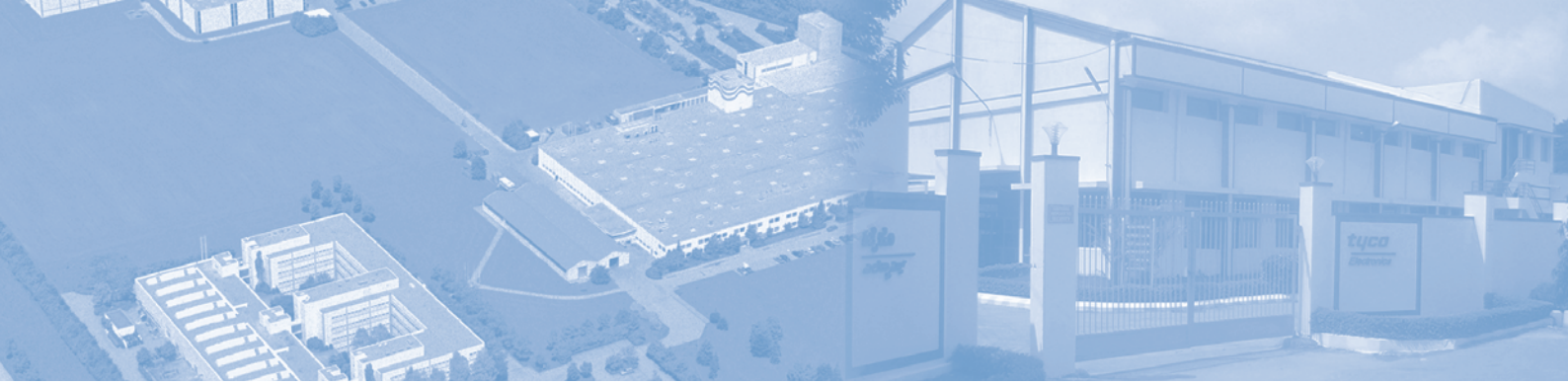




Energy Division

Connecting the World of Power

 **Tyco Electronics**
Our commitment. Your advantage.



Connecting the World of Power



Energy headquarters
Munich/Germany

Our manufacturing sites around the world:

Region	Country	Site
EMEA	Ireland	Shannon
	UK	Aldridge
		Witham
	Switzerland	Wohlen
	France	Gevrey/Chambertin
		Ottobrunn
	Germany	Falkenberg
		Berlin
UAE	Dubai	
Saudi Arabia	Damman	
India	Bangalore	
Czech Republic	Trutnov	
AMERICAS	Canada	Markham
	Brazil	Braganza
	Mexico	Juarez
	US	Fuquay-Varina
ASIA / PACIFIC	Thailand	Kennesaw
		Bangkok
	Indonesia	Jakarta
	Malaysia	Kuala Lumpur
	China	Shanghai
		Zibo
Australia	Wyong	

The Energy Division, a global operating unit of Tyco Electronics develops manufactures and markets products and systems for the electrical power industry. Today, the Energy Division employs approximately 4,000 people and annual sales amount to \$800 million. Our products are extensively employed by power utilities and equipment manufacturers, in rail transport systems and in industry around the world. We are a leading global supplier of

- Cable Accessories
- Connectors and Fittings
- Insulators and Insulation
- Surge Arresters
- Switching, Protection and Lighting
- Power Measurement and Control

Our global network of technical and sales representatives provides expert application and engineering assistance, hands-on field training and continuous after-sales support to help our customers successfully master the challenges of today's businesses.

Expertise of over 40 years in materials science, product design and process engineering go into the invention, development, manufacture and marketing of our high-performance products. Our competitive advantages are well recognized in the market:

- Customer focused organization
- Innovation and technology driven
- Extensive product offering
- Multiple market segments presence
- Industry leadership and expertise
- Structural and financial strength

Our wide range of reliable and cost-effective solutions is continuously expanded through research-driven product development.



Global expertise and local support

With manufacturing facilities across five continents, we can react promptly to customer requirements and keep lead times and shipping distances to a minimum. An effective product supply chain ensures products move from origin to installation without lag time. Local customer service centers offer a single point of contact with staff that can provide country-specific support based on the needs of each region. By combining local knowledge with world-class research, product development and manufacturing capabilities, we set high standards of performance and user convenience.



