens Medical Solutions USA	(610) 448-4500
Toshiba America Medical Systems	(714) 730-5000

**Radiation therapy equipment**

Capintec	(412) 963-1988
CIRS Inc.	(757) 855-2765
CMS	(314) 993-0003
Fluke Biomedical Radiation Mgmt Svcs	(888) 466-8257
Gammex	(608) 828-7000
IMPAC Medical Systems	(888) 464-6722
LAP of America	(561) 416-9250
Philips Medical Systems, NA	(425) 487-7000
Siemens Medical Solutions USA	(610) 448-4500
Standard Imaging	(608) 831-0025
Varian Medical Systems	(650) 493-4000

**Ultrasound  
imaging equipment**

Aloka	(203) 269-5088
Biosound Esaote, Inc.	(317) 849-1916
CIRS Inc.	(757) 855-2765
Fukuda Denshi	(425) 881-7737
Gammex	(608) 828-7000
GE Medical Systems	(414) 544-3011
Hitachi Medical Systems America	(330) 425-1313

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 TomTec Imaging Systems (303) 545-9000  
 Toshiba America Medical Systems  
 (714) 730-5000  
 Ultrasonix Medical Corp. (604) 437-9500

**X-ray imaging products**

Advanced Instrument Development  
 (708) 343-7777  
 Camtronics, Ltd., Medical Systems  
 (262) 367-0700  
 Canon Research Center America  
 (650) 812-1260  
 Capintec (412) 963-1988  
 CIRS Inc. (757) 855-2765  
 Eastman Kodak (716) 724-3579  
 Faxitron X-Ray Corp. (847) 465-9729  
 Fischer Imaging Corporation (303) 452-6800  
 Fluke Biomedical Radiation Mgmt Svcs  
 (888) 466-8257  
 Fujifilm Medical Systems USA  
 (203) 324-2000  
 Gammex (608) 828-7000  
 GE Medical Systems (414) 544-3011  
 Hitachi Medical Systems America  
 (330) 425-1313  
 Instrumentarium Imaging (414) 747-1030  
 Konica Minolta Medical Imaging USA  
 (800) 934-1034  
 Lorad, A Hologic Company (203) 790-1188  
 Philips Medical Systems, NA (425) 487-7000  
 R2 Technology Inc. (408) 481-5600  
 Sectra Intec AB (203) 925 0899  
 Shimadzu Medical Systems (310) 217-8855  
 Siemens Medical Solutions USA  
 (610) 448-4500  
 Thales Components (973) 812-9000  
 Toshiba America Medical Systems  
 (714) 730-5000  
 Varian Medical Systems (650) 493-4000

**MOTORS &  
 GENERATORS**



ABB Inc. (262) 785-3200



Regal-Beloit Electric Motors Group  
 (608) 364-8800



**GE Commercial Motors**

By Regal-Beloit

GE Commercial Motors by Regal-Beloit  
 (260) 439-3295



LEESON Electric (262) 377-8810



Lincoln Motors (216) 731-4790



Marathon Electric (715) 675-3311

**Large AC machines (>501 hp motors and generators)**

A.O. Smith Electrical Products  
 Company (937) 667-2431  
 ABB Inc. (262) 785-3200  
 ASI Robicon (742) 339-9231  
 Cummins Power Generation (800) 888-6626  
 Electra Gear, Division of  
 Regal-Beloit Corp. (714) 535-6061  
 Emerson Motor Technology (314) 553-2000  
 GE Industrial Control Systems:  
 Motors & Generators (219) 439-4652  
 GE Industrial Systems (260) 439-3447  
 GE: Total Control Products (630) 932-6032  
 Marathon Electric Manufacturing  
 Corporation (715) 675-3311  
 RAM Industries (610) 916-3939  
 Regal-Beloit Corp. (715) 675-3311  
 Rockwell Automation—Reliance  
 (216) 266-7000  
 Sterling Electric, Inc. (800) 654-6220  
 TECO—Westinghouse Motor Co.  
 (512) 255-4141  
 Toshiba International Co. (713) 466-0277  
 WEG Electric Motors Corp. (770) 338-5656

**Large DC machines (>501 hp motors and generators)**

ABB Inc. (262) 785-3200  
 ASI Robicon (742) 339-9231  
 Emerson Motor Technology (314) 553-2000  
 GE Industrial Control Systems: Motors &  
 Generators (219) 439-4652  
 GE Industrial Systems (260) 439-3447  
 GE: Total Control Products (630) 932-6032  
 Rockwell Automation—Reliance  
 (216) 266-7000  
 TECO—Westinghouse Motor Co.  
 (512) 255-4141  
 Toshiba International Co. (713) 466-0277  
 WEG Electric Motors Corp. (770) 338-5656

**Medium AC machines (1-500 hp motors and generators)**

A.O. Smith Electrical Products  
 Company (937) 667-2431  
 ABB Inc. (262) 785-3200  
 ASI Robicon (742) 339-9231  
 Cummins Power Generation (800) 888-6626  
 Electra Gear, Division of  
 Regal-Beloit Corp. (714) 535-6061  
 Emerson Motor Technology (314) 553-2000  
 GE Industrial Control Systems:  
 Motors & Generators (219) 439-4652

GE Industrial Systems	(260) 439-3447
GE: Total Control Products	(630) 932-6032
Georator Corporation	(800) 523-9938
Howell Electric Motors	(908) 756-8800
The Imperial Electric Co.	(330) 734-3600
LEESON Electric	(262) 377-8810
Marathon Electric Manufacturing Corporation	(715) 675-3311
Peerless Electric Motors, Inc.	(800) 676-3651
RAM Industries	(610) 916-3939
Regal-Beloit Corp.	(715) 675-3311
Rockwell Automation—Reliance	(216) 266-7000
SEW Eurodrive	(864) 439-7537
Sterling Electric, Inc.	(800) 654-6220
TECO—Westinghouse Motor Co.	(512) 255-4141
Toshiba International Co.	(713) 466-0277
WEG Electric Motors Corp.	(770) 338-5656

### Medium DC machines (1-500 hp motors and generators)

ABB Inc.	(262) 785-3200
ASI Robicon	(742) 339-9231
Electra Gear, Division of Regal-Beloit Corp.	(714) 535-6061
Emerson Motor Technology	(314) 553-2000
GE Industrial Control Systems: Motors & Generators	(219) 439-4652
GE Industrial Systems	(260) 439-3447
GE: Total Control Products	(630) 932-6032
The Imperial Electric Co.	(330) 734-3600
LEESON Electric	(262) 377-8810
Ohio Electric Motors	(828) 626-2901
Peerless Electric Motors, Inc.	(800) 676-3651
Powertec Industrial Motors, Inc.	(830) 328-1888
Rockwell Automation—Reliance	(216) 266-7000
Toshiba International Co.	(713) 466-0277
WEG Electric Motors Corp.	(770) 338-5656

### Servo and stepper motors

Alflex Corporation	(310) 886-8300
GE Fanuc Automation	(434) 978-5000
GE Industrial Control Systems: Motors & Generators	(219) 439-4652
Honeywell	(800) 328-5111
LEESON Electric	(262) 377-8810
Mitsubishi Electric Automation	(847) 478-2100
Peerless Electric Motors, Inc.	(800) 676-3651

Rockwell Automation—Allen-Bradley	(414) 382-2000
Rockwell Automation—Reliance	(216) 266-7000
SEW Eurodrive	(864) 439-7537
Square D	(847) 397-2600

### Fractional HP motors (under 1 hp motors and generators)

A.O. Smith Electrical Products Company	(937) 667-2431
ABB Inc.	(262) 785-3200
Electra Gear, Division of Regal-Beloit Corp.	(714) 535-6061
Emerson Motor Technology	(314) 553-2000
GE Industrial Control Systems: Motors & Generators	(219) 439-4652
GE Industrial Systems	(260) 439-3447
GE: Total Control Products	(630) 932-6032
Howell Electric Motors	(908) 756-8800
The Imperial Electric Co.	(330) 734-3600
LEESON Electric	(262) 377-8810
Marathon Electric Manufacturing Corporation	(715) 675-3311
Micro-Drives	(800) 807-9166
Powertec Industrial Motors, Inc.	(830) 328-1888
Regal-Beloit Corp.	(715) 675-3311
Rockwell Automation—Reliance	(216) 266-7000
SEW Eurodrive	(864) 439-7537
Sterling Electric, Inc.	(800) 654-6220
WEG Electric Motors Corp.	(770) 338-5656

## OUTLET & SWITCH BOXES

### Bar hanger sets

Allied Moulded Products	(419) 636-4217
Cooper Crouse-Hinds	(315) 477-5531
ERICO Inc.	(440) 248-0100
Minerallac Co.	(630) 543-7080
Steel City	(901) 252-5000

### Composite boxes & covers

Allied Moulded Products	(419) 636-4217
Cooper Wiring Devices	(718) 361-4914
Hoffman Enclosures	(763) 421-2240

## Nonmetallic boxes & covers

### Nonmetallic cable boxes

Allied Moulded Products	(419) 636-4217
CANTEX INC.	(800) 433-5623
Carlton, Lamson & Sessions	(216) 464-3400
Cooper Crouse-Hinds	(315) 477-5531
EGS Electrical Group	(847) 268-6000
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815
Pass & Seymour/Legrand	(800) 776-4035
Steel City	(901) 252-5000
Woodhead L.P.	(847) 272-7990

### Nonmetallic covers

Allied Moulded Products	(419) 636-4217
CANTEX INC.	(800) 433-5623
Carlton, Lamson & Sessions	(216) 464-3400
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
EGS Electrical Group	(847) 268-6000
Hubbell Incorporated—Wiring Devices-Kellems	(203) 882-4800
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815
Pass & Seymour/Legrand	(800) 776-4035
Steel City	(901) 252-5000
The Wiremold Company	(800) 621-0049
Woodhead L.P.	(847) 272-7990

### Nonmetallic concrete boxes

Carlton, Lamson & Sessions	(216) 464-3400
EGS Electrical Group	(847) 268-6000
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815
Pass & Seymour/Legrand	(800) 776-4035
Steel City	(901) 252-5000

### Extension rings

Bridgeport Fittings	(203) 377-5944
Carlton, Lamson & Sessions	(216) 464-3400
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815
Pass & Seymour/Legrand	(800) 776-4035
Steel City	(901) 252-5000

### Nonmetallic floor boxes

CANTEX INC.	(800) 433-5623
Carlton, Lamson & Sessions	(216) 464-3400
EGS Electrical Group	(847) 268-6000
Hubbell Incorporated—Wiring Devices-Kellems	(203) 882-4800
IPEX Inc.	(800) 463-9572
Kraloy	(800) 265-1815



Pass & Seymour/Legrand	(800) 776-4035
Producto Electric Corp.	(845) 359-4900
Steel City	(901) 252-5000
The Wiremold Company	(800) 621-0049

**Nonmetallic outlet boxes**

Allied Moulded Products	(419) 636-4217
CANTEX INC.	(800) 433-5623
Carlton, Lamson & Sessions	(216) 464-3400
Cooper Crouse-Hinds	(315) 477-5531
EGS Electrical Group	(847) 268-6000
Ericson Mfg.	(440) 951-8000
IPEX Inc.	(800) 463-9572
Killark Electric Manufacturing	(314) 531-0460
Kraloy	(800) 265-1815
Pass & Seymour/Legrand	(800) 776-4035
Producto Electric Corp.	(845) 359-4900
Steel City	(901) 252-5000
Wago Corporation	(800) 346-7245
The Wiremold Company	(800) 621-0049
Woodhead L.P.	(847) 272-7990

**Nonmetallic switch boxes**

Allied Moulded Products	(419) 636-4217
CANTEX INC.	(800) 433-5623
Carlton, Lamson & Sessions	(216) 464-3400
Cooper Crouse-Hinds	(315) 477-5531
EGS Electrical Group	(847) 268-6000
IPEX Inc.	(800) 463-9572
Killark Electric Manufacturing	(314) 531-0460
Kraloy	(800) 265-1815
Pass & Seymour/Legrand	(800) 776-4035
Producto Electric Corp.	(845) 359-4900
Steel City	(901) 252-5000
The Wiremold Company	(800) 621-0049

**Utility boxes**

Carlton, Lamson & Sessions	(216) 464-3400
IPEX Inc.	(800) 463-9572
Meter Devices	(330) 455-0301
Pass & Seymour/Legrand	(800) 776-4035
Steel City	(901) 252-5000
Woodhead L.P.	(847) 272-7990

**Metallic boxes & covers**

**Metallic cable boxes**

Adalet	(216) 267-9000
Cooper Crouse-Hinds	(315) 477-5531
EGS Electrical Group	(847) 268-6000
Steel City	(901) 252-5000

**Metallic covers**

Adalet	(216) 267-9000
Bridgeport Fittings	(203) 377-5944
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
EGS Electrical Group	(847) 268-6000
Genlyte Thomas Group LLC	(502) 893-4690
Hubbell Incorporated—Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460
Producto Electric Corp.	(845) 359-4900
Steel City	(901) 252-5000
The Wiremold Company	(800) 621-0049

**Metallic conduit boxes**

Adalet	(216) 267-9000
Bridgeport Fittings	(203) 377-5944
Cooper Crouse-Hinds	(315) 477-5531
EGS Electrical Group	(847) 268-6000
Genlyte Thomas Group LLC	(502) 893-4690
The Halex Company	(440) 439-1616
Killark Electric Manufacturing	(314) 531-0460
MIPCO—T&B	(800) 888-0211 x8680
Regal Mfg. Co.	(800) 582-3092
Russellstoll—T&B	(800) 888-0211 x8680
Steel City	(901) 252-5000
Wheelock Inc.	(800) 631-2148

**Metallic concrete boxes**

Adalet	(216) 267-9000
Cooper Crouse-Hinds	(315) 477-5531
EGS Electrical Group	(847) 268-6000
Steel City	(901) 252-5000
Wheelock Inc.	(800) 631-2148

**Metallic floor boxes**

Adalet	(216) 267-9000
Cooper Crouse-Hinds	(315) 477-5531
EGS Electrical Group	(847) 268-6000
Hubbell Incorporated—Wiring Devices-Kellems	(203) 882-4800
Steel City	(901) 252-5000
The Wiremold Company	(800) 621-0049

**Metallic gang boxes**

Adalet	(216) 267-9000
Cooper Crouse-Hinds	(315) 477-5531
EGS Electrical Group	(847) 268-6000
Killark Electric Manufacturing	(314) 531-0460
MIPCO—T&B	(800) 888-0211 x8680
Russellstoll—T&B	(800) 888-0211 x8680
Steel City	(901) 252-5000
Wheelock Inc.	(800) 631-2148

**Metallic hung-ceiling boxes**

Adalet	(216) 267-9000
Cooper Crouse-Hinds	(315) 477-5531
Killark Electric Manufacturing	(314) 531-0460
Steel City	(901) 252-5000

**Metallic outlet boxes**

Adalet	(216) 267-9000
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
EGS Electrical Group	(847) 268-6000
Genlyte Thomas Group LLC	(502) 893-4690
Killark Electric Manufacturing	(314) 531-0460
MIPCO—T&B	(800) 888-0211 x8680
Russellstoll—T&B	(800) 888-0211 x8680
Steel City	(901) 252-5000
Wheelock Inc.	(800) 631-2148
The Wiremold Company	(800) 621-0049

**PIN & SLEEVE PLUG,  
RECEPTACLE &  
CONNECTORS**

**Pin & sleeve connections  
for power (ac and dc)**

Bryant Electric, Inc.	(800) 323-2792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
EGS Electrical Group	(847) 268-6000
Ericson Mfg.	(440) 951-8000
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
ITT VEAM LLC	(860) 945-8269
Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Meltric Corp.	(800) 824-4031
MIPCO—T&B	(800) 888-0211 x8680
Pass & Seymour/Legrand	(800) 776-4035
Phoenix Contact Inc.	(717) 944-1300
Russellstoll—T&B	(800) 888-0211 x8680
Thomas & Betts	(901) 252-5000



W.T. Storey Inc.	(570) 758-2000
Woodhead L.P.	(847) 272-7990

**Pin & sleeve connections  
for control**

Cooper Crouse-Hinds	(315) 477-5531
Meltric Corp.	(800) 824-4031
Pass & Seymour/Legrand	(800) 776-4035
Phoenix Contact Inc.	(717) 944-1300
Russellstoll—T&B	(800) 888-0211 x8680
Thomas & Betts	(901) 252-5000
Woodhead L.P.	(847) 272-7990

**Pin & sleeve connections  
for signaling**

ITT VEAM LLC	(860) 945-8269
Meltric Corp.	(800) 824-4031
Pass & Seymour/Legrand	(800) 776-4035
Phoenix Contact Inc.	(717) 944-1300
Russellstoll—T&B	(800) 888-0211 x8680
Woodhead L.P.	(847) 272-7990

**Pin & sleeve connections  
for control & signaling**

Ericson Mfg.	(440) 951-8000
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
ITT VEAM LLC	(860) 945-8269
Meltric Corp.	(800) 824-4031
Pass & Seymour/Legrand	(800) 776-4035
Phoenix Contact Inc.	(717) 944-1300
Russellstoll—T&B	(800) 888-0211 x8680
Woodhead L.P.	(847) 272-7990

**POWER CONVERSION  
EQUIPMENT**

**Primary power sources**

American Power Conversion	(800) 800-4276
Systematics	(610) 696-9040

**Secondary power sources**

American Power Conversion	(800) 800-4276
Systematics	(610) 696-9040

**AC/DC power converters**

ABB LVPS	(888) 385-1221
Acme Electric Corp.	(800) 334-5214
Air Products and Controls Inc.	(248) 332-3900
American Power Conversion	(800) 800-4276
Ametek Solidstate Controls	(614) 846-7500
ASI Robicon	(742) 339-9231
Controlled Power Co.	(800) 521-4792
EGS Electrical Group	(847) 268-6000



EGS Electrical Group— Sola/Hevi-Duty	(847) 679-7800
MGE UPS Systems	(714) 557-1636
Omron Electronics LLC	(847) 843-7900
Solidstate Controls Inc.	(614) 846-7500
Wago Corporation	(800) 346-7245
Wheelock Inc.	(800) 631-2148

**Battery chargers**

American Power Conversion	(800) 800-4276
Ametek Solidstate Controls	(614) 846-7500
Cummins Power Generation	(800) 888-6626
Joslyn Clark Controls	(803) 286-8491
Solidstate Controls Inc.	(614) 846-7500
Wheelock Inc.	(800) 631-2148

**AC/AC power converters**

American Power Conversion	(800) 800-4276
Ametek Solidstate Controls	(614) 846-7500
ASI Robicon	(742) 339-9231
Controlled Power Co.	(800) 521-4792
EGS Electrical Group	(847) 268-6000
EGS Electrical Group— Sola/Hevi-Duty	(847) 679-7800
Georator Corporation	(800) 523-9938
Solidstate Controls Inc.	(614) 846-7500

**DC/AC power converters**

American Power Conversion	(800) 800-4276
ASI Robicon	(742) 339-9231
MGE UPS Systems	(714) 557-1636
Solidstate Controls Inc.	(614) 846-7500

**DC/DC power converters**

ABB LVPS	(888) 385-1221
American Power Conversion	(800) 800-4276
ASI Robicon	(742) 339-9231
Controlled Power Co.	(800) 521-4792
EGS Electrical Group— Sola/Hevi-Duty	(847) 679-7800
Wago Corporation	(800) 346-7245

**Voltage regulators**

**Active filters**

Control Concepts	(607) 724-2484
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**PROTECTIVE DEVICES**

**Circuit breakers**

**Enclosures, 250 type circuit breakers**

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Cooper Crouse-Hinds	(315) 477-5531
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
GE Electrical Distribution & Control	(860) 747-7234
Killark Electric Manufacturing	(314) 531-0460
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Milbank Mfg. Co.	(816) 483-5314
Moeller Electric Corp.	(713) 933-0999
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

**Loadcenter/panelboard circuit breakers**

ABB LVPS	(888) 385-1221
Adalet	(216) 267-9000
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
GE Electrical Distribution & Control	(860) 747-7234
Killark Electric Manufacturing	(314) 531-0460
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Milbank Mfg. Co.	(816) 483-5314
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

**Ground fault protection for equipment**

ABB LVPS	(888) 385-1221
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Cutler-Hammer	(800) 356-1243
Ericson Mfg.	(440) 951-8000
GE Electrical Distribution & Control	(860) 747-7234
Hubbell Power Systems	(573) 682-5521
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Leviton Mfg. Co.	(800) 323-8920
Siemens Energy & Automation	(770) 751-2000

Square D	(847) 397-2600
Technology Research	(727) 535-0572
Tyco Electronics/Raychem	
Wire and Cable	(919) 557-8863
Woodhead L.P.	(847) 272-7990

**Ground fault protection for personnel**

ABB LVPS	(888) 385-1221
AREVA T&D Inc.	(484) 799-8100
Bryant Electric, Inc.	(800) 323-2792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
Ericson Mfg.	(440) 951-8000
GE Electrical Distribution & Control	(860) 747-7234
Hubbell Incorporated—Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Technology Research	(727) 535-0572
Woodhead L.P.	(847) 272-7990

**Remote switching**

ABB Inc.	(919) 856-2360
Cooper Crouse-Hinds	(315) 477-5531
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
G&W Electric Co.	(708) 388-5010
GE Electrical Distribution & Control	(860) 747-7234
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Leviton Mfg. Co.	(800) 323-8920
Moeller Electric Corp.	(713) 933-0999
Square D	(847) 397-2600

**Surge protection**

ABB LVPS	(888) 385-1221
ASCO Power Technologies	(973) 966-2128
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Cutler-Hammer	(800) 356-1243
Delta Lighting Arrestors	(432) 267-1000
EFI Electronics	(800) 877-1174
EGS Electrical Group	(847) 268-6000

ERICO Inc.	(440) 248-0100
GE Electrical Distribution & Control	(860) 747-7234
Hubbell Incorporated—Wiring Devices-Kellems	(203) 882-4800
Hubbell Power Systems	(573) 682-5521
Leviton Mfg. Co.	(800) 323-8920
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Technology Research	(727) 535-0572
Transtector Systems	(800) 882-9110
Tyco Electronics/Raychem	
Wire and Cable	(919) 557-8863
Wago Corporation	(800) 346-7245

**Thermal magnetic circuit breakers**

ABB LVPS	(888) 385-1221
Cooper Crouse-Hinds	(315) 477-5531
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
GE Electrical Distribution & Control	(860) 747-7234
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Milbank Mfg. Co.	(816) 483-5314
Moeller Electric Corp.	(713) 933-0999
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Texas Instruments, Inc.	(508) 236-3800
Wago Corporation	(800) 346-7245