Committed to quality

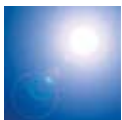
ISO 9000 series and ISO 14001 certifications for almost all locations underline our continuing commitment to quality and the environment. All Energy products are subjected to extensive testing from the time they enter our plants as raw material until they leave as finished products. Requalification testing is carried out on a regular basis with installed components. Customers can thus have full confidence in the products, services and data supplied. In many cases, this saves the cost and inconvenience of any further downstream verification. All our electrical power products meet international specifications, such as IEC, CENELEC, IEEE, ANSI, and virtually all national standards.

Enhanced properties for materials and products

Systematic research into new materials has resulted in a wide range of products with enhanced properties to meet the changing needs of the electrical power industry:



Excellent resistance to surface electrical activity



Excellent resistance to thermal aging and UV light



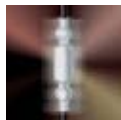
Insulation thickness memory



Void-free interfacial bonding



Impermeability to cable oils



Shape memory



Fiber reinforced resin



Total harmonic distortion analysis



Moisture blocking



Electrical stress control



Reduced contact resistance



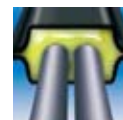
Excellent bimetallic interface



Reliable, durable current interruption



Resin technology



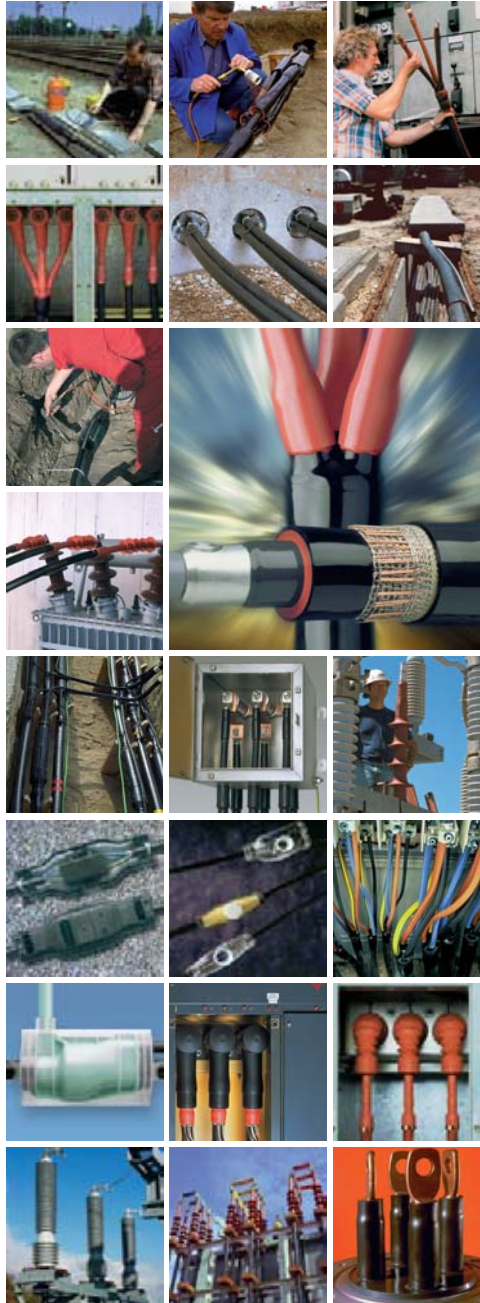
PowerGel



Cable Accessories

The most innovative utilities and industries around the world use our power cable accessories. Designed to withstand environmental extremes and high pollution levels over long operating lifetimes, they help maintain service reliability in both overhead and underground installations. Our Raychem accessories offer a universal system for all cable types, low, medium and high voltage up to 170kV. Their specially formulated insulation materials resist tracking and degradation caused by erosion, ultraviolet light and other environmental stresses. All our cable accessories meet international specifications, such as IEC, CENELEC, IEEE and GOST.

- Low voltage accessories
- Medium voltage joints
- Medium voltage terminations
- Medium voltage switchgear connection systems
- High voltage accessories
- Nuclear qualified products



Connectors and Fittings

Our full line of connectors and accessories for low, medium and high voltage cable and overhead networks, substations, grounding applications, rail transport infrastructure, industrial applications and accessories for overhead optical fiber lines (OPGW and ADSS) covers most applications in an electrical network. With our AMP, Dulmison, La Prairie, SIMEL, and UTILUX connectors and fittings we offer a large product selection in the industry from which our customers can choose the optimum solution for their specific application.