**Fuses**

**Non-renewable plug**

Cooper Bussmann	(636) 394-2877
Ferraz Shawmut Inc.	(978) 462-6662

**Non-renewable cartridge (not exceeding 1000V AC, 1200 C DC or less)**

Cooper Bussmann	(888) 937-6246
Cooper Bussmann	(636) 394-2877
Ferraz Shawmut Inc.	(978) 462-6662
Littelfuse	(847) 824-1188

**Renewable cartridge fuses and renewal links (600 V or less) or elements**

Cooper Bussmann	(636) 394-2877
Ferraz Shawmut Inc.	(978) 462-6662
Littelfuse	(847) 824-1188

Fuse blocks

ABB LVPS	(888) 385-1221
Air Products and Controls Inc.	(248) 332-3900
Cooper Bussmann	(636) 394-2877
Ferraz Shawmut Inc.	(978) 462-6662
Littelfuse	(847) 824-1188
Wago Corporation	(800) 346-7245

Fuse holders

ABB LVPS	(888) 385-1221
Cooper Bussmann	(636) 394-2877
Cooper Power Systems	(262) 524-3300
Cooper Wiring Devices	(718) 361-4914
Ferraz Shawmut Inc.	(978) 462-6662
Hubbell Power Systems	(573) 682-5521
Littelfuse	(847) 824-1188
Porcelain Products	(419) 396-7621
Square D	(847) 397-2600
Wago Corporation	(800) 346-7245

**Ground fault protection for equipment**

ABB LVPS	(888) 385-1221
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Cutler-Hammer	(800) 356-1243
Ericson Mfg.	(440) 951-8000
GE Electrical Distribution & Control	(860) 747-7234
Hubbell Power Systems	(573) 682-5521
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Leviton Mfg. Co.	(800) 323-8920
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Technology Research	(727) 535-0572
Tyco Electronics/Raychem	
Wire and Cable	(919) 557-8863
Woodhead L.P.	(847) 272-7990

Add-on ground fault systems

ABB LVPS	(888) 385-1221
Controlled Power Co.	(800) 521-4792
Cooper Crouse-Hinds	(315) 477-5531
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035
Russellstoll—T&B	(800) 888-0211 x8680
Siemens Energy & Automation	(770) 751-2000

Square D	(847) 397-2600
Technology Research	(727) 535-0572
Woodhead L.P.	(847) 272-7990

**Ground fault protection for personnel**

ABB LVPS	(888) 385-1221
AREVA T&D Inc.	(484) 799-8100
Bryant Electric, Inc.	(800) 323-2792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
Ericson Mfg.	(440) 951-8000
GE Electrical Distribution & Control	(860) 747-7234
Hubbell Incorporated—	
Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460

Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Technology Research	(727) 535-0572
Woodhead L.P.	(847) 272-7990

Ground fault circuit interrupters

ABB LVPS	(888) 385-1221
Cooper Wiring Devices	(718) 361-4914
Ericson Mfg.	(440) 951-8000
Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Technology Research	(727) 535-0572
Woodhead L.P.	(847) 272-7990

**Ground fault protection for personnel**

ABB LVPS	(888) 385-1221
AREVA T&D Inc.	(484) 799-8100
Bryant Electric, Inc.	(800) 323-2792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
Ericson Mfg.	(440) 951-8000
GE Electrical Distribution & Control	(860) 747-7234
Hubbell Incorporated—	
Wiring Devices-Kellems	(203) 882-4800

Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Technology Research	(727) 535-0572
Woodhead L.P.	(847) 272-7990

**Portable & cord-connected GFCI**

Coleman Cable Inc.	(847) 672-2300
Cooper Wiring Devices	(718) 361-4914
Ericson Mfg.	(440) 951-8000
Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035
Technology Research	(727) 535-0572
Woods Industries, Inc.	(317) 844-7261

**Receptacle type GFCI**

ABB LVPS	(888) 385-1221
Bryant Electric, Inc.	(800) 323-2792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
GE Home Electric Products	(216) 266-2121
Hubbell Incorporated—	
Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Lutron Electronics	(610) 282-3800
MIPCO—T&B	(800) 888-0211 x8680
Pass & Seymour/Legrand	(800) 776-4035
Russellstoll—T&B	(800) 888-0211 x8680
Woodhead L.P.	(847) 272-7990
Other GFCI	
Ericson Mfg.	(440) 951-8000
Leviton Mfg. Co.	(800) 323-8920
Technology Research	(727) 535-0572
Woodhead L.P.	(847) 272-7990

Personnel protection for electric vehicles

Ericson Mfg.	(440) 951-8000
Hubbell Power Systems	(573) 682-5521
Technology Research	(727) 535-0572

Other personnel equipment: ALCI, IDCI, etc.

ERICO Inc.	(440) 248-0100
Technology Research	(727) 535-0572

**Ground rods**

**Copper bonded ground rods**

A.B.Chance	(573) 682-8325
ERICO Inc.	(440) 248-0100
Galvan Industries, Inc.	(704) 455-5102
Hubbell Power Systems	(573) 682-5521
Porcelain Products	(419) 396-7621

**Couplers ground rods**

ERICO Inc.	(440) 248-0100
Galvan Industries, Inc.	(704) 455-5102
Porcelain Products	(419) 396-7621

**Zinc coated ground rods**

A.B.Chance	(573) 682-8325
ERICO Inc.	(440) 248-0100
Galvan Industries, Inc.	(704) 455-5102
Porcelain Products	(419) 396-7621
Producto Electric Corp.	(845) 359-4900

**Molded case circuit breakers**

**Current limiting**

**molded case circuit breakers**

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Moeller Electric Corp.	(713) 933-0999
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

**Electronic trip**

**molded case circuit breakers**

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Moeller Electric Corp.	(713) 933-0999
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

**Insulating case**

**molded case circuit breakers**

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243

GE Electrical Distribution & Control	(860) 747-7234
Moeller Electric Corp.	(713) 933-0999
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

**Magnetic only  
molded case circuit breakers**

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
Moeller Electric Corp.	(713) 933-0999
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

**Thermal magnetic  
molded case circuit breakers**

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Milbank Mfg. Co.	(816) 483-5314
Moeller Electric Corp.	(713) 933-0999
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

**Molded case switches**

ABB LVPS	(888) 385-1221
Cutler-Hammer	(800) 356-1243
GE Electrical Distribution & Control	(860) 747-7234
GE Zenith Controls	(773) 299-6600
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
L-3 Comm/SPD Electrical Systems	(215) 677-4900
Moeller Electric Corp.	(713) 933-0999
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600

**Supplementary  
circuit protectors**

ABB LVPS	(888) 385-1221
Controlled Power Co.	(800) 521-4792
Cooper Bussmann	(888) 937-6246
Cutler-Hammer	(800) 356-1243
Ferraz Shawmut Inc.	(978) 462-6662

GE Electrical Distribution & Control	(860) 747-7234
Moeller Electric Corp.	(713) 933-0999
Phoenix Contact Inc.	(717) 944-1300
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Tyco Electronics/Raychem Wire and Cable	(919) 557-8863
Wago Corporation	(800) 346-7245

**Surge protective devices,  
low voltage**

ABB LVPS	(888) 385-1221
Advanced Protection Technologies	(800) 237-4567
American Power Conversion	(800) 800-4276
ASCO Power Technologies	(973) 966-2128
Bryant Electric, Inc.	(800) 323-2792
Control Concepts	(607) 724-2484
Controlled Power Co.	(800) 521-4792
Cutler-Hammer	(800) 356-1243
Delta Lighting Arrestors	(432) 267-1000
EFI Electronics	(800) 877-1174



EGS Electrical Group— Sola/Hevi-Duty	(847) 679-7800
ERICO Inc.	(440) 248-0100
Ferraz Shawmut Inc.	(978) 462-6662
G&W Electric Co.	(708) 388-5010
GE Electrical Distribution & Control	(860) 747-7234
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Hubbell Power Systems	(573) 682-5521
Leviton Mfg. Co.	(800) 323-8920
Littelfuse	(847) 824-1188
Pass & Seymour/Legrand	(800) 776-4035
Pepperl+Fuchs	(330) 425-3555
Phoenix Contact Inc.	(717) 944-1300
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
Technology Research	(727) 535-0572
Texas Instruments, Inc.	(508) 236-3800
Therm-O-Disc/Midwest Components	(231) 777-2602
Wago Corporation	(800) 346-7245
The Wiremold Company	(800) 621-0049

Woods Industries, Inc. (317) 844-7261

### Surge arresters

ABB LVPS (888) 385-1221  
Advanced Protection Technologies (800) 237-4567  
American Power Conversion (800) 800-4276  
Control Concepts (607) 724-2484  
Controlled Power Co. (800) 521-4792  
Cooper Power Systems (262) 524-3300  
Delta Lighting Arrestors (432) 267-1000  
EFI Electronics (800) 877-1174  
GE Electrical Distribution & Control (860) 747-7234  
Hubbell Power Systems (573) 682-5521  
Leviton Mfg. Co. (800) 323-8920  
Mitsubishi Electric Power Products, Inc. (724) 772-2555  
Phoenix Contact Inc. (717) 944-1300  
Reliance Controls Corp. (262) 634-6155  
Siemens Energy & Automation (770) 751-2000  
Square D (847) 397-2600  
Thomas & Betts/Elastimold (901) 252-5000  
Wago Corporation (800) 346-7245

### Arc fault circuit interrupters

ABB LVPS (888) 385-1221  
Cutler-Hammer (800) 356-1243  
Leviton Mfg. Co. (800) 323-8920  
Pass & Seymour/Legrand (800) 776-4035  
Siemens Energy & Automation (770) 751-2000  
Square D (847) 397-2600  
Thomas & Betts/Elastimold (901) 252-5000

## RESIDENTIAL CONTROLS

### Automatic household controls

Apcom, Inc. (615) 794-5574  
Cutler-Hammer (800) 356-1243  
Eaton Corp. (216) 523-5000  
Honeywell (800) 328-5111  
Honeywell Home and Building Control (612) 951-1000  
Leviton Mfg. Co. (800) 323-8920  
Lutron Electronics (610) 282-3800  
Novitas, Inc. (310) 218-5360  
Texas Instruments, Inc. (508) 236-3800  
Therm-O-Disc (419) 525-8500  
The Watt Stopper, Inc. (800) 879-8585  
White-Rodgers (314) 533-3600

### Heating/air-conditioning/refrigeration panels

Apcom, Inc. (615) 794-5574  
Honeywell (800) 328-5111  
White-Rodgers (314) 533-3600

### Inherent overload protective devices

First Technology (248) 353-6200  
Leviton Mfg. Co. (800) 323-8920  
Texas Instruments, Inc. (508) 236-3800  
Therm-O-Disc (419) 525-8500  
White-Rodgers (314) 533-3600

### Programming sequencing devices

Honeywell (800) 328-5111  
Honeywell Home and Building Control (612) 951-1000  
Johnson Controls (414) 274-4000  
Leviton Mfg. Co. (800) 323-8920  
Rockwell Automation—Reliance (216) 266-7000  
Texas Instruments, Inc. (508) 236-3800  
Therm-O-Disc (419) 525-8500  
White-Rodgers (314) 533-3600

### Relays

GE Infrastructure Security Inc. (856) 662-8477  
Honeywell (800) 328-5111  
Honeywell Home and Building Control (612) 951-1000  
Leviton Mfg. Co. (800) 323-8920  
Pass & Seymour/Legrand (800) 776-4035  
Texas Instruments, Inc. (508) 236-3800  
White-Rodgers (314) 533-3600

### Transformers

ABB Inc. (919) 856-2360  
Honeywell (800) 328-5111  
Honeywell Home and Building Control (612) 951-1000  
Leviton Mfg. Co. (800) 323-8920  
Pass & Seymour/Legrand (800) 776-4035  
White-Rodgers (314) 533-3600

## SOFTWARE

ABB Inc. (919) 856-2360  
AREVA T&D Inc. (484) 799-8100  
Color Kinetics (617) 423-9999  
Honeywell (800) 328-5111  
Infolytica Corp. (514) 849-8752  
Omron Electronics LLC (847) 843-7900  
Rauland-Borg Corp. (847) 679-0900  
Rockwell Automation—Reliance (216) 266-7000  
Siemens Building Technologies Inc. (847) 215-1000  
Tridonic (770) 717-0556  
Wago Corporation (800) 346-7245  
The Watt Stopper, Inc. (800) 879-8585

## STEAM TURBINES

### Land steam turbine units

Dresser-Rand (585) 593-1234  
Elliott Company (724) 600-8470  
Tuthill Energy Systems/Murray (319) 753-5431

### Mechanical drive steam turbines

Dresser-Rand (585) 593-1234  
Elliott Company (724) 600-8470  
Tuthill Energy Systems. (508) 756-8391  
Tuthill Energy Systems/Murray (319) 753-5431

## TRANSFORMERS



Olsun Electric Corporation (800) 336-5786

## Distribution transformers

ABB Capacitors	(418) 650-4488
ABB Inc.	(919) 856-2360
Acme Electric Corp.	(800) 334-5214
AREVA T&D Inc.	(484) 799-8100
Controlled Power Co.	(800) 521-4792
Cooper Power Systems	(262) 524-3300
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000



EGS Electrical Group— Sola/Hevi-Duty	(847) 679-7800
Hammond Power Solutions Inc.	(888) 798-8882
Kentucky Association of Electrical Coop., Inc.	(502) 451-2430
MGM Transformer Company	(323) 726-0888
Niagara Transformer Corporation	(716) 896-6500
Pauwels Transformers, Inc.	(636) 239-9349
Shape LLC	(630) 620-8394
Siemens Energy & Automation	(770) 751-2000
Square D	(847) 397-2600
VanTran Industries	(254) 772-9740
Virginia Transformer	(540) 345-9892

## Dry-type transformers

ABB Inc.	(919) 856-2360
Acme Electric Corp.	(800) 334-5214
AREVA T&D Inc.	(484) 799-8100
Controlled Power Co.	(800) 521-4792
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
EGS Electrical Group— Sola/Hevi-Duty	(847) 679-7800
Hammond Power Solutions Inc.	(888) 798-8882

MGM Transformer Company	(323) 726-0888
Niagara Transformer Corporation	(716) 896-6500
Olsun Electric Corporation	(800) 336-5786
Shape LLC	(630) 620-8394
Siemens Energy & Automation	(770) 751-2000
Solidstate Controls Inc.	(614) 846-7500
Square D	(847) 397-2600
Virginia Transformer	(540) 345-9892

## Large power transformers

ABB Inc.	(919) 856-2360
AREVA T&D Inc.	(484) 799-8100
Controlled Power Co.	(800) 521-4792
Cutler-Hammer	(800) 356-1243
Hammond Power Solutions Inc.	(888) 798-8882
Mitsubishi Electric Power Products, Inc.	(724) 772-2555
Niagara Transformer Corporation	(716) 896-6500
Olsun Electric Corporation	(800) 336-5786
Pauwels Transformers, Inc.	(636) 239-9349
Smit Transformers	(843) 871-3434
Square D	(847) 397-2600
Toshiba International Co.	(713) 466-0277
Virginia Transformer	(540) 345-9892

## Network transformers

ABB Inc.	(919) 856-2360
Hammond Power Solutions Inc.	(888) 798-8882
Niagara Transformer Corporation	(716) 896-6500
Square D	(847) 397-2600

## Reactor &amp; special-purpose transformers

ABB Inc.	(919) 856-2360
Acme Electric Corp.	(800) 334-5214
AREVA T&D Inc.	(484) 799-8100



EGS Electrical Group— Sola/Hevi-Duty	(847) 679-7800
Hammond Power Solutions Inc.	(888) 798-8882
Mitsubishi Electric Power Products, Inc.	(724) 772-2555

Niagara Transformer Corporation	(716) 896-6500
Olsun Electric Corporation	(800) 336-5786
Radionic Industries	(773) 804-0100
Robertson Transformer	(800) 323-5633
Shape LLC	(630) 620-8394
Smit Transformers	(843) 871-3434
Solidstate Controls Inc.	(614) 846-7500
Square D	(847) 397-2600
Virginia Transformer	(540) 345-9892

## Small power transformers

ABB Inc.	(919) 856-2360
Acme Electric Corp.	(800) 334-5214
Controlled Power Co.	(800) 521-4792
Cooper Power Systems	(262) 524-3300
Cutler-Hammer	(800) 356-1243
EGS Electrical Group	(847) 268-6000
EGS Electrical Group— Sola/Hevi-Duty	(847) 679-7800
Ericson Mfg.	(440) 951-8000
GE Infrastructure Security Inc.	(856) 662-8477
Hammond Power Solutions Inc.	(888) 798-8882
MGE UPS Systems	(714) 557-1636
MGM Transformer Company	(323) 726-0888
Moeller Electric Corp.	(713) 933-0999
Niagara Transformer Corporation	(716) 896-6500
Pauwels Transformers, Inc.	(636) 239-9349
Radionic Industries	(773) 804-0100
Robertson Transformer	(800) 323-5633
Shape LLC	(630) 620-8394
Square D	(847) 397-2600
Virginia Transformer	(540) 345-9892
White-Rodgers	(314) 533-3600

## Specialty transformers

ABB Inc.	(919) 856-2360
Acme Electric Corp.	(800) 334-5214
Controlled Power Co.	(800) 521-4792
EGS Electrical Group	(847) 268-6000
EGS Electrical Group— Sola/Hevi-Duty	(847) 679-7800
Ericson Mfg.	(440) 951-8000
GE Infrastructure Security Inc.	(856) 662-8477
Hammond Mfg Co. Inc.	(716) 651-0086
Hammond Power Solutions Inc.	(888) 798-8882
MGM Transformer Company	(323) 726-0888
Niagara Transformer Corporation	(716) 896-6500

Olsun Electric Corporation (800) 336-5786  
 Pauwels Transformers, Inc. (636) 239-9349  
 Robertson Transformer (800) 323-5633  
 Shape LLC (630) 620-8394  
 Square D (847) 397-2600  
 VanTran Industries (254) 772-9740  
 Virginia Transformer (540) 345-9892

**Transmission & distribution voltage regulators**

ABB Inc. (919) 856-2360  
 Acme Electric Corp. (800) 334-5214  
 Controlled Power Co. (800) 521-4792  
 Cooper Power Systems (262) 524-3300  
 Cutler-Hammer (800) 356-1243  
 EGS Electrical Group (847) 268-6000



EGS Electrical Group—  
 Sola/Hevi-Duty (847) 679-7800  
 Square D (847) 397-2600  
 Virginia Transformer (540) 345-9892

**TRANSPORTATION MANAGEMENT SYSTEMS**

**Intersection (and other device) controller hardware and software**

Daktronics (605) 697-4500  
 Eberle Design (480) 968-6407  
 Econolite Control Products, Inc. (714) 630-3700  
 McCain Traffic Supply (619) 727-8100  
 Peek Traffic Corporation (941) 366-8770  
 Safetran Traffic Systems (719) 599-5600  
 Siemens ITS (512) 837-8320  
 Skyline Products, Inc. (719) 392-9046  
 Traffic Sensor Corp. (909) 388-1300  
 U.S. Traffic Corp. (562) 923-9600

**NTCIP-conforming control software**

3M Dynamic Message Systems (509) 928-2296  
 ADDCO, Inc. (651) 488-8600  
 American Signal Company (770) 448-6650  
 Daktronics (605) 697-4500  
 Econolite Control Products, Inc. (714) 630-3700  
 Fiberoptic Display Systems (401) 232-3370  
 PB Farradyne (301) 998-6625  
 Peek Traffic Corporation (941) 366-8770  
 Siemens ITS (512) 837-8320  
 Skyline Products, Inc. (719) 392-9046  
 U.S. Traffic Corp. (562) 923-9600

**Transportation vehicle sensor systems & components (loops, video, and other technologies)**

Eberle Design (480) 968-6407  
 Econolite Control Products, Inc. (714) 630-3700  
 Image Sensing Systems, Inc. (651) 603-7700  
 Peek Traffic Corporation (941) 366-8770  
 Reno A&E (775) 826-2020  
 Rockwell Automation—  
 Allen-Bradley (414) 382-2000  
 Safetran Traffic Systems (719) 599-5600  
 Siemens ITS (512) 837-8320  
 U.S. Traffic Corp. (562) 923-9600

**Roadside control cabinets, enclosures, components & subassemblies**

Adalet (216) 267-9000  
 American Signal Company (770) 448-6650  
 Cooper B-Line (618) 654-2184  
 Eberle Design (480) 968-6407  
 Econolite Control Products, Inc. (714) 630-3700  
 Hoffman Enclosures (763) 421-2240  
 McCain Traffic Supply (619) 727-8100  
 Milbank Mfg. Co. (816) 483-5314  
 Peek Traffic Corporation (941) 366-8770  
 Reno A&E (775) 826-2020  
 Rittal Corporation (937) 399-0500  
 Robroy Industries (412) 828-2100  
 Safetran Traffic Systems (719) 599-5600  
 Siemens ITS (512) 837-8320  
 Skyline Products, Inc. (719) 392-9046  
 Traffic Sensor Corp. (909) 388-1300  
 U.S. Traffic Corp. (562) 923-9600  
 Wiegmann (618) 539-3193

**Dynamic message sign (all types of VMS and CMS) hardware & software**

3M Dynamic Message Systems (509) 928-2296  
 ADDCO, Inc. (651) 488-8600  
 American Signal Company (770) 448-6650  
 Daktronics (605) 697-4500  
 Fiberoptic Display Systems (401) 232-3370  
 McCain Traffic Supply (619) 727-8100  
 Siemens ITS (512) 837-8320  
 Skyline Products, Inc. (719) 392-9046  
 U.S. Traffic Corp. (562) 923-9600

**Transportation control center management software & software utilities**

ADDCO, Inc. (651) 488-8600  
 AREVA T&D Inc. (484) 799-8100  
 Cutler-Hammer (800) 356-1243  
 Econolite Control Products, Inc. (714) 630-3700  
 Fiberoptic Display Systems (401) 232-3370  
 Image Sensing Systems, Inc. (651) 603-7700  
 PB Farradyne (301) 998-6625  
 Siemens ITS (512) 837-8320  
 Skyline Products, Inc. (719) 392-9046  
 U.S. Traffic Corp. (562) 923-9600