- Interconnection products for control wiring
- Solderless terminals and splices
- Terminal blocks
- Bolted connectors and clamps
- Insulation piercing connectors
- Copper compression connectors and lugs
- Bimetallic connectors and lugs
- Mechanical connectors and lugs
- Wedge pressure technology connectors
- Heliformed, cast and compression fittings
- Transmission line spacers and dampers
- Overhead powerline fittings
- Vibration control products
- Application tooling

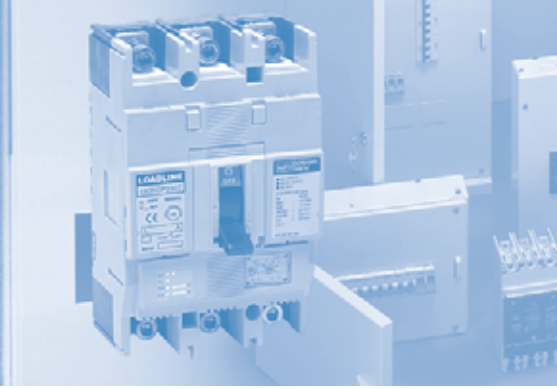


Insulators and Insulation

Our Axicom, Dulmison and Raychem insulators and insulation enhancement products have earned a world wide reputation for innovation, quality, service and technical expertise for an array of applications from utilities to railway systems. In long-term service, our brand products have an outstanding record for reliability and performance, in the toughest environments and applications. Our products are designed for use in distribution and transmission networks and fully qualified to IEC and ANSI standards.

- Porcelain insulators
- Polymeric insulators
- Hybrid insulators
- Busbar insulation tubing
- Busbar insulation tapes
- Insulating sheets
- Preformed covers
- Squirrel guards
- Bird protection caps
- Overhead line insulation tapes
- Creepage extenders
- Flexible insulated bars





Surge Arresters

Bowthorpe EMP and Raychem are among leading product-brands in the world-wide market for the protection of utility major assets. Their extensive range of polymeric and porcelain surge arresters are in service in over 130 countries and are protecting installations in all climatic conditions from the arctic circle to the tropics. Designed for use in distribution and transmission networks, all of the protection products and components Tyco Electronics Energy offers are designed and manufactured to IEC and ANSI standards.

- Low voltage surge arresters
- Medium voltage surge arresters
- High voltage surge arresters



Switching, Protection, and Lighting

Our products for electrical distribution systems, street lighting and public services include low power components such as photocontrols, timers, circuit breakers, fuses and control boxes as well as high power devices such as electrical distribution switchboards with busbars from 800 to 3,200 A. Well-known product-brands such as ALR, Bowthorpe EMP, Dorman Smith, Raychem and SIMEL deliver the performance customers expect at prices they can afford. With our extensive range of surge protectors for mains power, voice, and data systems we are able to meet the requirements of demanding applications and diverse power and communication system environments around the world.

- Photocontrols
- Photocontrol accessories receptacles, shorting caps, relays
- H.P.S. starter
- Test equipment
- Time controls
- MCB distribution board systems
- Moulded case circuit breakers
- Fuse combination units
- Panel board systems
- Transient voltage surge suppression (TVSS) for mains power, data/network, telecommunication
- Flexible insulated bars



Power Measurement and Control

Our Crompton Instruments products have earned a world wide reputation for quality, and offer proven reliability across power generation, process control, test and measurement, utility, marine, defence and energy management applications. With these products Tyco Electronics Energy offers a large product portfolio of DIN, ANSI and JIS style instrumentation available to switchgear and generator set manufacturers, panel builders and OEMs. Our commitment to product development, quality and customer satisfaction is upheld with ISO accreditation and compliance to international standards, including UL, CSA, LRS, BV, ABS and ISSep approvals for many products.

- Digital metering systems
- Kilowatt hour energy meters
- Transducers
- Protector trip relays
- Meter relays
- Digital indicators
- Analog instruments
- Current transformers
- Shunts
- Generator set controllers



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All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale. ALR, AMP, AXICOM, Bowthorpe EMP, Dorman Smith, Dulmison, La Prairie, Raychem, SIMEL, TE Logo and Tyco Electronics are trademarks. CROMPTON is a trademark of Crompton Parkinson Ltd. and is used by Tyco Electronics under licence.

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