**UNINTERRUPTIBLE POWER SYSTEMS**



EGS Electrical Group—  
 Sola/Hevi-Duty (847) 679-7800

**Single-phase UPS**

**250VA to 500VA single-phase UPS**

Controlled Power Co. (800) 521-4792  
 Cooper Lighting (770) 486-4800  
 Danaher Power Solutions (804) 236-3300  
 Dip-Proofing Technologies (360) 714-9552  
 EGS Electrical Group (847) 268-6000  
 EGS Electrical Group—  
 Sola/Hevi-Duty (847) 679-7800  
 Leviton Mfg. Co. (800) 323-8920  
 MGE UPS Systems (714) 557-1636



Sure-Lites (847) 956-8400  
 Toshiba International Co. (713) 466-0277  
 Transtector Systems (800) 882-9110

Sure-Lites (847) 956-8400  
 Toshiba International Co. (713) 466-0277  
 United Copper Industries (940) 243-7676

**501VA to 1000VA single-phase UPS**

Ametek Solidstate Controls (614) 846-7500  
 Controlled Power Co. (800) 521-4792  
 Cooper Lighting (770) 486-4800  
 Danaher Power Solutions (804) 236-3300  
 Dip-Proofing Technologies (360) 714-9552  
 EGS Electrical Group (847) 268-6000  
 EGS Electrical Group—  
 Sola/Hevi-Duty (847) 679-7800  
 Georator Corporation (800) 523-9938  
 Leviton Mfg. Co. (800) 323-8920  
 MGE UPS Systems (714) 557-1636  
 Mitsubishi Electric Automation  
 (847) 478-2100  
 Sure-Lites (847) 956-8400  
 Toshiba International Co. (713) 466-0277  
 Transtector Systems (800) 882-9110

**1000VA to 6kVA single-phase UPS**

Ametek Solidstate Controls (614) 846-7500  
 Controlled Power Co. (800) 521-4792  
 Cooper Lighting (770) 486-4800  
 Cooper Power Systems (262) 524-3300  
 Danaher Power Solutions (804) 236-3300  
 Dip-Proofing Technologies (360) 714-9552  
 EGS Electrical Group (847) 268-6000  
 EGS Electrical Group—  
 Sola/Hevi-Duty (847) 679-7800  
 Georator Corporation (800) 523-9938  
 Leviton Mfg. Co. (800) 323-8920  
 MGE UPS Systems (714) 557-1636  
 Mitsubishi Electric Automation  
 (847) 478-2100  
 Solidstate Controls Inc. (614) 846-7500  
 Sure-Lites (847) 956-8400  
 Toshiba International Co. (713) 466-0277  
 Transtector Systems (800) 882-9110

**Above 6kVA single-phase UPS**

Ametek Solidstate Controls (614) 846-7500  
 Controlled Power Co. (800) 521-4792  
 Cooper Lighting (770) 486-4800  
 Danaher Power Solutions (804) 236-3300  
 Dip-Proofing Technologies (360) 714-9552  
 EGS Electrical Group (847) 268-6000  
 EGS Electrical Group—  
 Sola/Hevi-Duty (847) 679-7800  
 Georator Corporation (800) 523-9938  
 MGE UPS Systems (714) 557-1636  
 Solidstate Controls Inc. (614) 846-7500

**Three-phase UPS**

**30kVA and below three-phase UPS**

Ametek Solidstate Controls (614) 846-7500  
 Controlled Power Co. (800) 521-4792  
 Dip-Proofing Technologies (360) 714-9552  
 Georator Corporation (800) 523-9938  
 MGE UPS Systems (714) 557-1636  
 Mitsubishi Electric Automation  
 (847) 478-2100  
 Solidstate Controls Inc. (614) 846-7500  
 Toshiba International Co. (713) 466-0277

**Above 30kVA three-phase UPS**

Ametek Solidstate Controls (614) 846-7500  
 Controlled Power Co. (800) 521-4792  
 Georator Corporation (800) 523-9938  
 MGE UPS Systems (714) 557-1636  
 Russelectric Inc. (781) 749-6000  
 Solidstate Controls Inc. (614) 846-7500  
 Toshiba International Co. (713) 466-0277

**WIRE & CABLE**

**Building wire & cable**



The Okonite Company (201) 825-0300

**Armored cables**

AETNA Insulated Wire (800) 423-6505  
 AFC Cable Systems (508) 998-1131  
 Alcan Cable (770) 394-9886  
 Alfex Corporation (310) 886-8300  
 Cable USA, Inc. (239) 643-6400  
 Danaher Power Solutions (804) 236-3300  
 Harbour Industries (802) 985-3311  
 Nexans (717) 354-6200  
 The Okonite Company (201) 825-0300



Radix Wire Co. (216) 731-9191  
 Rockbestos—Surprenant Cable  
 Corp. (978) 365-6331  
 Service Wire Company (800) 624-3572



Southwire (770) 832-4242  
 Viakable, S.A. de C.V.

**Metal clad cables**

AETNA Insulated Wire (800) 423-6505  
 AFC Cable Systems (508) 998-1131  
 Alcan Cable (770) 394-9886  
 Alfex Corporation (310) 886-8300  
 Cable USA, Inc. (239) 643-6400  
 Coleman Cable Inc. (847) 672-2300  
 Danaher Power Solutions (804) 236-3300



The Okonite Company (201) 825-0300  
 Rockbestos—Surprenant Cable Corp.  
 (978) 365-6331  
 Service Wire Company (800) 624-3572



Southwire (770) 832-4242  
 United Copper Industries (940) 243-7676

**Nonmetallic sheathed cables**

American Insulated Wire (401) 726-0700  
 Coleman Cable Inc. (847) 672-2300  
 Colonial Wire & Cable (631) 234-8500  
 Danaher Power Solutions (804) 236-3300  
 Encore Wire Corp. (800) 962-9473  
 Essex Electrical Products (800) 348-4662

Leviton Mfg. Co. (800) 323-8920



The Okonite Company (201) 825-0300  
 Rockbestos—Surprenant Cable Corp. (978) 365-6331



Southwire (770) 832-4242  
 United Copper Industries (940) 243-7676  
 Viakable, S.A. de C.V.

Rubber insulated wires & cables

AETNA Insulated Wire (800) 423-6505  
 Alcan Cable (770) 394-9886  
 AmerCable Incorporated (870) 862-4919  
 American Insulated Wire (401) 726-0700  
 Coleman Cable Inc. (847) 672-2300  
 Danaher Power Solutions (804) 236-3300  
 Essex Electrical Products (800) 348-4662  
 General Cable (859) 572-8000  
 Harbour Industries (802) 985-3311  
 Leviton Mfg. Co. (800) 323-8920



The Okonite Company (201) 825-0300  
 Radix Wire Co. (216) 731-9191  
 Rockbestos—Surprenant Cable Corp. (978) 365-6331  
 Service Wire Company (800) 624-3572



Southwire (770) 832-4242  
 United Copper Industries (940) 243-7676  
 Viakable, S.A. de C.V.  
 Woodhead L.P. (847) 272-7990

Service entrance cables

AETNA Insulated Wire (800) 423-6505  
 Alcan Cable (770) 394-9886  
 American Insulated Wire (401) 726-0700  
 Encore Wire Corp. (800) 962-9473  
 Essex Electrical Products (800) 348-4662  
 General Cable (859) 572-8000  
 Leviton Mfg. Co. (800) 323-8920  
 Service Wire Company (800) 624-3572



Southwire (770) 832-4242  
 United Copper Industries (940) 243-7676

Thermoplastic insulated wire & cables

AETNA Insulated Wire (800) 423-6505  
 AFC Cable Systems (508) 998-1131  
 American Insulated Wire (401) 726-0700  
 Cable USA, Inc. (239) 643-6400  
 Coleman Cable Inc. (847) 672-2300  
 Colonial Wire & Cable (631) 234-8500  
 Cubit Wire & Cable Co (413) 539-9892  
 Encore Wire Corp. (800) 962-9473  
 Essex Electrical Products (800) 348-4662  
 Harbour Industries (802) 985-3311  
 Leviton Mfg. Co. (800) 323-8920  
 The Okonite Company (201) 825-0300  
 Service Wire Company (800) 624-3572



Southwire (770) 832-4242  
 Tyco Electronics/AMP (800) 522-6752  
 United Copper Industries (940) 243-7676  
 Viakable, S.A. de C.V.  
 Woodhead L.P. (847) 272-7990

Thermoplastic insulated underground feeder and branch circuit

AETNA Insulated Wire (800) 423-6505  
 AFC Cable Systems (508) 998-1131  
 American Insulated Wire (401) 726-0700  
 Coleman Cable Inc. (847) 672-2300  
 Colonial Wire & Cable (631) 234-8500  
 Cubit Wire & Cable Co (413) 539-9892  
 Encore Wire Corp. (800) 962-9473  
 Essex Electrical Products (800) 348-4662  
 Leviton Mfg. Co. (800) 323-8920  
 Service Wire Company (800) 624-3572



Southwire (770) 832-4242  
 United Copper Industries (940) 243-7676

Flexible cords

Bulk cord

American Insulated Wire (401) 726-0700  
 Coleman Cable Inc. (847) 672-2300  
 Cubit Wire & Cable Co (413) 539-9892  
 Electri-Cord Mfg. (814) 367-2265  
 Ericson Mfg. (440) 951-8000  
 Essex Electrical Products (800) 348-4662  
 General Cable (859) 572-8000  
 Interpower Corporation (800) 662-2290  
 Leviton Mfg. Co. (800) 323-8920  
 Rockbestos—Surprenant Cable Corp. (978) 365-6331



Southwire (770) 832-4242  
 Woodhead L.P. (847) 272-7990  
 Woods Industries, Inc. (317) 844-7261

**Cord sets**

American Insulated Wire	(401) 726-0700
Coleman Cable Inc.	(847) 672-2300
Cooper Wiring Devices	(718) 361-4914
Electri-Cord Mfg.	(814) 367-2265
Ericson Mfg.	(440) 951-8000
Essex Electrical Products	(800) 348-4662
General Cable	(859) 572-8000
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Interpower Corporation	(800) 662-2290
Leviton Mfg. Co.	(800) 323-8920
MIPCO—T&B	(800) 888-0211 x8680
Pepperl+Fuchs	(330) 425-3555
Russellstoll—T&B	(800) 888-0211 x8680
Technology Research	(727) 535-0572
Volex Power Cord Products	(800) 246-2673
Woodhead L.P.	(847) 272-7990
Woods Industries, Inc.	(317) 844-7261

**Extension cords**

American Insulated Wire	(401) 726-0700
Coleman Cable Inc.	(847) 672-2300
Cooper Wiring Devices	(718) 361-4914
Ericson Mfg.	(440) 951-8000
General Cable	(859) 572-8000
Interpower Corporation	(800) 662-2290
Leviton Mfg. Co.	(800) 323-8920
MIPCO—T&B	(800) 888-0211 x8680
Russellstoll—T&B	(800) 888-0211 x8680
Technology Research	(727) 535-0572
Woodhead L.P.	(847) 272-7990
Woods Industries, Inc.	(317) 844-7261

**Plug blades**

ETCO Incorporated	(401) 467-2400
Heyco Products Inc.	(732) 286-4336

**High performance wire & cable****Appliance wiring**

American Insulated Wire	(401) 726-0700
Belden CDT Electronics Division	(765) 983-5200
Berk-Tek, a Nexans Co.	(236) 431-1252
Cable USA, Inc.	(239) 643-6400
Coleman Cable Inc.	(847) 672-2300
Cubit Wire & Cable Co	(413) 539-9892
Draka USA	(508) 541-7100
Essex Electrical Products	(800) 348-4662
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Judd Wire	(413) 863-4357

Leviton Mfg. Co.	(800) 323-8920
Montrose/CDT	(800) 346-6626
New England Electric Wire Corp.	(603) 838-6625
Nexans	(717) 354-6200
Phelps Dodge High Performance Conductors	(864) 472-9022
Quirk Wire	(508) 867-3155



Radix Wire Co.	(216) 731-9191
Rockbestos—Surprenant Cable Corp.	(978) 365-6331

**Southwire®**

Southwire	(770) 832-4242
Tyco Electronics/AMP	(800) 522-6752
West Penn/CDT	(412) 222-7060

**Airframe wire & cable**

Cable USA, Inc.	(239) 643-6400
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Judd Wire	(413) 863-4357
Leviton Mfg. Co.	(800) 323-8920
Micro-Tek	(856) 829-3855
Montrose/CDT	(800) 346-6626
Phelps Dodge High Performance Conductors	(864) 472-9022
Quirk Wire	(508) 867-3155
Rockbestos—Surprenant Cable Corp.	(978) 365-6331

Tyco Electronics/Raychem Wire and Cable	(919) 557-8863
West Penn/CDT	(412) 222-7060

**Automotive wire & cable**

Cable USA, Inc.	(239) 643-6400
Cubit Wire & Cable Co	(413) 539-9892
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Judd Wire	(413) 863-4357
Micro-Tek	(856) 829-3855
Montrose/CDT	(800) 346-6626
New England Electric Wire Corp.	(603) 838-6625

Nexans	(717) 354-6200
Phelps Dodge High Performance Conductors	(864) 472-9022
Quirk Wire	(508) 867-3155
Rockbestos—Surprenant Cable Corp.	(978) 365-6331
Tyco Electronics/Raychem Wire and Cable	(919) 557-8863
West Penn/CDT	(412) 222-7060

**CATV drop and trunk lines**

Belden CDT Electronics Division	(765) 983-5200
Coleman Cable Inc.	(847) 672-2300
Draka USA	(508) 541-7100
Harbour Industries	(802) 985-3311
Leviton Mfg. Co.	(800) 323-8920
Phelps Dodge High Performance Conductors	(864) 472-9022
West Penn/CDT	(412) 222-7060

**Coaxial cable**

American Insulated Wire	(401) 726-0700
Belden CDT Electronics Division	(765) 983-5200
Berk-Tek, a Nexans Co.	(236) 431-1252
Cable USA, Inc.	(239) 643-6400
Coleman Cable Inc.	(847) 672-2300
Draka USA	(508) 541-7100
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Judd Wire	(413) 863-4357
Leviton Mfg. Co.	(800) 323-8920
Montrose/CDT	(800) 346-6626
New England Electric Wire Corp.	(603) 838-6625
Nexans	(717) 354-6200
Phelps Dodge High Performance Conductors	(864) 472-9022
Quirk Wire	(508) 867-3155
Rockbestos—Surprenant Cable Corp.	(978) 365-6331
Tyco Electronics/Raychem Wire and Cable	(919) 557-8863
West Penn/CDT	(412) 222-7060
Woods Industries, Inc.	(317) 844-7261

**Flat cable**

Belden CDT Electronics Division	(765) 983-5200
Coleman Cable Inc.	(847) 672-2300
Cubit Wire & Cable Co	(413) 539-9892
General Cable	(859) 572-8000
Judd Wire	(413) 863-4357
Montrose/CDT	(800) 346-6626
New England Electric Wire Corp.	(603) 838-6625
Pepperl+Fuchs	(330) 425-3555
Phelps Dodge High Performance Conductors	(864) 472-9022
Rockbestos—Surprenant Cable Corp.	(978) 365-6331
Tyco Electronics/Raychem Wire and Cable	(919) 557-8863

**High performance conductors**

Fisk Alloy	(973) 427-7550
Leoni Wire	(413) 593-6618
Micro-Tek	(856) 829-3855
MWS Wire Industries	(818) 991-8553
Nexans	(717) 354-6200
Phelps Dodge High Performance Conductors	(864) 472-9022

**Hookup wire**

American Insulated Wire	(401) 726-0700
Belden CDT Electronics Division	(765) 983-5200
Cable USA, Inc.	(239) 643-6400
Coleman Cable Inc.	(847) 672-2300
Cubit Wire & Cable Co	(413) 539-9892
Draka USA	(508) 541-7100
Essex Electrical Products	(800) 348-4662
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Judd Wire	(413) 863-4357
Leviton Mfg. Co.	(800) 323-8920
Micro-Tek	(856) 829-3855
Montrose/CDT	(800) 346-6626
New England Electric Wire Corp.	(603) 838-6625
The Okonite Company	(201) 825-0300
Phelps Dodge High Performance Conductors	(864) 472-9022
Quirk Wire	(508) 867-3155



Radix Wire Co.	(216) 731-9191
Rockbestos—Surprenant Cable Corp.	(978) 365-6331
West Penn/CDT	(412) 222-7060

**Microphone cable**

American Insulated Wire	(401) 726-0700
Belden CDT Electronics Division	(765) 983-5200
Coleman Cable Inc.	(847) 672-2300
Cubit Wire & Cable Co	(413) 539-9892
Draka USA	(508) 541-7100
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Leviton Mfg. Co.	(800) 323-8920
Micro-Tek	(856) 829-3855
Montrose/CDT	(800) 346-6626
New England Electric Wire Corp.	(603) 838-6625
Phelps Dodge High Performance Conductors	(864) 472-9022
Rockbestos—Surprenant Cable Corp.	(978) 365-6331
West Penn/CDT	(412) 222-7060

**Motor lead wire**

AmerCable Incorporated	(870) 862-4919
American Insulated Wire	(401) 726-0700
Belden CDT Electronics Division	(765) 983-5200
Cable USA, Inc.	(239) 643-6400
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Judd Wire	(413) 863-4357
Leviton Mfg. Co.	(800) 323-8920
Micro-Tek	(856) 829-3855
Nexans	(717) 354-6200
Phelps Dodge High Performance Conductors	(864) 472-9022
Quirk Wire	(508) 867-3155



Radix Wire Co.	(216) 731-9191
Rockbestos—Surprenant Cable Corp.	(978) 365-6331

**Multiconductor electronic cable**

AFC Cable Systems	(508) 998-1131
Alflex Corporation	(310) 886-8300
American Insulated Wire	(401) 726-0700
Belden CDT Electronics Division	(765) 983-5200
Berk-Tek, a Nexans Co.	(236) 431-1252
Cable USA, Inc.	(239) 643-6400
Coleman Cable Inc.	(847) 672-2300
Cubit Wire & Cable Co	(413) 539-9892
Draka USA	(508) 541-7100
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Judd Wire	(413) 863-4357
Leviton Mfg. Co.	(800) 323-8920
Micro-Tek	(856) 829-3855
The Monroe Cable Company	(845) 692-2800
Montrose/CDT	(800) 346-6626
New England Electric Wire Corp.	(603) 838-6625
Nexans	(717) 354-6200
The Okonite Company	(201) 825-0300
Phelps Dodge High Performance Conductors	(864) 472-9022
Quirk Wire	(508) 867-3155

Rockbestos—Surprenant Cable Corp.	(978) 365-6331
Tyco Electronics/AMP	(800) 522-6752
Tyco Electronics/Raychem	
Wire and Cable	(919) 557-8863
West Penn/CDT	(412) 222-7060

**Power-limited circuit cable**

AFC Cable Systems	(508) 998-1131
Alflex Corporation	(310) 886-8300
American Insulated Wire	(401) 726-0700
Belden CDT Electronics Division	(765) 983-5200
Cable USA, Inc.	(239) 643-6400
Coleman Cable Inc.	(847) 672-2300
Cubit Wire & Cable Co	(413) 539-9892
Draka USA	(508) 541-7100
Essex Electrical Products	(800) 348-4662
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Judd Wire	(413) 863-4357
Leviton Mfg. Co.	(800) 323-8920
The Monroe Cable Company	(845) 692-2800
Montrose/CDT	(800) 346-6626

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The Okonite Company	(201) 825-0300
Phelps Dodge High Performance	
Conductors	(864) 472-9022
Quirk Wire	(508) 867-3155
Rockbestos—Surprenant Cable Corp.	(978) 365-6331
Service Wire Company	(800) 624-3572
Tyco Electronics/AMP	(800) 522-6752
West Penn/CDT	(412) 222-7060
Woods Industries, Inc.	(317) 844-7261

**Premise wiring**

AFC Cable Systems	(508) 998-1131
Belden CDT Electronics Division	(765) 983-5200
Berk-Tek, a Nexans Co.	(236) 431-1252
Coleman Cable Inc.	(847) 672-2300
Draka USA	(508) 541-7100
Essex Electrical Products	(800) 348-4662
General Cable	(859) 572-8000

Judd Wire	(413) 863-4357
Leviton Mfg. Co.	(800) 323-8920
Nexans	(717) 354-6200
Phelps Dodge High Performance	
Conductors	(864) 472-9022

**Thermocouple wire**

Belden CDT Electronics Division	(765) 983-5200
Cable USA, Inc.	(239) 643-6400
Essex Electrical Products	(800) 348-4662
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Leviton Mfg. Co.	(800) 323-8920
Micro-Tek	(856) 829-3855

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The Okonite Company	(201) 825-0300
Phelps Dodge High Performance	
Conductors	(864) 472-9022
Quirk Wire	(508) 867-3155
Radix Wire Co.	(216) 731-9191
Rockbestos—Surprenant Cable Corp.	(978) 365-6331

**Thermoset insulated wire & cable**

AmerCable Incorporated	(870) 862-4919
American Insulated Wire	(401) 726-0700
Belden CDT Electronics Division	(765) 983-5200
Cable USA, Inc.	(239) 643-6400
Coleman Cable Inc.	(847) 672-2300
Draka USA	(508) 541-7100
Encore Wire Corp.	(800) 962-9473
Essex Electrical Products	(800) 348-4662
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Leviton Mfg. Co.	(800) 323-8920
The Monroe Cable Company	(845) 692-2800

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The Okonite Company	(201) 825-0300
Phelps Dodge High Performance	
Conductors	(864) 472-9022
Quirk Wire	(508) 867-3155

**Radix**

Radix Wire Co.	(216) 731-9191
Rockbestos—Surprenant Cable Corp.	(978) 365-6331
Service Wire Company	(800) 624-3572
Woods Industries, Inc.	(317) 844-7261

**Transit wire & cable**

AmerCable Incorporated	(870) 862-4919
American Insulated Wire	(401) 726-0700
Berk-Tek, a Nexans Co.	(236) 431-1252
Cable USA, Inc.	(239) 643-6400
Draka USA	(508) 541-7100
ERICO Inc.	(440) 248-0100
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Judd Wire	(413) 863-4357
Leviton Mfg. Co.	(800) 323-8920
Micro-Tek	(856) 829-3855
The Monroe Cable Company	(845) 692-2800
Montrose/CDT	(800) 346-6626
Nexans	(717) 354-6200

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**CABLES**  
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The Okonite Company	(201) 825-0300
Phelps Dodge High Performance	
Conductors	(864) 472-9022
Rockbestos—Surprenant Cable Corp.	(978) 365-6331
Service Wire Company	(800) 624-3572

 **Southwire®**

Southwire	(770) 832-4242
Tyco Electronics/Raychem Wire and Cable	(919) 557-8863

Shipboard wire & cable

AmerCable Incorporated	(870) 862-4919
American Insulated Wire	(401) 726-0700
Draka USA	(508) 541-7100
General Cable	(859) 572-8000
Leviton Mfg. Co.	(800) 323-8920
The Monroe Cable Company	(845) 692-2800
Nexans	(717) 354-6200
The Okonite Company	(201) 825-0300
Phelps Dodge High Performance Conductors	(864) 472-9022
Rockbestos—Surprenant Cable Corp.	(978) 365-6331
Tyco Electronics/Raychem Wire and Cable	(919) 557-8863

Magnet wire

Bridgeport Insulated Wire	(203) 333-3191
Elektrisola	(603) 796-2114
Essex Electrical Products	(800) 348-4662
Essex Group	(260) 461-4633
MWS Wire Industries	(818) 991-8553
Nexans Magnet Wire	(905) 944-4300
Phelps Dodge High Performance Conductors	(864) 472-9022
Phelps Dodge Magnet Wire Company	(305) 648-8000
Rea Magnet Wire	(800) 732-9473
Sumitomo Electric Wintec America, Inc.	(270) 432-2233

Power & control cable

0 to 600 volt power & control cable

AETNA Insulated Wire	(800) 423-6505
AFC Cable Systems	(508) 998-1131
Alcan Cable	(770) 394-9886
AmerCable Incorporated	(870) 862-4919
American Insulated Wire	(401) 726-0700
Belden CDT Electronics Division	(765) 983-5200
Cable USA, Inc.	(239) 643-6400
Coleman Cable Inc.	(847) 672-2300
Draka USA	(508) 541-7100
ERICO Inc.	(440) 248-0100
Essex Electrical Products	(800) 348-4662
GE Industrial Systems	(260) 439-3447
General Cable	(859) 572-8000
Genlyte Thomas Group LLC	(502) 893-4690
Harbour Industries	(802) 985-3311
The Kerite Company	(203) 888-2591

Leviton Mfg. Co.	(800) 323-8920
Micro-Tek	(856) 829-3855
New England Electric Wire Corp.	(603) 838-6625
Nexans	(717) 354-6200
The Okonite Company	(201) 825-0300



Radix Wire Co.	(216) 731-9191
Rockbestos—Surprenant Cable Corp.	(978) 365-6331
Service Wire Company	(800) 624-3572



**Southwire®**

Southwire	(770) 832-4242
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601 to 15 kV power & control cable

AETNA Insulated Wire	(800) 423-6505
AmerCable Incorporated	(870) 862-4919
American Insulated Wire	(401) 726-0700
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Hendrix Wire and Cable	(603) 673-2040
The Kerite Company	(203) 888-2591
Leviton Mfg. Co.	(800) 323-8920
Nexans	(717) 354-6200



The Okonite Company	(201) 825-0300
Radix Wire Co.	(216) 731-9191
Rockbestos—Surprenant Cable Corp.	(978) 365-6331
Service Wire Company	(800) 624-3572



**Southwire®**

Southwire	(770) 832-4242
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15.1 kV & over power & control cable

AETNA Insulated Wire	(800) 423-6505
AmerCable Incorporated	(870) 862-4919
American Insulated Wire	(401) 726-0700
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Hendrix Wire and Cable	(603) 673-2040
The Kerite Company	(203) 888-2591
Leviton Mfg. Co.	(800) 323-8920
Nexans	(717) 354-6200



The Okonite Company	(201) 825-0300
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Radix Wire Co.	(216) 731-9191
Service Wire Company	(800) 624-3572
Southwire	(770) 832-4242

Control cable

AFC Cable Systems	(508) 998-1131
AmerCable Incorporated	(870) 862-4919
American Insulated Wire	(401) 726-0700
Belden CDT Electronics Division	(765) 983-5200
Cable USA, Inc.	(239) 643-6400
Coleman Cable Inc.	(847) 672-2300
Draka USA	(508) 541-7100
General Cable	(859) 572-8000
Harbour Industries	(802) 985-3311
Leviton Mfg. Co.	(800) 323-8920
Micro-Tek	(856) 829-3855
Nexans	(717) 354-6200



The Okonite Company	(201) 825-0300
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Radix Wire Co. (216) 731-9191  
 Rockbestos—Surprenant Cable Corp. (978) 365-6331  
 Service Wire Company (800) 624-3572



Southwire (770) 832-4242

**Welding cable**

American Insulated Wire (401) 726-0700  
 Coleman Cable Inc. (847) 672-2300  
 Essex Electrical Products (800) 348-4662  
 General Cable (859) 572-8000  
 Leviton Mfg. Co. (800) 323-8920  
 The Okonite Company (201) 825-0300

**Portable power cable**

AmerCable Incorporated (870) 862-4919  
 American Insulated Wire (401) 726-0700  
 Belden CDT Electronics Division (765) 983-5200  
 Cable USA, Inc. (239) 643-6400  
 Coleman Cable Inc. (847) 672-2300  
 Day-Brite Lighting (800) 234-1890  
 Ericson Mfg. (440) 951-8000  
 Essex Electrical Products (800) 348-4662  
 General Cable (859) 572-8000  
 Genlyte Thomas Group LLC (502) 893-4690  
 Leviton Mfg. Co. (800) 323-8920  
 The Okonite Company (201) 825-0300  
 Rockbestos—Surprenant Cable Corp. (978) 365-6331

**Paper power cable**

The Okonite Company (201) 825-0300

**Uninsulated electrical conductors**

Alcan Cable (770) 394-9886  
 American Insulated Wire (401) 726-0700  
 Coleman Cable Inc. (847) 672-2300  
 Essex Electrical Products (800) 348-4662  
 General Cable (859) 572-8000  
 Leviton Mfg. Co. (800) 323-8920  
 Micro-Tek (856) 829-3855  
 MWS Wire Industries (818) 991-8553  
 New England Electric Wire Corp. (603) 838-6625  
 Phelps Dodge Magnet Wire Company (305) 648-8000  
 Service Wire Company (800) 624-3572



Southwire (770) 832-4242  
 Tyco Electronics/Raychem Wire and Cable (919) 557-8863

**WIRING DEVICES**

**Attachment plug caps & flanged inlets**

Bryant Electric, Inc. (800) 323-2792  
 Cooper Wiring Devices (718) 361-4914  
 GE Home Electric Products (216) 266-2121  
 Genlyte Thomas Group LLC (502) 893-4690  
 Hubbell Incorporated—Wiring Devices-Kellems (203) 882-4800  
 Leviton Mfg. Co. (800) 323-8920  
 Meltric Corp. (800) 824-4031  
 MIPCO—T&B (800) 888-0211 x8680  
 Pass & Seymour/Legrand (800) 776-4035  
 Russellstoll—T&B (800) 888-0211 x8680  
 Woodhead L.P. (847) 272-7990

**Connector bodies & flanged outlets**

Bryant Electric, Inc. (800) 323-2792  
 Cooper Wiring Devices (718) 361-4914  
 Ericson Mfg. (440) 951-8000  
 GE Home Electric Products (216) 266-2121  
 Genlyte Thomas Group LLC (502) 893-4690  
 Hubbell Incorporated—Wiring Devices-Kellems (203) 882-4800  
 Leviton Mfg. Co. (800) 323-8920  
 Meltric Corp. (800) 824-4031  
 MIPCO—T&B (800) 888-0211 x8680  
 Pass & Seymour/Legrand (800) 776-4035  
 Russellstoll—T&B (800) 888-0211 x8680  
 Tyco Electronics/AMP (800) 522-6752  
 Woodhead L.P. (847) 272-7990

**Lighting control devices**

**Dimmers**

Acuity Lighting Group (770) 922-9000  
 Bryant Electric, Inc. (800) 323-2792  
 Color Kinetics (617) 423-9999  
 Cooper Lighting (770) 486-4800  
 Cooper Wiring Devices (718) 361-4914  
 GE Home Electric Products (216) 266-2121  
 Genlyte Thomas Group LLC (502) 893-4690  
 Halo Lighting (847) 956-8400  
 Hubbell Incorporated—Wiring Devices-Kellems (203) 882-4800  
 HUNT Dimming (970) 484-9048  
 Leviton Mfg. Co. (800) 323-8920  
 Lightolier (508) 679-8131  
 Lutron Electronics (610) 282-3800  
 Pass & Seymour/Legrand (800) 776-4035  
 Progress Lighting (864) 599-6000  
 Rockwell Automation—Reliance (216) 266-7000  
 The Watt Stopper, Inc. (800) 879-8585

**Occupancy sensors**

Acuity Lighting Group (770) 922-9000  
 Bryant Electric, Inc. (800) 323-2792  
 Cooper Wiring Devices (718) 361-4914  
 Day-Brite Lighting (800) 234-1890  
 GE Home Electric Products (216) 266-2121  
 GE Total Lighting Control (877) 584-2685  
 Genlyte Thomas Group LLC (502) 893-4690  
 Hubbell Incorporated—Wiring Devices-Kellems (203) 882-4800  
 Leviton Mfg. Co. (800) 323-8920

Lightolier	(508) 679-8131
Lutron Electronics	(610) 282-3800
Novitas, Inc.	(310) 218-5360
Pass & Seymour/Legrand	(800) 776-4035
The Watt Stopper, Inc.	(800) 879-8585

**Other lighting controls**

Acuity Lighting Group	(770) 922-9000
ASCO Power Technologies	(973) 966-2128
Bryant Electric, Inc.	(800) 323-2792
Color Kinetics	(617) 423-9999
Controlled Power Co.	(800) 521-4792
Cooper Wiring Devices	(718) 361-4914
Day-Brite Lighting	(800) 234-1890
GE Home Electric Products	(216) 266-2121
GE Total Lighting Control	(877) 584-2685
Genlyte Thomas Group LLC	(502) 893-4690
Leviton Mfg. Co.	(800) 323-8920
Lightolier	(508) 679-8131
Lutron Electronics	(610) 282-3800
Novitas, Inc.	(310) 218-5360
Pass & Seymour/Legrand	(800) 776-4035
Progress Lighting	(864) 599-6000
The Watt Stopper, Inc.	(800) 879-8585

**Lampholders****Fluorescent lampholders**

Bryant Electric, Inc.	(800) 323-2792
Cooper Lighting	(770) 486-4800
Cooper Wiring Devices	(718) 361-4914
GE Home Electric Products	(216) 266-2121
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Leviton Mfg. Co.	(800) 323-8920
Metalux Lighting	(847) 956-8400
Pass & Seymour/Legrand	(800) 776-4035
Tyco Electronics/AMP	(800) 522-6752
Woodhead L.P.	(847) 272-7990

**Incandescent lampholders**

Allied Moulded Products	(419) 636-4217
Bryant Electric, Inc.	(800) 323-2792
Cooper Lighting	(770) 486-4800
Cooper Wiring Devices	(718) 361-4914
Ericson Mfg.	(440) 951-8000
GE Home Electric Products	(216) 266-2121
Halo Lighting	(847) 956-8400
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460

Leviton Mfg. Co.	(800) 323-8920
Metalux Lighting	(847) 956-8400
Pass & Seymour/Legrand	(800) 776-4035
Porcelain Products	(419) 396-7621
Producto Electric Corp.	(845) 359-4900
Woodhead L.P.	(847) 272-7990

**Multiple-outlet assemblies**

Bryant Electric, Inc.	(800) 323-2792
Cooper Wiring Devices	(718) 361-4914
Ericson Mfg.	(440) 951-8000
GE Home Electric Products	(216) 266-2121
Hammond Mfg Co. Inc.	(716) 651-0086
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460
MIPCO—T&B	(800) 888-0211 x8680
Pass & Seymour/Legrand	(800) 776-4035
Russellstoll—T&B	(800) 888-0211 x8680
Tyco Electronics/AMP	(800) 522-6752
The Wiremold Company	(800) 621-0049
Woodhead L.P.	(847) 272-7990
Woods Industries, Inc.	(317) 844-7261

**Cover plates**

Bryant Electric, Inc.	(800) 323-2792
Cooper Wiring Devices	(718) 361-4914
Ericson Mfg.	(440) 951-8000
GE Home Electric Products	(216) 266-2121
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Lutron Electronics	(610) 282-3800
Pass & Seymour/Legrand	(800) 776-4035
Producto Electric Corp.	(845) 359-4900
Steel City	(901) 252-5000
Woodhead L.P.	(847) 272-7990

**Receptacles****Convenience receptacles**

ABB LVPS	(888) 385-1221
Bryant Electric, Inc.	(800) 323-2792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
GE Home Electric Products	(216) 266-2121
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Lutron Electronics	(610) 282-3800
MIPCO—T&B	(800) 888-0211 x8680
Pass & Seymour/Legrand	(800) 776-4035
Russellstoll—T&B	(800) 888-0211 x8680
The Wiremold Company	(800) 621-0049
Woodhead L.P.	(847) 272-7990

**GFCI type receptacles**

ABB LVPS	(888) 385-1221
Bryant Electric, Inc.	(800) 323-2792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
GE Home Electric Products	(216) 266-2121
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Lutron Electronics	(610) 282-3800
MIPCO—T&B	(800) 888-0211 x8680
Pass & Seymour/Legrand	(800) 776-4035
Russellstoll—T&B	(800) 888-0211 x8680
Woodhead L.P.	(847) 272-7990

**Isolated ground receptacles**

Bryant Electric, Inc.	(800) 323-2792
Cooper Wiring Devices	(718) 361-4914
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Leviton Mfg. Co.	(800) 323-8920
Lutron Electronics	(610) 282-3800
MIPCO—T&B	(800) 888-0211 x8680
Pass & Seymour/Legrand	(800) 776-4035
Russellstoll—T&B	(800) 888-0211 x8680
Woodhead L.P.	(847) 272-7990



## Locking type receptacles

Bryant Electric, Inc.	(800) 323-2792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Leviton Mfg. Co.	(800) 323-8920
Meltric Corp.	(800) 824-4031
MIPCO—T&B	(800) 888-0211 x8680
Pass & Seymour/Legrand	(800) 776-4035
Russellstoll—T&B	(800) 888-0211 x8680
Woodhead L.P.	(847) 272-7990

## Surge suppression receptacles

Bryant Electric, Inc.	(800) 323-2792
Cooper Wiring Devices	(718) 361-4914
Cutler-Hammer	(800) 356-1243
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035
Phoenix Contact Inc.	(717) 944-1300
Wago Corporation	(800) 346-7245
The Wiremold Company	(800) 621-0049

## Weatherproof receptacles

Bryant Electric, Inc.	(800) 323-2792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Ericson Mfg.	(440) 951-8000
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
MIPCO—T&B	(800) 888-0211 x8680
Pass & Seymour/Legrand	(800) 776-4035
Russellstoll—T&B	(800) 888-0211 x8680
Woodhead L.P.	(847) 272-7990

## Switches

## Door operated switches

Bryant Electric, Inc.	(800) 323-2792
C3 Controls	(724) 775-7926
Cooper Wiring Devices	(718) 361-4914
GE Infrastructure Security Inc.	(856) 662-8477
Honeywell Sensing and Control	(800) 537-6945
Pass & Seymour/Legrand	(800) 776-4035

## Key operated switches

Bryant Electric, Inc.	(800) 323-2792
C3 Controls	(724) 775-7926
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Electro Switch	(781) 335-5200
GE Infrastructure Security Inc.	(856) 662-8477
Honeywell Sensing and Control	(800) 537-6945
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Moeller Electric Corp.	(713) 933-0999
Pass & Seymour/Legrand	(800) 776-4035

## Lighting (snap switches)

Bryant Electric, Inc.	(800) 323-2792
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
GE Home Electric Products	(216) 266-2121
Genlyte Thomas Group LLC	(502) 893-4690
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Lutron Electronics	(610) 282-3800
Pass & Seymour/Legrand	(800) 776-4035
Therm-O-Disc/Midwest Components	(231) 777-2602

## Momentary switches

Bryant Electric, Inc.	(800) 323-2792
C3 Controls	(724) 775-7926
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Electro Switch	(781) 335-5200
GE Infrastructure Security Inc.	(856) 662-8477
Honeywell Sensing and Control	(800) 537-6945
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035

## Motion sensor switches

Acuity Lighting Group	(770) 922-9000
Bryant Electric, Inc.	(800) 323-2792
Cooper Wiring Devices	(718) 361-4914
GE Home Electric Products	(216) 266-2121
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Leviton Mfg. Co.	(800) 323-8920
Novitas, Inc.	(310) 218-5360
Pass & Seymour/Legrand	(800) 776-4035
Pepperl+Fuchs	(330) 425-3555
The Watt Stopper, Inc.	(800) 879-8585

## Pendant switches

Bryant Electric, Inc.	(800) 323-2792
C3 Controls	(724) 775-7926
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
Ericson Mfg.	(440) 951-8000
GE Home Electric Products	(216) 266-2121
Hubbell Incorporated— Wiring Devices-Kellems	(203) 882-4800
Hubbell Industrial Controls	(336) 434-2800
Hubbell/Lexington	(336) 434-2800
Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035
Woodhead L.P.	(847) 272-7990

## Remote control switches

Cooper Wiring Devices	(718) 361-4914
Electro Switch	(781) 335-5200
GE Home Electric Products	(216) 266-2121
Genlyte Thomas Group LLC	(502) 893-4690
Leviton Mfg. Co.	(800) 323-8920
Lutron Electronics	(610) 282-3800
Novitas, Inc.	(310) 218-5360
Pass & Seymour/Legrand	(800) 776-4035
The Watt Stopper, Inc.	(800) 879-8585

**Rocker type switches**

ABB LVPS	(888) 385-1221
Bryant Electric, Inc.	(800) 323-2792
Cooper Wiring Devices	(718) 361-4914
Honeywell Sensing and Control	
	(800) 537-6945
Hubbell Incorporated—	
Wiring Devices-Kellems	(203) 882-4800
Leviton Mfg. Co.	(800) 323-8920
Lutron Electronics	(610) 282-3800
Pass & Seymour/Legrand	(800) 776-4035
Therm-O-Disc/Midwest	
Components	(231) 777-2602

**Rotary type switches**

ABB LVPS	(888) 385-1221
Bryant Electric, Inc.	(800) 323-2792
C3 Controls	(724) 775-7926
Cooper Wiring Devices	(718) 361-4914
Electro Switch	(781) 335-5200
Honeywell Sensing and Control	
	(800) 537-6945
Killark Electric Manufacturing	
	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Lutron Electronics	(610) 282-3800
Pass & Seymour/Legrand	(800) 776-4035

**Silent type switches**

Bryant Electric, Inc.	(800) 323-2792
C3 Controls	(724) 775-7926
Cooper Wiring Devices	(718) 361-4914
Hubbell Incorporated—	
Wiring Devices-Kellems	(203) 882-4800
Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035

**Tap switches**

Electro Switch	(781) 335-5200
Leviton Mfg. Co.	(800) 323-8920
Lutron Electronics	(610) 282-3800
Pass & Seymour/Legrand	(800) 776-4035

**Toggle switches**

ABB LVPS	(888) 385-1221
C3 Controls	(724) 775-7926
Cooper Wiring Devices	(718) 361-4914
Honeywell Sensing and Control	
	(800) 537-6945
Hubbell Incorporated—	
Wiring Devices-Kellems	(203) 882-4800
Leviton Mfg. Co.	(800) 323-8920
Lutron Electronics	(610) 282-3800
Pass & Seymour/Legrand	(800) 776-4035

**Therm-O-Disc/Midwest**

Components	(231) 777-2602
The Watt Stopper, Inc.	(800) 879-8585

**Tumbler switches**

Bryant Electric, Inc.	(800) 323-2792
C3 Controls	(724) 775-7926
Cooper Crouse-Hinds	(315) 477-5531
Killark Electric Manufacturing	
	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035

**Weatherproof switches**

Bryant Electric, Inc.	(800) 323-2792
C3 Controls	(724) 775-7926
Cooper Crouse-Hinds	(315) 477-5531
Cooper Wiring Devices	(718) 361-4914
GE Infrastructure Security Inc.	
	(856) 662-8477
Honeywell Sensing and Control	
	(800) 537-6945
Hubbell Incorporated—	
Wiring Devices-Kellems	(203) 882-4800
Killark Electric Manufacturing	
	(314) 531-0460
Leviton Mfg. Co.	(800) 323-8920
Pass & Seymour/Legrand	(800) 776-4035
Woodhead L.P.	(847) 272-7990

**Surface extensions**

Cooper Lighting	(770) 486-4800
Pass & Seymour/Legrand	(800) 776-4035
The Wiremold Company	(800) 621-0049

**Undercarpet premises wiring system components**

Hubbell Incorporated—	
Wiring Devices-Kellems	(203) 882-4800
Nexans	(717) 354-6200
Tyco Electronics/AMP	(800) 522-6752

**Flat conductor power cable**

Hubbell Incorporated—	
Wiring Devices-Kellems	(203) 882-4800
Tyco Electronics/AMP	(800) 522-6752

**Undercarpet telephone & data cable**

Hubbell Incorporated—	
Wiring Devices-Kellems	(203) 882-4800
Tyco Electronics/AMP	(800) 522-6752

**SOURCES FOR PUBLICATIONS FROM OTHER ORGANIZATIONS****American National Standards Institute (ANSI)**

25 West 43rd Street, 4th floor  
New York, NY 10036  
Phone: (212) 642-4900  
website: <http://www.ansi.org>

**American Society of Testing and Materials (ASTM)**

100 Barr Harbor Drive  
West Conshohocken, PA 19428-2959  
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website: <http://www.astm.org>

**American Welding Society (AWS)**

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Miami, FL 33126  
Phone: (800) 443-9353 or (305) 443-9353  
website: <http://www.aws.org>

**Electronic Industries Alliance (EIA)**

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**Insulated Cable Engineers Association (ICEA)**

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**Institute of Electrical and Electronic Engineers (IEEE)**

445 Hoes Lane  
Piscataway, NJ 08854  
Phone: (732) 981-0060  
website: <http://www.ieee.org>

**International Electrotechnical Commission (IEC)**

3 Rue de Varembe, P.O. Box 131  
CH - 1211 Geneva 20 Switzerland  
Phone: +41-22-919-02-11  
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**National Association of Standardization and Certification of the Electrical Sector (ANCE)**

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Fax: 525-520-8800  
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3 Bethesda Metro Center, Suite 1100  
Bethesda, MD 20814  
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1 Batterymarch Park  
Quincy, MA 02169  
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website: <http://www.advancedenergy.org>

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website: <http://www.entela.com>

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3933 US Route 11  
Cortland, NY 13045  
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website: <http://www.intertek-etlsemko.com>

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website: <http://www.met-test.com>

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website: <http://www.metlabs.com>



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Payment by check or money order is required except for established accounts. State and local sales tax plus processing and shipping must be added.

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